

A PHENOMENOLOGICAL STUDY OF STUDENT RETENTION
AND GRADUATION IN DOCTORAL EDUCATION

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BOĞAZİÇİ UNIVERSITY

2024

A PHENOMENOLOGICAL STUDY OF STUDENT RETENTION
AND GRADUATION IN DOCTORAL EDUCATION

Thesis submitted to the
Institute for Graduate Studies in Social Sciences
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy
in
Educational Sciences

by
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2024

A Phenomenological Study of Student Retention
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- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
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ABSTRACT

A Phenomenological Study of Student Retention and Graduation in Doctoral Education

This dissertation, conducted in Türkiye, examines the influences of personal, institutional and academic complexities on student retention and graduation in doctoral education. It is based on one-on-one interviews with 24 students and 16 dropouts from different stages of a doctoral degree. Interpretive phenomenological analysis is used to highlight how these participants perceive complexities on their way to graduation or dropout. Trustworthiness and credibility are ensured via saturation in the field, peer review, triangulation, member checking and clarifying researcher bias via reflexivity. The findings show that demographic and financial background of the participants shape their retention and graduation. The participants have difficulty maintaining their work-life balance, overcoming gender-specific barriers, conducting independent research, and managing supervisor-supervisee relationships during their doctorates. Moreover, the traditional higher education system appears to be challenging for them. Although the participants experience similar challenges, it seems that those with limited support mechanisms drop out of their programs more easily. The existing models and theories need to be updated and recontextualized considering country-specific challenges and opportunities. Furthermore, this dissertation presents an illustration named the Composite Interaction Perspective for Complexities in Doctoral Education that shows the intertwined challenges perceived by the participants as a base for new conceptual frameworks.

ÖZET

Doktora Eğitiminde Öğrenci Devamlılığı ve Mezuniyeti Üzerine Fenomenolojik Bir Çalışma

Türkiye'de yürütülen bu tez, doktora eğitiminde kişisel, kurumsal ve akademik karmaşıklıkların öğrenci devamlılığı ve mezuniyeti üzerindeki etkilerini incelemektedir. Çalışma, doktora derecesinin farklı aşamalarında olan 24 öğrenci ve 16 doktora terk birey ile yapılan birebir görüşmelere dayanmaktadır. Yorumlayıcı fenomenolojik analiz, bu katılımcıların mezuniyet veya okulu bırakma yolundaki karmaşıklıkları nasıl algıladıklarını vurgulamak için kullanılmıştır. Güvenilirlik ve inanılabilirlik, sahada doygunluk, akran değerlendirmesi, üçgenleme, üye kontrolü ve refleksivite yoluyla araştırmacı önyargısının açıklığa kavuşturulması yoluyla sağlanmıştır. Bulgular, katılımcıların demografik ve finansal geçmişlerinin, okulda kalma ve mezuniyet durumlarını şekillendirdiğini göstermektedir. Katılımcılar doktoraları sırasında iş-yaşam dengelerini korumakta, cinsiyete özgü zorlukların üstesinden gelmekte, bağımsız araştırma yapmakta ve danışman-danışan ilişkilerini yönetmekte zorlanmaktadır. Geleneksel yükseköğretim sistemi de katılımcılar için zorlayıcı görünmektedir. Katılımcılar benzer zorluklar yaşasa da destek mekanizmaları sınırlı olanların programlarını daha kolay bıraktığı görülmektedir. Mevcut model ve teorilerin, ülkeye özgü zorlukları ve fırsatları gözeterek güncellenmesi ve yeniden bağlamsallaştırılması gerekmektedir. Ayrıca bu tez, katılımcılar tarafından algılanan iç içe geçmiş zorlukları gösteren Doktora Eğitimindeki Karmaşıklıklar için Bileşik Etkileşim Bakış Açısı adlı yeni kavramsal çerçevelere temel olacak bir görsel sunmaktadır.

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ACKNOWLEDGMENTS

First and foremost, I am honored to give special thanks to my advisor, Assoc. Prof. Gülistan Gürsel-Bilgin for her ongoing support, understanding and encouragement while becoming a crucial role model for me with her disciplined and ethical academic standing. She guided me through this journey with her immense knowledge and wisdom. I am excited to embark on the next chapter of my academic and professional life with her continued support.

I would like to thank my co-advisor, Prof. Fatma Nevra Seggie (retired) who shared her valuable comments and critiques throughout all phases of this dissertation. Her unforgettable graduate courses motivated me to pursue an academic career in the field of higher education. I was lucky that her personal and academic intellectuality lit this road. She was there whenever I needed her emotional and academic support even if she was miles away.

I am grateful to my committee members, Assoc. Prof. Ayşe Caner and Assoc. Prof. Serap Emil, for their constructive and valuable contributions not just in committee meetings but in every step of this dissertation. I would also like to thank Assoc. Prof. Bengü Börkan and Assoc. Prof. Elif Bengü for their kind reviews, insightful comments and valuable recommendations.

I would like to express my deepest appreciation to my master's thesis advisor Prof. Zeynep Kızıltepe (retired). She encouraged me a lot for going ahead. Apart from our joint academic endeavors, our everyday dialogues consistently enriched the quality of my life.

I am grateful to Dr. Muki Gorar for supporting me from miles away with her great academic standing and sense of humor. She made me believe that doctoral students are like phoenixes rising from their ashes. By doing so, she unconsciously motivated me to go further as a woman scientist.

Moreover, I would like to express my sincere gratitude to doctoral students and doctoral dropouts who shared their experiences and feelings for this study with great motivation. This study would not be possible without their sincere contributions. I hope, I can make their voice heard for educational transformation.

I feel so lucky to have my family members beside me with their unconditional love, incredible support and encouragement throughout my personal and academic life. I am grateful to my mother Hatice Karaduman, my father Aksoy Karaduman and my brother Enver Karaduman for not letting me feel alone during this long and arduous process. It is a great honor for me to be the first PhD holder in our family.

I would like to thank Ali Talat Oskay for his emotional support. He came into my life during the most challenging times of this study. He made me feel happy and glorious with his courtesy.

I also received tremendous peer support and encouragement from Aysel Kapan and Erdem Akgün. I am so happy that I got to meet them. We shared all the joy and sorrow of life together. They were quite instrumental at various stages of this dissertation by providing endless reviews whenever I needed.

Last but not least, I am happy to have my exceptional friends: Aymer Karaca-Çobanoğlu, Bengi Birgili-Karabulut, Büşra Aksöz, Cennet Rümeyza Gündüz, Ceren Merhan, Gülizar Sinem Ön-Kahveci, Kübra Alaca-Tütüncü, Nil Arabacı, Özlem Çiçek, Özlem Tekin, Sena Arman-Ergin, Şengül Pala, Tuğba Dişikırık and Tuğba Yayla for their academic and non-academic supports.

I would like to dedicate this dissertation to all who are struggling in their doctoral journeys and are hoping to have a (better) place in academia.

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ABBREVIATIONS

ALES	: The Academic Personnel and Post-graduate Training Examination
BP	: Bologna Process
CI	: Composite Interaction
CoHE	: The Council of Higher Education
DS	: Diploma Supplement
ECTS	: European Credit Transfer and Accumulation System
FDD	: Female Doctoral Dropout
FDS	: Female Doctoral Student
GPA	: Grade Point Average
HDI	: Human Development Index
HE	: Higher Education
I	: Interaction
IUC	: Inter-University Council
MDD	: Male Doctoral Dropout
MDS	: Male Doctoral Student
NQF	: The National Qualifications Framework
ÖSYM	: Student Selection and Placement Center
ÖYP	: Academic Training Program
PhD	: Doctor of Philosophy
PhD Students	: Doctoral Students
PhD Dropouts	: Doctoral Dropouts
RPL	: Recognition of Prior Learning

TÜBİTAK : The Scientific and Technological Research Council of
Türkiye

TÜİK : Turkish Statistical Institute



CHAPTER 1

INTRODUCTION

In this part, there is introductory information about this study under five titles: (1) background of the study, (2) statement of the problem, (3) purpose of the study, (4) research questions, (5) significance of the study, and (6) definition of key terms.

1.1 Background of the study

Universities have been engaged in the search for and application of knowledge for many centuries as social institutions (Bawa, 2019). Their place and roles have expanded with the changing interactions of different stakeholders throughout history (Leydesdorff & Etzkowitz, 2002). The value of partnerships between governmental, industrial and academic entities for improving societies has been at the heart of higher education, which is overemphasized during 1990s by The Triple Helix Model (Etzkowitz & Leydesdorff, 2000).

The model basically suggests that industry is responsible for production and that governments have a role in stabilizing authorized relations. On the other hand, universities are the source of knowledge that is required for the continuity of entities (Etzkowitz & Leydesdorff, 2000). Under these circumstances in which the university has been seen as an innovative center to underpin industry by providing qualified experts, research findings and higher-level knowledge (Etzkowitz, 2003), the teaching role of the university has been combined with research. The Triple Helix has even become a model for creating incubators in university settings in some countries like Brazil (Almeida, 2005). Consequently, research conducted in

universities has evolved into a more sociopolitical and socioeconomic concept over time.

The model enables all stakeholders to re/think the key position of universities both nationally and internationally. Governments and industries have been seen as one of the major institutions in nations for many years. Supposedly, the secondary role of the university has been upgraded to the equivalent level of industry and the government over time since academia has become an enterprise implying that knowledge has a new form of power and domination over personal bodies (Foucault, 1982; Freidson, 1986; Kattakayam, 2006). However, it should not be forgotten that the connections of these actors stay in motion due to their changing economic, political, and socio-cognitive missions (Lawton-Smith & Leydesdorff, 2014).

In reality, these idealized roles and statuses might not be possible for all universities in the world. In other words, power relations are more complicated and less stable. They are also not equally distributed among the actors. What is more, the existing literature on The Triple Helix demonstrates a very generic approach to universities (Pugh, 2017). Nonetheless, the capabilities, resources and interactions of universities can be different from one another. For example, universities in developing nations do not naturally possess the presumed capabilities of developed nations (Wright et al., 2008). At this point, the capabilities of universities should be clearly defined and conceptualized, which is often missing in literature, especially for developing countries like Türkiye. In addition, the model ignores the constantly shifting relationships among all local and global actors allowing non-existing capabilities to be promoted through regional initiatives (Liu & Huang, 2018). Moreover, The Triple Helix Model has a small micro-level perspective focusing much on individual constructs of universities such as technology transfer offices;

therefore, macro-level constructs are often neglected in available discussions (Felin et al., 2015; Mangematin et al., 2014; O'Kane et al., 2015).

Additionally, all the developments observed in technology following the rising importance of knowledge re/production, circulation and reception in the globalized world have also been reflected in the current state of universities (Stewart et al., 2009). In this atmosphere, universities need to change themselves in such a way that they can help the production and dissemination of knowledge by using technology. As highlighted by Sutz (2007), there is no ready-made guidebook for universities to pursue such changes. Furthermore, government and industry as other main actors should be open to new commitments in and out of universities.

In today's world, such a power of knowledge that turns more into economic ends makes individuals, who are embedded in societies and bound by social norms and conditions, struggle to acquire higher positions and better qualifications. Accessing into universities is one of the formal pathways to gaining the necessary credentials for getting better jobs (Freidson, 1986). Some people can pursue higher education with such an aim even though this is not their single and ultimate goal. On the contrary, the study of Brown and Hesketh (2004) on graduate employability shows that academic credentials have already lost their significance in a competitive labor market over behavioral competencies. In addition, credential inflation has created instrumental concerns about the real purpose and necessity of higher education (Naidoo, 2003).

Not only academic but also humanistic and pragmatic practices contradict higher education with the effects of globalization and neo-liberal policies. However, it is possible to reverse current undesirable trends spreading in the world by supporting the authentic abilities of individuals (Mayor Zaragoza, 2019), which is

among the key actions of institutions these days. According to Mezirow (2000), ideas causing a profound shift in people's attitudes and actions while giving adult students a chance to critically go over their presumptions, question the ways they already think, and form fresh, inclusive, egalitarian and socially fair viewpoints, should definitely be integrated into the knowledge-creation processes of universities instead of totally ignoring the powerful role of knowledge in changing people and societies (Terepyshchyi & Khomenko, 2019).

In this atmosphere, doctoral students, as future scholars, should also be trained in a way that they can go beyond the creation of a favorable world filled with personal and social change (Mezirow, 2000). Indeed, they should implement such ideals in practical terms. Higher education institutions, especially through their graduate degrees, raise individuals who connect their research and teaching to common social issues (Giroux, 2009). These institutions, in so doing, contribute to the overall diversities of people and society by enhancing them thanks to the various programs they offer, which indicates that they will have a critical place in the future as also argued in UNESCO's (2008) reports.

Science re/produced in doctoral programs should be decisively linked to the paradigm of humanistic education suggesting that empowering students with the essence of dialogue, which is necessary in both theoretical and practical aspects (Aloni, 2013). Therefore, it is more important to increase intellectuality and intellectuals in society than economic performance (Terepyshchyi & Khomenko, 2019). Among all these various programs offered, doctoral degrees construct an important public realm by helping individuals improve critical thinking skills, practice sophisticated debates, exercise unusual ways of thoughtfulness and hold

authority, which is necessary for the survival of democratic and socially involved agents (Arendt, 1968; Dewey, 1927).

Correspondingly, doctoral programs offered by universities and specialized institutes have gained more popularity due to the current knowledge-driven social structure in the world (Knight, 2007) and the requirements of the community. They have also changed from being the concept of the elite that they once were to a concept accessible to all as a result of the rising demand from the public (Bunoti, 2011). They have come to the point of not being able to respond to the emerging higher-level economic, social, political and intellectual needs of individuals and societies. This has, thus, given rise to quantitative growth of such programs both in public and especially in foundation universities. Under such an economic, political and social atmosphere, which also exemplifies the main characteristics of today's capitalist society, human beings start to lose their role as engaged citizens and critical thinkers (Bauman, 2007).

The current case of people who increasingly become less engaged citizens and the popularity of doctoral programs have posed a challenge and an opportunity for universities. As more people are included in the formation phase, universities have chances of reaching out to more people. As much as this is a challenge, this is also an opportunity since these institutions have become one of the few public spaces that still keep the promise of democracy alive through their sophisticated inquiries (Said, 2004).

A fresh start is possible and required for universities to emerge from the current economic, political and social erosions and the changes that the whole world is going through (Paleari et al., 2015). At this turning point, a definition of the ideal society is also required to discuss the roles of educational institutions for humanity.

Universities should encourage a fairer and better society where individual talents, engagement, and responsibility are recognized. A new kind of humanism should also be integrated into a new society without sacrificing the interests of the community as a whole and by valuing and respecting the abilities of individuals (Paleari et al., 2015).

In the first stage, universities as social institutions should have a role in sustaining equality and sustainability in societies, and they should increase public responsibility and engagement while bridging generations (Paleari et al., 2015). In addition to this, universities in today's modern era are responsible for raising individuals to such a degree that they can face difficulties of contemporary life. For this aim, they should aim to transfer necessary knowledge, skills and visions to their students so that they can address the challenging issues of the modern world by the standards achieved with a multidisciplinary and global perspective in research (Audretsch, 2014).

Indeed, universities have to go beyond their traditional missions of teaching, research, and innovation. They should be connected more to society in a civil and cooperative manner to fulfill any demands of the learners and society (Goldin & Katz, 2008). The objective to guarantee that all people can obtain advanced degrees should continue for personal and national growth. Nonetheless, the growth of universities should not be measured in quantitative terms. Ideally, quality should be at the forefront of personal and social growth. For this purpose, universities and students should have connections with the community and the outside world (Paleari et al., 2015). The rising number of university graduates does not guarantee betterment. There are even negative outcomes of quantitative increases without ensuring the quality of education (Holland et al., 2013).

Universities, especially with their doctoral degrees, do more than just research. They are like ‘change agents’ with the ethical, scientific and theoretical foundations required for sustainability (Vogt & Weber, 2020). Doctoral students and academics need to adopt public goals and enhance social responsibility while addressing current global issues. Unfortunately, such global aims as equality are missing in today’s higher education under the harsh conditions of neo-liberal policies. Unluckily, knowledge and wisdom ‘moved from its ethical center’ (Kersting, 2005), and the role of universities as ‘change agents’ has deteriorated.

For these reasons, the role of doctoral education came down to producing knowledge and raising individuals with more knowledge. Moreover, three basic missions of universities namely, research, education and outreach, have been conveyed via doctoral education (Elmgren et al., 2016). Knowledge acquired through doctoral education, especially in developed countries, helps these countries keep their existing places and corporate power (Peters, 2002) in this environment.

When compared to such developed or industrialized nations as Japan, the USA and Canada, developing nations are often considered to be at an earlier stage of their economic and industrial expansion, and they frequently have less developed infrastructure and lower standards (Kapur & Crowley, 2008). Some emerging countries, such as those in Africa, face extreme poverty, limited access to essential educational and health services, and any resources necessary for their development (Kapur & Crowley, 2008). Türkiye is also categorized as a developing country OECD (2023). What is problematic here is that it does not have similar statistics and similar life conditions to other developing countries. Hence, quantitative and qualitative differences even among developing countries are growing, and to be

placed in the same category does not mean that they are homogenous in terms of essential features affecting their economies (Petrou, 2007).

Developing nations deal with more educational difficulties than their wealthier fellows due to a lack of infrastructure (Babu & Shree Reddy, 2015). Universities and individuals with doctoral degrees pose a better future for these developing countries including, Türkiye. Unfortunately, some developing countries miss the likelihood of achieving a high level of quality in education as they competitively focus on increasing quantity (Suresh & Kumaravelu, 2017). From this point of view, however, universities in developing countries also have a market value causing them to lose their public place associated with critical interpretations (Giroux & Giroux, 2004). This has resulted in a major drawback. The fact that more and more people are interested in doctoral programs has led universities to be transformed into spaces of consumption. Hence, doctoral education has become more critical in shaping the future of emerging countries since these countries need to improve their shaky place in the evolving global socioeconomic order through competent individuals (UNESCO, 2008).

The improvement and training of such well-qualified citizens can be achieved, among many options, also via doctoral education. Hence, there is much to be learned and much to be achieved for individuals in developing countries through doctoral degrees (Keely, 2007); these individuals become one of the most vital components of creating material knowledge and contributing to knowledge societies and economies in all countries regardless of their socioeconomic status (Knight, 2007). However, attributing solely instrumental values to universities and individuals with doctoral degrees is a big threat to the noble goals of academia (Giroux, 2009).

Doctoral degrees have more important and specific roles with their particular emphasis on creating new opportunities as a critical transition process to be evolving into a lifetime scientist (Brown, 2003; Lin & Cranton, 2005). Doctoral programs have systematic objectives to raise researchers and academics (Austin & Sorcinelli, 2013; Austin & Wulff, 2004). Graduate programs provide expertise and contribute to society by educating individuals who can follow the literature, be innovative, conduct research, solve problems, produce and transfer knowledge (Bakırcı & Karaman, 2010; İnce & Korkusuz, 2006; Sayan & Aksu, 2005). Therefore, both the private and public sectors need such a qualified labor force (Alhas, 2006).

Last but not least, higher education has a mission to give people the information and instruction necessary for public life while enabling them to challenge the serious problems of the 21st century as emphasized by many well-respected public intellectuals including John Dewey (Aronowitz & Giroux, 1985; Bernstein, 2005; Giroux, 2009). To put it another way, more should be done to advance doctoral education for the welfare of individuals and the whole of humanity even under the pressure of market values (Giroux, 2007).

The arguments of Paulo Freire (1970) in his book ‘Pedagogy of the Oppressed’ are also intimately tied to doctoral education. In ‘the banking concept of education’ explained in this book, Freire criticizes the traditional education system and its outcomes. For him, education is like an obstacle for students and turns them into robots per se receiving the information presented by anti-autonomous teachers. Accordingly, people are like objects with no autonomy. It limits overall improvement (Freire, 1991). Instead, “Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings

pursue in the world, with the world, and with each other” as suggested by Freire (1970, p. 244).

Freire's critique of traditional education (Freire, 1991) resonates with complexities often encountered in doctoral education during which students might feel constrained by strict rules and structures, power imbalances and a lack of independence in their own learning experiences. Accordingly, doctoral students are at risk of becoming mere conduits for established knowledge rather than active agents in the creation and dissemination of new knowledge. Therefore, universities should aim to create personalized emancipatory learning environments (Bananuka, 2023), taking the principles of Freire prioritizing critical inquiry, agency and collaborative engagement into account (Smith-Campbell et al., 2016). One of the best strategies to overcome the power imbalance in education is through obtaining a doctoral degree since it can potentially allow an authentic form of problem-solving based on realities and broaden the horizons of individuals while fostering their independence. In terms of raising the future intellectuals of society, doctoral education has a critical autonomous position with its radical practices (Micheletti, 2010). This should also remind us of Gramsci's (1971) concept of 'organic intellectual':

The mode of being of the new intellectual can no longer consist in eloquence, which is an exterior and momentary mover of feelings and passions, but in active participation in practical life, as constructor, organizer, 'permanent persuader' and not just simple orator... From techniques-as-work one proceeds to technique-as-science and to the humanistic conception of history, without which one remains 'specialized' and does not become 'directive' (Gramsci, 1971, p.10).

Higher education institutions, with their doctoral programs, have a responsibility to raise such organic intellectuals as future academics who can touch critically on social, economic, technological and political issues resulting from the changes that

have occurred throughout the world. Still, they are shaped more by traditional approaches while raising future intellectuals. Instead, they should be transformed into places where pedagogical training and peace education are presented and opportunities for contributing to public spheres are promoted through the concept of 'hidden curriculum' as emphasized by Apple (1971).

On the one hand, ideal atmosphere and production are based on developing critiques and initiating debates on fundamental social issues and have a radical effect on the course of society, which is challenging (Badat, 2006). On the other hand, traditional programs end up being political instruments that produce and reproduce knowledge (Buci-Glucksmann, 1980). When the current case of doctoral education under the aforementioned situations is considered, there is an urgent need for developing new models or improving the already existing ones in many countries to graduate organic intellectuals with critical perspectives (Yogev & Michaeli, 2011).

As highlighted by Badat (2001), critical thinkers raised by universities should support 'substantive social democracy' and have a 'non-capitalist future'. Hence, individuals with doctoral degrees are supposed to have political commitments to stand out against neo-liberalism, privatization, marketization, commodification, and commercialization (Sörlin, 2006). Similarly, Kuzhabekova et al. (2015) regard higher education as an academic subject with sometimes unclear boundaries that bring scholars together with research communities to study national and international topics and be concerned about the future. The active and critical participation of such scholars in their specific fields lowers the space between research and action (Chen & Hu, 2021; Altbach et al., 2006).

Under these circumstances, scholars are also perceived for their different and critical positions in policy-making processes (Ashwin et al., 2016). The state-serving

function of HE institutions through re/production processes, however, makes them the agents of the state following the steps of dominant interests (Udas & Stagg, 2019). From this perspective, universities can be linked to Althusser's concept of ideological (not necessarily) state apparatus contributing to capitalist ideas (Althusser, 2014). They are one of the independent intellectuals critically transforming state policies even if they fail to do so, but the corporatization of academia gave rise to academic capitalism moving universities from their public aims (Slaughter, 2014), which in turn caused universities to have difficulty joining in hot discussions on social, global issues.

Despite commonalities of neo-liberal practices in higher education, which are also reflected in doctoral education, the market economy has not yet taken total control of education. Instead, status competition has spread throughout the entire world, which forces partial commodification, limits the flow of public services, and fractures common goals (Marginson, 2011). At this point, the advancement and reinforcement of higher education systems with planned growth through investment in expansion strategies have become critical for international competitiveness (Akbulut Yıldırımış & Seggie, 2018).

The use of PhD training for community learning and scientific production has a particular promise for the future of individuals and society (Freire, 1994; Terepyshchyi & Khomenko, 2019). It cultivates the capacities of human beings in terms of reasoning, emancipation and equality. However, a doctorate is viewed as an opportunity to enhance the productivity of individuals and the quality of the graduate labor force in reality (Rospigliosi et al., 2014). The mission of academia to raise lifelong scholars (Austin & Sorcinelli, 2013; Lovitts, 2005) has started to disappear under the effect of privatized ideas and neoliberal practices (Moreau & Leathwood,

2007). In consequence, people rush to pursue doctoral degrees with primary concerns and objectives regarding employability (Alhas, 2006) without considering their pedagogical implications.

1.2 Statement of the problem

In this local and global context, the enrollment rates and the quotas of doctoral programs are rising day by day on a large scale causing ‘PhD Glut’ (Sarrico, 2022), which is also the case in Türkiye. Table 1 below shows the doctoral education statistics of the Council of Higher Education (CoHE, 2023) in Türkiye. The statistics indicate that more people have been enrolled in PhD programs particularly in the last 20 years. In a comparable manner, there are also more students accumulated in PhD programs.

Table 1. Doctoral Education Statistics in Türkiye

Academic Year	#Enrollments	#Registered Students	#Graduates
2021-2022	19,050	109,540	8,857
2020-2021	18,876	106,148	7,598
2019-2020	20,894	101,242	8,069
2018-2019	20,262	96,199	7,332
2017-2018	16,773	95,100	6,045
2016-2017	12,458	91,267	6,052
2015-2016	14,192	86,094	5,192
2014-2015	12,200	78,223	4,516
2013-2014	9,397	67,157	4,551
2012-2013	13,349	59,763	4,462
2011-2012	12,956	51,468	4,617
2010-2011	9,500	42,938	4,659
2009-2010	10,736	44,407	4,235
2008-2009	7,622	35,669	3,744
2007-2008	7,726	34,879	3,339
2006-2007	7,000	33,711	2,581
2005-2006	8,422	32,503	2,827
2004-2005	6,729	27,335	2,664
2003-2004	6,367	24,835	2,805
2002-2003	5,476	23,176	2,458
2001-2002	4,764	22,514	1,975
2000-2001	4,827	21,739	2,113
1999-2000	3,550	19,543	2,567

The rising numbers can be considered in harmony with the rising population and with the educational effects of globalization. Nonetheless, the government implemented a policy to boost the number of PhD holders in Türkiye. Therefore, the recent massification case has a particular place. It was stated in The Eleventh Development Plan introduced in 2019 that there ought to be a greater proportion of those holding doctorates and their employment should also be enhanced in the country (Presidency for Strategy and Budget, 2019). Keeping this objective in mind, the CoHE expanded the quotas and launched new programs, which in turn gave rise to uncontrolled, massive expansion. Consequently, the total amount of learners has nearly tripled in the last ten years in doctoral education as seen in Table 1 above (CoHE, 2023). In the same vein, the diversity of the requirements of these programs has increased to deal with the rising statistics (Bakırcı & Karaman, 2010).

However, the number of graduates from these doctoral programs does not increase as much as expected. There are a lot of doctoral students starting and continuing their programs. The data in Table 1 indicates that there are still few graduates from these programs. Students enrolled in doctoral programs cannot finalize their degree within a given time. They are accumulated in the system as registered students or they leave their programs, which is a personal and social loss in the long run. Statistically, more than eight thousand individuals can get a doctoral degree per year in Türkiye (CoHE, 2022). Unfortunately, the data is much lower than the amounts of several other industrialized nations like Japan (16 thousand) and Germany (29 thousand) (CoHE, 2022). It is important to underline that these two developed countries are far beyond from Türkiye in terms of their positions in Human Development Index (HDI) interpreted by United Nations Development Programme (2021). However, it is still valuable to compare Türkiye with such

nations as opposed to developing ones to highlight disparities. Indeed, this statistical imbalance in Türkiye might also be the result of rising dropout numbers in Türkiye.

Indeed, it is required to retain and graduate these students in order to move forward in intellectual, social, cultural, and economic terms. Doctoral education contributes not only to the future of individuals themselves but also to the betterment of their societies (Heckman & LaFontaine, 2010). For this reason, students who cannot retain their education and graduate on time create a problem, especially for such developing countries as Türkiye where doctoral graduates with their autonomous status (Micheletti, 2010) have a huge potential to change the human future ineradicably by critically serving the common good (Chomsky, 2000).

Nonetheless, little information is available about this incomplete quest in Türkiye. It is crucial to understand the influence of personal, institutional and academic complexities beneath this picture to foster retention and graduation in doctoral education, which can contribute to the development of tailor-made doctoral program designs and the improvement of policies in doctoral education.

1.3 Purpose of the study

The aim of this qualitative study is to identify the influences of personal, institutional and academic complexities on student retention and graduation in doctoral education from the perspective of current doctoral students and recent dropouts in Türkiye. By taking the perspectives of both current doctoral students and recent dropouts into account, this study aims to offer a holistic understanding of the potential complexities playing a role in doctoral retention and graduation.

1.4 Research questions

Considering the increasing number of doctoral students and the limited number of graduates in doctoral education in developing countries like Türkiye, this study aims to explore the influence of personal, institutional and academic complexities on student retention and graduation in doctoral education from the perspective of students and dropouts. Towards this end, this dissertation is guided by the following research questions:

1. Personal complexities

- a. What are the personal complexities influencing student retention and graduation in doctoral education?
- b. In what ways do these personal complexities influence student retention and graduation in doctoral education?

2. Institutional complexities

- a. What are the institutional complexities influencing student retention and graduation in doctoral education?
- b. In what ways do these institutional complexities influence student retention and graduation in doctoral education?

3. Academic complexities

- a. What are the academic complexities influencing student retention and graduation in doctoral education?
- b. In what ways do these academic complexities influence student retention and graduation in doctoral education?

1.5 Significance of the study

Personal, institutional and academic complexities influencing student retention and graduation in doctoral education are investigated through a qualitative phenomenological study to unearth the underlying problems causing dropouts in Türkiye. Possible outcomes of this study will be significant in a number of ways for different parties, given the individualistic and societal costs of doctoral dropouts in such a developing nation pursuing a continuous expansion in higher education.

1.5.1 For prospective doctoral students

This qualitative study will help prospective doctoral students be more knowledgeable about doctoral education in Türkiye. They will have a chance to see the experiences of current doctoral students and recent dropouts before applying to doctoral programs. Therefore, they will be more aware of the challenges and opportunities waiting for them. They will evaluate the findings from their own perspectives and go through an extensive decision-making process. By doing so, they will apply for the most suitable program and university, considering their own needs and characteristics. This will not only enrich their doctoral experience, but also increase the possibility of retention and graduation on time for them. In addition, such conscious steps will help them navigate their future plans more efficiently upon graduation.

1.5.2 For current doctoral students

This qualitative study will make the muted voices of Turkish doctoral students heard by all stakeholders. Doctoral students will have a chance to reflect on doctoral education and their unique experiences in this challenging journey. They will also

realize the existing opportunities for them. In addition, they will feel the power of not being alone on their way to graduation when they see similar experiences presented by their cohorts in other universities or programs. Current students will evaluate their doctoral journeys, considering their own needs and characteristics in light of potential findings.

This evaluation process will enrich their ongoing doctoral experiences. For example, they will detect possible problems hindering their retention and graduation. At this point, they will get immediate support to solve them. Moreover, they will become more aware of the future challenges and opportunities upon graduation. Hence, these will increase the possibility of their retention and graduation on time. Furthermore, such conscious steps will help them navigate their future plans with a doctoral degree.

1.5.3 For doctoral dropouts

This qualitative study will make the muted voices of recent doctoral dropouts in Türkiye heard by all stakeholders. Doctoral dropouts will have a chance to reflect on their incomplete doctoral education and their unique experiences on this challenging journey. In addition, they will feel the power of not being alone when they see similar experiences presented by different dropouts in other universities or programs. At this point, they will realize problems hindering their retention and graduation to get support. They will also realize the existing opportunities for them.

Therefore, they will even re/consider completing their doctoral studies after gaining such awareness. They will re/consider their current needs and characteristics in light of potential findings. Hence, these will increase the possibility of going back to their education to graduate. By doing so, their negative doctoral experiences can

be replaced with positive ones. If not, they will become more aware of the challenges and opportunities for doctoral dropouts. In other words, such consciousness will help them re/navigate their future plans.

1.5.4 For the faculty

This qualitative study will help the faculty better understand the needs, characteristics and expectations of their current and prospective doctoral students. They will have a chance to develop better-functioning doctoral programs. For this aim, they will improve selection and admission criteria. They will also improve their course contents, instruction designs and supervisory skills. They will also provide on-the-spot support mechanisms such as effective mentorship programs or academic resources for their doctoral students in each stage of the degree. The faculty will take doctoral dropouts into account to gain them back with the necessary steps. By doing so, they will contribute to the continuous improvement of doctoral curriculum design and delivery in Türkiye. Additionally, all these will enrich the doctoral experiences of students and increase the possibility of their retention and graduation on time.

1.5.5 For administrators

This qualitative study will be useful for university administrators to have a deeper understanding of the dynamics involved in doctoral education. They will identify the areas for improvement from the perspective of doctoral students. By doing so, they will take the necessary steps at the institutional level to increase retention and graduation while hindering dropouts. In addition, they will promote support services not only for doctoral students and dropouts, but also for the faculty in charge of doctoral education. At this point, they will adopt the best practices and innovative

strategies to enrich doctoral experiences of their students. In the long run, they will enhance student retention and graduation in their doctoral programs. All these will also increase the academic quality and reputation of the institutions.

1.5.6 For policymakers

This qualitative study will provide valuable insights into the personal, institutional and academic complexities influencing student retention and graduation in doctoral education. It also provides policy suggestions. Policymakers will take the necessary micro and macro-level steps to increase doctoral completion while hindering dropouts in the light of study findings. For this aim, they will improve the target research and development services so that they will manage continuous improvement in doctoral curriculum design and delivery in Türkiye. Policy changes based on the needs and characteristics of current students and recent dropouts will not only increase the possibility of doctoral completions, but also the overall quality and the efficiency of the higher education system.

1.5.7 For the field of higher education

This qualitative study will fill the critical gap in HE literature through its theoretical and practical implications. The existing HE studies in Türkiye either neglect doctoral-level students or are not up-to-date at all. There is a lack of literature that problematizes the specific dynamics of doctoral education in such a developing country as Türkiye. The experiences of Turkish doctoral students and dropouts from their own perspectives are also missing in the literature. The recent experiences of doctoral students from dissimilar stages namely course, qualifying, thesis and of those who left doctoral programs in these stages are also missing in the literature.

The deeper analysis of the personal, institutional and academic complexities faced by these two groups, who finished the first year of their coursework, will have a significant place in the literature. Furthermore, the worldwide literature questions the retention phenomenon mostly at the undergraduate level. Therefore, this qualitative research will contribute to the advancement of knowledge in local and global literature by specifically addressing the phenomenon of retention of students pursuing doctorates level by putting the experiences and voices of Turkish students at the center.

1.5.8 For the nation

Each individual and the whole society will better understand doctoral education in Türkiye from the perspective of current students and recent dropouts. When all stakeholders benefit from the study outcomes for the advancement of further doctoral education curriculum design and delivery, the overall quality of Turkish HE will be ensured. Besides, doctoral completion rates will increase in the country. This also means that further dropouts will be prevented. In return, national investments in this area will not be wasted. Türkiye, as a developing country, will have more PhD graduates with higher-order skills. These individuals will scientifically and critically help the development of innovation and research, financial stability, knowledge production and societal change. Furthermore, individuals as intellectual agencies and the whole humanity consisting of these citizens will eventually come out ahead.

1.6 Definition of key terms

1. ‘Academic integration’ has two dimensions: ‘Structural’ and ‘normative’.

‘Structural integration’ is about fulfilling the requirements of the university. Besides,

‘normative integration’ is about learners’ connection with the normative framework of the educational ecosystem (Spady, 1970; Tinto, 1975).

2. ‘Adult learners’ are categorized into three groups by their age intervals: younger adults from 18 to 24, working-age adults from 25 to 64, and older adults from 65 and above (Wlodkowski, 2008). Unlike children, *adult learners* are more mature, independent, self-directed and autonomous in their learning activities (Knowles, 1984).

3. ‘Andragogy’ is the employment of specific techniques and ideas to instruct mature learners (St. Clair & Kapplinger, 2021).

4. ‘Complexities’, also called factors, reasons or motivations, are internal or external driving forces underlying individuals’ decisions to remain in or leave doctoral programs (Castelló et al., 2017).

5. ‘Composite interaction’ is a new term developed based on this study's outcomes to explain the coexistence of interactions between two codes from different categories or themes, and their different influences on retention and graduation, or dropout.

6. ‘Dropping out’ is the official or unofficial act of withdrawal from a doctoral program due to an extended period of the making of decisions and intricate engagements among many factors (Behr et al., 2020). Similarly, the term *attrition* refers to doctoral students leaving the program without finishing the requirements (Ali & Kohun, 2006). The terms dropping out and attrition are often used interchangeably.

7. ‘Enrollment’ is a process completed after a student is granted admission to a specific doctoral program at a university, which allows that student to select doctoral courses and take advantage of any university services (Knapp et al., 2012).

8. ‘First-generation university students’ are individuals whose families did not receive a university-level diploma as opposed to ‘second-generation university students’ whose parents got the university-level diploma (Engle, 2007). First-generation university students have less knowledge and expectations about their education. What is more, they have less social support at home regarding their studies (Pascarella & Terenzini, 2006; Palbusa & Gauvain, 2017). Accordingly, ‘first-generation doctoral students’ can be conceptualized as the first member of their families pursuing a doctoral degree (Hutson et al., 2022).
9. ‘Fundamental life retention’ is a new term derived from the findings of this study to describe the specific cases of Turkish doctoral students who have to prioritize their basic needs, such as housing or dining, before their academic retention.
10. ‘Graduation’ in doctoral education means getting the degree awarded for the successful completion of a scientific thesis or dissertation after multiple years beyond the master’s level (West et al., 2011).
11. ‘Interaction’ is a term used to describe the main relationships among three mutually exclusive areas of complexities in this study, which influences retention and graduation, or dropout.
12. ‘Post-traditional students’ are those who experience distance or online learning during their doctorates in times of globalization and digitalization for different reasons. This terminology is derived based on the findings of this study.
13. ‘Retention’ is staying in the university in order to complete an educational program with the help of students’ efforts and behaviors to become vigorous members of their institution (Tinto, 1987; Tinto, 1975). The terms ‘persistence’ and ‘retention’ frequently serve as synonyms. However, they are not the same. The term

retention has an institutional connotation. On the other hand, persistence is a student measure (Hagedorn, 2006).

14. ‘Matter of priority’ is a term used to highlight the importance of meeting such basic needs as housing or dining that need to be taken care firstly and quickly by Turkish doctoral students over academic goals.

15. ‘Social integration’ means the harmony of students’ needs and their university’s social system through formal or informal associations such as peer groups or extracurricular faculty activities (Spady, 1970; Tinto, 1975).

16. ‘Traditional students’ begin their further education as soon as they graduate from high school. These students have been studying continuously and full time in an educational setting (Laing et al., 2005). Besides, ‘non-traditional students’ re/start higher education later in their lives as opposed to traditional students. They are generally part-time students living outside of an educational setting (Laing et al., 2005). Inevitably, they have different motivations and goals for their education.

Regardless of their age and starting time, it is likely to describe ‘non-traditional students’ as those who have different family and job-related roles in life, live mostly outside of the campus and attend doctoral education part-time (Levine, 1993).

Moreover, the typology of Kim (2002) categorizes non-traditional adult students according to their age, background characteristics and risk of attrition, which is also meaningful within the scope of this study.

17. ‘Transfer students’ are those who enroll in a university and complete some credits there. Then, they transfer to a different university in order to complete their education (Cambridge Dictionary, 2023).

1.7 Summary of Chapter 1

Chapter 1 provides an outline of this dissertation. It is divided into six sections: (1) background of the study, (2) statement of the problem, (3) purpose of the study, (4) research questions, (5) significance of the study and (6) definition of key terms. To summarize, the study investigates the personal, institutional and academic complexities that influence student retention and graduation in doctoral education from the eyes of current doctoral students and recent dropouts. Furthermore, the impact of these complexities on student retention and graduation in doctoral education is discussed. The study intends to close gaps in the body of knowledge by suggesting alternative ways to improve the existing doctoral education through a new curriculum design and delivery in Turkish higher education. In line with this introductory section, the following chapter presents a review of the relevant literature.

CHAPTER 2

LITERATURE REVIEW

In this literature review part, the subject area is covered under five sections: (1) doctoral education, (2) characteristics of doctoral students, (3) aims of doctoral education, (4) student retention in doctoral education and (5) complexities influencing student retention and graduation in doctorate from broader angles while concentrating on the particular one.

2.1 Doctoral education

The most advanced level of study is a doctorate given by educational institutions worldwide throughout history (Park, 2007). The word ‘doctorate’ derives from the Latin word ‘docere’ meaning ‘to teach’ (Verger, 1999). In many countries, it is a required research degree to be able to teach in universities or to work in higher positions in the public or private sectors (Alhas, 2006). There are different types of doctoral degrees. Doctor of Philosophy (PhD) is the most prevalent and well-known type of it. The degree is given to individuals as a consequence of a research-oriented doctorate (Altbach, 2007c; Park, 2007a).

A doctoral degree can be awarded in many different fields in return for scholarly work. Besides, honorary doctorates are given to people who made special contributions to the university or the whole of humanity (Park, 2007b). The use and meaning of having a doctoral degree have changed over time. In addition, national or regional variations in doctoral education exist (Park, 2007b). Still, the importance of doctoral education and having a doctoral degree is overestimated in today’s knowledge-driven world for all individuals and countries (Macleod & Holdridge,

2004). Unfortunately, in recent years, knowledge gained from doctoral education has come to be valued more about its utility in the market rather than its potential for emancipation (Peters, 2002).

2.1.1 The role of doctoral education for individuals and society

A doctorate is beyond a realm providing deep knowledge as it also improves one's overall development (Walker et al., 2012). These crucial developmental points such as intellectuality or personality gained through doctoral education contribute to individuals and society at large (Elkana, 2006). Doctoral education develops scholarly integration, intellectual community, and stewardship (Walker et al., 2012). Putting research at the center, doctoral education raises scholars. Individuals who engage in scholarly work develop intellectually.

A scholar is meant to be a good steward embracing both academic and non-academic purposes (Elkana, 2006). When doctoral degrees come down to employability, their contribution to the public sphere via intellectuality is often ignored. It is not surprising to consider social sciences as worthless as they are not easily transferred into profitable careers in this sense (Giroux, 2009). Having no objection to the commercialization of intellectual property, some researchers pave the way for commercially favorable conclusions (Guterman, 2003).

Doctoral education is a formal route to raising researchers, and it has a significant influence on how new academics develop their own identities (Murray & Ozanne, 1997). It extends the mindset of individuals (Firat, 2001). In addition, doctoral education has an essential role in increasing interdisciplinary research capacity at the macro and micro levels (Boden et al., 2011). As stated by Giroux (2009), higher education, including doctoral level, is beyond job preparation. It is

more about raising conscious minds and developing interventions applicable to the public good.

Doctoral education is also a way of socialization. The socialization concept in doctoral education is a key element for understanding student development, retention and attrition (Gardner, 2008). It is a process of acquiring the knowledge, skills, and behaviors that make them effective members of their community (Weidman et al., 2001). Doctoral students, through socialization, enter into a professional career (Weidman et al., 2001). The socialization process of doctoral students covers different stages and multiple levels (Golde, 1998). At this point, Weidman et al. (2001) offer four levels to gain more insight into the socialization of PhD students. Accordingly, the first level is called ‘the anticipatory stage’ during which individuals collect information through digital platforms and in-person conversations in order to have a general understanding of a doctorate. The second level is called ‘the formal stage’ during which individuals receive additional official training on standards and guidelines. The third level is called ‘the informal stage’ during which individuals establish unofficial assumptions as being a part of academic societies. During the final level called ‘the personal stage’, individuals have deeper and more meaningful interaction with academic activities and people, which helps them develop their own identities (Weidman et al., 2001).

It is apparent that people gradually advance from beginner status to total membership within the academic society. In addition, they are socialized as current doctoral students and future professionals (Austin, 2002). Therefore, universities not only offer deeper information and intellectual perspectives but also shape the ideas, identities and values of students as citizens of the world (Giroux, 2009). It should be emphasized that doctoral degree holders upon completion of their doctoral journeys

step into and become members of a scholarly community and academic network contributing to their social capital. In accordance with Bourdieu's (1986) forms of capital, doctoral education also contributes to the economic and cultural aspects of people. From his perspective, individuals with doctoral degrees contribute more to the economic, cultural, and social accumulation of themselves and their surroundings. For instance, doctoral education and the degree provided at the end can help someone attain higher positions in jobs or be promoted; this may result in a salary increase, which would be an example of increasing economic accumulation, which might open another way for socialization for them. This, in return, helps them be perceived as intellectuals in communities among the public and increases the cultural and symbolic capital they acquire. Departing from this point, doctoral education has come to be considered a tool to increase symbolic and economic capital through the market value attributed to the degree.

From the side of transformative consumer research, education and research should aim to boost the wellbeing of people and their nations. Therefore, the mission of doctoral education can be thought as "to make a positive difference in the lives of [consumers], both present and future generations, through the chosen focus and conduct of specific research and in the [communication] of its implications and usefulness" (Mick, 2004, p. 2). The word transformative "signifies important and constructive influence, including the potential for [uplifting] change" (Mick, 2004, p. 2). What is interesting is that people who are in search of a higher-level of knowledge and expect to improve themselves together with their standards are considered consumers. This again points to the market value attributed to doctoral degrees today.

All forms of pedagogy present a way of understanding society and a specific commitment to the future of individuals and society (Freire, 1994). In this sense, doctoral education has immense potential to develop values of reason, freedom, and equality. As Freire (1994) argues, education including doctoral degrees can be a practice for freedom and expands the capacities necessary for human agency, which is integral to the idea of democracy. Hence, these pedagogical practices should be promoted through doctoral education in academia (Giroux, 2010). Particularly, the humanities should be updated to keep up with the complexities of this era and to conceptualize critical agency for the survival of democratic concepts (Giroux, 2009).

2.1.2 The role of doctoral education for knowledge societies

Education and research are core elements in the formation and sustainment of global knowledge societies (Marginson, 2010). Indeed, one of the prominent aims of knowledge societies is to promote the capacity of human capital through education and research in a globalized world. Therefore, promoting availability of possibilities for ongoing learning and inquiry in countries for all is a more critical issue for this purpose. In this system, doctoral degree holders are instrumentalized as knowledge-acquiring machine-like objects to develop practical capabilities. However, the ideal and main purpose of a doctoral degree is supposed to be driven by more humanistic objectives by respecting learner autonomy (Mielkov et al., 2021). In this sense, a humanistic approach takes a stand against formalities and commonalities in higher education and focuses on ‘human capacity’ not on ‘human capital’, which is more democratic and radical (Gilyazova et al., 2021). This domain raises a person into an independent thinker and a doer who is endowed with cultural, national and social information and abilities (Howard, 2018). Learners need to develop their

personalities and soft skills such as creativity to encounter the complexities of the existing status quo of today's world (Hilt, et al., 2019).

Nonetheless, governmental policies, in many countries, focus on the growing role of scholarly work and research under the pressure of the worldwide knowledge economy (Marginson, 2010). From this point of view, practices conform to the 'narrowly focused idea of the university as support to the economy' (Sharp, 2002, p. 280). Consequently, doctoral education is seen as a way of contributing more to people and their society by enhancing the potential productivity of the graduate labor force (Rospigliosi et al., 2014). Given this, graduate learning serves as one of the key mediums for raising scholars, is at the center of personal and national investment (UNESCO, 2008), which has a special place especially in the developmental agenda of developing countries (United Nations, 2000).

Universities, especially with their research side, enable nations to catch up the recent trends of the 21st century (Altbach, 2007a; Altbach, 2013). Globalization has pros and cons for developing countries in this regard (Altbach, 2004; Knight, 2008). On the one hand, it helps them participate in global scientific and economic networks with their graduate labor force. On the other hand, it is really a big challenge for them to compete with developed countries and their highly skilled graduates. This competition is not fair.

Globalization and neoliberalism raise many concerns in terms of social, economic, and educational inequality with a market-based system in education (Brown, 2009). Hence, the existing injustice and inequality in education all around the world somehow reproduce themselves. In this era, doctoral education should be less about informing students in their specific fields. It should be more about raising responsible citizens of the world aiming for long-term returns. Nonetheless, there is a

fear and insecurity of taking risks and engaging in social criticism among public intellectuals at present (Giroux, 2009). Even under these circumstances, governments give greater importance to doctoral education for their future in a global neoliberal environment (Olssen & Peters, 2007). Higher education institutions have a rush to produce employable graduates who can continually develop themselves (Moreau & Leathwood, 2007).

Greenberg (2003) criticizes romanticized thoughts describing education as not a business. He relates education and training to employability and sees the investment in public goods as a burden (Giroux 2009). The privatized ideas and practices of market fundamentalists like Greenberg pose a big danger to democratic public sphere and academic freedom as highlighted by renowned critics like Giroux and Freire. In such a time when the boundaries between public good and private good are getting blurred day by day, people in academia turn into profit-seekers rather than truth seekers, which is reflected in their research and causes the erosion of ethics (Bok, 2003). To put it differently, people and society might be put aside in this context (Angus, 2007). That is why higher-level education providing critical perspectives like doctoral studies is more important than ever in this age.

2.2 Characteristics of doctoral students

Understanding the characteristics of doctoral students is crucial when explaining their reflections on their retention or dropout behavior in a doctorate. Theory of Adult Learning is insightful in the context of this study. Malcolm Knowles (1984) developed the Theory of Adult Learning and proposed five basic assumptions on ‘experience’, ‘self-concept’, ‘readiness to learn’, ‘learning orientation’ and

‘motivation’ as a fifth assumption was added later. These five assumptions about adult learners and adult learning are closely related to the characteristics of doctoral students. These assumptions (Knowles, 1984; p. 12) are as follows:

1. ‘Self-concept’: “As people become mature, their self-concept moves from one of being a dependent personality toward one of being a self-directed human being.”
2. ‘Readiness to learn’: “As people become mature, their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles.”
3. ‘Orientation to learning’: “As people become mature, their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly their orientation towards learning shifts from one of subject-centeredness to one of problem-centeredness.”
4. ‘Experience’: “As people become mature, they accumulate a growing reservoir of experience that becomes an increasing resource for learning.”
5. ‘Motivation to learn’: “As people mature, the motivation to learn becomes internal.”

The assumptions of the theory of adult learning given above explain who doctoral students as adults are and what their characteristics are. Considering the Theory of Adult Learning (Knowles, 1984), doctoral students are mature and independent human beings. Therefore, they are self-directed in their actions, including their educational choices or decisions. For example, they go through independent decision-making processes before selecting and starting a doctoral program relevant to their own needs. Their thoughts and behaviors can also be affected by several factors such as financial issues. If a doctoral student as an adult can pay for his or her learning, s/he has a better chance to make decisions and selections about what

program they will apply for, where they will study and whether to be a full time or part-time learner. They also have more chances to make their own independent decisions during any dropout action. Hence, doctoral students are supposed to be mature adults in theory and to have independence in their actions. However, doctoral education should have a space for students to nourish their minds intellectually with the help of radical implementations (Micheletti, 2010), and they should not be oppressed in education as the pure receiver of information but be emancipated through critical thoughts (Freire, 1991).

Doctoral students who are sponsored by an authority such as their employer or those who have scholarships for their studies might not have such an independent decision for any continuity or non-continuity in their doctoral degrees. Doctoral learners can also apply for a scholarship for their studies, which helps them feel free to make decisions and selections for the program, place, and timing. In scholarship or self-sponsoring cases, students are expected to be motivated to successfully complete their studies and not waste the funds or loans. When their expectations are not met in doctoral education, their motivation might be lower. This means that they can simply participate so as not to miss the given opportunity and not to waste money (Boulton-Lewis et al., 2001; p. 90). In this case, they somehow avoid leaving their doctoral program, but the quality of this education forced by lower motivation is open to debate.

Additionally, students with a lack of necessary financial support get sponsorships from private corporations, and they cannot find their own way during doctoral studies because they somehow borrow their way of education and graduation (Giroux, 2009). Universities sometimes have contracts with private organizations to get research funds or to open places such as dormitories, cafes or

bookstores on campus. In this case, students become customers of specific commercial sponsors (Croissant, 2001). What is even worse is that scientific studies become advertisements.

Doctoral students learn something with great interest when they need to learn it (McKechnie, 1978). To put it in another way; doctoral students are highly motivated to learn and complete their degree when they are ready to learn based on their needs. In addition, they tend to learn more and complete their doctoral degrees faster. For example, a student will be more motivated to complete the degree when he or she turns the knowledge and skills gained in the doctoral program into a promotion. Hence, readiness to learn and the need for learning are outstanding elements for doctoral students to continue their programs or to avoid leaving them.

Kamenetz (2006) labels students of this era as ‘a generation of debt’ and the prominent need of this generation is to pay their debts. That is one of the reasons why students limit their career choices to the corporate workforce with entry-level salaries based on several surveys (Tannock, 2006). Public service jobs offer them rewards instead of higher salaries, which is a hindrance to paying back their debts. Doctoral education offered by public universities is free in Türkiye, and this applies more to the American context.

However, unlike doctoral students who are mostly employed in such positions as teaching assistantships in universities in many other contexts, doctoral students in Türkiye have to work outside of academia during this journey to maintain their lives, which means that they try to perform a double task at the same time. As doctoral students have to work, they try to select programs related to the sectors they work in to maximize their financial profits. In this case, this becomes a primary factor that increases the possibility of retention and graduation.

Doctoral students are more problem-orientated. Therefore, they want to apply their knowledge immediately to given tasks or problems, which increases their motivation to complete doctoral education. In this case, the content of their doctoral education, and the practicality of learning outcomes are important for them to sustain their education. Universities should offer such a pedagogical environment that they can create socially responsible, active and critical citizens who can solve problems and question the given truths (Giroux, 2009).

Doctoral students have more experiences as opposed to younger learners, and they can benefit from accumulated experiences for their learning actions in negative or positive ways. In other words, doctoral students use their previous experiences, which motivates them to learn, continue to learn and complete their learning action. Doctoral students share their experiences with others and learn from their experiences of them (Galbraith & Fouch, 2007; p. 37). For instance, they can transfer their workplace experiences to their scholarly works and vice versa.

Besides, doctoral students bring their personal and social experiences to the learning setting. They have real-life examples to make their learning more meaningful. They also have more real-life problems to struggle with. If they relate their doctoral education to their professional or personal life, they are expected to be more interested and motivated. If they cannot relate their doctoral education to their professional or personal life, they are less interested and less motivated, which can result in dropping out of doctoral programs. Here, the role of doctoral education and educators is critical in providing students with real-life situations and autonomy so that they use their experiences while improving intellectually (Freire, 1991).

Doctoral students, as adults, have internal motivation in their learning actions according to Knowles (1984). That is the reason they mostly initiate, continue, and

complete their doctoral education with an inner motivation that is not triggered by any external factors. Beyond motivation, the learning styles of individuals change over time with age and experience. The life span of learners affects their learning styles (Brookfield, 1986). Doctoral students, in their life cycle, become mature and go through phases of life.

They can learn and motivate in unusual ways, at contrasting times and for different purposes over time. Nonetheless, external personal, institutional and academic factors can shape the decisions and actions of doctoral students most of the time in today's challenging conditions. For example, if scholarship can function as an external factor for a doctoral student to retain his or her studies, then it will have corporate effects on his or her actions. Students can unfortunately be the servants of the market supporting its needs instead of contributing to the common good (Aronowitz, 1998).

Studies in adult learning show that intrinsic motivation contributes better to the understanding of learning actions since adult learners have intrinsic needs and physiological drives, and these intrinsic needs help them act (Deci & Ryan, 2000). A significant point here is that motivation has a two-way function; that is, motivation affects doctoral students' learning, and learning affects the sustainment of their motivation to complete their doctorate (Schunk et al., 2008). In other words, if they are motivated before or during a learning process and they achieve their learning goals, their learning and performance are positively affected.

Similarly, if doctoral students realize that learning is possible, they are motivated to complete their education and set new learning goals for themselves. Extrinsic motivation should not be ignored for this target group. Most of the time,

adults living in the age of globalization have to shape their educational decisions and actions based on extrinsic motivational factors like promotion or a new position.

2.3 Aims of doctoral education

The characteristics of each graduate system can vary according to national requirements (Altbach, 2013). In general, graduate education covers master's and doctoral programs as well as post-doctoral programs. Graduate schools basically have three main goals: selecting, evaluating, and educating graduate students (Clifton, 2009). Each graduate program also has specific missions paralleling national and global aims. Master's and doctoral programs can have specific aims. All graduate schools, however, expect a graduate student to meet the scientific and academic qualifications of the applied programs (Demirtaşlı, 2002; Alhas, 2006). In this sense, raising scientists, academics and researchers is the main and initial aim of graduate schools (Austin & Wulff, 2004). These prospective scientists, academics and researchers are supposed to produce knowledge, use that knowledge, and solve problems while scientifically criticizing them.

Doctoral programs educate students in a more detailed way to raise more knowledgeable and effective individuals by giving them expertise in a specific field as opposed to an undergraduate degree. Hence, doctoral education functions as an intensified learning experience and a formal pathway to professionalization in a specific field (Austin & Sorcinelli, 2013). Doctoral education is more than an education ending with a diploma. Instead, it is a long journey of acquiring research skills, improving professional development, learning how to learn, and synthesizing cultural and ethical issues (İnce & Korkusuz, 2006). In today's world, not only universities but also other sectors require such a qualified labor force (Alhas, 2006).

That is one of the reasons why doctoral degrees have become a prerequisite for some other jobs, too. Doctoral education serves the public good and grows thoughtful intellectuals ‘in order to help us find our way to a more human future’ (Chomsky, 2000, p. 34). The number of graduate schools and the diversity of requirements have increased following such a demand (Bakırcı & Karaman, 2010).

As knowledge creation is among the priorities of developing economies, the role of doctorates as well as their numbers within an entire system is rising (Mitra et al., 2011). Universities should promote the public good by expanding research focusing on social issues and training critically engaged individuals (Giroux, 2009). Corporations should not exercise their power over universities and academics for the sake of developing better economies. Only then can doctoral education as a public realm survive and continue to serve democratic values by embracing public pedagogies (Giroux, 2009).

2.4 Student retention in doctoral education

National data from many developing countries show that the number of enrollments in doctoral programs is rising. However, it is not enough to enroll many more students in higher education, it is also important to retain them. Unfortunately, the number of enrollments is not in harmony with the expected number of graduates. The imbalance between inputs and outputs is, therefore, one of the main problems of higher education (Paura & Arhipova, 2014).

The reason behind such a picture is that many of the students cannot complete their doctoral journeys in one way or another, and they have to leave graduate school. The Bill and Melinda Gates Foundation (2014) describes dropping out as leaving the institution without getting the degree awarded after completing the

program. It is the official or unofficial act of withdrawal from a doctoral program as a result of a long decision-making process and complex interaction among many factors (Behr et al., 2020). On the other hand, retention is related to the students' efforts and behaviors toward becoming active members of their universities (Tinto, 1987).

Dropping out of a doctoral degree or choosing not to retain it is a huge problem even in such developed countries as the United States of America. Student dropout is a complex phenomenon with many underlying reasons, and it is called a 'wicked' concept without a single solution and with complex symptoms beyond control with traditional methods (Beer & Lawson, 2018). Individuals make sacrifices to enroll in these programs, and the state invests huge amounts of money in those doctoral programs (Wendler et al., 2010). Hence, students who leave their doctoral programs pose a big threat and burden to their nations because their attrition causes a waste of investment for countries.

In addition, dropouts in doctoral programs not only negatively affect the futures of individuals but also those of the universe (Heckman & LaFontaine, 2010). Therefore, it is more than necessary to understand personal, institutional and academic complexities to analyze retention reasons and outcomes for doctoral students in order to prevent such undesirable educational actions as attrition while increasing retention rates.

2.5 Complexities influencing student retention and graduation in doctoral education

As stated by Leone and Tian (2009), the attrition rates in education are not only a financial failure but also an academic failure for higher education institutions on their path to actualizing their main goal. Understanding and promoting student retention

have been among the most critical issues for them throughout history. The possible reasons presented in the literature for student dropout in a doctorate are closely related to student retention, too. For example, if financial problems are one of the reasons for student attrition in a doctorate, having a scholarship or a fund is expected to be one of the reasons for student retention.

Students in doctoral programs are adults. There are many ways to retain these learners in their education until graduation (Leone & Tian, 2009). Adults can have different reasons to achieve or not achieve their graduate goals based on their specific features in terms of ‘self-concept’, ‘experience’, ‘readiness to learn’, ‘motivation’ and ‘orientation to learning’ (Knowles, 1984). Therefore, it is rather crucial to understand their features, lives, experiences, goals, and motivations while analyzing their behaviors including attrition and retention (Morstain & Smart, 2016).

There is sometimes a mismatch between doctoral students’ characteristics, goals, experiences, training and their actual careers (Golde & Dore, 2001). However, the careers of doctoral graduates are not systematically tracked in many countries (Sarrico, 2022). Hence, it is impossible to understand the level of education-career mismatch deeply. Such a conflict experienced by students contributes to their decisions to continue or leave the school (Lovitts, 2001). Fortunately, graduates are employed in general, but they feel such a mismatch between their training and their actual career. In the discourse of employability, individual responsibility is highlighted, and social inequalities are mostly neglected. However, inequalities and challenges experienced by graduates inevitably damage their determination to finalize their education (Moreau & Leathwood, 2007). For example, language can be a challenge and bring about inequality in the scientific environment. Actually,

language itself is always a complex issue for researchers in developing countries (Altbach, 2007b).

Many universities require competence in English, the global scientific language, from their students so that they can function effectively in the global knowledge network. Again, according to Altbach (2004), English as the most commonly used scientific language makes the academic systems in which it is spoken more influential on other systems. As a result, practically all higher education fields largely rely on books, journals, printed materials and databases that are in English. Unfortunately, these resources are expensive for universities, academics and students in developing countries since their target audience is Americans or Europeans. Due to language barriers, students either leave their graduate studies completely or prefer to start a new graduate program taught in their native language. To exemplify, a study in Italy has indicated that even reducing any kind of inequality in education does not guarantee the completion of school (Bratti et al., 2008).

Furthermore, the best students and researchers who have better scientific competence can be lured away by other universities in this market-based system (Altbach, 2013). For example, the Netherlands has such an attraction for researchers. Here, students can have better facilities and are supervised by active researchers, which results in higher retention rates (Van Ours & Ridder, 2003). Students can enroll in another program with better facilities in their own country or another country for similar reasons.

Besides the language and better facilities, the way the instruction is designed and delivered can also be a reason for retention (Barefoot, 2007). A longitudinal study conducted in Spain with 7000 university students shows that academic preparedness has a major impact on university completion (Lassibille & Gómez,

2008), which can also be an important reason for graduate dropouts as graduate-level education requires more academic production. In this study, older students who delay entry into higher education are more likely to leave before graduating. Hence, age is an important factor for retention.

Little (2008) emphasizes that overage students who are repeating their degrees or adults in higher education have the pressure of their jobs or families. The change in their family or job status, their military commitments and their dissatisfaction with the particular program can be among the common reasons for dropouts (Wendler et al., 2010). In addition to this, financial support and family characteristics of university students are other significant issues affecting their attrition and retention (Lassibille & Gómez, 2008).

The findings of empirical studies on dropouts conducted in Germany show that the demands of a higher education institution can sometimes be too much for learners to handle. They have wrong expectations and less identification with the subject matter. They also have problems financing their studies (Heublein, 2014). Unfortunately, financial, social, and personal issues can trigger withdrawal from education (Qureshi & Rarieya, 2008).

Age, expectations, identification, financial support, family characteristics and the demands of institutions are among the reasons for retention in doctorate because adult students' palette of life experiences becomes more colored with age, employment, and other roles or responsibilities that might be reflected in their educational decisions (Villela & Hu, 1991). Moreover, students with different ages or different potentials are sometimes placed in the same program and treated with inappropriate methodologies. Hence, they drop out of their schools (Lloyd et al., 2006).

From another perspective, students can leave university because of class-cultural discontinuities (Lehmann, 2007). To illustrate, a survey conducted in Texas with 108 graduate students highlighted the vital role of the faculty, financial aid, and a need for community and connectedness to sustain commitment and success (Bain et al., 2009). Students are not able to relate themselves to the school habitus and people such as other students, staff, or professors.

The actual reason for such discontinuity is social class differences among students based on some quantitative research conducted in developed countries (Lambert et al., 2004; Quinn, 2004). Students from different social classes have different levels of commitment to school. On the other hand, a few Canadian studies have found little relationship between class differences and university retention (Butlin, 2000). There is limited research about the effect of social class on student attrition and retention. However, class differences are a potential reason for continuing or discontinuing a doctorate.

Like social class, gender can be another reason for student attrition and retention especially in male-dominated countries. In addition, female dropout rates are higher than those of men in most countries. A case study was conducted recently based on in-depth interviews with five female students who left their doctoral education in Türkiye by Gür and Bozgöz (2022). The findings of this study have shown that female doctoral students cannot retain their motivation. Academic disappointment, household roles and responsibilities, institutional deficiencies and financial problems are the main reasons for losing motivation towards a doctorate. Women are endowed with household roles, and they have difficulty sustaining their education. During the COVID-19 pandemic, it has become increasingly evident and

aggravated that female scholars experience feelings of marginalization and invisibility as their careers advance (Akbulut Yıldırım et al., 2021).

Even though women comprise the majority of graduate schools, their number is limited in male-dominated fields such as engineering (Wendler et al., 2010). They have difficulty building resilience for their education. Howe-Walsh and Turnbull (2016) assert that a male-dominated work culture that places significant demands on women's personal lives is the primary reason of this unfavorable condition. It is feasible to draw the conclusion that regular patriarchal activities oppress women and worsen their social marginalization.

Khan and Rizwan (2011) state that poor, illiterate, and traditional families make their daughters engaged in household chores not in higher education. Female students who do not receive any support even from their families can easily leave their programs. In this regard, policymakers should conduct in-depth research to understand and prevent further dropouts. Any kind of support mechanisms including financial and social ones should be activated to eliminate negative factors reducing the motivation of doctoral students (Gür & Bozgöz, 2022).

The term retention is identified as ‘degree completion versus non-completion’ or as ‘dropping out versus not dropping out’ (Leone & Tian, 2009). Leaving school is regarded as the termination of an educational journey without obtaining the degree offered, and it is mostly calculated and interpreted with the help of statistical estimation in previous studies. However, it is a complex issue and more qualitative interpretations are required to prevent it for the sake of individual and national developments. In addition, the literature mainly focuses on university-level retention or attrition rates. There is an avoidance or escape behavior directed by any

undesirable event or idea beneath almost all attrition behaviors (Tsutsui-Kimura et al., 2017).

There is still much to be learned especially from doctoral students' specific experiences to be able to interpret student retention in developing countries in greater detail and to decrease student attrition while increasing retention in doctoral programs by implementing necessary changes. It should not be forgotten that student attrition and retention in master's and doctoral programs can have different reasons and outcomes. This study focuses on personal, institutional and academic complexities influencing student retention and graduation in doctoral education.

2.6 Summary of Chapter 2

Chapter 2 connects this study to the relevant local and global literature by organizing it into five sections: (1) doctoral education, (2) characteristics of doctoral students, (3) aims of doctoral education, (4) student retention in doctoral education and (5) complexities influencing student retention and graduation in doctorate. To summarize, a general picture of doctoral education is provided at first glance. Students' distinctive adult characteristics are taken into consideration keeping in mind that they are the main agency in doctoral education. The goals of doctoral education are then discussed. The student retention phenomena in doctoral education is investigated believing the necessity of accomplishing these goals and obtaining the best efficiency in doctoral education. The chapter concludes with the potential difficulties that affect student retention and graduation in doctoral programs. The following chapter moves this literature section forward by providing a contextual background for this Turkish case.

CHAPTER 3

CONTEXTUAL BACKGROUND

In this part, the contextual scope of the study is presented. Contextual background knowledge related to the target context, Türkiye, in which the study is conducted will be useful to understand the whole study in a better way. In accordance with this purpose, (1) the country profile of Türkiye is briefly explained at first glance. Then, (2) higher education in Türkiye and (3) doctoral education in Türkiye are discussed.

3.1 Country profile of Türkiye

According to the OECD (2023), Türkiye is defined as a developing country. The rank of the country in Human Development Index (HDI) is 48 out of 191 countries and territories in the world (HDI, 2021). Although its position is rising day by day, there still a huge gap between Türkiye and developed countries in terms of gender, inequality and poverty. Türkiye is like a bridge country connecting the continents of Europe and Asia. It shares borders with Iraq and Syria to the southeast; Greece and Bulgaria to the northwest; Georgia to the northeast; Armenia, Azerbaijan and Iran to the east; and the Mediterranean Sea to the south. The seven geographic regions of Türkiye are as follows: Marmara, Black Sea, Central Anatolia, Aegean, Eastern Anatolia, Southeastern Anatolia, and Mediterranean.

The country has a rich and long cultural history because of its geographically critical position. Türkiye is a democratic, secular nation with a unitary constitutional system. The official language of the country is Turkish and the official currency is the Turkish Lira. Ankara, one of the biggest cities, is the capital of the country. The overall population is about 85 million. Türkiye key has been ranked 18th out of 194

countries concerning its population size based on the recent data of the Turkish Statistical Institute (TÜİK, 2023). Additionally, the youth population makes up 15.2% of the total population. The overall unemployment rate is 10.4%, whereas the youth unemployment rate is 19.4% in the country (TÜİK, 2023).

3.2 Higher education in Türkiye

Higher education (HE) in Türkiye has a lengthy history with the formation of the first public university in the early 20th century (Durgun, 2020). Istanbul University, originally founded as a madrasa in 1453, underwent modernization during Ottoman times (Türkoğlu, 2023). It is thought to be among the world's oldest universities. Because of this, it has been a key model in forming the nation's university system (Dölen, 2010). Following this, a number of other public institutions were formed in Türkiye, including Ankara University and Ege University. It appears that new educational opportunities, including both public and foundation universities, have been crucial in giving more students from a variety of backgrounds access to a higher level of learning (Özoğlu et al., 2016). Over years, the issue of access somehow turned into boosting numbers without much ensuring quality.

The HE sector has shown significant growth all over the world especially to meet rising demands, but not all countries have progressively experienced this massification (Özoğlu et al., 2016; Schofer & Meyer, 2005). Some industrialized and developed countries have provided earlier and better access to HE. Thus, they increased their enrollment rates earlier than many developing countries. In this sense, their HE models have led others. Furthermore, HE studies, as an area of academic study, took on new dimensions (Akbulut Yıldırımış & Seggie, 2018).

According to Altbach (2004), the higher education systems of these core countries have been used as a reference to shape those of the periphery countries historically. That is to say, universities in developed countries have had an influence on universities in developing countries like Türkiye from the past to the present. Even so, several emerging nations have also successfully expanded their HE systems to the public throughout the past few decades (Dias et al., 2011). This global social trend forcing societies to expand their HE systems has also been reflected in Türkiye since the 1960s (Çetinsaya, 2014). This worldwide growth has helped more students access universities in many countries including Türkiye in a short time (Gök, 2016), which is a controversial issue due to its long-term negative effects.

Expansion in HE has not started all of a sudden with the recent trends in the country. Foundation universities are established by a foundation as their names suggest. They charge students with tuition or they provide scholarships as opposed to free public universities run by public funds. The higher education system in Türkiye has a dual structure consisting of public and foundation universities based on the Higher Education Act No. 2547 following the military coup in 1980 (Birler, 2012), which has let more universities and students enter the system since then. This military coup also resulted in the creation of a new constitution in 1982. In addition to this structural shift, it has fundamentally changed the political landscape in the country allowing the integration of the national economy into the global market system (Ercan, 2005). Expectedly, Türkiye has employed several expansion strategies to meet the growing HE needs especially after the structural changes applied during those times (Özoğlu, 2011). Even so, the higher education system in Türkiye during the 1980s can be characterized as elite reaching fewer people statistically.

The country has not been much criticized by other countries or leading educational organizations during the years of uncontrolled growth. It is because of being considered in the phase of rapid industrialization that requires a more educated population (World Bank Report, 2007). However, Türkiye's position in the Global Competitiveness Report regarding the quality of HE has started to decline (Kaplan, 2010) due to unplanned and sudden growth in its HE system. At this point, policymakers have been called on to take action to improve quality, but reformist steps have only been taken for vocational schools and not for all HE institutions to increase their standards and quality. These vocational schools are considered HE institutions in Türkiye. It is important to remember the vital role of higher education in providing a foundation for professional, academic and financial success, as well as for personal and psychological success, which fosters the social and cultural development of society (Senay et al., 2020).

Additionally, the connections between HE institutions and the business sector have increased with similar goals (Hatakenaka, 2006). Furthermore, the CoHE has been called upon to reduce the number of students enrolled in four-year university programs and increase the number of students receiving vocational training by the business sector as a response to deteriorating quality in education and labor market conditions in the country (Kurul Tural, 2007). On the contrary, some underrated four-year university programs have already had few students since the alarming graduate job market has forced some high school graduates to pursue high-ranking universities and departments. That is the reason some job guarantee fields, suggesting that they offer more employment upon graduation, have more students in Türkiye (Habibi, 2017). Then, the CoHE has called on the universities to combine the programs that do not have enough students.

At this juncture, it is essential to remember the place of the CoHE in the HE system of the country in time. The CoHE has been given control over the HE systems in Türkiye following the 1981 reform, which promised planning for improving access, effectiveness and cooperation (Mızıkacı, 2003). The educational system which is highly centralized in the country from preschool to university years has become even more centralized with this attempt (Altinyelken et al., 2015). In parallel with this, Akbulut Yıldırım et al. (2015) argue that Turkish universities have a completely top-to-bottom organized system and they have to adhere to rules and procedures required by the CoHE. Hence, there is less involvement from different stakeholders in educational processes.

Moreover, the CoHE's dominating position in the system has put academic autonomy and independence in jeopardy for years (Mızıkacı, 2003; Yıldız, 2014). The CoHE has substantially limited universities' ability to generate their own plans and increased the level of pressure on academics in the country (Kaya, 2014). Despite definitional differences among the researchers, it would be beneficial to remember the definition of academic freedom by Gökbel and Seggie (2015) at this point as it has been mainly used in Turkish HE literature. According to them:

the freedom of members of an academic community, comprised of scholars, teachers, and students, who pursue their scholarly activity within a framework determined by that community. It includes freedom of expression, learning, teaching, and research, as well as university autonomy and individual rights and freedoms, such as job security and the right to participate in decision making processes (p.10).

The arguments on academic freedom in Türkiye are just linked to the idea of university autonomy (Aydın et al., 2020). At this point, the definition of Gökbel and Seggie (2015) exceeds the limits and underlines the fact that the members of an academic community consisting of scholars should be able to seek scientific

knowledge without being concerned about any constraints (Kandiyoti & Emanet, 2017). In addition, the relevant article of the 1981 Constitution clearly indicates the place and limits of academic freedom in the country as follows:

Universities, members of the teaching staff and their assistants may freely engage in all kinds of scientific research and publication. However, this shall not include the liberty to engage in activities against the existence and independence of the State, and against the integrity and indivisibility of the nation and the country (Article 130).

On the further side of definitions and legal basis, Türkiye has signed many international commitments such as the Paris Bologna Communiqué 2018 to ensure the application of academic freedom. Unfortunately, it has an extremely dark history of protecting them (Aydın et al., 2020). What is even worse is that violations date back to the 1930s and generally occur after major political events.

That is to say, academic freedom and autonomy in universities have consistently continued to be threatened (Fındıklı, 2020). Although academic freedom improved in the early 2010s to some extent, the situation has become even darker in recent times especially after the military coup attempt on July 15, 2016 (Doğan & Selenica, 2022). Following the July 15 coup attempt, Türkiye's state of emergency decree-laws established a constitutional foundation for political actions limiting and suspending the rights of people (Öztürk, 2018; Scholar's Rights Watch, 2018). With the enactment of decree law no. 667 announced on July 23, 2016, over 2341 higher education institutions were closed in the country (Baser et al. 2017). As a consequence, about 110,778 researchers and civil servants have lost their positions due to their claimed ties with the Gülen Movement or related groups (Scholar's Rights Watch, 2018; Özkırmılı, 2017). Even though the rest of academia stayed functioning, the academic and non-academic regulations in the country and the

supervision of the CoHE made them feel limited (Aydın et al., 2020; Aktas et al., 2019).

According to the qualitative data of 15 academics in Türkiye (Aydın et al., 2020), the majority of the scholars, identifying themselves as apolitical, became the subjects of political pressure under which their academic voices were met with unfair results. The participants added that they had traumatic experiences as supporters of democracy and peace in their society. Moreover, academic and emotional hardships led some of them to leave their home countries in search of a new life and opportunities.

Furthermore, today's scholars especially in foundation universities confront the fact that they voluntarily obey the degenerated rules and practices as well as the harsh working conditions of their organizations which are away from academic freedom and autonomy in order not to be locked out, which in turn deteriorates the overall academic climate in the country (Balyer, 2011). Under these conditions, Türkiye's academic reputation has progressively fallen in rankings since 2016 despite large investments in HE (Hosoglu & Akturk, 2023) during times when academic achievement is unquestionably the most important factor in determining a university's excellence and standing in the world (Erdoğan et al., 2016).

According to Günay and Günay (2017), academia itself presents a greater challenge than issues with academic freedom or autonomy. They argue that rather than embracing or possessing freedom on paper, academics should focus on reality and disengaged from any personal gain. While speaking of academic freedom and the harrowing experiences of academics, it is necessary to mention how most university administrators including rectors and deans apply arbitrary and oppressive attitudes. According to Özdemir-Taştan and Örddek (2020), non-democratic and non-

autonomous practices imposed by the CoHE are put into action via these assigned administrators in universities, which seriously undermine academic freedom and autonomy in universities. For example, some scholars faced the fact that they were in a position of vulnerability in the eyes of the administrative people in charge of initiating investigations and reporting them to authorities during any dismissal process. This shows that power relations among academics with different positions even within the same university are not balanced.

In fact, Article 120 of the 1961 Constitution secures academic and administrative autonomy in Turkish universities by underlining that “Universities shall be administered and supervised by organs consisting of qualified members of the teaching staff elected from among themselves”. It also says that “Universities are public corporate bodies enjoying academic and administrative autonomy.” This shows that academic and administrative autonomy had its legal grounds during those times when the boundaries of a university were full of autonomy and freedom (Çelik and Gür, 2012). Over time, academic freedom and autonomy in Türkiye were not allowed to improve effectively (Seggie & Gökbel, 2015) based on different sociopolitical events resulting in restrictive modifications in Article 120. Indeed, it can be inferred that scholars have a form of restricted freedom within the context of controlled autonomy (Marginson, 1997).

In the meantime, some countries like Germany made a difference by adopting university autonomy considering it a necessary step for academic freedom through the democratic election of faculty and administrative staff (Altbach, 2001). On the other hand, even elected faculty and administrative members in Turkish universities sometimes use their power in non-democratic, authoritative ways (Kutoğlu, 2022). The rising existence of assigned members in universities and the dismissal of elected

members contribute much to the serious deterioration of freedom and autonomy in Turkish HE (Kahraman, 2023; Karadağ, 2022).

According to significant theorists such as Cole (2017) and Butler (2017), academic freedom and autonomy are highly critical for the functioning and sustainment of a democratic nation as well as a better society. Socially engaged scholarships need to disseminate their expertise to the public at large to participate in societal transformation (Beaulieu et al., 2018). Without ensuring it, the role of universities and scholars will be reduced to teaching. Moreover, the idea of democracy and a democratic society will be in danger. As critically highlighted by Doğan and Selenica (2022), Türkiye has not much succeeded in developing the Gramscian intellectual foundation necessary for social transformation. Therefore, academia and scholars need to be protected from any threat that silences their scientific and critical voices for the survival of democratic thinking and diversity in the country (Aktas et al., 2019; Öztürk, 2018; Butler, 2017; Cole, 2017; Seggie & Gökbel, 2015; Summak, 2008).

In this context, the urgent need for restructuring HE as well as the CoHE in Türkiye has often been discussed to increase freedom, autonomy and transparency in higher education. The CoHE has converted all higher education institutions into universities at first glance. In the course of time, it has put forward the centralization of the admission process for universities, and all students have been required to take a central exam, the primary means of ranking for universities in Türkiye (Yamamoto, 2006), to be placed in top universities. From the perspective of Yüksel (2013), the establishment of a quality control mechanism can alter this situation and the perception towards centralized exams (Yüksel, 2013), but many academics are

strictly against such a controlling system considering their freedom of speech (Kargn & Bıkmaz, 2007).

For expansion purposes, dual/evening programs have also been introduced and two-year vocational programs have also been added to the HE system in Türkiye; open and distance education opportunities have been expanded; and non-profit foundation universities allowed by the 1981 reform have been introduced (Çetinsaya, 2014). Until that time, universities failed to attract or train an adequate number of faculty, and they could not boost their enrollment rates (Çetinsaya, 2014; Özoğlu et al., 2016).

After the reform in 1981, the number of public universities and enrollment rates in HE has increased tremendously challenging the public investment required for more infrastructure (Özoğlu et al., 2016). The increase in numbers is not always gradual. For example, the public HE sector has encountered a period of stagnation due to the economic crises of 1994, 1999 and 2001; and the coalition government prevented effective policymaking until 2002 (Özoğlu et al., 2016). According to Mızıkacı (2003), the rise in secondary school enrollments and the common belief that HE is a crucial step for social mobility and economic empowerment have basically given birth to ongoing demands for HE in the country.

Furthermore, compulsory education has been extended from eight to 12 years in Türkiye increasing the number of high school graduates demanding higher education (Özoğlu et al., 2016; Aksit, 2007). Actually, reaching higher levels of enrollment in HE has been one of the primary goals on the educational agenda of Türkiye for years even though the most significant efforts have been made during the last twenty years, which has been particularly accelerated by the aggressive growth strategy adopted between 2006 and 2008 (Özoğlu et al., 2016). For example, 41 new

public universities have been founded across the country during this period, and the number of foundation universities has also increased (Doğan, 2013).

Distinctively, this growth in quantity has been observed in a short period without proper planning and centered around the less developed cities of the country, causing academic, financial and administrative problems in the long run (Kaynar et al., 2015; Arap, 2010). To put it in another way, expansion of the HE has enabled more and easier access for many people to universities whereas inadequate intellectual and material sources have given rise to the inevitable deterioration of standards and quality (Teferra, 2007). In fact, existing classrooms, laboratories, libraries, maintenance services and educational facilities cannot accommodate the rising number of students (Sifuna, 2010; Teferra, 2007). Therefore, the lack of sufficient funding and opportunities has provoked debates on the decline in the quality of HE services in the face of the enormous expansion in numbers.

What is more, the expansion of enrollment rates and institutions has also increased the number of students per faculty, which also causes a decline in quality emerging from teaching and administrative workloads and limited time allocated to research (Welch, 2013). The rapid growth and changing trends encourage Turkish academics to adopt a research-oriented approach while using old-fashioned teaching styles (Çalikoğlu et al., 2020). In the 21st century, universities and academics need to widen their research and teaching nexus (T-R Nexus) to provide the multifaceted skills and competencies (Calikoglu et al., 2020; Geschwind & Broström, 2015).

The recently established universities have confronted such quality-based problems more deeply from the perspective of Doğan (2013). The researcher has conducted a survey study with 150 faculty members working at the recently

established public universities in Türkiye. She has discovered that these universities lack institutionalization and have difficulty finding qualified lecturers.

In addition, the physical facilities of these universities are not adequate for their students. Another quality-based problem has arisen from the placement of part-time lecturers without doctoral degrees in universities to fill the teaching staff demand of existing programs (Özoğlu et al., 2016). As an anti-intellectual behavior (Doğan, 2022), some qualified academics who speak or write against threatful acts towards the future of democracy, human rights, and particularly academic freedom necessary for all public spaces (Gol, 2022) have been compelled to leave their own countries under intense pressures and conflicts (Özgür, 2022). In this undesirable context, the number of academics per student and the quality of instruction as well as research have dramatically decreased in Türkiye.

Unfortunately, the overall expansion of HE institutions in Türkiye has transformed the recently established universities into high schools in terms of quality of research and instruction (Yavuz, 2010). What is more, the analysis of Karadağ (2021) shows that the majority of rectors, also known as university presidents, in these universities are male. The male domination in academia, especially for such higher positions with administrative power, makes women's images fluid in academia, which hinders the ideal diverse and inclusive environment necessary for the social transformative roles of universities (Bleijenbergh et al., 2012). As highlighted by Bilimoria and Singer (2019), measures should be immediately taken across universities with different strategies to promote gender equity, diversity, inclusion, and leadership of women academics as well as academic excellence in the best manner possible. Karadağ (2021) also added that these non-inclusive rectors have a limited number of academic works, fewer references, and lower H-indexes.

This has also accelerated the deterioration of quality in universities. It should not be forgotten that there are also rectors in the country with many published works, references and higher H-indexes.

In a qualitative study conducted by Özoğlu et al. (2016), 12 rectors of recently established universities were interviewed to understand their expansion strategies and the challenges faced during their implementation. The researchers have discovered that finding skilled faculty members and administrators is the main difficulty for these new universities. In addition, the participants in the study have complained about the unequal distribution of budgets among the universities, ignoring their strategic plans. They have also mentioned limited financial support for universities from local communities. The interference from local public authorities in the determination of the campus locations is another challenge for them. The rectors have also stated that the quotas of some programs cannot be filled as they do not meet the needs of the labor market.

It can be understood that all the underlying quality-based challenges experienced by the participants regarding HE in Türkiye are related to aggressive growth in the system in direct or indirect ways. In some countries, the extension of HE out of control has been strictly criticized and slowed down due to the fact that it has led to a decrease in quality and public resources not in graduate unemployment (McCowan, 2007). Nonetheless, Türkiye has followed this trend for a long time and universities have become accessible to all (Esen, 2020). At this point, insufficient planning and limited employment opportunities for the rising number of graduates are among the main problems faced during this massification process.

According to Habibi (2017), the number of individuals with university degrees has sharply increased in Türkiye over the past two decades even if some

students drop out before they graduate. As stated by Tuzen and Yurtseven (2016), this significant growth in HE enrollments in the country after 2002 has been caused mainly by the government's HE policy focusing on quantity under the centralized management of the system allowing the government to put its policies easily into action. Gök (2013, p. 227) summarizes the HE case of Türkiye since 2002 as follows: “[Türkiye] has been witnessing a series of dramatic transformations in social, political, cultural and economic contexts although both sides that support and oppose these transformations are available in the political arena and general public.”

The government adopted the slogan ‘One University in Every Town’ and they achieved this quantitative success by establishing 116 new universities between 2006 and 2015 (Kaya 2012). There hasn't been a single city in Türkiye without a university since 2008 and even some quite tiny cities have multiple universities located within their borders. This makes it possible for HE program and student enrollment rates to steadily rise, strengthening Türkiye’s position in the world's competitive arena (Günay & Günay, 2016; Günay & Günay, 2017). In fact, the expansion plan demonstrates the goal of creating a long-lasting sociocultural and socioeconomic environment within and beyond the nation (Günay, 2014).

While there was a noticeable increase in the number of HE programs and enrollments in the country, scientific progress and production stagnated (Günay & Günay, 2017). In addition, this strategy inevitably adopted neoliberal policies of privatization and market-oriented liberalization for economic development and supported the establishment of non-profit foundation universities also called private universities within the scope of their economic growth strategies (Şimşek, 2022). Hence, 53 new foundation universities were established between 2002 and 2016 regardless of critical discussions and voices against such neo-liberal changes in the

country (Kaya & Onursal-Beşgöl, 2023). It is realistic to draw the conclusion that academics are more scientifically involved in private-dominant and more competitive HE environments since they seek out a wide range of financing and cooperation options (Guzmán et al., 2022).

According to Esen (2020), a new era started in 2018 with the creation of 14 new universities through the division of current universities. He states that this was the transition era from expansion to consolidation in higher education, but the rationale behind this policy and its results are still not clear. In fact, Türkiye had the sixth-largest higher education system in the world with 7.8 million students in 2019 by any means. Statistically, the country has 129 public, 75 foundation universities and four vocational institutions in 2023 (CoHE, 2023). Istanbul, as one of the most populated cities in the country, became home to many public and foundation universities. Cities that were relatively tiny and underdeveloped became home to new universities. However, this posed a new problem due to the overall shortage of qualified staff in the less developed areas. University professors had to teach all courses regardless of their expertise (Tekerek, 2023).

Unfortunately, the budget for HE has increased moderately in this growing atmosphere in which education is seen as an instrumental tool in fostering the economy (Johnstone, 2004; Gyimah-Brempong et al., 2006). Far from increasing the budget, the government has relied more on tuition fees and loans to meet the increasing costs. In the same vein, universities have continued to increase their tuition fees as they cannot survive without extra public funding widening the disparity between affluent individuals and those in need. In 2012, Türkiye abolished tuition fees for public universities unlike many other countries (Özoğlu et al., 2016). Actually, they should never have been applied.

For the past 40 years, the country has implemented a law just before each election. Depending on socio-political conjuncture, student/academic amnesties are frequently applied in the country and allow dismissed or dropped students for whatever reason, including doctoral-level students, to resume their studies (Esen, 2022). Only those who have certain criminal records cannot benefit from this opportunity. Unfortunately, neither the system nor universities have much of a say in these legal agreements. Moreover, there is no public dropout data and it is challenging to determine the scope of the issue and the role of amnesties in recovering it (Esen, 2022). However, it can still be inferred that student amnesties contribute to the size of higher education.

There is a widening gap between the qualities of HE systems in developed and developing countries as they do not experience educational trends and challenges equally (Şimşek, 2022). Developed countries have a monopoly on knowledge due to their profit-driven neo-liberal agendas (Altbach, 2004). Neo-liberal policies in HE concerning economic outputs in higher education bring about the reproduction of existing inequality faced by people, especially in such developing countries as Türkiye. Pretorius and Xue (2003) mention the new form of inequality in their study as follows:

An important aim for expanding higher education in many developed countries has been to improve equality, but the results have been far from satisfactory. Furthermore, while former inequalities may decline, new inequalities, such as the disproportion of social participation in prestigious institutions or fields, may emerge (p. 91).

According to Altinyelken et al. (2015), educational systems are marked by severe economic, regional, ethnic, and linguistic differences in Türkiye. They emphasize that the socioeconomic status of people is the main element shaping the segregation in society reflected in higher education. In this regard, education has the potential to

mask inherited barriers between classes and status groups by legitimizing the persistent patterns of social inequality instead of giving the poor a path to upward mobility (Bourdieu & Passeron 1977; Collins 1979).

Higher education in Türkiye has become more diverse with students coming from different social groups (Gür, 2016). Besides, universities serve both as an instrument for social inequality reproduction and a tool through which the states recreate their own ideas and practices in society (Ramirez & Boli, 1987). As stated by Agarwal (2009), growth in HE does not guarantee the access of a relatively poor population to universities under the harsh conditions of a globalized world without supporting them financially. Caner and Okten (2012) underline that students from wealthier and more educated backgrounds are more likely to enroll at public universities in Türkiye. Therefore, entrance into top-choice public universities is highly competitive in the country and families invest a lot of money in private tutoring for the future of their children.

On the one hand, tuition and fees applied in many countries negatively affect the access level of both rural and urban students to HE institutions (Wu & Zheng, 2008). On the other hand, students coming from rurally disadvantaged groups struggle more to find a place in HE institutions (Dias et al., 2011). In other words, they are eliminated in the selection stage due to their socioeconomic backgrounds. Even when they are placed at the top-choice universities, they have difficulty completing their degrees. Hence, higher dropout rates are commonly observed among these groups all over the world (Altbach et al., 2009). In addition to the financially disadvantaged groups, students with headscarves in Türkiye feel stressed and discriminated against in some academic environments and they prefer socializing primarily among themselves to be away from the upsetting statements, stares and

comments of others, which makes them isolated and disadvantaged in terms of accessibility and acceptability (Seggie, 2015).

The English language might become a barrier for Turkish students, especially for those receiving poor public education, and makes them disadvantaged. According to Arik and Arik (2014), English is used as the medium of instruction in about 20% of Turkish university programs; 50% of them consist of engineering programs and programs linked to the English language. This ratio is higher in graduate programs. Students with low English proficiency can be marginalized and fail (Airey & Linder, 2007) in such non-native countries as Türkiye where some or all subjects are delivered in English (Jiang et al., 2019; Macaro et al., 2018). Specifically, the number of Syrian students in Türkiye's higher education system is high and they face a variety of challenges including language and cultural barriers (Yilmazel & Atay, 2023). A study conducted by Fincham (2020) with Syrian youth in the given context shows that massification attempts have increased the availability of HE opportunities for these refugee students.

Nonetheless, accessibility without any barriers in the system and acceptability for higher-level jobs still pose trouble for Syrian students and graduates. Hence, no clear connections between educational opportunities and equality are drawn for such disadvantaged and minority groups despite the idealized concept of formal higher education as a meritocratic mechanism of social mobility (Koksal, 2018). While integrating previously excluded students into public universities is proposed as a sign of democratization and development in Türkiye, the importance of quality over quantity is questioned with concerns for long-standing youth unemployment (Aksu et al., 2011).

It has been noted by Can (2015) that the extent of quantitative success is not in line with that of qualitative success for all educational stages in the country. He has also added that the centralized exams in Türkiye are an integral part of the system and the quality of education is often ignored for the sake of exams and placement (Can, 2010). At this point, it should be remembered that an increase in quotes, enrollments and placement rates does not necessarily mean an increase in quality. Instead of aiming for quantity and taking action for it, quality should be ensured in the HE system of Türkiye.

The Bologna Process (BP) took place while Turkish higher education moved toward universal access. BP aims to increase coherence among European HE systems while improving student and faculty mobility, providing access to HE for all, and increasing the attractiveness and competitiveness of HE in Europe on a global scale (European Commission, 2006). A more competitive labor market that rewards academic activity at the international level has also altered the foundation of academic work (Çalıkoğlu et al., 2022). Hence, internationalization has also become a notion that has gained a new dimension in the field of higher education during this process (Erdoğan & Bulut-Şahin, 2021). In recent years, it has evolved into a strategy for both nations and academia. In addition to these, it was the starting point for a quality assurance system for higher education institutions (Furuzan, 2012; Yağcı, 2010). This quality assessment mechanism has served for a variety of purposes including accountability, improvement, information exchange, and accreditation. As emphasized by Onursal-Beşgül (2014), BP underlines three main goals in general: international competitiveness, mobility and employability, which contributes to the internalization of Turkish higher education. From her point of view, the adaptation process turned the system in Türkiye into a more student-

centered one. However, it failed to actualize the internalization aims completely. She adds that transparent qualifications and quality assurance as the key components of the declaration are also problematic in this context.

The CoHE and Inter-University Council (IUC) led the first phase of BP in Türkiye. Public and foundation universities adapted their curricula in accordance with the Bologna objectives (Gilder 2011; Heitmann 2005). Beginning with the academic year 2005–2006, all institutions were required to provide diploma supplements (DS) to their students in the country. At the same time, providing the European credits (ECTS) equivalents for national credits became compulsory for them (Esen et al., 2012). The National Qualifications Framework (NQF) established by the CoHE in 2006 signaled the start of the second phase of BP in Türkiye. The CoHE called each university in the country to establish a Bologna Coordination Commission in 2008 with a set of guidelines, which can be marked as the second phase of BP lasting until 2010. Finally, NQF became a mandate for institutions of higher learning during the third stage of the Bologna Process in Türkiye (Onursal-Beşgöl, 2017).

Türkiye, as a candidate country of the EU, has experienced a major reform since it joined the Bologna Process in 2001. The objectives of BP have been helpful in the process of resolving various quality-based issues caused by the rapid expansion of HE in the country (Esen, 2020) as universities were required to meet the standard criteria added to the old law in light of BP. Nonetheless, it is still challenged by many problems related to funding, quality and expansion (Higher Education Board, 2007). In such a Turkish HE context, research and development activities need to be increased with a systematic and qualified mechanism (Toprak et

al., 2019). Interestingly, the BP in Türkiye has nearly come to an end following a lengthy adaptation procedure (Kaya & Onursal-Beşgöl, 2023).

Akbulut Yıldırım et al. (2022) criticize that higher education institutions are charged with distinct strategies or roles regardless of their capacities as the development of HE policies is a hot topic among actors at the regional, national, and international levels these days. Essentially, Türkiye needs to come up with its own set of HE policies that take historical and societal aspects of high culture into account and create context-based plans (Bugday Ince & Gounko, 2014). It is believed that new generation universities function as the main source of human resources for developing the knowledge economy and society in Türkiye, which underestimates the essentiality of quality in HE (Toprak et al., 2021). At this point, the social and economic progress of the nation should be ensured by learning from past mistakes in HE (Günay & Kılıç, 2011). In the same way, universities need to undergo reconstruction processes and humanism should be reformed via academics and scientists to ensure betterment for individuals and society (Akyol & Tanrısevdi, 2018).

3.3 Doctoral education in Türkiye

In Türkiye, graduate education has been carried out by institutions organized in universities since 1982 by the law of the CoHE. The role and tasks of graduate schools are framed under the law numbered 2547 (Bakırcı & Karaman 2010). Until the late 1960s, graduate education was like a doctoral program lasting three or four years. After the 1970s, it was divided into master's and doctoral degrees. Their structure, functions and roles have been totally or partly shaped and reshaped by the relevant regulations (Çakar, 1997).

The number of universities and graduate programs is rising in Türkiye day by day along with the demands and opportunities highlighted in the previous part. According to the data from the CoHE (2023), there are 11,305 doctoral programs (10,632 public and 673 private) in Turkish universities. Universities in the country have undergone drastic transformations in order to meet these statistical increases arising from socioeconomic changes and the massification trend since the 1990s (Kose & Korkmaz, 2019). At this point, how each university responds to such local and global trends is a debatable issue.

According to Mammadov and Aypay (2020), Turkish universities concentrated much on building regional, national and worldwide standards following numeric advances. In their study, they underlined that transforming doctoral education in particular and increasing scientific standards are essential in the country. In 2017, governmental regulations in Türkiye mandated the establishment of research universities as a new concept for similar purposes. 10 universities in Türkiye were selected as research universities by the CoHE based primarily on their potential and desirability by the winners of the centralized university exam (Mammadov & Aypay, 2020).

The idea of research universities has its origins in the U.S. (National Research Council, 2012), and these universities are regarded as public spheres that prioritize scientific research as their main vision (Clark, 2019). Doctoral studies, conducted in these specific types of universities, are considered to be the main source of serving the public and facilitating improved social conditions (Salmi, 2009; Zerquera, 2016). Therefore, all stakeholders, at least in these universities, are expected to focus freely on academic works and scientific products without any concerns in their minds (Altbach, 2011).

Erdem (2021) underlines that universities in Türkiye are not ready for proper standardization and transformation with their existing graduate opportunities, faculties and students. Therefore, quality remains one of the biggest problems in universities without ensuring such improvements are actualized by authorities (Onasch, 2013). Within the scope of Vision 2023, Türkiye needs to advance in scientific and technological production. The country has established a goal of reaching its centennial year, 2023, as one of the 10 greatest economies and beginning to set up its strategies in line with that. For this aim, it should raise highly qualified manpower so that it ensures economic and social development (Günay & Günay, 2017). Unfortunately, Turkish HE has to cope with various problems based basically on supply-demand imbalance (Deniz, 2022). In this sense, increasing the number of qualified PhD students and graduates is highly critical (Özer, 2011).

On the other side of the same coin, Kezar and Eckel (2002) argue that it is hard to alter such public entities as universities without transforming their organizational culture believing that change is a cultural process. In addition, local and global challenges make cultural changes in universities inevitable (Douglass, 2016). Keeping these in mind, Türkiye gets closer to realizing its scientific and technological goals with necessary changes, but there is still a large difference between its current state of advancement and its intended goals (Uslu et al., 2021).

In Türkiye, graduate schools are components of universities and they provide the necessary education on paper, scientific research, and practical information necessary for master's, doctoral and post-doctoral degrees as well as studies for proficiency in art or medicine (Sevinç, 2001). In this regard, these programs have been designed to provide expertise and contribute to humanity by educating people sensitive to the problems of the country and the whole world (Sayan & Aksu, 2005).

A student who has completed his or her master's degree is considered as a possible candidate for doctoral programs.

Students can pursue a doctoral degree relevant to their previously obtained degrees. They can also study in a different field in which they are interested. In both cases, they go through the requirements of the target universities and programs. In general, these requirements include such necessary documents as those about their educational backgrounds, language proficiency and central entrance examination records. In addition, learners are supposed to be successful in scientific examinations and face-to-face interviews if they apply. Apart from common sets of standards, each university can have its own requirements as well.

Doctoral education has various types in specific nations (Noble, 1994). However, the doctorate is regarded as the highest academic degree raising scientific researchers and academics in most countries (Yılmaz, 2008; Park, 2005). Lately, doctoral programs have become a critical threshold providing new learning opportunities at the micro and macro levels, which is also the case for Türkiye. Moreover, dissertations can contribute to science, offer a new scientific methodology or apply an existing method to a new field (Çakar, 1997). Hence, a doctoral degree is like a process of combining information gathered through undergraduate and master's degrees to be able to yield a scientific production (Gök & Sılay, 2005). In knowledge societies, a doctoral degree is considered to be linked to rising innovation, employment and the economy (Erdoğan, 2014). In other words, the purpose of a doctoral degree is to bring out an original study and results by using existing scientific knowledge and qualified skills (Can et al., 2009).

Even though the application processes and requirements for doctoral programs differ from country to country and university to university, all universities

still expect a student to meet the scientific qualifications of applied doctoral programs for enrollment and graduation (Demirtaşlı, 2002; Alhas, 2006). As Clifton (2009) underlines universities have three basic goals namely selecting, evaluating, and educating their prospective students. Based on the national laws and regulations of the university in the target context, students are supposed to provide the necessary documents for their application processes to doctoral programs. Written and verbal exams, interviews, or presentations are applied during the selection and evaluation of doctoral students (Çakar, 1997).

Who attends doctoral programs, what criteria are used to select or evaluate them, and who determines admission criteria are all issues that must be addressed in Türkiye. Universities are expected to admit students to doctoral programs designed according to their own educational philosophy and infrastructure. At this point, they might consider the current doctoral education model that focuses on writing a dissertation centered around a scientific problem, and pay attention to academic work or knowledge during admissions (Boud & Lee, 2009). Nonetheless, such idealistic cases are often tempered in the highly centralized Turkish system because universities are not autonomous in applying their own procedures and admission criteria.

In these centralized models, admission processes are standardized, and students are not matched with a supervisor at this initial stage (Posselt, 2015). On the other hand, decentralized models can apply their own selection criteria and enroll the most qualified person in their doctoral programs (Nerad et al., 2022). They can even match the applicant with a supervisor who studies the same or similar topics. Turkish universities have to apply the obligations and standards imposed by the CoHE during doctoral admissions. For example, students need to get high scores on a centralized

exam called ALES to apply for a doctoral program as universities have to take 50% of it into account while selecting their doctoral students. Nevertheless, criteria based on such performance indicators as tests might cause unfair and inefficient results (Jung et al., 2023) and reproduce inequalities, especially for minority groups (Miller et al., 2019) in the country.

Moreover, standardized and top-down criteria fail to ensure success in doctoral programs during which students are supposed to go beyond standard skills and qualifications (Miller et al., 2019) to remain in the program or graduate. What is even worse is that overemphasis on past achievements during doctoral admissions hinders ‘diversity’ and ‘the embrace of democratic values’ in the long run (Nerad et al., 2022; Posselt 2018). Instead, the soft and transferable skills of the applicants that influence their future success in doctoral studies should be evaluated at the beginning (Mantai & Marrone, 2022; Mowbray & Halse, 2010; McGee & Keller, 2007). Furthermore, such individual attributes as motivation should also be critically evaluated while selecting prospective doctoral students (Durette et al., 2016).

While discussing the formal doctoral programs, including those in Türkiye, ‘the hidden curriculum’ which refers to ‘the unintentionality and the often concealed learning processes that transpire’ (Elliot et al., 2016, p. 740) should also be considered. By doing so, the adventures of learners could be analyzed in a more meaningful way (Elliot et al., 2020) as well as those of dropouts. Individuals pursuing a doctoral degree build personal and professional networks on their way to graduation (Bryan & Guccione, 2018). If a formal doctoral program is insufficient in providing learning opportunities, students might have a tendency to benefit from such hidden dialogues as chats with scholars (Wisker et al, 2007). Interestingly,

learning achieved unintentionally contributes to the motivation of students and the overall competencies (Elliot et al., 2020).

In recent times, the explicit and hidden curriculum of universities has turned into a neo-liberal one (Collini, 2012), which means that they force students to gain standardized credentials (Semper & Blasco, 2018; Zajda & Rust, 2016) instead of promoting democratic objectives for social transformations. Moreover, universities, especially private ones, can make better use of the hidden curriculum while ‘selling their educational services’ to doctoral students (Kujawska-Lis & Lis-Kujawski, 2005). However, it is also possible to improve graduate programs and competencies through the hidden curriculum (Rossouw & Frick, 2023). Investigating the hidden curriculum of universities might help authorities gain insight into institutional cultures so that they can develop strategies to question or modify them (Koutsouris et al., 2021).

Even if it has different functions in today’s world, the main and initial focus of doctoral education is still to raise scientists, academics, and researchers (Çakar, 1997). In addition, doctoral programs have a mission to raise more knowledgeable and effective individuals by providing expertise in a specific field when they are compared to undergraduate programs. These programs have deeper and more focused study requirements than master’s programs. Hence, they should be able to educate students in more specific and detailed ways.

Through doctoral education, as a formal route to professionalization in learning that is intensified with increasing globalization (Austin & Sorcinelli, 2013), universities first aim to raise future academics (Austin & Wulff, 2004). Nonetheless, it should not be forgotten that not only academic areas but also other sectors need qualified people who can produce knowledge, use that knowledge, and solve

problems while scientifically criticizing them in all countries (Alhas, 2006). That is why having a doctoral degree is also related to employability (Park, 2007b).

Still, oversimplifying doctoral education into employability raises an important question about its scholarly contributions to individuals and societies (Giroux, 2009). The focus should be shifted away from employment or employability. It should be geared toward the formation of graduates who are ready to take on everyday obstacles, which is feasible by emphasizing ability while accepting diversity (Bennett, 2018).

Unfortunately, there is an inconsistency between doctoral students' goals, knowledge, skills, and actual careers based on today's world (Golde & Dore, 2001). In Türkiye, students start their doctoral education with academic or non-academic expectations. However, they sometimes cannot finalize this journey with the same goals and motivation considering regional and international situations. Unfortunately, doctorate education in Türkiye has remained largely theoretical and academically focused, which is far from the current trends. Even so, people with doctoral degrees cannot find ideal academic positions, which can affect their decisions to leave the doctorate (Lovitts, 2001). For instance, a rise in academic positions may cause a decline in the number of doctoral dropouts, especially among female students bearing domestic roles and responsibilities (Gür & Bozgöz, 2022).

Academic Training Program (ÖYP) was designed to address the growing demand for faculty members and research assistants at universities in Türkiye (Çelebi & Tatık, 2012). The program and the necessary steps were first put into action in 2001 by Middle East Technical University (METU). Then, students who are under the age of 35 were selected by CoHE according to their language scores,

bachelor's grade point average and ALES (Academic Personnel and Post-graduate Training Examination) scores since 2010.

According to Tülübaş and Göktürk (2017), ÖYP enables host universities with PhD programs to interact with recently founded partner universities. Students chosen for the program are supposed to return to their own institutions as faculty members after completing their doctoral degrees at another university. These students receive project funding that can be used for their academic expenses. Some research assistants state that ÖYP is a great opportunity for their personal and professional improvements when it is applied with proper planning and legislation (Çelebi & Tatık, 2012). On the other hand, it presents an insecure, constrained, and critical future from another perspective of some students and administrators (Memiş & Sağır, 2013).

Minor and major changes occur in educational policies in all countries, and they have an impact on practices. The picture of policy changes has become even more complicated in the last five years for doctoral education (Park, 2007b). Doctoral programs adapt to local and global changes both across sectors and within universities. Neoliberalism places a strong emphasis on professional growth and hiring potential, along with the value of continuous education (Park, 2005).

The Advisory Board of the Research Councils (1996) emphasizes that “changes in the nature and practice of the PhD have arisen because of ‘indirect’ pressures rather than from a clearly defined study of the degree itself.” Roberts (2002) underlines that institutions of higher learning are failing to react swiftly to the evolving demands, requirements and qualifications of those pursuing doctorates. On the other hand, there is a tension between producing scholarly work of adequate quality and raising researchers (Park, 2007). In addition, there is concern regarding

the way a doctorate is viewed in other countries. In addition, there is a discrepancy between the requirements companies have and what universities are aiming for in terms of competencies, transferable skills, attitudes, and behaviors based on a lack of research (Leonard & Metcalfe 2006).

Another problem for developing countries like Türkiye is that developed countries can dominate doctoral education as they have advanced in research and developed services. They sometimes avoid sharing information, cooperating with other countries and contributing to their development. Instead, they lead these countries and their educational systems. Altbach (2004) summarizes this situation as follows:

(In the West), important centers of academia (universities) lead in all areas of science, offering acceptable patterns in areas such as research and teaching, appropriate organizational models, and the dissemination of knowledge. These centers are generally the great and wealthy centers of the West. While these universities have rich financial and infrastructure opportunities such as libraries and laboratories for research, they can also include an academic audience equipped with academic freedoms and high-level qualifications. When you add the freedoms provided by the widely accepted academic traditions and laws in those countries, high levels of achievement can be envisaged for its staff and students. In some ways, academic institutions in the periphery, and indeed all academic systems of small developing industrialized countries, have been used by the core countries through research, information communication and other direct or indirect means. articulated into 'knowledge production centers' (p. 5).

Last but not least, doctoral education around the world has grown in recent years, which is also the case in Türkiye. For example, there were 67,157 PhD students in 2013 and it reached 109,540 in 2022 (CoHE, 2022). Neoliberal policies, globalization, aims for economic growth, desires for a better social status and credentialism forces can be some of the underlying reasons for this trend (Marginson, 2016). Basically, personal (micro) and social (macro) outcomes gained through doctoral education make it appealing to individuals and societies (Sarrico, 2022).

This attractive position in doctoral education has not been slowed down by the scarcity of positions within academia (Stephan, 2012). The number of individuals pursuing doctoral degrees has still been rising year by year regardless of such concerns. People with PhD titles are challenged by the scarcity of academic positions in the country. Unluckily, those in non-academic sectors face adaptation problems in their workplaces with their academic skills (Skakni et al., 2022).

This ongoing expansion trend has fueled debate on the impacts of a doctorate on individuals and society (Halse & Mowbray, 2011). In addition, research activities as indicated by publications in indexes have traditionally been largely confined to developed countries even though HE has also grown significantly in developing countries (Sarrico, 2022). This is beyond the primary mission of doctoral education which focuses on scientific research, and this can cause a waste of time and money for developing countries. Türkiye as one of these developing countries has a dramatic picture compared to many other nations because the unemployment rate of individuals with higher degrees is greater than the unemployment rate of individuals with less education (Habibi, 2017). Moreover, the social impact of academia and academics is on shaky ground due to proletarianization (Yönden-Pehlivan, 2017).

Some researchers attributed the high unemployment rate among university graduates to skill mismatch and receiving a low-quality university education (Alpaydın, 2015; Visakorpi et al., 2008). When university graduates with doctoral degrees are not able to find jobs in accordance with their own fields and talents, they either become unemployed or have to accept jobs that do not require any higher degrees in order to sustain their lives, which results in qualitative unemployment or underemployment in the country.

This unemployment and underemployment rate is often much higher among females in Türkiye. For instance, the unemployment rate among youth males was 16,5 in January 2023 while it was 26,6 among youth females (Turkstat, 2023). Therefore, increasing the number of doctoral programs and quotas without proper planning is expected to have negative effects on people and society including social and political instability in the long run (Habibi, 2017). To solve these problems, a multidimensional transformation of doctoral education is necessary (Cardoso et al., 2022).

Overall, doctoral education has its pros and cons in the given Turkish context. Like other educational models in the world, it needs to be improved in many senses. In this specific context, this higher-level degree should especially aim for intellectual emancipation through scholarly experiences even under the harsh conditions of the neo-liberal era (Dinçer, 2018; Rancière, 2016). Only then will future graduates be able to recognize and strengthen democratic ideals and contribute to social transformation in broader contexts (Fitz & Nikolaidis, 2020).

3.4 Summary of Chapter 3

Chapter 3 outlines a contextual background of the study in three sections: (1) country profile of Türkiye, (2) higher education in Türkiye and (3) doctoral education in Türkiye. To summarize, this study was conducted in Türkiye, a developing country with a unique profile. First, the overview of the country is given to help readers comprehend the target environment in a better way. Furthermore, higher education and doctoral education in the country are explored considering the contextual background. As a result, the chapter contributes to the development of deeper meaning and clarity while investigating student retention in the Turkish HE context.

The following chapter presents a conceptual framework for identifying complexities that will be investigated with respect to research questions.



CHAPTER 4

CONCEPTUAL FRAMEWORK

To present the analysis of the data coming from current doctoral students and recent doctoral dropouts properly, a conceptual framework of what is searched for is defined in this section. 11 widely tested models and theories on student retention and graduation, or dropout are given in this section chronologically.

In an exploration of the complexities influencing doctoral students' retention and graduation within the given Turkish context, fundamental models and theories are presented. These are: (1) Spady's Theory of Student Departure (1970), (2) Tinto's Student Integration Theory (1975), (3) Pascarella's Attrition Theory (1980), (4) Astin's Student Involvement Theory (1984), (5) Bean and Metzner's Student Attrition Theory (1985), (6) Kember's Model of Dropout in Distance Education (1989), (7) Cabrera's Integrated Retention Model (1992), (8) Bean and Eaton's Psychological Theory (2000), (9) Rovai's Composite Persistence Model (2003), (10) Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009) and (11) Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016).

It is important to emphasize that a conceptual framework can be derived from theories, models or practices, and it amplifies the target study (Bordage, 2009) by simplifying the variables (Mugenda & Mugenda, 2003). Keeping this in mind, the data of 24 Turkish doctoral students and 16 doctoral dropouts will be analyzed and discussed using all or relevant parts of the theories, models, or practices listed above in this study.

4.1 Spady's Theory of Student Departure (1970)

Spady's Theory of Student Departure (1970), also known as Spady's Sociological Theory (1970), is the first and foremost theory regarding student retention in higher education. The theory has its basis in Durkheim's Theory of Suicide (1951).

According to Durkheim (1951), individuals are prone to suicidal actions when they are not integrated into their community in social and intellectual terms. Likewise, learners who do not fit in with their university's social structure and with the academic community are prone to discontinue their studies before receiving their degrees as reflected by Spady (1970).

In light of this theory, dropping out of a university degree program can be clarified by an interaction continuum between students and the social environment at the university. During this academic and social interaction process, attributes of students including their knowledge, skills, behaviors and interests are open to change with the effect of the university's social system. The level and result of this social interaction and assimilation process shape the decisions of students to remain or not at the university. Subsequently, their decisions on graduation from the university are also assimilated by their integration into the whole ecosystem.

According to Spady (1970), 'students' satisfaction' with the university environment and their 'institutional commitment' are related to their overall integration. Indeed, 'students' academic potential', 'family background', 'grade performance', 'intellectual development', 'normative congruence' and 'chance to have peer support' are key variables connected more closely to their academic and social integration in higher education. As shown in Figure 1, the family background of students has an influence on their academic capacities and normative congruence

including their goals, orientations, interests, and personalities, which eventually influences their interaction with social environments and the system.

The academic capacity and potential of university students affect their grade performance and intellectual development, whereas the normative congruence of university students affects their grade performance, intellectual development and level of peer support. All these proposed factors affect the student's social integration as emphasized by Spady's Sociological Theory (1970), which in turn affects students' satisfaction with higher education institutions and their commitment to the university.

The theory of Spady (1970) also highlights that the degree to which students are committed to their university is an essential criterion for understanding their decision to retain or drop out. Similarly, students with high grades tend to stay in university, while students with low grades tend to drop out easily for academic reasons. Moreover, students' commitment to the university can alter their goals and motivation as it has a critical impact on their normative congruence. In 1971, Spady collected data from 683 freshmen students enrolled at the University of Chicago between 1965 and 1970. The report of the data using multiple regression analysis showed that the main factor affecting student retention is academic performance for male students. For female students, institutional commitment comes first as the main predictor of student retention.

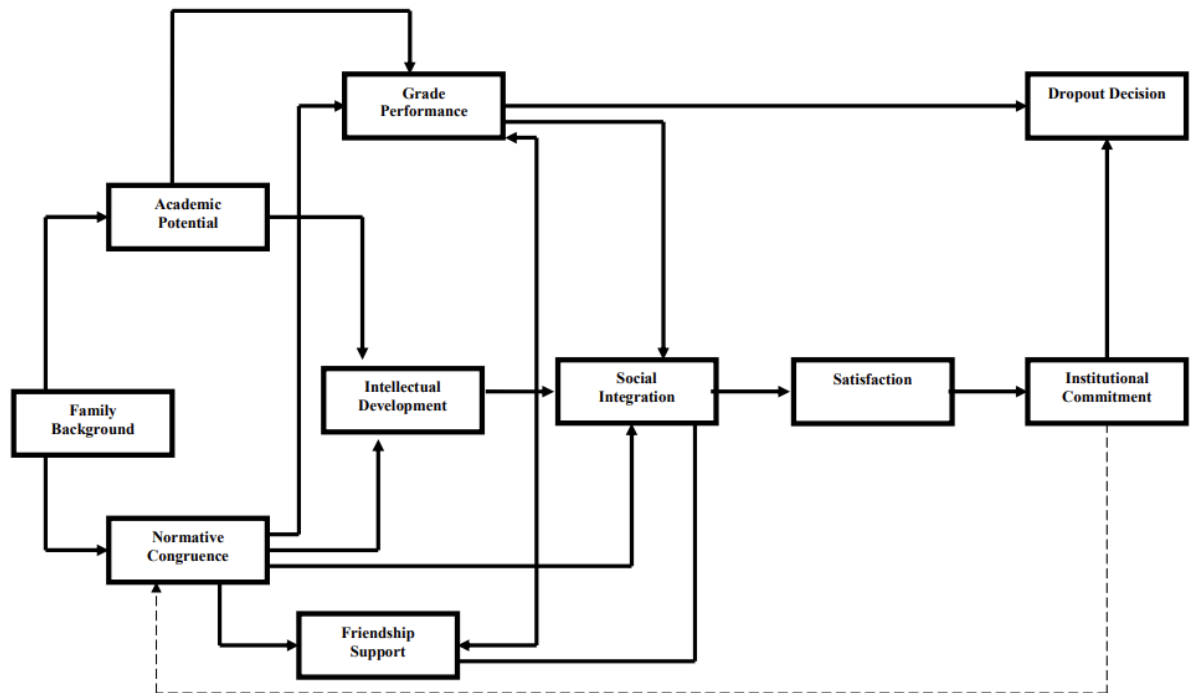


Figure 1. Adapted from Spady's Theory of Student Departure Theory (1970)

Spady's Theory of Student Departure (1970) is widely accepted in the field of higher education. It explains why individuals cannot finalize their studies. According to this theory, students drop out of college when they have social and academic integration in the system, and many underlying causes affect this integration continuum.

Researchers have used this, one of the oldest models in the field of higher education, and approved the validity of its original and extended forms many times (Mannan, 2007; Nicoletti, 2019). When recent studies are taken into account, some studies concentrate mainly on confirming integration and commitment factors to explain dropout behavior while ignoring the role of institutional support (Brown & Mazzarol; Yair et al., 2020).

The lack of commitment to the institution is the primary reason why students cannot integrate into the system and depart from their studies (Georg, 2009). In countries where university students work long hours and stay with their families,

high attrition rates are pointed out (Bozick, 2007) as these students are far from academic habitus and endowed with social, cultural and academic elements (Lehmann, 2007). When they have non-academic family backgrounds or are in risk groups, the dropout picture is beyond imagination (Vignoles & Powdthavee, 2009).

In some male-dominated societies, women are considered in these risk groups, they are likely to drop out of their programs because of their household responsibilities and caregiver roles (Conger & Long, 2010; Quinn, 2013; Gür & Bozgöz, 2022). However, some studies signal that gender difference is not a significant factor in explaining students' departure (Guzmán & Kingston, 2012).

When it comes to the cases of international students, they struggle a lot to finish their studies on time, especially in such countries as the USA where the cost of higher education is high (Kercher, 2018). In contrast, international students, in such countries as Germany where education is public and free, are more likely to depart (Kercher, 2018). Students from ethnic minorities and immigrants are also more likely to leave higher education, especially in the USA (Thompson et al., 2013; Arbona et al., 2018). This is even the case in the Canadian context where international and immigrant students have better opportunities (Da Silva et al., 2017) since international learners and learners in risk groups form a heterogeneous group.

Some studies have concluded that immigrant students can enroll in universities based on their high academic achievements in the past, but they fail to continue when they lack information about the host institution (Støren, 2009; Van Houtte & Stevens, 2010). In addition, being a first-generation student in higher education, as the first person in the family studying at university, accelerates dropout action in many European countries based on many related factors (Heublein, 2014). Hence, reasons for dropouts in different contexts cannot be reduced to integration

and commitment factors. There are many more additional related factors including parental support, social and educational background (Hadjar, 2022).

One of the most recent studies has focused on a specific program to redefine this dropout model based on Eurostudent survey data (Hadjar et al., 2022). By doing so, they can draw more attention to such background characteristics of the participants as gender and race. The model has been retested with the help of structural equation modeling for the institutions of Luxembourg, embracing global and diverse learner population.

Accordingly, the initial model of Spady has been confirmed, but study commitment is not linked to social integration for this group. In addition, satisfaction with institutional support has been revealed as the most important element shaping the intentions of dropout students. What is more, the relationship between socioeconomic factors and dropout intention has not been explained by the commitment and integration suggested by Spady-Tinto factors (Hadjar, 2022).

The relevant parts of Spady's Theory of Student Departure Theory (1970) will be used in this qualitative study on student retention and graduation in doctoral education. Accordingly, intellectual development, friendship support, social integration and satisfaction will be taken into account to analyze the personal, institutional and academic commitments and integrations of Turkish doctoral students. Therefore, the possible effects of these aspects on student retention and graduation in this specific context will be understood.

4.2 Tinto's Student Integration Theory (1975)

Tinto's Student Integration Theory (1975) is the most discussed and referred to theory on student retention in the literature. The theory has its origins in Durkheim's

Theory of Suicide and Spady's Sociological Theory (1970). Tinto's model is based on a longitudinal process centered around empirical studies, and it has a more paradigmatic place for retention studies in higher education (Berger & Braxton, 1998).

As far as academic integration is concerned, it is defined as the perceived performance of a student and their intellectual development, whereas social integration is measured by the quality of their relationships with their peers and faculty members in the context of this theory put forward by Tinto (1975). In addition, student retention is defined as the degree to which students integrate into their social and academic communities (Tinto, 1975; Tinto, 1993; Rendon et al., 2000). They are two critical elements for retaining students at the university at one point or another.

Nonetheless, the level of academic and social integration can be balanced or imbalanced for different students. In addition, these two concepts have mutual opposition in practice. If a university student is connected more to academic tasks, he or she spends much time studying and may lack social integration with the university and scholarly communities, which results in dropout. Expectedly, a university student engaging in social activities and communities can easily be lured away from academic assignments, which again results in dropout. When viewed from this angle, the balance between academic and social integration is also vital for student retention.

As indicated in Figure 2., students enrolling in higher education programs bring their family backgrounds, individual attributes and pre-college schooling experiences or performances to the university. These existing characteristics influence on students' initial expectations, aims and commitments. According to

Tinto (1975), goal-committed university students are eager to get the degree and the title, if any, whereas institutional commitments force students to graduate from the target institution. Two types of initial commitments are open to change over time depending on the effect and degree of integration into academic and social communities at a university. Still, the initial commitments of students shape their later commitments to their goals and institutions. This theory shows how two types of commitments affect each other, and they both form students' retention and dropout decisions (Tinto, 1975, p. 96).

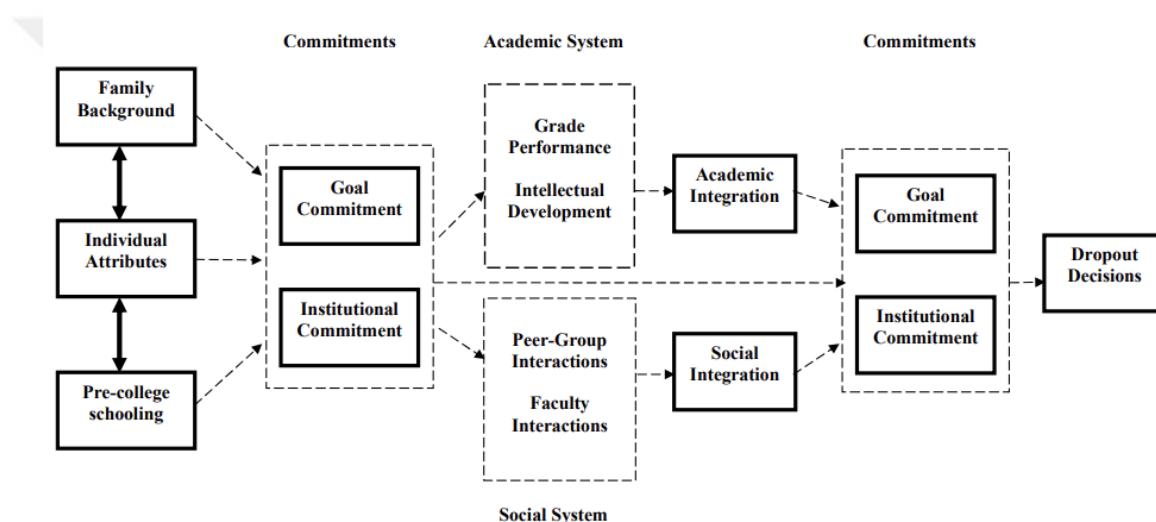


Figure 2. Adapted from Tinto's Student Integration Theory (1975)

Van Gennep's Theory of Rites of Passage (1960) and the three stages, namely separation, transition, and incorporation, offered in it were used by Tinto (1993) in order to demonstrate the process of student integration. The focus of Van Gennep's study is on how societies evolve and how people encourage stability in the face of change. The purpose of citing Van Gennep's work is to give readers a framework for understanding the longitudinal process of student retention and dropout (Tinto, 1988, p. 442).

He proposed that university students retain their studies and graduate once they complete all of the stages of their educational journey. Firstly, the separation stage is an indispensable part of retention. Students need to be physically and socially separated from their old friends, relatives and places because they often have different values and behaviors as opposed to their counterparts in the university setting. Therefore, students transform themselves, the norms and practices of the previous communities into which they are integrated. By doing so, they have a chance to integrate into the ideas and communities of this new educational environment. For students enrolled in a local university, this separation stage may not be fully achieved (Tinto, 1993) as they still live in the same context and with their previous community.

On the other hand, students studying in a new place with new community members integrate more readily into the university. Secondly, the transition phase needs to be experienced by university students on their way to integration into the university, which occurs before or after the first separation phase. Students who are at this transition stage are no longer a part of their previous communities, but they have not yet fully assimilated into the new university communities. During this second phase, the majority of the students are unable to overcome the stresses of transition, and they drop out of university. Nonetheless, students' commitments to their goals and institution are crucial at this point to their retention at the university. Students can pass to the next and final phase by overcoming challenges faced during the transition phase when they are dedicated to their goals and their university (Tinto, 1988).

The last phase is the inclusion stage during which university students are integrated into the communities of their university. As opposed to traditional

communities, formal and structural activities are not provided for the students to integrate them into the university communities. At this point, it is incredibly important for universities to implement formal and informal integration facilities such as residence halls, faculty or peer organizations and extracurricular activities for students (Tinto, 1993).

As presented in Figure 3, Tinto revised his original theory in 1993 by adding two factors namely external commitments and intentions. Accordingly, students' intentions affect their commitments to the goal and the institution, which affects their retention in turn. The revised version of the theory also points out that external commitments such as family, peers and work environments influence their initial commitments.

Tinto's Theory of Integration (1975) and Tinto's Revised Theory of Integration (1993) are commonly used in student retention literature all over the world. However, they ignore the effect of financial factors on student retention and have limitations on factors causing transfer to another program or university rather than dropout among students. Additionally, university students of different races, genders, and social backgrounds were not distinguished in Tinto's model of retention (St. John et al., 2002).

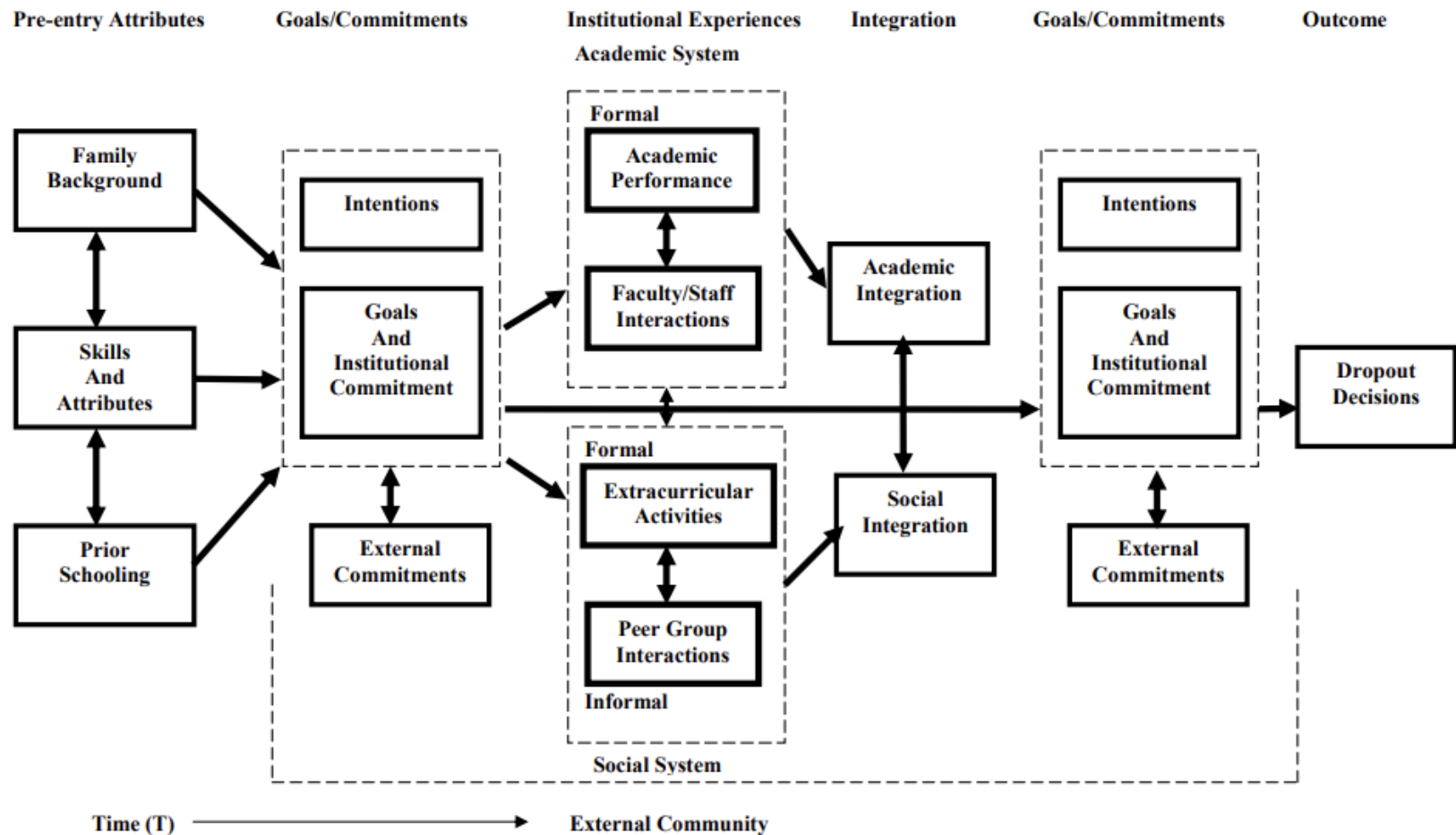


Figure 3. Adapted from Tinto's Revised Student Integration Theory (1993)

A very well-known model in higher education that aims to explain student achievement and perseverance is Tinto's (1975) framework. It discusses the pre-entry attributes of the students, their goals and commitments, the academic system and outputs as well as integration while explaining dropout behavior. Many researchers have drawn on Tinto's framework to study specific cases and groups. For example, a long-term research including 411 freshmen at a publicly funded university was carried out by Elkins et al. (2000). They grounded their quantitative study on Tinto's (1993) findings and used the path analysis method.

This study has shown that being present at the university and moving away from old ideals have important effects on persistence. In addition to this, the results have also confirmed that underrepresented ethnic groups have difficulty in this separation phase as they do not receive enough support. On the contrary, a study has found that the academic performance of first-year Australian university students and their integration into the institution have a negative effect on their academic achievement, which has not been mentioned in Tinto's model (McKenzie et al., 2001).

The data coming from the study of Liu (2002) have underlined that Tinto's findings have limitations regarding operational definitions. The factors affecting the integration of white students positively can affect the integration of non-white students negatively. Therefore, it is less likely to find a standard line for academic and social integration based on cultural differences among university students. Astin and Oseguera (2002) have used regression analysis to find institutional and student characteristics that cause higher retention and graduation rates in universities. Accordingly, institution types, namely public, private, college, and university, influence the persistence of students differently. According to another study (St. John

et al., 2004), African-American students who reenrolled in universities for their second year and in fields like business, health, engineering and computer science were more likely to retain and graduate. In addition, these fields are referred to as highly-demanded programs with higher retention rates as opposed to other fields considering their value in the labor market. In an effort to fill the gap in Tinto's model about the effect of institutions on retention, public universities have been praised for their potential to graduate more students than their private counterparts (Scott et al., 2006). Hence, the type of university is found to be an important variable in exploring retention factors.

A relatively recent dissertation by Kelly (2009) has explored the factors influencing student persistence from the perspective of transfer students using Tinto's framework. The study has also focused on the role of technology and contextual elements in the same phenomenon. In accordance with this study, students' past, current dedication, engagement with the target structure, social integration, and their choices to stay or leave are all significant factors that determine retention from the eyes of transfer students. Data collected in Taiwan from students studying the same field in six different private institutions have revealed self-efficacy as the most important factor in changing students' decisions to persist or not (Weng et al., 2010). Goal commitment and academic integration have also been confirmed as essential elements of direct retention and graduation (Weng et al., 2010). Another recent survey on persistence specifically in music was conducted by Sichivitsa (2016) with 154 members of a public college choir in the US. The results gathered from the path analytical model have indicated that social integration in the choir and the value of music shaped the musical intentions of the participants.

The relevant parts of Tinto's Student Integration Theory (1975) and Tinto's Revised Student Integration Theory (1993) will be used in this qualitative study on student retention and graduation in doctoral education. Accordingly, initial commitments and later commitments of doctoral students to their studies together with their academic and social integration will be taken into account to analyze the personal, institutional and academic commitments and integrations of Turkish doctoral students. Therefore, the possible effects of these aspects on student retention and graduation in this specific context will be understood.

4.3 Pascarella's Attrition Theory (1980)

Pascarella's Attrition Theory (1980) originates from previous studies on student retention conducted by Spady (1970) and Tinto (1975). According to Pascarella's discussion of student retention and its educational outcomes, the importance of informal interactions between university students and faculty is underlined. It is crucial to take into account not only the background characteristics of students that they convey to the university but also their current experiences in the university to understand their retention.

Additionally, institutional factors should also be explored to find out the unique impact of student-faculty and non-classroom contact on institutional retention and its outcomes. Figure 4 points out that there is a significant interaction between student characteristics, institutional characteristics, and three independent factors including informal contact with the faculty, other experiences in the university and any academic outcomes. Based on the theory of Pascarella (1980), these three factors have a direct or indirect influence on one another. That is to say, all factors affect the retention and dropout decisions of students in some way or another. Nevertheless,

educational outcomes have a direct effect on their decisions regarding whether to continue or leave. Pascarella's Attrition Theory (1980) was derived from a study conducted in a single institution, which makes it a limited source.

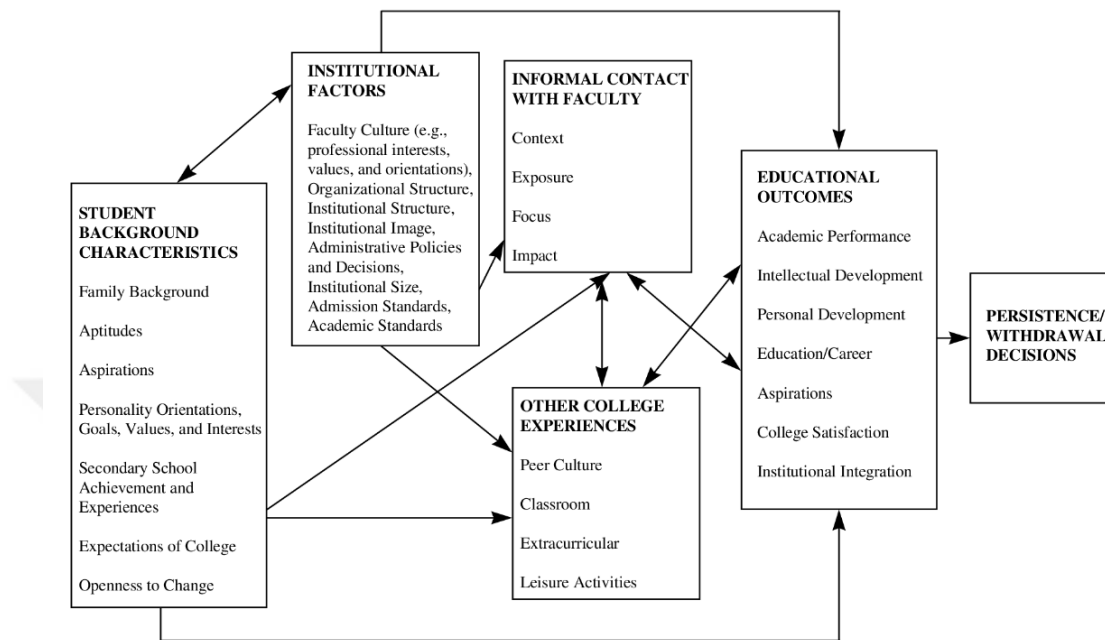


Figure 4. Adapted from Pascarella's Attrition Theory (1980)

Pascarella's Attrition Theory (1980) explains why students drop out of school before getting their diplomas. According to the theory, students drop out of university because they are dissatisfied with their social and academic experiences at the institution. Additionally, they do not participate in informal activities and don't feel connected to the school or the faculty. Here, the background characteristics of the students are also highlighted.

Putting the findings of Pascarella (1980) and Pascarella et al. (2004) in the center, institutional elements such as learning environment, size, expenditure, program and quality have been confirmed as moderating factors of dropout in many studies all over the world (Chen, 2012). These predisposing conditions are closely related to the social inclusion and feeling of belonging experienced by the students in

the long run as well as to the whole quality of the university (Georg, 2009). When students feel that they do not belong to the program or university in many ways, they eventually think of leaving it, which is the ultimate result of having problems with self-identification (Heublein, 2003).

Previously, dropout decisions of the students have been linked to their level of social and academic integration in prominent studies (Dahm & Lauterbach, 2016), and satisfaction has been linked to the material and non-material opportunities of the institutions as well as to the involvement level of the faculty in the learning journeys of the students (Nadiri et al., 2009). Nonetheless, integrating orientation programs into the system has greater potential to increase retention rates when different types of dropout behaviors are studied (Rodríguez-Gómez et al., 2016).

Here, dropout behaviors are thought to be reversed especially when students leave certain programs not the higher education system. Students who have left their programs are found to have high academic achievement most of the time (Meggiolaro et al., 2017), which again shows the importance of institutional factors and the level of informal contact with the faculty. The dropout phenomenon is reported as not being a one-sided notion, but it is often referred to as a result of micro-level (program) and macro-level (higher education system) factors in various studies. Among all factors, the dimension of formal or informal institutional support to foster the integration and well-being of the students is highlighted. Students have reported that they feel courageous to continue when they feel the power of peer/staff or program/institution support as stated by Li and Carroll (2020). Therefore, universities should give voice to students to improve their institutional mechanisms by making them evaluate the formal and informal factors based on their own experiences so that improvements can be made to reduce dropouts (Hadjar, 2022).

Students can feel more content with the institution when formal or informal peer groups and workshops are organized for mentoring purposes (Collings et al.,2014).

The relevant parts of Pascarella's Attrition Theory (1980) will be used in this qualitative study on student retention and graduation in doctoral education.

Accordingly, student characteristics, institutional factors, informal contact with faculty and other college experiences as well as the educational outcomes will be taken into account to analyze student retention and graduation in the Turkish context.

4.4 Astin's Student Involvement Theory (1984)

The study of Astin (1984) represents one of the best paradigms for examining student involvement. According to Astin's Student Involvement Theory (1984), involvement is described as the amount of mental and physical energy that students devote to their academic experience, and it is incredibly important for students to get involved so that they can learn. Astin relates his theory on student involvement to the concept of cathexis cited by Freud, which refers to the energy committed to other people, ideas or tasks.

In a longitudinal study conducted by Astin (1975), a lack of involvement was found to be one of the key factors behind university dropouts. For Astin (1984), how much students are committed to their academic goals and the level of their involvement in academic activities are critical factors affecting their retention. Those who are active in classes, spend much time on campuses and take part in student associations engage in academic practices a lot since they have more contact with academic settings and communities. He notes that retention and graduation are possible through the active engagement of students, faculty and administrators. The theory of Astin (1984) takes a different approach to development than other

developmental theories. In contrast to other developmental theories, Astin believes that development does not occur in stages. His emphasis is on students' actions and behaviors rather than their moral or intellectual qualities (Hawkins & Larabee, 2009)

Astin (1999) suggests that his theory can also be applied to students' involvement outside the classroom, even if it is based primarily on academic pursuits. That is to say, environmental factors including problems with on-campus housing and employment, a detachment from academic tasks, and a lack of feeling of acceptance to a university environment contribute negatively to retention. Students having problems with these factors lose their connection with their institution, the faculty and their academic goals, which results in dropout meaning the ultimate act of non-involvement (Astin, 1999: 524).

The theory of Astin (1984) has five essential postulates as presented in Figure 5. Accordingly, (1) Involvement necessitates the investment of mental and physical effort in general or specialized aims. (2) Involvement is an ongoing process during which learners devote certain power to different aims in separate times. (3) Involvement has quantitative and qualitative aspects. The time spent on studying by students and the quality of the learning occurring during these times is quite important. (4) The quantity and quality of involvement are closely related to the amount of student learning and improvement. (5) The effectiveness of educational programs or applications to enhance student involvement depends on their ability to boost involvement.

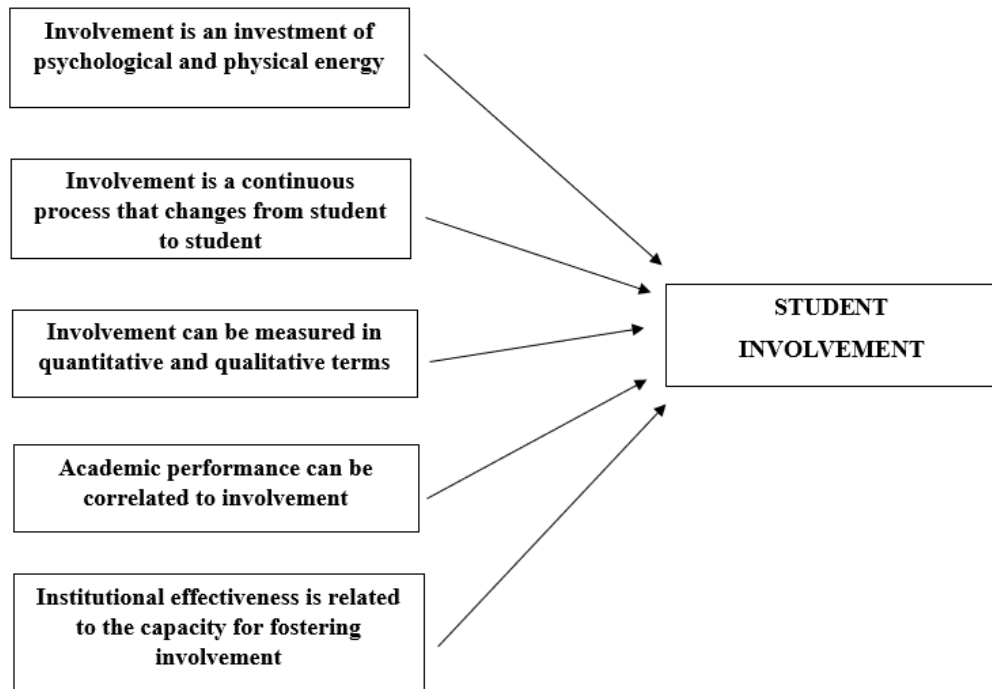


Figure 5. Adapted from Astin's Student Involvement Theory (1984)

Astin's Student Involvement Theory (1984; 1999) posits that students' involvement in university has a favorable impact on their development and educational productivity. The level of involvement, including taking part in extracurricular activities, interacting with friends, and pursuing worthwhile academic goals, is positively related to both factors. Students who are physically and psychologically involved in university have huge potential to retain and graduate.

Over the past few decades, this pedagogical theory has received a lot of attention from researchers studying in-class and out-class involvement focusing on different groups and contexts. They have also studied the relationship between involvement and other specific factors. For instance, a national survey of student engagement has been used as data to test involvement in a quantitative study (Kuh & Umbach, 2004), and exposing students to different curricular and extracurricular

activities has been found essential to boost involvement, which is one of the main responsibilities of universities.

The extracurricular index score indicating the number of clubs, officer positions, and hours spent has been studied by Rubin et al. (2002). As a result, higher levels of leadership and interpersonal abilities have been correlated with the frequency and quality of involvement. When interpersonal skills namely communication, conflict resolution, decision-making, initiative and teamwork are considered, undergraduate students have better scores with their extracurricular backgrounds (Rubin et al., 2002).

Shertzer and Schuh (2004) proposed that the advanced skills attributed to students with different roles can be connected to the extra training provided to these students. In a similar vein, university students who engage more in extracurricular events such as clubs have higher achievements in tasks requiring higher-order skills including conflict resolution (Logue et al., 2005). Studies generally investigate the amount of time spent physically in activities (Rubin et al., 2002; Dugan & Komives, 2007) in order to define involvement. Thus, quality as an important element is often ignored while discussing involvement issues. However, the role and status of students in their extracurricular activities are also considered crucial factors in determining their involvement, which can be thought of as a measure of quality.

Rubin et al. (2002) have stated that students who have leading roles in clubs and organizations improve such skills as decision-making. On the other hand, those who are basic members with standard roles cannot move their leadership skills forward (Ewing et al., 2009). For some researchers, there are few psychosocial differences among students regardless of their roles in the community (Foubert & Grainger, 2006).

Students who participated in the survey by Foreman and Retallick (2013) are active members of their out-of-class organizations. Female participants have shown more involvement in extracurricular actions concerning quantity. In contrast, male participants are more likely to hold more active roles and their involvement can be considered high in quality for this reason. The amount of time spent by students on activities is not always linked to their leadership skills (Foreman & Retallick, 2013).

Gilbert (2016) states that Astin's theory neglects the passive role of students in enhancing their own involvement. She redefines this fundamental model for the new generation studying in the United States of America believing that this group is diverse and skilled in the use of technology. This generation is described by its members as merciful, open-minded and responsible (Seemiller & Grace, 2016). Educational administrators should go beyond the simple model of Astin and try to find paths to encourage students so that they can actively participate in their involvement processes (Gilbert, 2016).

All parts of Astin's Student Involvement Theory (1984) will be used in this qualitative study on student retention and graduation in doctoral education. Accordingly, all five essential postulates about student involvement given in this theory can be meaningful while analyzing student retention and graduation, or dropout in Türkiye within the scope of this study.

4.5 Bean and Metzner's Student Attrition Theory (1985)

Previous studies and theories of Spady (1970), Tinto (1975), Pascarella (1980) and Astin (1984) mostly regard socialization, integration and involvement as the key elements for student retention. However, this is not the case for non-traditional students since they have a lower chance of being integrated into academic

communities as opposed to traditional students who are exposed more to the university and its entities.

Indeed, non-traditional students have more concerns about academic task completion, and they are more distant from social and academic communities. Bean and Metzner (1985) developed their Student Attrition Theory for non-traditional students regarding the effects of external factors on student retention. This theory is based on non-traditional students who are generally part-time and over 24 students living away from the university campus.

From the perspective of Bean and Metzner (1985), the reasons for students to remain in the university or to drop out of the university are similar to the ones that adults have when they decide to leave their workplaces. As seen in Figure 6, there are four factors influencing student retention: academic factors, students' intentions to leave, factors about students' backgrounds, and environmental factors. Academic factors are related to GPA (grade point average), while environmental factors are more related to the financial, marital or employability statuses of students, their responsibilities in life, opportunities and challenges faced by.

A student's decision to stay or to leave is affected by psychological factors such as stress and goal satisfaction. Previous school experiences and academic performances of students as well as their overall academic goals constitute their background variables. Notwithstanding that all four variables have an effect on student retention, environmental factors have a big effect on retention, especially for non-traditional adult students, on retention compared to the other three variables. What is more interesting is that students with good academic performances and scores cannot remain at the university when they have problems with environmental

factors. On the other hand, students who have support for environmental factors can stay in the university even when they are poor academically.

Comparably, psychological factors are more crucial for non-traditional students to stay at the university. When psychological factors are positive, students are more likely to persist. However, students with higher academic success have difficulty with retention when they have negative environmental support. An ideal case for student retention balances positive academic, psychological and environmental factors. In this manner, learners are more inclined to go on their education and graduate emphasized by Bean and Metzner (1985).

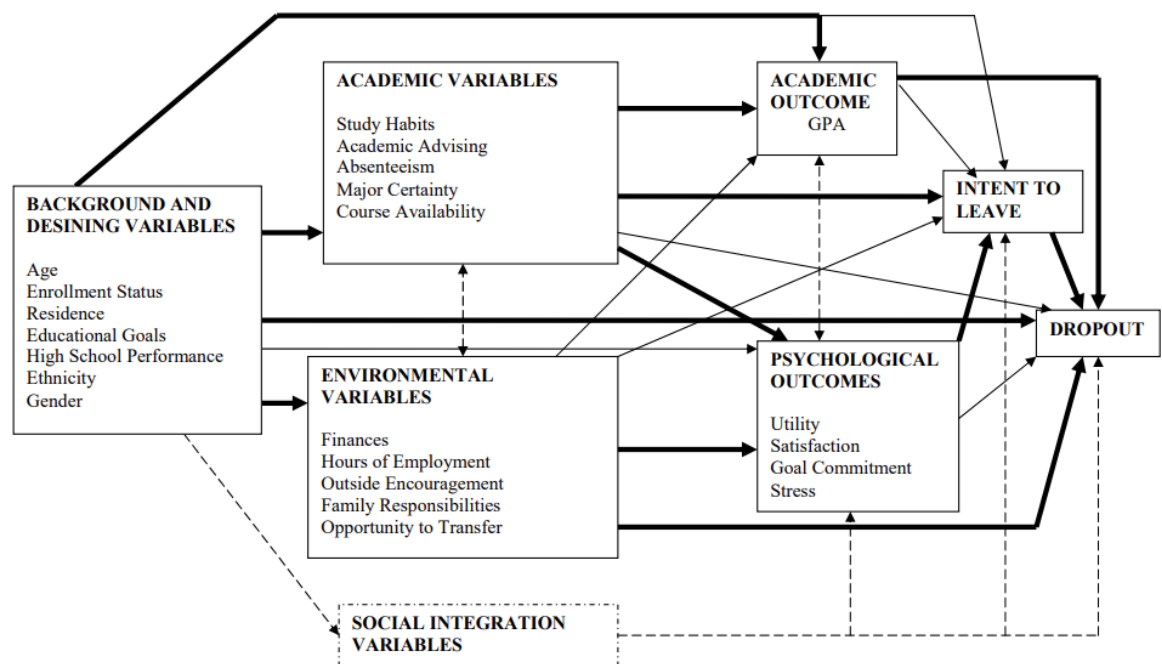


Figure 6. Adapted from Bean and Metzner's Student Attrition Theory (1985)

The Student Attrition Theory developed by Bean and Metzner (1985) explains why students, especially non-traditional ones, drop out of university before graduating. Accordingly, non-traditional students drop out of university for a variety of reasons,

including a lack of academic and social integration, a lack of dedication to the university and its objectives, and a lack of positive interactions with faculty and staff, which results in academic and psychological outcomes on their way to dropping out. Keeping in mind the previous studies concentrating mostly on traditional students (Bailey & Alfonso, 2005), some studies have also focused on non-traditional students in light of Bean and Metzner's Student Attrition Theory (1985).

Pengitore (2000) has studied student persistence in a career college by using Houle' (1961) typology of learner orientation so that the study has compared the changing motivational orientation of these students from enrollment to graduation. Schulz (2000) has also collected data from 14 career college students studying massage therapy and eight faculty members. Even though the sample is very limited, the study has contributed to the literature related to career college. However, factors for retention are not specifically mentioned in this and similar studies (Berg, 2005; Ruch, 2001). In general, they explain the features of career college students in their studies. The study of Boyles (2000) is another confirmatory action of retention factors for 635 non-traditional students. However, it does not present comparisons with Bean and Metzner's model. Similarly, some broad conclusions concerning 268 community college students are drawn from Byun's (2000) study.

The retention of female students over 30 enrolled in a community college in North Carolina has been explored by Jones-Ford (2002) using Bean and Metzner's model. Jones-Ford (2002) has used chi-square data analysis and independent sample T-test analysis and has found that there are significant differences between black and white students in many in-class and out-of-class variables including interest, encouragement, hours spent studying, hours spent working, number of meetings with

the faculty, commitment, plans, conflict in schedules, knowledge of what to do and how to handle financial issues.

When it comes to for-profit colleges and universities, they aim to have profits at all. Hence, the instructions and students need to integrate ‘know-how’, ‘know-what’ and ‘know-why’ knowledge into their learning processes to achieve their goal, which in turn results in higher retention rates (Tierney & Hentschke, 2007). Recent and ongoing studies using Bean and Metzner’s model have the goal of explaining non-traditional retention in a specific institution. A comprehensive dissertation (Olson, 2009) has used this model to compare the cases of community college and career college students. The researcher has used the data from the National Center for Education Statistics to analyze these non-traditional students’ retention as measured by graduation date. He has emphasized that male students have different features as compared to females in terms of their age and credit hours. The study has basically proved the validity of Bean and Metzner’s model on community college and career college students using graduation date as a dependent variable.

In an empirical study conducted by Garza and Bowden (2014) in Texas, the effect of the Student Development Course (SDEV) on 1557 community college students has been analyzed. The goal of the program is to help students improve their intellectual and social abilities. The results based on analysis of variance, post hoc analyses, and bivariate correlations have shown that female and male students who attend this course have a tendency to stay longer at the community college and have better academic scores. The ethnicity of the students can change the results (Garza & Bowden, 2014). Thus, formal and informal integration programs can be beneficial for non-traditional students.

Another data set retrieved from the Integrated Postsecondary Education Data System (IPEDS) and The Beginning Postsecondary Students Longitudinal Study (BPS: 04/09) has been used to develop a retention model for community college students (Yu, 2015). Academic integration is more crucial to retaining this group of students than other variables. In addition, the availability of minority students and part-time faculty members in the institutions has been reported as having a positive effect on retention. Interestingly, the size of the institutions and the number of female students are negatively connected to the retention phenomenon based on this study.

The relevant parts of Bean and Metzner's Student Attrition Theory (1985) will be used in this qualitative study on student retention and graduation in doctoral education. Accordingly, background variables except ethnicity, academic variables, environmental variables and social integration variables will be useful to analyze academic and psychological outcomes influencing student retention and graduation in the Turkish context.

4.6 Kember's Model of Dropout in Distance Education (1989)

To study dropout rates among distance learners, Kember (1989) presented a longitudinal strategy. His study draws attention to the interaction among many variables including family, personal motivation, and capacity to complete the program, as well as prior academic success, educational experiences and institutional support mechanisms for explaining the dropout phenomenon, which is given in Figure 7.

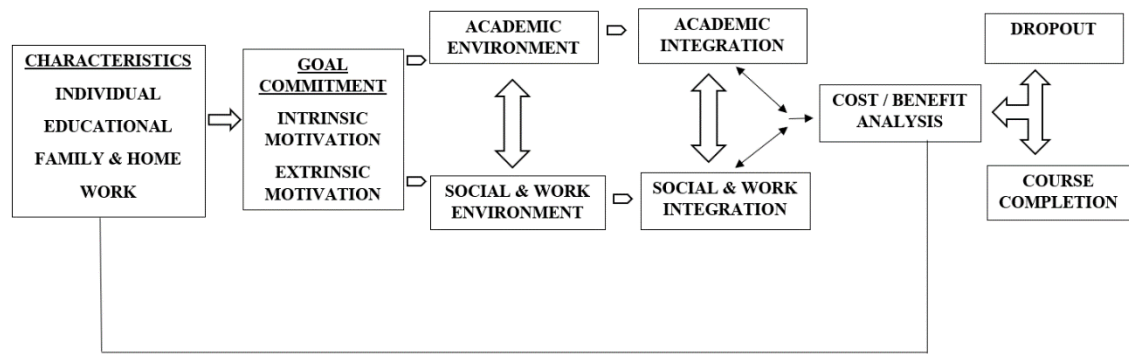


Figure 7. Adapted from Kember's Model of Dropout in Distance Education (1989)

Kember highlights the fact that students in distance education are working adults with family-related roles. Taking care of one's family, job, and educational responsibilities simultaneously is a tough task and significant for dropout decisions as opposed to situational factors that affect their academic performance (Kember, 1989), which is a considerably less effective factor for full time students. Kember also thinks that family-related factors such as the number of children in school, housing problems, or priorities related to the profession have a big impact on students' retention and graduation decisions. If one or more of the mentioned factors are negative for students, they cannot complete their studies facilitated especially through distance education.

Kember's (1989) longitudinal process model of dropout in distance education suggests that social and academic integration affecting student retention should be seen with an eye toward factors such as the initial characteristics or background of the students as well as the factors that change over time. It should not be forgotten that dropout decisions are not spontaneous actions. Students decide on leaving or continuing many times during their academic journey.

Kember et al. (1992, 1994) have retested this first model regarding dropout in distance education. They have used the same model in various settings and with different students and underlined the essential place of social and academic integration to retain and graduate from distance learning. This model is an effective and unique one discussing the dropout phenomenon in a specific learning setting taking place at a distance. Even though the model is an adaptation of previous models, especially the one proposed by Tinto (1975) on retention focusing on adult students in university settings, a new design shows that adults trained in traditional ways and adults learning at a distance are quite different.

Kember's Model of Dropout in Distance Education (1989) is about the distance learning paradigm and explains why distance learners drop out of universities before finishing their degrees. According to the model, learners drop out of distance learning programs when they lack intrinsic and entrance motivation, have trouble managing their time because of their responsibilities and family-related roles, have a hard time adjusting to the social and academic learning environment, and receive little support from their professors and classmates.

This model is not only essential to defining retention and dropout phenomena in distance education, but also to understanding the case of adult learners in particular. Thus, it is often referred to in online or distance education literature by researchers. The data obtained from learners enrolled in four business courses at the Open University of the United Kingdom do not fit Kember's model (Woodley et al., (2001). Empirical results have indicated limited internal consistency in the sub-scales for the main constructs in Kember's model in this context. The majority of dropout learners have stated their discontent with the learning environment and pointed out a

mismatch between their academic goals and their work or personal interests (Chyung, 2001).

Another study by Diaz (2002) has proven that the rising dropout rate among online adult learners is affected by many factors that cannot be controlled. Additionally, retaining adult learners is a highly challenging task especially for online learning programs due to the distinctive features of these individuals and their specific living or working circumstances. These learners are generally between the ages of 25 and 50, and the number of those adults who take distance learning courses as well as those who drop out of the courses has dramatically expanded within the previous 20 years (Moore & Kearsley, 2005; Levy, 2007). There are also increasingly more corporate programs being given online throughout the world, which is expected to rise in time based on the survey study conducted in the USA and Canada (Bersin, 2005). In the same vein, instruction delivered online or through technology has increased a lot (Sugrue & Rivera, 2005).

According to Park (2007), similar empirical and conceptual studies have been conducted by Jun (2005), O'Connor et al. (2003), and Willging and Johnson (2004) to analyze the reasons for adults dropping out from distance education by using Kember's model. They have failed to categorize the underlying reasons (Park, 2007). Among all, Willging and Johnson (2004) have especially emphasized that the number of assignments, learning style conflicts, lack of engagement, lack of enthusiasm, and lack of instructional environment and technical support are the key factors influencing students' withdrawal.

Packham et al. (2004) state that external factors such as technical problems, the number of assignments and coursework undoubtedly have an impact on dropout rates. However, they are much more challenging in online learning as the instructor

and the program provider do not have any influence on them. Menager-Beeleys (2004) states that learners with high task choice values can retain and graduate. Apart from these previous studies, Jun (2005) has focused on the relationship between the motivational/demographical features of online adult learners and their dropout decisions.

It is possible to categorize factors specific to each individual's case as well as factors valid for everyone. Although non-traditional distance learners are covered in these studies taking their roles and responsibilities into account, they have failed to develop a systematic approach for their outcomes. The rate of learners who leave open and distance learning programs is higher than that of leaving face-to-face learning environments (Boston & Ice, 2011). Learners who cannot complete their distance learning pose a threat at micro and macro levels, which is a long-term danger (Grau-Valldosera & Minguillón, 2014).

Radovan (2018) has recently reviewed existing retention and dropout models and concluded that support from different cases is required. Yukselturk et al. (2014) have underlined that the primary elements for predicting dropout reasons for online programs are self-efficacy, readiness and previous experience. Aydin et al. (2019) interviewed 14,972 learners who dropped out of the Open Education System in Türkiye between the academic years 2012 and 2015. A questionnaire has also been applied. The findings of this study have enabled the researchers to categorize them into personal, system-related, and environmental reasons.

All elements in Kember's Model of Dropout in Distance Education (1989) except cost-benefit analysis will be used in this qualitative study on student retention and graduation in doctoral education. Although the model is about distance education and distance learners, aspects such as characteristics, goal commitment, academic

environment, social and work environment, academic integration, social and work integration will be meaningful within the scope of this study targeting retention doctoral education.

4.7 Cabrera's Integrated Retention Model (1992; 1993)

Tinto's Student Integration Theory (1975) and Bean and Metzner's Student Attrition Theory (1985) are combined into Cabrera's Integrated Retention Model by Cabrera, Castaneda, Nora, and Hengstler (1992) to explore similarities and differences between the two pioneer theories. Previous studies regard retention as a complex process based on interactions. These models see the characteristics that students bring to the university as the principal factors influencing their adaptation and integration into the new educational environment. When the characteristics of the students and the university are in harmony, the retention rate is expected to be high. Previous studies often blamed institutions for student dropouts. Nevertheless, Bean and Metzner's Student Attrition Theory (1985) emphasizes the greater effect of external factors such as financial status, transfer opportunities to other universities, and the approval of parents or friends not the institution on student retention.

These theories have different perspectives on academic performance and achievement. Student Integration Theory (1975) considers academic performance a sign of academic integration whereas Student Attrition Theory (1985) sees it as the ultimate result of social and psychological phases. Empirical studies based on Tinto's Student Integration Theory (1975) show that student retention is highly correlated with academic and social integration; institutional and goal commitment (Pascarella & Terenzini, 1980; Munro, 1981; Pascarella & Chapman, 1983). On the contrary, empirical studies based on Student Attrition Theory (1985) relate student retention to

external factors, institutional adaptation, students' intention to persist and students' attitudes (Bean, 1982; Bean & Vesper, 1990).

Cabrera et al. (1992) collected data through a questionnaire including 79 items to explore the validity of the aforementioned two theories. The items in the questionnaire have been adapted from various instruments developed by Bean (1982a; 1982b; 1983; 1985), Metzner and Bean (1987), Pascarella and Terenzini (1979), and Terenzini, Lorange, and Pascarella (1981). Ten constructs have been analyzed via 79 items in this study. These are: intent to persist, family approval, institutional fit, courses, encouragement of friends, the opportunity to transfer, academic integration, social integration, institutional commitment, and goal commitment.

Additionally, two extra items have been gathered from the literature to measure institutional commitment and goal commitment (Mowday, Steers & Porter, 1979; Pierce & Dunham, 1987). The data have been analyzed in three steps by using structural equation modeling. Firstly, 14 items were chosen among 79 items to measure eight constructs: loyalty, fit here, practical value, family approval, institutional quality, courses, opportunity to transfer and encouragement of friends for testing Student Attrition Theory (1985).

Furthermore, two extra items have been chosen from Nettles et al. (1985) to measure financial attitudes. As a result, 11 out of 14 items have been discovered as the most reliable and valid indicators for analyzing the given constructs. Items developed by Pascarella and Terenzini (1979) have been used in factor analysis for testing the Student Integration Model (1975). Items measuring six constructs are: frequency of contact with the faculty, interactions with the faculty, faculty and staff

concern for student development, academic and intellectual development, peer relations, institutional commitment and goal commitment.

Here, two extra items have been chosen to measure satisfaction with the social and academic life at the university. In addition, two extra items to measure value have also been chosen. Secondly, a structural model has been implemented to analyze the target data. Accordingly, the structural model of Student Attrition Theory (1985) has given rise to four variables in intent to persist. Besides, six out of fifteen structural paths have been found statistically significant. Three extra statistically significant paths showing a direct effect of financial attitudes on course and GPA and a non-causal relationship between financial attitude and parental approval have also been found by this analysis.

When it comes to testing Student Integration Theory (1975), the structural model has been implemented to analyze the target data. In this respect, 38 percent of the variables in persistence and 36 percent of the variables in intent to persist have been obtained. What is more, nine out of thirteen structural paths are statistically significant. Three extra statistically significant paths showing a direct effect of academic integration on persistence and two positive relationships between goal commitment and institutional commitment and academic integration and social integration have also been found as a result of this analysis.

Finally, the data have been analyzed using a two-step strategy to see differences between each construct. Three structural models have been provided for each construct. The first structural model has shown that the constructs across the two theories are independent of each other. The first model has been rejected to test the convergence between factors. The second structural model is representative and shows that the constructs across these theories are correlated. The third structural

model has the best fit for the data and indicates that the constructs across theories form a single construct.

Cabrera, Nora and Castaneda (1993) have retested the Integrated Model of Student Retention (1992) by using structural equation modeling to find out the possibility of combining these two theories while analyzing student retention. This follow-up study has resulted in two independent variables and seven dependent variables. The modified version of the model, indicated in Figure 8, is noticeably better than the first version since a new structural path from encouragement from friends and family to goal commitment has been added. Encouragement has a positive effect on students' goal commitments and retention (Nora et al., 1990). Tinto's model is more comprehensive and powerful, but Bean and Metzner's model has more variables to explain student retention. Cabrera's Integrated Retention Model (1992) and a follow-up version of Cabrera's Integrated Retention Model (1993) unite Tinto's Social Integration Theory (1975) and Bean and Metzner's Student Attrition Theory (1985). The model presents a comprehensive analysis of similarities and differences, mostly casual patterns, among factors related to the student retention phenomenon.

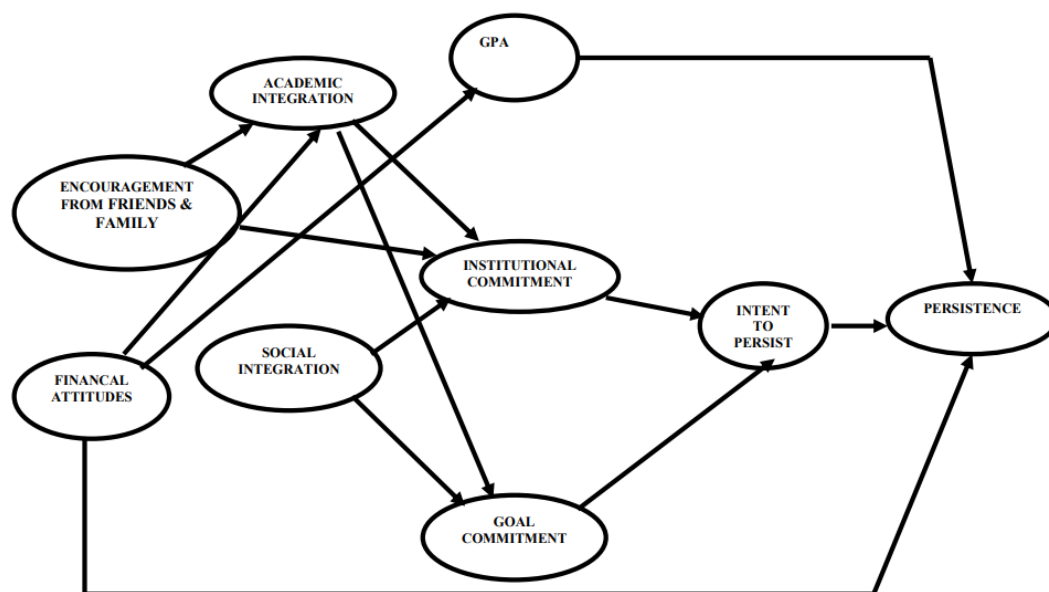


Figure 8. Adapted from Cabrera's Integrated Retention Model (1993)

Cabrera's Integrated Retention Model (1992) explains why students in higher education are connected to their university and how they can finish their degrees. The model shows the similarities and differences among previous models, too. According to this model, a student's ability to stay at a university is influenced by their sense of academic and social integration and belonging to the campus community, their ability to form positive bonds with faculty and staff, their dedication to the mission and core principles of the university, and encouragement from family and friends.

Some studies have referred to this model. However, they have also referred to the model of Tinto (1975) as they are interrelated models of integration. Sandler (2000) has developed a new structural equation model based on Cabrera's Integrated Retention Model (1993) by highlighting the rising presence of over 24 adult populations in universities. He has applied this model to 937 two- and four-year

students by adding three new variables to the existing internal and external variables. These are: career decision-making self-efficacy (CDMSE), perceived stress and financial difficulty. In addition, a survey questionnaire and institutional records of the students have also been used to extend possible results. Finally, the model has indicated that CDMSE, as a career development construct, has the highest impact on persistence among other internal variables (Sandler, 2000).

Crawford Sorey and Harris Duggan (2008) relate academic and social integration to institutional commitment and underline the difference between traditional-aged and adult students in Virginia. Encouragement and support, academic integration, fall grade point average, and an expressed intent to leave were found to be the most predictive variables of institutional commitment for traditional-aged community students in their study.

Townsend and Wilson (2006) interviewed 19 community college students who moved to a research-extensive university to study the factors influencing the academic and social integration of community college transfer students. They have asked about the transfer procedure, the institutional orientation process and students' perceptions of the university in comparison to the community college. The results have suggested that these transfer students need more support due to the larger size of the university. Additionally, these students need to comprehend the mission of a research university to be completely integrated. In this sense, student affairs staff can take the initiative.

On the other hand, Conway (2009) has drawn attention to students from different countries studying at a community-based university because they comprise the majority of the American HE population. They do quite well in academia. Therefore, the future success of HE in the United States depends on retaining and

graduating these students (Camarota, 2005). Although the cases of immigrants are not homogenous, particularly Hispanic students have been performing worse than others in terms of integration and persistence (Conway, 2009).

When credit completion rates are analyzed to understand persistence levels, Black immigrant students who have completed their secondary education overseas have higher integration and persistence rates than all other groups (Conway, 2009). The impacts of a sense of belonging and an intervention to boost the sense of belonging among the students have been tested by Hausmann et al. (2009) on the strength of Cabrera's Integrated Retention Model (1993). Accordingly, the proposed intervention has boosted a sense of belonging for white students but not for African-American students. However, the sense of belonging has direct effects on institutional commitment and indirect effects on intentions to persist and actual persistence behavior in both groups.

Davidson and Wilson (2013) go back to Tinto's model which is a milestone for Cabrera's model. The researchers have concluded that integration into campus is critical for student persistence, however, further studies aiming to point out better terminologies are still required to differentiate non-traditional, racial and ethnic minority students based on their critical examination of social and academic integration (Davidson & Wilson, 2013). Results from full time undergraduate students with different racial backgrounds show that academic and social integration have different impacts on the persistence of Black and White students. In addition, financial pressure is the most effective barrier to retention for all students. Moreover, institutional control over academic quality is critical to retain students (Xu & Webber, 2018). To be able to hinder dropouts and increase persistence, the identification of students at risk is required to improve such strategies and

interventions as tutoring, counseling and mentoring to support these students (Ortiz-Lozano et al., 2018).

All parts of Cabrera's Integrated Retention Model (1992; 1993) will be used in this qualitative study on student retention and graduation in doctoral education. However, financial attitudes in this model will be related to work status of doctoral students in the target study. In addition, GPA in this model can be considered as an integral part of intention to persist for doctoral students in the target study.

4.8 Bean and Eaton's Psychological Theory (2000)

Bean and Eaton's Psychological Theory (2000) emphasizes the important place of psychological processes in student retention, which is often missing in previous sociological approaches considering social and academic integration as the key elements for retention. Indeed, Bean and Eaton (2000) evaluate social and academic integration as the outcome of psychological processes.

As can be seen in Figure 9, students enroll in an institution with their existing characteristics such as their specific experiences and abilities. They also bring their academic scores and performances achieved through their educational lives to higher education institutions. Inevitably, all these entry-level characteristics contribute to their psychological attributes. In the context of this theory, self-efficacy assessments are related to the confidence level of students on how much they can be academically successful in this new educational setting; normative beliefs are related to the degree to which attending this higher education institution is a good idea for students; and past experiences are related to old social and academic experiences that prepare students for this new setting.

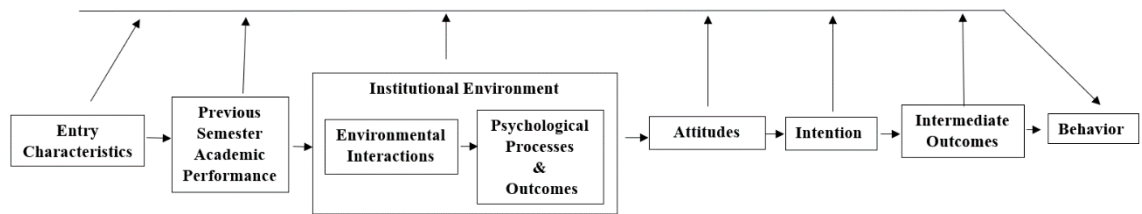


Figure 9. Adapted from Bean and Eaton's Psychological Theory (2000)

All psychological factors are combined to create an institutional environment when students start their education. They integrate with the social, academic and bureaucratic extents of the institution as well as its representatives. Social interactions can occur with any person in the institution including faculty members, students and staff. Similarly, academic interactions take place in class or out of class with faculty members, other students, supervisors, librarians and staff. On the other hand, bureaucratic interactions take place in such places as registration offices, financial aid offices, housing and advising areas. Direct or indirect interactions involve formal and informal relationships. It should not be forgotten that students continue to be with such people outside of the university during any integration process.

Interaction in academic, social and bureaucratic realms does not magically increase the overall integration of students, but it does change the feelings and emotions of students towards the institution step by step as highlighted by Bean and Eaton (2000). Emotional connections motivate students to develop strategies that help them adapt to the university environment more easily. They sometimes need to develop coping skills to face any academic and social challenges on their way to graduation. When these students have internal motivation for their actions, they are eager to achieve their academic and social goals. However, students with external

motivation are reluctant to achieve their academic and social goals as they believe that success depends on other factors except their own effort. In addition, positive feelings and motivation resulting in high levels of integration turn into specific attitudes.

All in all, positive attitudes lead to intentions and intermediate outcomes. Students with positive attitudes towards their institution tend to remain in the program and are linked to their initial goals to graduate. Even if this integration process based on psychological factors is represented linearly in Figure 9, the overall flow of this model proposed by Bean and Eaton (2000) is circular. This model not only explains the psychological factors affecting student retention and graduation, but it also suggests future programs to establish or improve service-learning programs, freshman interest groups and other learning communities, freshman orientation seminars, and mentoring programs to enhance student retention and graduation rates.

Bean and Eaton's Psychological Theory (2000) presents psychological reasons and outcomes. They see retention or dropout actions as the result of psychological factors. Studies using Bean and Eaton's theory focus on psychological factors for retention and dropout as expected. Behavioral intention, which stems from a person's mindset or personal standard is one of the main psychological factors in students' intent to leave or continue (Trafimow, 2009).

At this point, the self-efficacy theory of Bandura (1977) also comes into play for understanding retention and dropout intentions in a better way. It is a deliberate act done in a certain way in order to attain a given goal (Bean & Eaton, 2002). In a dissertation by Luke II (2009), the interaction between self-efficacy, locus of control, coping strategies, and perspectives on the relationship between education and

employment on retention among college students at a small liberal arts college has been examined.

According to Luke II (2009), the likelihood that a student returns to the institution the following semester is significantly higher for those who feel more flexible in choosing their academic major. In addition, retention rates are high among students who believe that their academic work contributes to future employment and success. Weng et al. (2010) have extended the integrated model of Tinto and Bean. They have added self-efficacy as an extra construct to their study conducted in six Taiwanese private higher education institutes.

Demetriou and Schmitz-Sciborski (2011) have revealed through a historical look that empirical studies of undergraduate retention have increased widely over the last fifty years, and they have similar social and psychological concerns. A questionnaire survey has been conducted face-to-face and online. Self-efficacy has been found to have the most critical impact on intent to persist among these students. Goal commitment and academic integration have also been found to be strongly linked to retention.

As stated by Warren (2020), the Beginning Postsecondary Student (BPS) survey on retention and completion of programs was used in 2012 by the National Center for Education Statistics to collect data from nationally representative participants at the final phase of the first year, three years following the start of post-secondary education, and six years following the start of the educational process.

This data has shown that the link between integration and retention varies across disciplines. However, social and academic integration characteristics are quite essential to predicting retention for the entire sample.

In a recent dissertation by Gramatikova (2022), survey data collected from first-year freshmen students and the National Survey of Student Engagement (NSSE) have been used to test Bean and Eaton's conceptual framework in California. This data has been analyzed through Structural Equation Modeling (SEM) and moderated mediation. In this regard, the hypothesized model is supported across all three samples in 2018, 2019, and 2020. The findings have also shown that academic interactions, academic integration, social integration and institutional fit are related to persistence. On the contrary, locus of control, self-efficacy and coping have indirect effects on persistence into the second and third years of college.

All parts of Bean and Eaton's Psychological Theory (2000) will be used in this qualitative study on student retention and graduation in doctoral education. Understanding the entry characteristics of doctoral students as adults will be especially valuable for the target study. In the target context, previous semester academic performance can be related to such different stages of a doctorate as course, qualifying and thesis. Moreover, the institutional environment, attitudes and intentions will be important to evaluate intermediate outcomes and behaviors shaping doctoral students' decision to remain or not in the program.

4.9 Rovai's Composite Persistence Model (2003)

Rovai (2003) suggested a model to analyze the factors influencing a student's decision to leave online learning. On the one hand, such pre-admission factors as personal characteristics and skills of students are affecting their persistence in online education according to this recent model. On the other hand, external and internal factors covering post-admission periods are also important to understand student persistence.

External factors can include the financial status of a student, hours spent as an employee and encouragement provided by others. These external factors are open to change from enrollment to graduation period, especially for adult students during their online education. When it comes to internal factors including academic or social integration, personal study habits, self-esteem and absenteeism, they are less open to change immediately. Rovai's Composite Persistence Model (2003), represented in Figure 10, precisely reviewed Tinto's Integration Model (1993) and Bean and Metzner's Student Attrition Model (1985) referring to them as the most complete and comprehensive models on retention and dropout. However, he put much emphasis on non-traditional online adult learners in his model.

Packham et al. (2004) retested and extended this model within the scope of their own context. They stated that successful online learners are often female, unemployed, without a higher degree, and between the ages of 31 and 50. In addition, among many other external factors, time conflict was described as the most common problem for adult online learners in degree completion. External factors such as the amount and design of the coursework and the presence of technical problems affecting dropout are difficult to change or control by the learner and the instructor (Packham et al., 2004). Later, external and internal factors proposed by Rovai (2003) are linked to motivation as a key element for persistence in online programs (Menager-Beeley, 2004; Jun, 2005). The online learning environment, learning outcomes, and retention rates of online adult students were all positively affected by their motivation. Adult online learners drop out for a multitude of causes, but there is little experimental research on this topic and no systematic methodology (Jun, 2005).

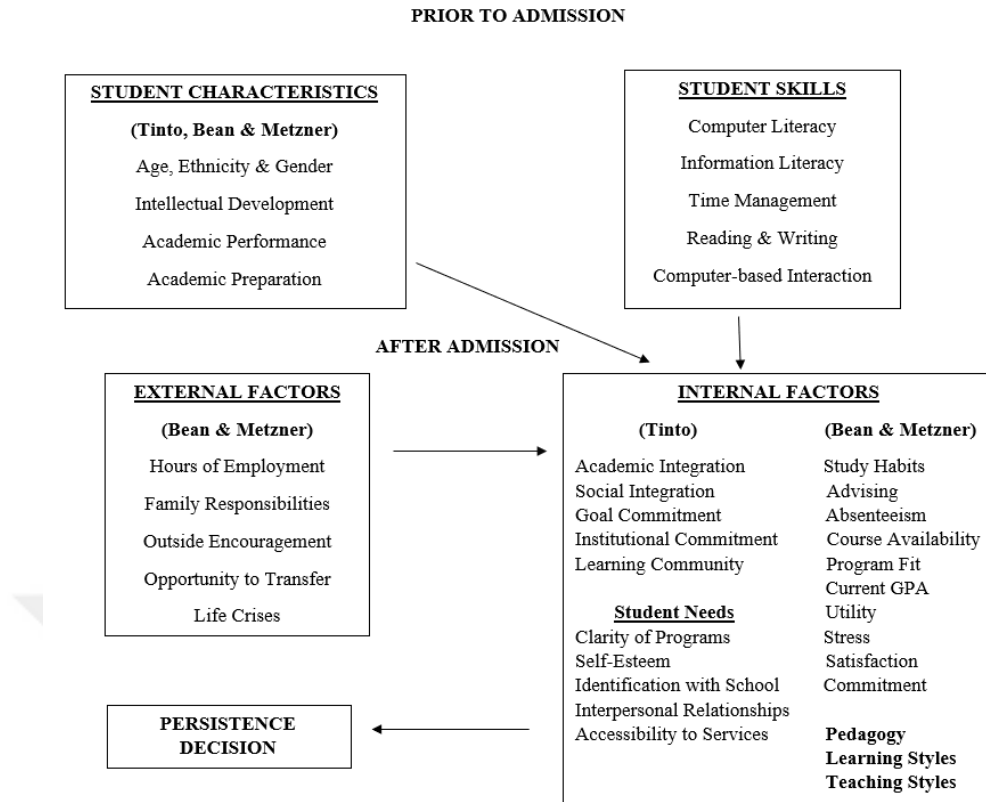


Figure 10. Adapted from Rovai's Composite Persistence Model (2003)

Rovai's Composite Persistence Model (2003), one of the recent models in the field of higher education, has gathered previous models together. It basically suggests that student characteristics, student skills, internal and external factors influence student persistence, especially in online learning. Taking this model and other related models as a theoretical base, Tyler-Smith (2006) has suggested that sociological, psychological, technical and cognitive factors have an impact on the dropout rate of first-time non-traditional students in distance learning.

Students' cognitive load and their capacity for adjustment are crucial to continuing in such programs. Furthermore, these students should be proficient in technology, the learning environment, a new application, and a new form of communication (Tyler-Smith, 2006, p. 78). Institutions that aim to motivate their

students through engaging activities and materials, improve the quality of social interaction, and provide pedagogical support before and during the program contribute positively to persistence (Park & Choi, 2009). Planning the introductory activities in online or distance learning carefully has been underlined as an advantage for increasing student retention (Brewer & Yucedag-Ozcan, 2013).

In the recent review by Van Ameijde et al. (2016), contextual and subjective elements have been emphasized as the reasons for retention which is a complex issue. They have focused on aspects of module design and have pointed out Integration, Collaboration, Engagement, Balance, Economics, Reflection, and Gradualism (ICEBERG) to be able to retain students. Radovan (2018) has also reviewed retention models both for traditional and non-traditional students in this article to indicate new obstacles to retaining students evolved from advanced technologies and developments in learning. He suggests that policies be implemented before the start of the academic year to lower dropout rates. High dropout rates are observed especially in the first few weeks of online programs because of new knowledge, new online tools, and hidden elements of the virtual learning environment. These online adult learners need much more support and motivation than face-to-face students. What is interesting is that these students generally lack independent learning abilities as they have never developed such abilities in their previous, more structured learning environments. Therefore, students should be able to possess autonomy in their own learning (Radovan, 2018).

As a case study, the perceptions of two groups of students from the WebIT online Master of Science Degree in Instructional Technology at the University of Tennessee at Knoxville have been collected over two years (Su & Waugh, 2018). The electronic survey about online WebIT experiences has been applied to 16

participants. Then, data from 11 learners who graduated, and five learners who left that program were compared. The results have shown that there are several potential distinctions between the two groups of participants, and they shed light on the connection between the questions' subjects and the high attrition rate seen in the WebIT program's initial cohort. However, the results are open to debate in other contexts (Su & Waugh, 2018).

All parts of Rovai's Composite Persistence Model (2003) will be used in this qualitative study on student retention and graduation in doctoral education. All aspects given prior to admission and after admission to a program will be related to doctoral students for the target study. The model will be valuable to analyze and discuss the target data on student retention as it also covers other fundamental models.

4.10 Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009)

In the assessment of studies that explored the factors that contribute to dropping out of non-traditional and non-degree online program students, Park and Choi (2009) offered a new model framing Rovai's (2003) model for understanding adult dropouts in online learning given in Figure 10. They improved the revised model of Park (2007). Accordingly, the previous model of Rovai has been tested and proven many times so far. Nonetheless, revision is still necessary to change the structure and reduce the number of variables.

The revised and simplified model of Park and Choi (2009) is given in Figure 11. When this model is investigated closely, learner skills can be seen in a gray box as there have been limited empirical studies on their effect on retention. The external

factors are given before and during the courses in this revised model with the belief that these factors affect the retention decisions of students throughout the period. This is especially true for adult learners in distance education since they have a huge potential to leave their education because of job-related issues that emerge during the course period. Such external factors as workload can even cause adult learners to drop out of the course at the beginning.

Additionally, internal and external factors interact with each other in this revised model. They represent an inter-correlation as opposed to a one-sided influence shown in Rovai's (2003) model. Many studies proved that external factors as well as internal ones have a major effect on adult dropout in online learning. That is the reason for a new direct line from external factors to the dropout or persistence box was added by Park and Choi (2009). Although Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations does not present new information, it makes the connections among different factors clearer and simpler.

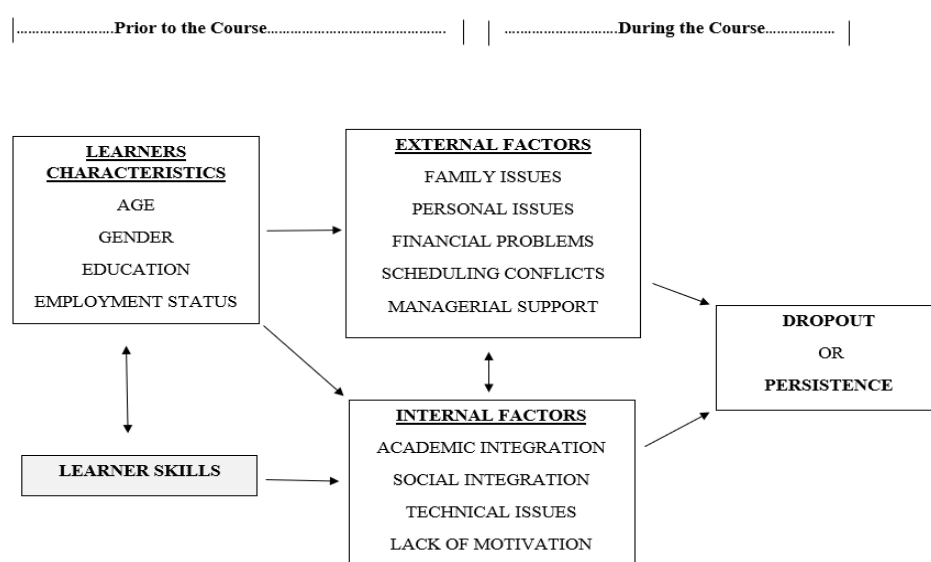


Figure 11. Adapted from Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009)

An explanation of the factors influencing student dropout in organizational settings can be found in Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009). The model asserts elements such as learner characteristics, external and internal factors, and learner skills as direct or indirect predictors of student dropout and persistence in distance learning in organizations. Keeping in mind that motivation is a key factor in affecting attrition, Chen and Jang (2010) tested the self-determination theory on two online certificate programs in the USA. The researchers have developed a model for evaluating 'need support' on the contextual variables of autonomy and competency support. The variables perceived relatedness, perceived ability, and perceived autonomy have been used to test 'need satisfaction'. The results have indicated that proficiency in distance learning is greatly guided by autonomy, and competency also has a favorable impact on how online learners regard their autonomy, relatedness, and competence.

All in all, online students' self-determination is positively influenced by the actualization of these demands. On the other hand, Nistor and Neubauer (2010) focused on ten factors linked to online courses in their study conducted in Germany. Being physically in the setting, introducing oneself in the 'Yellow Pages,' and interacting with the course's instructor via an email during the first two weeks are considered the main predictors of retention since they are all about relatedness and a sense of connectivity in the long run.

According to Nichols (2010), contact with the course tutor, a course setup or design supporting continuity, and aspects of the self, such as self-determination are the key reasons for persistence when a target intervention has been put into place in the context of New Zealand. In addition, follow-up interviews with the post-intervention group have proven that personal factors are the most important retention

factor from the perspective of students. In another study, Lee and Choi (2011) determined 69 factors affecting students' decisions to drop out and they divided them into three categories: factors related to students, courses/ programs and environmental elements. Digital technologies are seen as significant in online courses. They are proven to be important factors affecting students' decisions to continue or drop out (Hachey et al., 2014; Lakhal & Bazinet 2015).

The Unified Theory of Acceptance and Use of Technology model (UTAUT model) of Venkatesh et al. (2003), which is extended with factors drawn from previous studies has been retested in several studies and contexts (Khechine & Lakhal 2018; Lakhal & Khechine 2017). In a review-based study conducted by Xavier and Meneses (2020), relevant databases including 138 studies conducted between 2014 and 2018 have been analyzed. Even though online higher education has grown, it has been defined by its lack of standard definitions and models in this review. These researchers have found course and program factors, student factors and environmental factors to be the main predictors of retention.

Moreover, Lakhal et al. (2021) have used the UTAUT model in order to identify and analyze the reasons for persistence in online HE programs by validating an integrative model recently. The researchers have collected data from 759 students at Université Laval and Université de Sherbrooke via an online questionnaire. The results have shown that anxiety, satisfaction, effort expectancy, engagement, behavioral intention, employer encouragement, facilitating conditions and performance expectancy are among the primary factors of persistence in online programs.

All parts of Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009) will be used in this qualitative study on student

retention and graduation in doctoral education. Even though this model focuses on distance learning, the presented aspects are quite relevant to the target study. Learner characteristics, learner skills, external and internal factors covering prior to the course and during the course period will be extended to the different stages of a doctorate for this study.

4.11 Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016)

The most recent theoretical model for student dropout and retention has been put forward by Choi (2016). This is a modified version of previous models proposed by Park (2007); and Park and Choi (2009) aiming to frame the attrition of adults who have started an online program. Park and Choi's (2009) model has focused on the attrition acts of non-degree online students. It is not suitable to use that model for full time students and programs to understand their dropout decisions (Choi & Kim, 2018).

Therefore, Choi (2016) has restructured the existing model and renamed some concepts in it. In addition, a new construct named outcome factor has been added to this most recent model. He has also renamed 'student characteristics' to 'learner factors'. These factors related to learners themselves are basically age, gender, educational level, employment status, scholastic aptitude, and motivation. In this model, external factors having an effect on dropout are categorized as encouragement from superiors, colleagues, family members, financial support, and physical constraints from work, family, and other personal issues.

Choi (2016) has also put the sub-construct named "physical constraints" under the 'external factors' category in his model believing that any physical problem in the life of adult learners can hinder their retention and graduation in the

long run, which finally leads to dropout behavior. The number and type of these physical constraints vary from increased workload to family-related responsibilities. Contrary to former models, Choi (2016) has added GPA as an outcome factor to his model as indicated in Figure 12. GPA is linked to adult learners' decisions to persist or drop out (Dupin-Bryant, 2004) and students' final decisions to leave or persist in online classrooms respectively (Choi & Kim, 2018; Choi & Park, 2018).

Moreover, Choi (2016) identified 'basic scholastic aptitude' under the 'learner factors' category as a sub-construct impacting students' persistence and dropout decisions. As the scholastic aptitude scores of adult students measure their overall academic success, Choi (2016) thought that the learning skills of these students could also be classified under this category. He pointed out that the scholastic aptitude and GPA of these adult students in online degree programs are positively correlated in shaping their dropout decisions (Choi & Park, 2018).

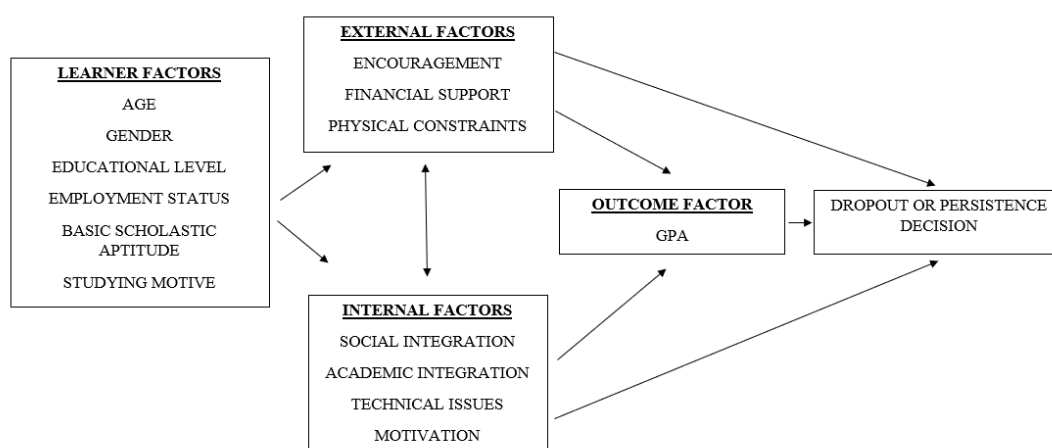


Figure 12. Adapted from Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016)

Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016) explains why adult learners' drop out of online degree programs. According to the

model, learner factors, internal and external factors, and outcome factors highly affect adult learners' dropout or persistence decisions in online environments. According to research by Knestrick et al. (2016), grade point average (GPA), program specialization, enrollment status, either full- or part-time, and age can be the main explanatory factors for 27% of dropouts or withdrawals from online learning. As stated by Bourdeaux and Schoenack (2016), online adult students can suffer when their instructors fall behind their expectations, utilize ineffective pedagogical strategies, fail to make their courses clear or act disrespectfully. Interestingly, According to Rienties and Toetenel (2016), there is no apparent association between retention and contentment of mature learners pursuing online education. They have implied that online learning is not a fruitful and pleasurable journey. However, Farrell et al. (2016) underlined that increasing participation in online learning is quite possible by giving students detailed information about the timetable and obligations. Backs (2017) has emphasized that interaction with fellow learners and the faculty is a crucial coping tactic, which points out the adverse effect of separation leading to attrition. The relevance of the course for online learners' needs has a major effect on their retention, progress and graduation (Yang et al., 2017).

In another examination of the educational processes of freshman and senior learners, Li et al. (2017) discovered that continuing learners showed 70% lower satisfaction than freshman students when their education does not match with their professional development goals. In addition to this, adults can fail to continue their online learning schedules due to their work-related commitments (Sorensen & Donovan, 2017). Richardson et al. (2017) have found that social presence affects motivation and participation in online learning, which increases student satisfaction and retention. Martin and Bolliger (2018) have explored how online students'

judgments of engagement tactics, which are connected to learning progress, are influenced by gender, age, and their prior online learning experience. They have discovered that using additional online learning materials is more significant for female students than for male students. For younger students, it is more crucial to receive frequent updates or e-mail reminders from the instructor. Although online education offers many benefits for adults, dropouts can cause social isolation, financial loss and marginalization (Sosu & Pheunpha, 2019).

In the context of Turkish higher education, open education faculty and distance education students' dropout reasons have been analyzed by Gunduz and Karaman (2020). They conducted semi-structured interviews with 25 students and listed the reasons for dropout as difficulty paying fees, maladjustment to online learning, need for traditional books, technical problems in exams, lack of career objectives, anxiety about failure, environmental circumstances, conditions, personal responsibilities, programs and other environmental factors.

Based on an empirical study since 2001, Shaikh and Asif (2022) have presented a detailed review of online dropout literature, including the cases of the COVID-19 era. Their study is helpful for future researchers as it categorizes the existing online dropout factors clearly.

In a very recent study, Rotar (2022) reviewed 30 empirical studies about online HE learners conducted between 2009 and 2020 in order to comprehend and analyze factors having a role in the retention, attrition and progress of adult learners. Four categories of factors affecting online adult learners' retention have been listed: student factors, course factors, social factors and support factors. All parts of Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016) excluding GPA will be taken into consideration for this qualitative study on student retention

and graduation in doctoral education. This model developed for online degree programs will also be meaningful for target doctoral programs with its on-the-spot elements. In addition, it should be highlighted here that the idea of online learning has gained momentum in the country after a period of global COVID-19 crisis (Telli & Altun, 2020). that doctoral programs also have online elements in Türkiye. Therefore, this model covering learner factors, internal factors and external factors will be useful to understand student retention in doctoral education.

4.12 Summary of conceptual models and theories

Complexities influencing student retention and graduation in higher education have been studied over time, and many student dropout or retention models have been developed (Al-Dossary, 2008; Braxton, 2002). In this chapter, 11 different models and theories were presented considering the fact that they were closely related to the content area of this study. They explore retention or dropout phenomena in different contexts with different target groups. From these given models and theories, the ones focusing especially on distance and online education, are also helpful because their target groups are also adult learners similar to those in this study.

In addition, the findings drawn from these models on distance and online education are to be specifically useful to attribute meaning to the experiences of doctoral students and dropouts in this study by keeping in mind that they experienced distance and online education during the COVID-19 pandemic. Furthermore, the given models have been referred to in the literature from the past to the present, and their validities have been frequently tested. Even though some of them date back to old times, they are still relevant and important.

In a nutshell, the most recent studies demonstrate the continued relevance and usefulness of given models for understanding why traditional and non-traditional students continue or leave their education and how to increase retention and graduation rates in different HE contexts. Hence, they are all crucial and inspirational for future studies including this current one. Nonetheless, they are not specifically about doctoral students or dropouts most of the time, and they depend heavily on empirical quantitative studies conducted by similar scholars with limited support. In addition, the majority of well-known models in the literature were derived from research conducted generally in the westernized countries with Eurocentric standards and viewpoints.

The aforementioned existing student dropout or retention models can be grouped into five categories: sociological, psychological, environmental, economic and organizational. For more than 45 years, sociological models related to the integration of students have been used as the primary source to explain the reasons why students remain or leave universities. Tinto's (1975) model has been the most commonly used sociological model in higher education literature. Nevertheless, in residential institutions and non-residential colleges, this model has gained only sporadic empirical support.

Psychological, environmental, economic and organizational models offer alternative perspectives on student retention and dropout. Psychological models deal with personality and relate dropout behavior to weaknesses in the individual's personality even if there are no specific personal characteristics connected to attrition. Environmental models underline the social, economic, and institutional factors having an effect on student retention. Social models focus on the essential

place of social factors external to the university such as social status and race in explaining retention.

What is more, economic models put emphasis on university students' financial status and whether financial aid helps their retention or causes them to drop out of the university even if it is not the key element in their decisions (Tinto, 1993). Financial factors play a primary role during the enrollment process of university students. However, they have a secondary role in the leaving decisions of many students (Tinto, 1993). Organizational models focus on institutional and structural factors including bureaucratic operations, the size and structure of the university, faculty-student protocols and resources that play a role in students' decisions on retention or dropout. Economic, financial and organizational models can be considered part of environmental and interactional models with their secondary roles in retention decisions.

These given models, based mostly on empirical data, are thorough sources for analyzing student dropout or retention phenomenon, mostly in a single institution, and for explaining factors affecting traditional and non-traditional undergraduate-level adult students' decisions. However, they are highly limited in their ability to explain the dropout or retention phenomenon for doctoral students at different universities. Moreover, empirical and theoretical studies dealing with the phenomenon of dropout or retention in adult education are rare in the literature (Hoffmann et al., 2021), especially within the scope of doctoral education. Indeed, doctoral education as a part of higher education is similar to adult education because of its target group. Hence, the models about undergraduate-level adult learners' dropout and retention decisions and insights gained from these models can be transferred to doctoral students and dropouts.

None of the models, in the particular setting of this study, is solely efficient in understanding student retention and graduation in doctoral programs. While prior models offer a clear picture of the phenomenon, the retention of doctoral students today requires a different kind of investigation than that of undergraduate students. Hence, all or relevant parts of the previous theories, models, or practices given in this section will be used for this study. Within the light of given retention and dropout models considering traditional and non-traditional university students, prospective overlapping complexities affecting doctoral students' retention and graduation were conceptualized as personal, institutional and academic complexities for this qualitative study exploring the phenomenon through the lenses of doctoral students and dropouts.

4.12.1 Personal complexities

Personal factors, including demographic variables, personal attributes, motivation and goals, roles and responsibilities, and support mechanisms are closely related to student retention in a doctorate (Spaulding & Rockinson-Szapkiw, 2012). Individuals with various demographics and personal backgrounds enroll in doctoral programs (Laskey, 2004). Their marital and financial status, educational background, talents, life conditions, including the presence of dependents, enrollment and residency status (Castello et al., 2017), and living standards have either direct or indirect effects on doctoral retention (Sverdlik et al., 2018).

The age, gender, ethnicity and marital status of doctoral students motivate them to persist in their studies or not (Wao & Onwuegbuzie, 2011). The age of students is also reflected in their educational decisions and performances (Villela & Hu, 1991). Students with older ages have more roles and responsibilities in life and

are likely to give up (Little, 2008). On the other hand, the aging experience of students can be a positive factor for their academic success in a doctoral program considering Knowles' Theory of Adult Learning (1984). That is to say, any personal complexities faced by students based on their age, gender, social class and race can hinder their progress, retention and graduation in a doctorate (Moreau & Leathwood, 2007).

Some studies underline the effects of gender and race in particular (Gardner, 2009) while others put emphasis on social class (Lambert et al., 2004). Based on previous studies, male students are luckier and more advantageous in completing their degree as opposed to female students (Stiles, 2003). Women have less tendency to finish their education due to the household and caregiver roles attributed to them (Özmen & Güç, 2013; Wendler et al., 2010), and they cannot receive any support from their families, especially in poorer and illiterate contexts (Khan & Rizwan, 2011).

Minority groups have more difficulty sustaining their education toward graduation (Stiles, 2003). Although some studies indicate that married students are more likely to finish their doctoral degree on time (Lott et al., 2009), it is extraordinarily difficult for them to be committed to their family-related tasks and responsibilities while studying hard for a doctorate (Austin, 2002; Flynn et al., 2012).

Students who are at doctoral levels are adults with many roles and responsibilities as husbands, wives, parents or employees. They encounter many difficulties and challenges in life in order to balance their personal priorities or obligations with their doctoral education (Sverdlik et al., 2018). It was reported that students are least satisfied with the balance between family and academic roles based on a quantitative study with 619 doctoral students (Wasburn-Moses, 2008). This

results in an excessive level of stress and anxiety for students to retain in doctoral studies (Smith et al., 2006).

Under these circumstances, personal support mechanisms including friends, peers or family members can ease the situation and help students overcome such suffering (Nelson et al., 2001). Fulfilling personal and family needs associated with their primary roles and responsibilities through a doctoral degree is a key point for progress in a doctorate (Włodkowski, 2008). When personal issues related to their physical or psychological health, and their personal relationships are set aside, doctoral students are pushed to attrition (Rizzolo et al., 2016).

Different personality traits, personal goals and motivational orientations of doctoral students are rather critical to their beliefs, behaviors and decisions (Ulate & Carballo, 2011). These non-cognitive elements shape their behavior to remain in a doctoral program until graduation or to leave it before graduation (Scepansky & Bjornsen, 2003). Student retention is mainly dependent on students' personal characteristics (Ali & Kohun, 2006).

A recent study conducted by Goldman and Goodboy (2017) showed that the characteristics of doctoral students also guide their relationships with their supervisors. Accordingly, students who are psychologically mature can easily communicate with their supervisor in a positive and constructive manner. A negative relationship with supervisors is one of the main reasons for feeling alone and isolated.

The feeling of isolation can be felt at different stages of the doctoral degree by a student, but unfamiliar situations may trigger it (Castelló et al., 2017). It affects the quality of future products and scholarships (Golde, 2005). Moreover, the personal motivation of doctoral students to cope with the complexities and aim to get the title

contributes positively to their persistence level in the doctorate (Hoskins & Goldberg, 2005). Personal attributes, including interest, learning style, intelligence or motivation, help students persist in a doctorate (Lovitts, 2005). Students' level of personal interest in participating in a doctoral program is important since their interest motivates them to remain in that program by following the requirements on their way to graduation (Laskey & Hetzel, 2011).

Being interested in scholarly issues, participating in curricular activities (Javanthi et al., 2014), studying strictly and regularly with self-motivation, and avoiding absenteeism (Sibanda et al., 2015; Ali et al., 2013) affect the performance and success of students and help them graduate on time (Abaidoo, 2018). Competencies and being active learners are associated with higher retention rates (Grover, 2007). Some studies show that only a third of students are counted as active agents in their learning community (Pyhälto et al., 2009). They retain a doctorate if they have the opportunity to collaborate with other scholars, create their own networks, and contact experienced researchers to solve problems (Spaulding & Rockinson-Szapkiw, 2012).

Moreover, personal and intellectual integrations of doctoral students into various academic communities foster their persistence toward graduation, as suggested by Tinto's Integration Theory (1993) and affirmed by other studies in doctoral retention (Ivankova & Stick, 2007). Students in natural and health sciences work for their doctoral studies with a team, and they feel less lonely in their doctoral journeys, whereas students in the social sciences and humanities work individually and are more likely to withdraw (McAlpine & Norton, 2006). Additionally, family-related dependencies of doctoral students push them to be socially isolated from scholarly communities during their educational studies (Longfield et al., 2006),

which causes them to not complete their degree with helpless feelings. Student traits of dependency and procrastination for any reason function as barriers on this compelling journey (Terrell, 2002).

4.12.2 Institutional complexities

Doctoral students' decisions on enrollment, retention, and graduation are also affected by institutional factors related to a doctoral program including curricula, opportunities, and support mechanisms provided by the university. Bean's Model of Student Retention (1980) shows that student retention in the doctorate is directly affected by students' satisfaction with the institutional aspects of the organization. Students who are satisfied with their university feel more integrated into academic and social communities, which helps them retain their studies and graduate on time. Bhandari and Blumenthal (2011, p. 7-8) highlight some institutional factors as follows: 'the cost and quality of higher education programs, the value of the degree or professional credentials for future careers, the availability of certain areas of specialization and access to the education system.'

In this regard, doctoral students who are glad about the structure of their doctoral program and the opportunities are more likely to maintain their motivation for graduation. These external parameters discussed in previous studies (Li & Bray, 2007) ignore the personal lives, features, and preferences of doctoral students. Each individual can reflect on the same institutional factor distinctively based on their own experience and integration (Tinto, 1993).

The structure and type of doctoral program definitely shape the retention or attrition decisions of doctoral students in higher education. Face-to-face doctoral programs with residency opportunities are more integrative, and they allow

socialization. Nonetheless, online programs push doctoral students into isolation and give rise to attrition (Rovai, 2002). Online or distance programs implementing cohort models permit more students to retain a doctorate (Lovitts, 2001).

Moreover, online doctoral programs allow students to go beyond national borders and ease their participation in a doctorate. The inconsistency between what doctoral students “wanted from the program and what they thought the program was preparing them to do” (Hoskins & Goldberg, 2005, p. 183). Hence, a structured orientation in a doctorate is essential to integrating students into the culture of outlined programs, processes, and procedures (Wasburn-Moses, 2008).

In addition, students report a need for more effective support systems in universities, especially for more effective advising mechanisms. Structured support mechanisms in doctoral programs should be in action and accessible to all students on their way to graduation (Earl-Novell, 2006). Structured support mechanisms are not always provided by universities or they remain only on paper when available.

As stated by Rumbley et al. (2014), the field of higher education includes more than 450 programs at the macro level, and the number of doctoral programs, as well as the number of students, is increasing globally (Campbell, 2015; Johnston et al., 2016). Previous studies in higher education show that there is a remarkable difference between the structure of doctoral programs and their curricula worldwide.

European countries implement a research-based approach in their doctoral programs, and students do not have to take courses. Students in the United Kingdom start to work on a project when they enroll in a program. However, completing the theoretical coursework and submitting a dissertation is necessary to get the degree in other countries like the United States (Freeman et al., 2014). Nevertheless, coursework does not guarantee active learning and production.

Similarly, doctoral students in Türkiye have to complete institutional coursework before they move on to their dissertations. Although similarities and differences are found in various programs applied by countries, students are supposed to go deeper into the theoretical knowledge that they have gained in their master's degrees to be able to apply it to doctoral studies under the supervision of an academic and committee members (Barnett et al., 2017). Many countries, including China and Australia, aim to integrate field-based research into their curriculums in order to raise professional doctorates offering theoretical and practical knowledge (Fotovatian, 2012).

In an international survey study conducted by Misu (2012), it was found that comparing all doctoral programs to analyze retention issues is challenging because of country-specific concerns and practices. Even so, theory-based doctoral programs were associated with a high level of attrition compared to research-based doctoral programs (Wildy et al., 2015). There are many reasons for this situation. One of the reasons why students retain more in research-based programs is that they feel more integrated and actively involved in their practical tasks and research.

The content, methodology, and procedures in doctoral programs are also varied, and they are not standardized. However, the local and global agendas of the countries under the pressure of the labor market and the economy have shaped the scope of doctoral education in recent times (Samuel, 2014). Regardless of institutional differences from country to country, individuals with doctoral degrees are considered intellectuals with deeper knowledge worldwide. Retention rates are visible in programs considering the deeper intellectual needs of these adults in their curriculums (Knowles, 1984). When their expectations are not met in doctoral programs, individuals are less likely to complete their degrees. Hence, the programs

and curriculums should be flexible to meet their needs and professional practices (Hoskins & Goldberg, 2005).

The course stage of a doctoral program is more structured, but the dissertation stage is more unstructured and flexible. Nonetheless, students, especially those who have a structured educational background, are unfamiliar with the latter stage and have difficulty with persistence (West et al., 2011). Programs and curriculums connecting the structured course stage to the unstructured dissertation stage have more graduates (Jimenez, 2011).

Structured funding opportunities or financial support mechanisms in doctoral programs are another critical factor in doctoral retention (Chen, 2008). Doctoral students who work full time jobs are more likely to leave their degrees (Esteban et al., 2016). Angelier (2012) states that doctoral students work in an academic setting as paid employees in some countries, while doctoral students in other countries conduct research on behalf of companies to be paid via collaborative partnership protocols. Students with research-based salaries or payments persist in doctorates more easily. However, part-time students also exist in academia (Angelier, 2012) as do adults working full time in other sectors.

A cohort model should be organized for research groups (West et al., 2011), especially for these adults isolated from academic settings to earn their living. Their sense of belonging to the scholarly community should be boosted via structured integrative actions (Lovitts, 2001). Students relying on loans to fund their doctoral education cannot persist in academia (Hillman, 2014) as they are aware that getting a doctoral degree does not guarantee expected jobs upon graduation in many countries (Schomburg, 2011).

4.12.3 Academic complexities

Academic factors shape the decisions of students on enrolment, retention, and graduation from doctoral programs (Tinto, 2006). Doctoral programs admit students meeting scientific and academic requirements (Bakırcı & Karaman, 2010). They raise academically qualified scholars by using scientific methodologies (Can et al., 2009). The academic backgrounds and qualifications of doctoral students are important criteria for their admission and enrollment (Smith & Naylor, 2001). Their academic records, including GPA records, are helpful in understanding their qualifications and are linked to their future persistence (Burillo et al., 2011). High academic grades obtained before entry into doctoral education are a good indicator of success and completion (Casaravilla et al., 2012). Nevertheless, an academic background filled with successful grades is not enough to retain in academia since students have to come up with an original scientific dissertation (Gök & Sılay, 2005) by combining previous academic knowledge and skills (Çakar, 1997), which is an unfamiliar task for them.

Social adaptation to doctoral studies, motivation, commitment, and qualifications to meet academic demands are essential to retention (Landry, 2003). A student's academic preparedness covering all these factors plays an important role in his or her ability to complete the degree based on a longitudinal study conducted in Spain with 7000 university students (Lassibille & Gómez, 2008). In addition, students' academic level of instructional language is closely related to their academic preparedness, and it is also important for them to remain in the program or leave it before graduation (Barefoot, 2007).

According to Tinto's Adaptive Explicative Model (1993), student retention is a result of factors such as academic background and academic adaptation to the

educational and communal atmosphere of the university regardless of contextual aspects. Family-related (Bean, 1983) or culture-related factors (Guiffrida, 2006) outside the academic context are undermined in studies framing the model of Tinto (1993).

The context and culture of students are reflected in their academic journeys during their first years in particular (Upcraft et al., 2004). Freshman students' academic adaptation to the doctoral environment has an effect on their decision to continue or to leave (Araque et al., 2009). In the eyes of learning theorists, students' commitment to their doctoral studies and their ability to develop strategies to go on are vital factors for academic performance (Broadbent & Poon, 2015).

Apart from an academic background, current academic performance is a good sign to understand retention in doctorate for many researchers (Arco-Tirado et al., 2011). The chances of it getting done of doctoral studies are higher among students who come from academically established and successful universities (Lassibille & Navarro, 2009). There is satisfactory evidence that previous well-organized academic education helps students survive in their current academic studies as highlighted by Rodrigo et al. (2012).

Rodríguez and Herrera (2009) underline that regular attendance in doctoral studies makes it easy for students to adapt and to be integrated into academic communities, which fosters their progress and persistence (Tinto, 1997). Along with regular attendance and adaptation, the study techniques and learning styles of students have an effect on their retention in the doctorate. However, there is no best technique or habit to promote academic studies for students based on the research conducted by Schmeck (2013). When there is a mismatch between individual learning techniques and the techniques required by the target doctoral degree,

students tend to be remedial or drop out (Hernández et al., 2015). In some countries, educational systems are academically more effective at graduating students independent of their learning habits and techniques (Lamb et al., 2010). Universities should hear the voices of their learners to provide mechanisms for boosting necessary learning skills such as being competent at research methodologies (Braxton et al., 2000). In addition, they should analyze the risk factors for being remedial or dropping out so that they can bear responsibility for the retention of doctoral students (Tinto, 2006). Hoskins and Goldberg (2005) describe the academic match as the harmony between the goals of students and their academic development. When academic mismatch exists and reaches a higher level, students withdraw from doctoral programs (Golde & Dore, 2001). It should not be forgotten that students' academic circumstances and mismatch levels can vary even within the same university (Willcoxson et al., 2011). Academic support mechanisms, if any, come into the stage for them including help with dissertation writing, language or editing, challenging assignments, publications, conference presentations and creating professional academic networks organized by universities (Tenenbaum et al., 2001).

4.13 Summary of Chapter 4

Chapter 4 presents a conceptual framework for identifying complexities relevant to the study's topic and research questions. The chapter gives details for 11 different models and theories in sections: (1) Spady's Theory of Student Departure (1970), (2)Tinto's Student Integration Theory (1975), (3)Pascarella's Attrition Theory (1980), (4) Astin's Student Involvement Theory (1984), (5) Bean and Metzner's Student Attrition Theory (1985), (6) Kember's Model of Dropout in Distance Education (1989), (7) Cabrera's Integrated Retention Model (1992;1993), (8) Bean

and Eaton's Psychological Theory (2000), (9) Rovai's Composite Persistence Model (2003), (10) Park and Choi's Revised Model of Dropouts from Distance Learning (2009) and (11) Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016). To summarize, the given models and theories provide insights into the personal, institutional and academic complexities influencing student retention and graduation in doctoral education. Therefore, all or relevant parts of them will be used in this study. The methodology employed in this study is covered in the following chapter.



CHAPTER 5

METHODOLOGY

In this section, the methodological details of this study are presented. (1) research design and procedure, (2) data collection and analysis as well as (3) ethical considerations are given as main headings allowing many sub-headings for this purpose.

5.1 Research design and procedure

According to Merriam and Tisdell (2016), the field of education is a part of applied social sciences and qualitative research focuses on the lives and practices of individuals to gain insight into them. In addition, qualitative research design provides detailed information through in-depth interviews by focusing on various behaviors, beliefs, opinions, experiences, and feelings of individuals. Therefore, a qualitative research design was chosen for this study dealing with the experiences and feelings of doctoral students and those who have left their doctoral education.

Understanding the experiences and attributes of individuals who continue their doctoral programs or who have left their doctoral programs enhances the interpretability and social formation of this study (Creswell, 2013). In this qualitative study, Interpretative Phenomenological Analysis (IPA) was used to see how doctoral students who continue their education and individuals who have left their doctoral programs reflect on their experiences (Smith et al., 2021). IPA is a way of discovering the perceptions of a uniform group consisting of individuals going through comparable experiences (Sart, 2015; Smith, 2011). It is similar to descriptive phenomenological analysis in the sense that they both emphasize the individuals' real

lives by conducting in-depth interviews and observations with the aim of comprehending the target notion. However, IPA highlights the importance of experiences and discusses the essence of the target phenomenon in a more detailed way (Patton, 2018; Creswell & Creswell, 2018; Giorgi, 1997). Therefore, it facilitates empathy with the participants, provides flexibility, and enables access to richer data (Smith & Osborn, 2004).

Although descriptive phenomenology deals with the lived experiences of people without attributing extra meaning to them, interpretive phenomenology reveals more and interprets the embedded meaning in the lived experiences of people (Smith et al., 2009). That is to say, the participant and researcher are like co-creators of the interpretation process (Swanson & Wojnar, 2007) where the researcher brings his or her own understanding, background, experiences, interpretation and conceptual frameworks to draw meanings from the data. Hence, interpretive phenomenology is a more flexible and subjective approach that helps the researcher explore the target phenomenon more holistically.

5.1.1 Data collection instruments

The data was collected through in-depth, semi-structured interviews using open-ended questions utilizing an interview protocol. Initially, two interview protocols were developed for current doctoral students and recent doctoral dropouts. Semi-structured interview questions for doctoral students and doctoral dropouts were created to answer the research question of this study. In the development of the interview protocols, the main aim was to create interview questions pointing out the research question, relevant literature and conceptual framework. Hence, all interview questions were formed in search of factors affecting doctoral students' retention and

graduation. These two words were not used in the wording of the interview questions as their inclusion has led interviewees to concentrate on a certain facet of their responses. The researcher was challenged by the wording of the questions in this sense. She formed and reformed each question based on relatable higher education literature. The interview protocols were organized in such a way that the conceptual framework was presented. Hence, personal, institutional and academic questions were included.

Committee members checked, revised and reworded the initial version of the interview protocols. They verified the interview questions. Then, they collaboratively decided on employing a pilot study to form the final version of the protocols. After the pilot study, the researcher and the committee members decided to use the interview protocol for doctoral dropouts to triangulate the main data coming from doctoral students. Thus, they reconsidered two interview protocols both for current doctoral students and for recent doctoral dropouts.

While checking the available interview questions used in the pilot study, new questions were added for incorporating a variety of viewpoints into the investigation of the phenomena under consideration. This ongoing process shaped the development of the ultimate interviewing procedures. Regarding the questions that were part of the interviews, there were basically fourteen open-ended questions that were created by reviewing the literature in order to investigate the research phenomenon that is being studied. These questions were continuously changed as the interview procedures evolved. They were organized in accordance with the conceptual framework.

As suggested by Patton (2002), a pattern of uniformity was established both inside and between the two categories of participants in the study by using two

different kinds of questions. The researcher started with knowledge questions to establish a pattern and to 'encourage the respondent to talk descriptively'. Then she continued with probing questions to understand a more thorough accounts of their doctoral experiences. Finally, she moved to their opinions and suggestions for doctoral education, which contributed to in-depth interpretations (Patton, 2002, p. 352).

Each interview protocol's opening question centered on the elements that the research participants considered while deciding whether to start a doctoral program, while the questions from two to ten inquired about personal, institutional and academic factors affecting retention and graduation in doctoral education from the viewpoints and perceptions of the participants. Thus, the first part of the open-ended questions was mainly 'knowledge questions' searching for personal, institutional and academic factors playing a role in students' retention and graduation in doctoral education (Patton, 2002, p. 350).

The questions from eleven to fourteen in the interviews were 'opinion and values questions' (Patton, 2002, p. 350). This second part of the questions aimed at uncovering opinions on doctoral education according to the viewpoints and perceptions of the participants as the main agency in doctoral programs. Based on the opinions and suggestions of the research participants, the last three questions were especially aimed at exploring alternative ways to improve doctoral education in Türkiye. In general, the study's interview techniques included both opinion and knowledge-based questions. These questions were asked to the participants by the researcher in such a way that they were grouped in the conceptual framework as personal, institutional and academic.

5.1.2 Participants

There are two different groups of participants in this study: Students who continue their doctoral education and individuals who have left their doctoral education. The first group consists of students who have completed at least one year of their course stage and are continuing their doctoral education at any stage. Doctoral students from any department of the public universities in Türkiye have been selected based on accessibility and voluntariness for this study.

In Türkiye, doctoral education covers eight semesters, excluding the scientific preparation stage. This period is for a maximum of 12 semesters. Therefore, it was determined as a criterion that target participants should have started their doctoral education within the last 12 years at most, considering situations such as suspending the university and benefiting from academic or student amnesty. The second group consists of individuals who have left their doctoral education in any department of public universities in Türkiye. They have been selected based on accessibility and voluntariness for this study. These participants have been selected from those who have officially or unofficially left any doctoral program during any stage in any public university in Türkiye within the last 10 years after completing at least one year of their course stage.

Accessible and volunteer participants have been conveniently chosen via the snowball sampling technique for this study following the presumptions to be uncovered (Patton, 2015). The research questions of this study have guided the discovery of these assumptions. Accordingly, the first participants have been reached through the social and academic networks of the researcher and the academics in the thesis committee by announcing the study and the qualifications sought in the participants. The participants have helped the researcher reach the next participants

through their own social and academic networks. When a sufficient number of participants were not reached in this way, announcements were made through social media and e-mail groups. The data gathered from these two groups of participants have been collected anonymously, and any identifiers such as the names of institutions have been removed or coded.

5.1.3 Pilot study

A pilot study is a mini version of a full-scale study. Functioning as a feasibility report, a pilot study can give early warning of any potential future failure. After the receipt of institutional ethical approval, a pilot study was conducted with accessible and volunteer participants to boost the general efficacy of the research while gaining vital conclusions (Teijlingen van et al., 2001). Correspondingly, the proposed method and the whole procedure, including semi-structured interview questions, were redesigned (Teijlingen van et al., 2001).

Four participants were reached for the pilot study. Two of them were doctoral students at public universities in Türkiye and they completed their course stage. Two of them were those who left their doctoral education in public universities after completing their course stage. After giving information on the study and getting the permission of these participants, online interviews were used to finalize the interview protocols. Due to COVID-19 pandemic concerns, semi-structured interviews were conducted through Zoom meetings.

The interviews lasted between 30 and 60 minutes, and they were recorded with the consent of the interviewees. Turkish, as the native language of the participants, was the language of the interviews. The interviews were transcribed, and transcriptions were sent to the participants for member checking. The data was

anonymized, and a number was given to each participant. The interview protocols were developed for two groups of participants: doctoral students and doctoral dropouts. All participants were asked about their initial expectations for a doctorate, their attrition or retention reasons, their relationship with the supervisors or faculty members, and their support mechanisms, if any. Concisely, individuals were interviewed about their perceptions towards their doctoral experiences.

All participants were also asked about their demographics such as age, financial status, work, and family conditions. Additionally, the second group of participants who left their doctoral education were also asked for their demographics at the time of dropout. The pilot study was helpful for the researcher to assess all aspects of the main study. It showed that the proposed method and the whole procedure, including semi-structured interview questions, worked well. The participation criterion for having completed the course stage was extended with the help of this pilot study. Having completed at least one year of the course stage was added as a criterion for the collection of the actual data. By doing so, the study was deepened, and participants from the course stage, qualifying stage and thesis stage were added. The data coming from dropout participants was decided to be functional for triangulation purposes.

Accordingly, additional questions related to the different stages of the doctorate were added to the semi-structured interviews planned to gather the actual data. As stated by Crossman (2019), such pilot studies can be used to define or improve research questions, determine the most effective ways to investigate them, project how much time and what kind of materials will be needed to finish the full version of a study. Furthermore, they provide specialists with the chance to dive into the initial findings (Aziz & Khan, 2020). In this regard, the pilot study indicated the

preliminary findings of the target study even though it was not specifically aimed at. Accordingly, the demographics of the pilot participants are given here, and preliminary findings of the pilot study are summarized. The first group of participants were PhD students. One of these students was a single female at the age of 29. She was working full time as an educational specialist with a middle-income level during this interview. She was doing her PhD at an English-medium public university. She was in the thesis stage. The other doctoral student was a single male at the age of 25. He was not working during this interview. He did not have any income or scholarships during this interview. He was doing his PhD at a Turkish-medium public university. He was in the thesis stage.

The second group of participants were PhD dropouts. One of these dropouts was a married male at the age of 42. He was married and 34 years old when he left the doctorate. He was working full time as a school principal with a middle-income level during this interview. He was also working full time as a vice school principal with a middle-income level at the time of his dropout. He had two children at the time of the interview. He had two children at the time of his dropout. He dropped out of a doctorate at a Turkish-medium public university in 2015.

The other dropout participant was a single female at the age of 29. She was single and 28 years old when she left the doctorate. She was working full time as a growth manager with a middle-income level during this interview. She was also working full time as a growth manager with a middle-income level at the time of her dropout. She had no children. She dropped out of a doctorate from an English-medium public university in 2021.

Based on the data gathered through the pilot study, the first group of participants, who are current doctoral students, started their doctorate to be

academics, to continue their academic path, to get the compliments of others and to have this social status. They actualized their initial aims to some extent, and they hope to actualize all their initial aims when they complete their studies. Before starting this journey, they were aware of the upcoming difficulties, and they took them seriously. Although they felt tired after completing their master's degrees, they were urged to start a new academic journey which is a doctorate. After starting their doctorate, they had some difficulties for different reasons, but they also had motivating factors to resist. Their relationships with their supervisors and faculty members were not problematic. They had non-institutional support mechanisms during their doctorate. They have some plans after completing their doctorate.

Based on the data gathered through the pilot study, the second group of participants who left their doctorate started this degree to get more theoretical and deeper information so that they could contribute to the changes or their current jobs. They actualized their initial aims to some extent, but they lost hope of actualizing all their initial aims when they completed their studies. Before starting this journey, they were more powerful and had more positive feelings towards academia and the doctorate itself. These powerful feelings decreased after starting the PhD. Their relationships with their supervisors and faculty members were not as expected. They had no support mechanisms during their doctorate. Unfortunately, they felt discouragement, sadness, and demotivation after dropping out of their doctorate. They were not sure about their future academic plans.

The researcher was able to see the study's preliminary findings with the use of the mentioned data coming from the pilot study. Additionally, they inspired the creation of insightful probing questions for the larger study's interviews.

5.1.4 Research site

The unexpected outbreak of the COVID-19 pandemic required changing the research site of this study from a face-to-face setting to an online platform during the planning phase of this study, which created both opportunities and challenges. The data for this study were gathered during the post-pandemic period when the participants were still anxious about catching coronaviruses as a result of any interactions. Considering such a threat both for the participants and the researcher, a virtual platform named Zoom was chosen as the interview setting.

The description of this research site is crucial, as is that of the participants in the study, in pursuit of answering the research questions as emphasized by Creswell (2012). Zoom, as an online virtual platform, is one of the most common ways of arranging synchronized and 40-minute meetings. It creates a real-life, active participation site for different purposes including research. It also allows breakout rooms to divide participants into groups if necessary.

The official Zoom rooms of Boğaziçi University were utilized for data collection purposes in this study, which eliminated the time constraint for standard Zoom meetings. Thanks to the official rooms allotting unlimited meetings, the researcher prevented having to restart the platform every 40 minutes. It was essential and beneficial for the organic flow of the interviews entailing active participation of doctoral students and dropouts in a virtual environment keeping in mind the andragogic principles (Knowles, Holton, & Swanson, 2015).

The participants of this study were mostly working adults and they were quite busy with their personal and professional schedules, which posed extra trouble for them to attend interviews during the daytime in a real-life setting. This online process eliminated time and space restrictions. Instead, the participants could

participate in the interviews at the most appropriate time and in the most convenient place for them. Otherwise, they would waste their time and energy reaching the real-life research site. Through online processes, doctoral students and dropouts from seven regions of Türkiye gave their voices to this study with great motivation. In other words, using an online site resulted in diversity in terms of the participants and the data provided by them.

Collecting the data through online tools and in a virtual environment was also challenging for the researcher at the beginning. Hence, the researcher made an extra effort to research similar online techniques. In addition, she attended many webinars, lectures and research studies both as a participant and as an agency in order to get more familiar with the platform and conduct interviews more naturally by experiencing similar environments and cases.

5.2 Data collection and analysis

According to Rubin and Rubin (2005), interviewing is a dialogue technique that relies on a deep bond of the person being interviewed and the interviewer. Semi-structured interviews have been conducted with individuals who continue their doctoral education and who have left their doctoral education to establish such a meaningful relationship and gain insight into their experiences.

Interviews offer a deeper and more detailed interpretation of the perceptions of those involved in the process (Lichtman, 2006). The research participants have been selected from accessible and volunteer individuals who continue their doctoral education and who have left their doctoral education from any public doctoral programs based on various criteria. Everyone involved in the study have been given a consent form that describe the study and their ethical rights beforehand as can be

seen in Appendix A. The participants have been informed both verbally and in a written form. As for the instruments, demographic information forms given in Appendix B and Appendix C together with interview questions given in Appendix D and Appendix E have been created by the researcher for two distinct groups of participants and employed online for this study regarding COVID-19 pandemic concerns. A flexible schedule has been arranged considering the comfort of each participant.

A demographic form categorizing information such as gender, age, marital status, family background, educational background, educational stage, employment, and income level has been employed. After filling out the demographic information forms, the participants were asked to attend semi-structured interviews. As the interviews were conducted online due to the COVID-19 pandemic, an e-mail message stating the consent of the participants was collected instead of wet ink signatures. In addition, verbal consent of the participants has also been taken during voice recording if the participants allow their voice to be recorded.

The participants were free to ask or give any kind of information to the researcher before, during and after the study so that they could feel safe and secure about attending the study. The participants had a chance to withdraw from the study at any time. In such cases, their whole data were disposed of. A copy of a detailed consent form was given to the participants. When the participants did not want to be recorded during semi-structured interviews, the researcher took notes during the interviews.

The total time of each interview was around one hour. The interview questions were centered around research questions. The interviews were done with using primary and specific questions that aim to probe the given perception. Data

gathered through demographic information forms and semi-structured interviews were organized, analyzed, and interpreted in an effort to understand and describe the experiences of individuals who continue their doctoral education and who have left their doctoral education at any stage.

After conducting one-on-one semi-structured interviews, each interview was listened by the researcher many times and transcribed immediately in order to gain deeper insight into the lived experiences. By doing so, the researcher also felt closer to the content. Transcriptions were sent to each participant for member-checking. Then, the themes were reached based on thematic analysis in the belief that qualitative data offers a deeper understanding of human experiences and that the method of theme development functions as effective means (Vaismoradi et al., 2016). According to Beck and Watson (2008), the Colaizzi's data analysis approach increases objectivity of formulated meanings in qualitative research. It is defined as 'Fidelity to phenomena'. "It is a refusal to tell the phenomenon what it is, but a respectful listening to what the phenomenon speaks of itself" by Colaizzi (1978, p. 52). Keeping this in mind, the researcher followed seven steps of his approach given below:

1. Examining and reexamining all transcriptions to gain insight.
2. Extracting parts from transcriptions related to the research phenomena.
3. Formulating meanings from the significant statements.
4. Arranging formulated meanings into clusters for emerging themes.
5. Incorporating results into a rich description of the lived experience.
6. Validating the exhaustive descriptions with the participants.
7. Incorporating new data obtained from participants' validation if any.

The six-stage analysis process of Smith et al. (2009) was also used as a guideline during the analysis of the data, which has similar steps with Colaizzi's approach. Accordingly, the researcher read through the transcribed interviews once to establish familiarity and gain a comprehensive understanding in the initial stage. During the subsequent stage, she took descriptive notes on the responses to each question for every participant, with significant quotes highlighted. These descriptive notes were then coded in the third stage, with similar codes combined to form overarching themes in the fourth stage. Moving into the fifth stage, she examined patterns within and across themes for each question. Finally, in the last stage, themes were finalized based on these identified patterns. The final analyses were then compared with those of peers, ensuring the trustworthiness of the process.

Two different colleagues not involved in the study provided a reality check to improve the likelihood of using the most meaningful themes, categories and codes from the data (Saldaña, 2013). One of them was a male PhD candidate in the field of translation and interpreting studies. He also had a master's degree in cultural studies. While he was working on his dissertation in a public university, he was also working as an academic in a foundation university. He had international publications for which he did qualitative analysis. For this dissertation, he followed six-stage analysis process of Smith et al. (2009) as a peer. By doing so, he ended up with similar findings with the researcher. However, there were also diversifying nuances in his analysis compared to that of the researcher. He also provided back translations of given quotations as a translator.

The second colleague was a female linguist. She received her bachelor's degree in the field of foreign language education. Then, she completed her master's degree in linguistics. She was working as an English teacher in a public high school.

In addition, she was conducting qualitative research on linguistics for international publications. For this dissertation, she also followed six-stage analysis process of Smith et al. (2009) as a peer. By doing so, she also compared visual representations prepared by the researcher to her codes and images (Paulus, 2022).

According to Tennant and Rose-Hellauer (2020), such a peer review process cannot be totally separated from the research context during which different researchers might interact for the ultimate scholarly work. Keeping this in mind, reviews coming from two different colleagues in written documents and media forms were blended into the analysis of the main researcher to be able to manage all data. Finally, the researcher went over the final version of findings and discussion sections together with two peers. Therefore, this dissertation followed a more transparent and systematic process for a high quality research outcomes (Konopasek, 2008).

5.2.1 Demographics of research participants

Two groups of participants were targeted for this dissertation. The first group (students) consists of 24 individuals who are current doctoral students at public universities in Türkiye. Table 2 shows the gender of the students in the study. There were 12 female and 12 male students in this first group.

Table 2. Gender of Students

#Female	#Male
12	12

The second group (dropouts) consists of 16 individuals who left their doctoral education at public universities in Türkiye. All accessible participants wanted to

participate in this study voluntarily. As shown in Table 3, there were eight female and eight male participants in this second group.

Table 3. Gender of Dropouts

#Female	#Male
8	8

The marital status of students is given in Table 4. There were 16 single students and eight married students in the study.

Table 4. Marital Status of Students

#Single	#Married
16	8

There were eight single, four married, one engaged, two divorced and one widowed dropout in the study as presented in Table 5 below.

Table 5. Marital Status of Dropouts

#Single	#Married	#Engaged	#Divorced	#Widowed
8	4	1	2	1

As indicated in Table 6 below, all doctoral students in the first group had full time jobs. Eight students were lecturers, five students were research assistants, and 11 students were working in other sectors.

Table 6. Occupations of Students

#Lecturer	#Research Assistant	#Other Sector
8	5	11

The occupations of dropouts in the second group are presented in Table 7 below. 15 out of 16 participants had full time jobs. One participant was working part-time. Four participants were working as lecturers and 11 participants were working in other sectors. There was one unemployed participant in this second group.

Table 7. Occupations of Dropouts

#Lecturer	#Other Sector	#Unemployed
4	11	1

Table 8 represents the income level of students. 17 students out of 24 declared that they were in the middle-income group, which was the highest ratio in this category. Three students were in a low-income group. Two students assigned themselves to the high-income group. Two students were in the lower-middle income group.

Table 8. Income Level of Students

#High Income Level	#Middle Income Level	#Lower-middle Income Level	#Low Income Level
2	17	2	3

The income levels of doctoral dropouts are given in Table 9 below. Nine participants out of 16 assigned themselves to the middle-income group, which was the highest ratio in this category. Four participants were in a low-income group. There was one

participant in the high-income group. There was one participant in the upper-middle income group and one participant in the lower-middle income group.

Table 9. Income Level of Dropouts

#High Income Level	#Upper-middle Income Level	#Middle Income Level	#Lower-middle Income Level	#Low Income Level
1	1	9	1	4

Table 10 shows the ages of students based on the categorization of Wlodkowski (2008). Accordingly, all the participants were working-age adults because their ages were between 25 and 64. The youngest and oldest participants were present with ages ranging from 26 to 39. Six of the students, forming the majority, in this first group were at the age of 30. The mean score of the ages was 30,4 for the first group consisting of 24 students.

Table 10. Age of Students

#Younger Adults	#Working-age Adults	#Older Adults
None	24	None

The current ages of doctoral dropouts are given in Table 11 below. The youngest participant was 31 years old and the oldest participant was 57 years old. Four participants in this second group were at the age of 30. The mean score of current ages was 36,75 for the second group consisting of 16 dropouts. According to the categorization of Wlodkowski (2008), all the participants were working-age adults. Their current ages were between 28 and 57.

Table 11. Current Age of Dropouts

#Younger Adults	#Working-age Adults	#Older Adults
None	16	None

Table 12 below shows the ages of dropout participants when they left the doctorate. The youngest age was 27, and the oldest age was 52. Four participants were 29 when they left the doctorate. The mean score of dropout ages was 33,5. When the categorization of Wlodkowski (2008) was taken into account, all the participants were working-age adults when they left their doctoral education.

Table 12. Leaving Age of Dropouts

#Younger Adults	#Working-age Adults	#Older Adults
None	16	None

The institutes of doctoral students are given in Table 13. Students were from three different institutes. 11 out of 16 participants were in the Institute of Social Sciences, nine were in the Institute of Science, and four were in the Institute of Health.

Table 13. Institute of Students

#Institute of Social Sciences	#Institute of Science	#Institute of Health Sciences
11	9	4

Table 14 indicates the institutes for dropouts. Dropout participants were from five different institutes. Five out of 16 participants were in the Institute of Social Sciences; five were in the Institute of Science; three were in the Institute of Health; two were in the Institute of Environmental Sciences; and one was in the Institute of Educational Sciences.

Table 14. Institute of Dropouts

#Institute of Social Sciences	#Institute of Science	#Institute of Health Sciences	#Institute of Environmental Sciences	#Institute of Educational Sciences
5	5	3	2	1

Doctoral students were at different stages of their education as shown in Table 15 below. There were 12 students in the course stage, eight students in the thesis stage, and four students in the qualifying stage.

Table 15. Doctoral Stage of Students

#Thesis Stage	#Course Stage	#Qualifying Stage
12	8	4

Participants who dropped out of doctoral programs were in different stages as shown in Table 16 below. There were eight participants in the course stage, five participants in the thesis stage, and three participants in the qualifying stage.

Table 16. Doctoral Stage of Dropouts

#Thesis Stage	#Course Stage	#Qualifying Stage
5	8	3

Students from different public universities in Türkiye participated in this study. The location of universities is given in Table 17 representing the city names and their regions. Participants were located mostly in Ankara with a ratio of 25% and in Istanbul with a ratio of 21%.

Table 17. Location of Students' Universities

Name of the City	Region of the City	Number of Students
Ankara	Central Anatolia	6
İstanbul	Marmara	5
İzmir	Aegean	2
Gaziantep	Southeastern	2
Kırklareli	Marmara	1
Adana	Mediterranean	1
Afyon	Aegean	1
Çankırı	Central Anatolia	1
Erzurum	Eastern Anatolia	1
Karabük	Black Sea	1
Düzce	Black Sea	1
Kastamonu	Black Sea	1
Bolu	Black Sea	1

Doctoral dropouts from different public universities in Türkiye participated in this study. The location of universities is given in Table 18 representing the city names and their regions. Participants were located mostly in Istanbul with a ratio of 44% and in Ankara with a ratio of 19%.

Table 18. Location of Dropouts' Universities

Name of the City	Region of the City	Number of Students
İstanbul	Marmara	7
Ankara	Central Anatolia	3
Konya	Central Anatolia	2
Niğde	Central Anatolia	1
Kars	Eastern Anatolia	1
Erzurum	Marmara	1
İzmir	Aegean	1

The aggregated information about the participants who were doctoral students is presented in Table 19 on the following page. The participants' data on demographics is provided with each city name, institution type, doctoral stage, gender, age, job, marital status and income level.

Table 19. Aggregated Information of Students

No	City	Institution	Doctoral Stage	Gender	Age	Job	Marital Status	Income Level
1	Ankara	Social Sciences	Thesis	F	33	Research Assistant	Single	Middle
2	Kırklareli	Educational Sciences	Qualifying	M	30	Economist	Single	Upper Middle
3	İstanbul	Social Sciences	Thesis	F	27	PE Teacher	Single	Middle
4	İstanbul	Science	Qualifying	F	28	Psychological Counselor	Single	Middle
5	İstanbul	Science	Course	F	30	Psychological Counselor	Married	Middle
6	İstanbul	Social Sciences	Thesis	M	30	Lecturer	Single	Low
7	Adana	Social Sciences	Course	F	27	Lecturer	Married	High
8	Ankara	Environmental Sciences	Qualifying	M	34	Psychological Counselor	Single	Low
9	Erzurum	Science	Thesis	M	32	Research Assistant	Married	Middle
10	Gaziantep	Social Sciences	Course	M	26	English Teacher	Single	Middle
11	İzmir	Science	Thesis	M	30	Pharmacist	Single	Middle
12	Ankara	Health Sciences	Qualifying	F	28	Math Teacher	Single	Middle
13	Düzce	Environmental Sciences	Thesis	F	29	Lecturer	Married	High
14	İstanbul	Health Sciences	Thesis	M	32	Lecturer	Single	Middle
15	Ankara	Science	Course	M	29	Research Assistant	Single	Lower Middle
16	Gaziantep	Health Sciences	Course	F	30	School Vice Principal	Single	Low
17	Ankara	Social Sciences	Thesis	F	29	Research Assistant	Single	Middle
18	Bolu	Educational Sciences	Course	F	31	Nurse	Single	Middle
19	İzmir	Social Sciences	Course	F	28	Architect	Single	Middle
20	Kastamonu	Science	Thesis	F	38	Lecturer	Married	Middle
21	Ankara	Science	Thesis	M	30	Lecturer	Married	Middle
22	Karabük	Social Sciences	Thesis	M	39	Lecturer	Married	Middle
23	Afyon	Social Sciences	Course	M	28	Research Assistant	Single	Middle
24	Çankırı	Environmental Sciences	Thesis	M	32	Lecturer	Married	Middle

The aggregated information about the participants who were dropouts is presented in Table 20 below. The participants' data on demographics is provided below each city name, institution type, dropout stage, gender, current age, dropout age, job, marital status and income level.

Table 20. Aggregated Information of Dropouts

No	City	Inst.	Dropout Stage	Gender	Age	Drop out Age	Job	M. Status	Income Level
1	İstanbul	Social Sci.	Qualify.	F	34	30	Turkish Teacher	Single	Middle
2	Erzurum	Edu. Sci.	Thesis	F	54	50	Lecturer	Widow.	Upper Middle
3	İstanbul	Social Sci.	Thesis	M	39	37	IT Teacher	Div.	Lower Middle
4	Niğde	Science	Course	F	37	31	Employee Counselor	Married	Middle
5	Ankara	Science	Qualify.	F	30	29	Archeologist	Single	Low
6	Konya	Social Sci.	Thesis	F	44	34	Counselor	Single	Low
7	İstanbul	Social Sci.	Course	F	30	28	English Teacher	Single	Middle
8	İstanbul	Environ. Sci.	Qualify.	M	29	29	-	Single	Low
9	Ankara	Science	Course	M	37	27	Product Manager	Married	Middle
10	Ankara	Social Sci.	Thesis	M	42	40	Lecturer	Div.	Middle
11	İstanbul	Science	Course	M	31	29	Software Engineer	Married	High
12	Kars	Health Sci.	Course	F	30	29	Vet	Engaged	Middle
13	İstanbul	Environ. Sci.	Thesis	F	39	36	Biologist	Single	Low
14	İstanbul	Health Sci.	Course	M	30	28	Lecturer	Single	Middle
15	İzmir	Science	Course	M	28	28	Civil Engineer	Single	Middle
16	Konya	Health Sci.	Course	M	57	52	Lecturer	Married	Middle

5.3 Ethical considerations

As a very first step, the Institutional Review Board (IRB) approval of Boğaziçi University, given in Appendix F, was obtained for this qualitative study. The authorities went through the research topic, the aim of the research, the methods and the whole procedure. The ethical approval given by this committee guarantees the ethical rights of each participant and the researcher. Accessible and volunteer participants were part of this study. The participants were given information on this approval and their ethical rights verbally before the data collection process. The

consent form that details the study's purpose and the participants' ethical rights was also provided to them in print.

The data were kept secure. The researcher and the supervisor had access to them. To ensure confidentiality, the names of the participants and any identifiers like university names were coded. At any point, the volunteers in this study were free to leave. In this case, their data were disposed of. In addition, the researcher has taken notes if the participants did not want to be recorded during the interviews.

5.3.1 Trustworthiness and credibility

Creswell (2013) suggests five main approaches that help a researcher establish the trustworthiness and credibility of a qualitative study. These approaches are:

Saturation in the field, member checks, peer review, clarifying researcher bias via reflexivity or debriefing and triangulation. For this study, these approaches have been applied to increase the trustworthiness and credibility of this dissertation based on a qualitative study. Firstly, saturation in the field was achieved by building engagement and trust with the participants and checking for any possible misinformation and inaccuracies presented by the participants. Having ethical approval and ensuring confidentiality were also helpful in this sense.

Secondly, the participants were sent their transcriptions so that they could read and verify their responses for member-checking. Thirdly, peer reviews were conducted by two colleagues to check the themes and codes to verify them. Lastly, the researcher purposefully situated herself in the study to acknowledge any potential influence of self-reflexivity. Keeping in mind that the data could be obtained from distinct times, locations, or perspectives for triangulation purposes, a different group of participants, who were recent doctoral dropout individuals from different

locations, were interviewed to triangulate the data by converging information from multiple sources (Kolb, 2016; Merriam & Tisdell, 2016). The triangulation technique together with reflexivity was applied to clarify any bias keeping in mind that triangulation is especially useful in research that includes interviews aiming to acquire a more complete picture of the topic under investigation (Davies, 2001).

5.3.2 Reflexivity and identity of the researcher

Qualitative studies are subjective by their very nature because the field functions mainly through interviews, discussions or questionnaires led by the researcher himself or herself. That is the core reason the data gathered via qualitative methods have the potential to be influenced by the researcher's beliefs and biases even if the target study is well organized. In qualitative studies, a researcher deals with a phenomenon completely through the reports of the participants. The researcher engages in primary knowledge and works with an organized data set in order to find out the necessary codes, categories and themes. Reflexivity comes into the stage at this point as an advanced state and method to ensure validity for a qualitative study by reducing any possible personal beliefs and biases (Popoveniuc, 2014).

Characteristically, a researcher should be aware of any beliefs and convictions which might affect the research outcomes by any chance and be open to scrutiny (Cunliffe, 2011). Being reflexive is a critical task before, during and after the study. In other words, the researcher should be more aware of his or her own methodology and judgements, especially across the steps of data collection and analysis since his or her dynamic roles in these processes are reflected more in the outcomes of the study (Hardy et al., 2001).

Considering the importance of reflexivity in qualitative research, the reflexive journal of the researcher is presented here to be open and transparent for the reader. The researcher positioned herself in this study by giving details of her background and identity considering the idea that identities are formed and reformed during a study (Haynes, 2011). The researcher of this study obtained her bachelor's degree in the field of foreign language education in 2015. She achieved the Dean's Special Award and a high honors degree upon her graduation from one of the most prestigious universities in her country. Immediately after her graduation, she started to work as an English teacher in public schools, which was an expected career path for her.

As a successful student among her cohorts, her family, friends, professors and inner voice encouraged her to go further in knowledge and practice. Accordingly, she wanted to challenge herself in academia and wanted to be an academic. Thereby, she pursued a master's degree in the field of educational sciences/adult education. Until that time, she had not taken any specific course or received any education related to adult learners. She thought that she had an opportunity to learn adult learners and theories in detail through this program while practicing and spreading them as a teacher.

Her master's thesis was on the motivation of adult learners pursuing a graduate degree. She completed her master's degree with success in 2018 and wanted to go even further in the field. She started to be interested in graduate learners with the outcomes of her thesis. Accordingly, she conducted studies on graduate education and learners as a part of higher education, and she attended different conferences to gain and spread knowledge on the topic.

As the next but not final academic step, she enrolled in an educational sciences/adult education doctoral program. From the very beginning, she wanted to conduct a study on graduate education for her doctoral dissertation. After completing her course and qualifying stages, she decided to narrow down the topic of graduate education into doctoral education so that she could scientifically go deeper.

The topic of this dissertation and the whole research procedure were shaped by the personal life, beliefs and practices of the researcher as well as her educational background. Additionally, the workplace experiences and environment of the researcher were somehow reflected in the study. As a person who gained all her diplomas from public schools in her country, she started and continued her academic life in public universities. She purposefully worked at public schools as a teacher since she wanted to contribute to the public good throughout her life.

As an ultimate goal, she wanted to be an academic at a public university in her country after getting her academic title based upon the completion of this dissertation. The researcher was aware that she reflected her beliefs in public good in her study. She wrote each section of this dissertation keeping in mind the public good. In light of these personal beliefs and biases, neoliberal approaches were criticized, while humanistic perspectives were highlighted in each section of the study. The target group of this study was selected from public universities. By doing so, the outcomes of the study were thought to present much about the public sphere in higher education and contribute much to the public good. In the same vein, the outcomes of the study were expected to improve public practices on behalf of all humanity.

The interview questions were reached with the same philosophical framework. The data collection process and the analysis of the data set were carried

out neutrally by the researcher herself. Even so, her beliefs and biases were inevitably reflected in these processes. The triangulation technique helped the researcher use the data of another group of participants and reduce the risk of bias by adding the perspective of this group on the same phenomenon. Peer review was also applied to the data analysis to eliminate expected biases. Two different peers analyzed the same data to increase trustworthiness and credibility.

As a doctoral student and a working adult, the researcher inevitably shared similar ideas and experiences with her participants. Hence, her doctoral journey was reflected in her interpretations and discussions taking the doctoral experiences of her participants into account. That is the reason why she specifically selected the Interpretive Phenomenological Analysis method for her dissertation.

5.4 Summary of Chapter 5

Chapter 5 explains the methodology used in this study. It consists of three main sections: (1) research design and procedure, (2) data collection and analysis and (3) ethical considerations. It also provides background information on the researcher's identity and position as well as details for trustworthiness and credibility. The following chapter presents the findings of the study.

CHAPTER 6

FINDINGS

This chapter presents the findings of the study about the complexities influencing student retention and graduation in doctoral education from the perspectives of doctoral students and dropouts. Based on the research questions and conceptual framework of the study, the findings are presented at three levels: (1) personal complexities, (2) institutional complexities and (3) academic complexities.

Specifically, the chapter explores how doctoral students and dropouts describe and interpret personal, institutional and academic complexities that influence their retention and graduation. The quotations given in this chapter were taken from the data of 24 doctoral students and 16 doctoral dropouts. They were translated from Turkish to English by the researcher and back translation technique was employed by a translator to maintain the equivalency.

Three main themes with their sub-categories are shown in Figure 13 below.

<u>Theme 1</u> Personal Complexities	<u>Theme 2</u> Institutional Complexities	<u>Theme 3</u> Academic Complexities
1. Family-related complexities 2. Work-related complexities 3. Socialization-related complexities 4. Value-related complexities 5. Personal support-related complexities	1. Program-related complexities 2. University-related complexities 3. Institutional support-related complexities	1. Course stage-related complexities 2. Qualifying stage-related complexities 3. Thesis stage-related complexities 4. Supervisor-related complexities 5. Faculty-related complexities 6. Committee-related complexities 7. Academic support-related complexities

Figure 13. Themes and sub-categories

6.1 Theme 1: Personal complexities

This initial research question of the study investigates the understanding of doctoral students and dropouts about the personal complexities influencing their retention and graduation. Personal complexities have an important influence on student retention and graduation in doctoral education. These complexities tremendously shape the decisions of doctoral students about whether to continue their programs or drop out. According to the data analysis directed by the first research question and the conceptual framework of the study, personal complexities revealed from this study can be categorized as a) family-related, b) work-related, c) socialization-related, d) value-related and e) personal support-related complexities.

6.1.1 Family-related complexities

According to the findings, the first category of personal complexities is the family-related complexities of the participants. 14 out of the 40 participants in this study were in a relationship. The ages of doctoral students were from 26 to 39. Eight out of the 24 doctoral students were married and two of them were married with two children. 16 out of the 24 doctoral students were single. When it comes to doctoral dropouts, their ages ranged from 28 to 57. Their marital status was more complicated. Eight out of the 16 dropouts were single. One dropout was engaged and planning to marry soon. One dropout was widowed and another dropout was divorced. One of them got divorced and married again after a while. Four dropout participants were married. Five of the dropouts had at least two children. One of them had six children.

Nine doctoral students and one dropout participant stated that it was a big struggle for them to balance their doctoral education and family lives. They stated

that they needed to adapt their family lives based primarily on their educational responsibilities. A female doctoral student explained the influence of doctoral education on her family life as below:

My family life definitely affects my doctoral education. I hardly have time for myself, my friends and family members. I guess all PhD students are in the same situation. While I am spending time with them, I have to think about my studies. Those who are familiar with me know this situation. It is really difficult to explain, especially to my relatives, the reasons why I always need to study. In other words, they are always asking why I am still studying. They cannot understand. So, I do not tell them anything related to my studies anymore. Moreover, I have very little time for my hobbies. For example, I like traveling but I cannot even remember my last trip. In addition to all these, I have been planning to marry soon. I first plan my doctoral tasks like presentations or projects to be able to plan any marital preparation. I mean, doctoral education has a great negative effect on my family life (FDS 4).

11 doctoral students and a dropout participant mentioned that they were highly busy and had no time for family. The dropout participant rephrased their sayings from her point of view like this:

You do not have time to socialize, to make friends or to spend time with others. I do not have time even for a romantic relationship because it needs time and effort. We are always busy with many things and we need to solve various problems during this academic journey (FDD 13).

A male doctoral student underlined the limited time spared for the family as below:

I was married with a child when I started my doctoral education. My wife and my parents always tell me that I do not spend enough time with them. I am aware of it, but my supervisor thinks the opposite. For him, I do not spare enough time for academia (MDS 21).

Six doctoral students and four dropouts noted that it was highly challenging to study especially for married people as expressed below by a female doctoral dropout participant:

During my doctoral journey, I was trying to find a balance between my work, university and home. I was raising two children. It was highly challenging for me to care for many things at the same time. I had hard times and my doctoral

education affected my family life. Nobody, including my husband, supported me. However, I still did my best (FDD 4).

Doctoral education is highly challenging and full of unexpected ups and downs for everyone. Still, it can be more hectic depending on the marital status of the students. Despite the fact that each student's age may vary depending on when they opt to begin their doctorate, it is conceivable to classify all of them as adults based on their characteristics and responsibilities. The rocky road leading to getting a PhD title involves more than just dealing with academic work for these individuals. It also entails immersion in a particular adult lifestyle replete with growth, learning, and hardships. These adult students have certain challenges in their private lives in addition to their academic burdens, which is reflected in their retention and graduation on time in many ways. Individuals in academia have an intense fear of starting a family while struggling with academic tasks. Those with families have difficulty balancing academia- and family-related expectations.

A male doctoral dropout participant highlighted a culture-specific pressure on doctoral students regarding their family lives as follows:

In Türkiye, there is sociocultural pressure on us as we have to put some such family issues as marriage and having a child into the background for the sake of a doctoral degree. Everybody including family members, neighbors and relatives always tell us the importance of starting a family and having a child. They were raised in this culture and they are imposing it on us. This sociocultural pressure is probably more intense for female doctoral students. I believe they are also struggling to balance their education and family issues (MDD 15).

Doctoral students are expected to be in emotional relationships or to lead married lives in the Turkish context because of their age. The pressure to get married and start a family is more on female students. However, this cultural pressure in the country does not change the reality that the majority of doctoral students - regardless

of their gender - are single and they even avoid being in a relationship during their education. Their time and energy are consumed by their academic lives and responsibilities. As a result, individuals avoid meeting new people and beginning love connections during their education. Additionally, it is quite challenging for doctoral students who are in a relationship to reconcile their personal and professional obligations.

Two doctoral students emphasized that doing a doctorate was easier for single people in particular. One of them said:

If you are not single in your private life during your doctoral education, family-related responsibilities become a huge burden on your shoulders. Therefore, it is really hard for married people to get a degree as opposed to single ones. Single students can handle it more easily for sure (MDS 2).

A male doctoral student found doctoral education itself challenging. However, he, as a single man, put himself in the shoes of his married friends in academia. According to him:

It would be harder for me if I were married. I do all such things as cooking and cleaning by myself, which is tiring. I also observe the cases of married people and see that their marriages are not going well. There are tensions because of the doctorate, and this brings about a feeling of inadequacy in their marriages. I would not spare enough time for my wife if I were married. Indeed, doctoral education itself is hard and challenging both for single and married people (MDS 6).

The marital status is a significant element affecting doctoral retention and graduation on time. Both male and female doctoral students who have problems in their private lives for various reasons tend to drop out of their doctoral degrees. Single students experience the negative influence of their private life on their doctorate to a lesser extent. In this sense, it is more likely for single students to retain in doctorate and complete their degree on time. On the contrary, married students or students who are in a romantic relationship deal with many hardships. Furthermore, doctoral students,

especially with children, cannot easily keep up with the necessities of their academic and family lives.

Three doctoral students and two dropouts claimed that the challenges in doctoral education for women are a lot because they have more responsibilities in their private or family lives than those of men. One of these students regarded herself as a feminist and added:

Men are very comfortable in a marriage. My husband is an academic, but he cannot empathize with me as he is a very patriarchal person, which makes my doctoral education even harder. My challenges are doubled because I also care about the responsibilities of my husband instead of him. Men do not have to cook, wash the clothes, order the dishes and do other household. Filling the empty soap bottles or organizing the napkins can even be time-consuming and tiring for me. Of course, this may not be the case in every house or marriage. My academic studies are badly affected as my academic husband is extremely patriarchal (FDS 7).

Another female dropout participant also mentioned a similar case as follows:

There is a lot of burden on you as a woman while studying. You can imagine it as a woman researcher, too. For example, we can say that the responsibilities of a man are equal to one, but those of a woman are equal to five. If I had enough support for my roles and responsibilities, the situation might be different (FDD 4).

The challenges can be exclusively doubled for women pursuing a PhD in patriarchal countries like Türkiye. Female students are expected to be natural slaves of household chores regardless of their academic status and workload. They either spare less time for academia to be able to sustain such family roles as cleaning, cooking or raising children or they do feel guilty towards their family members when they focus entirely on academia. On the other hand, male PhD students can have more time for academia while they have fewer household responsibilities as opposed to females. Nonetheless, male doctoral students also feel the struggle of balancing their private

and academic lives. Moreover, male students also feel guilty about spending less time with their family because of their academic tasks to be completed.

Two dropouts mentioned the booster effect of their divorce process on their dropout actions. One of these dropouts also stated the death of his father during his divorce process and the worldwide COVID-19 pandemic as a combined family-related complexity influencing his educational decision as follows:

Frankly speaking, the dropout decision came after my divorce process. It was a period of depression and feeling mentally weak for me. I could not have any resilience towards anything in my life. You become more aggressive over the things that bother you. I could not stand it. At that point, I dropped out of my doctoral program. In addition, my father was ill and passed away. So, it was emotionally and physically hard for me. It was also the time of the pandemic. I can say that all my family-related problems overlapped (MDD 3).

Another dropout participant (FDD 12) addressed the situation of her fiancé who got cancer as the key reason for her decision to drop out like this: *“My fiancé was diagnosed with leukemia during that time. I personally have had really bad experiences since then. Actually, I could not mentally recover from it myself. Even if I wanted to go on with my doctoral education, I had to leave it.”*

To sum up, there are several family-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 21.

Table 21. Family-related Complexities

Theme 1:	Personal complexities
Category 1:	Family-related complexities
Codes:	1. Struggle of balancing academic and family lives 2. Difficulty of sparing enough time for family 3. Challenges of studying with many family roles and responsibilities 4. Sociocultural pressure for marriage and having a child 5. Patriarchal challenges imposed on females 6. Hindering influences of marriage, engagement, divorce, sickness and deaths

These similar family-related complexities encountered both by doctoral students and doctoral dropouts show that some of them are unexpected and inevitable. In this sense, these individuals with families or adult lifestyles should improve their time management and multitasking skills in order to balance their academic and family roles. While it is impossible to completely eliminate contextual influences like the urge to get married or to accomplish household responsibilities, doctoral students can build resilience on their own or with the help of a support mechanism to deal with them more easily and effectively.

Otherwise, students are at risk of leaving their degree program or delaying their graduation date, which leads to a number of other academic and non-academic consequences in the long run. As shown in Table 22 and Figure 14 below, similar family-related complexities experienced by the participants can result in retention or dropout depending on their personal skills, resilience and support. The gray areas on the figures that are constructed from the tables in this chapter are given as a summary of the relevant figure with umbrella terms.

Table 22. The Outcomes of Family-related Complexities

Family-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Struggle of balancing academic and family lives 2. Difficulty of sparing enough time for family 3. Challenges of studying with many family roles and responsibilities 4. Sociocultural pressure for marriage and having a child 5. Patriarchal challenges imposed on females 6. Hindering influences of marriage, engagement, divorce, sickness and deaths	- Balancing academic and family lives by scheduling - Developing time management and multitasking skills - Reconciling academic and family obligations - Becoming resilient toward sociocultural pressure for marriage and having a child - Becoming resilient toward patriarchal challenges imposed on females - Developing coping strategies for marriage, engagement, divorce, sickness and deaths - Getting personal supports from others	- Not balancing family and academic lives by scheduling - Not developing time management and multitasking skills - Not reconciling academic and family obligations - Not becoming resilient toward sociocultural pressure for marriage and having a child - Not becoming resilient toward patriarchal challenges imposed on females - Not developing coping strategies for marriage, engagement, divorce, sickness and deaths - Not getting enough support from others
	Different personal skills, resilience or support	

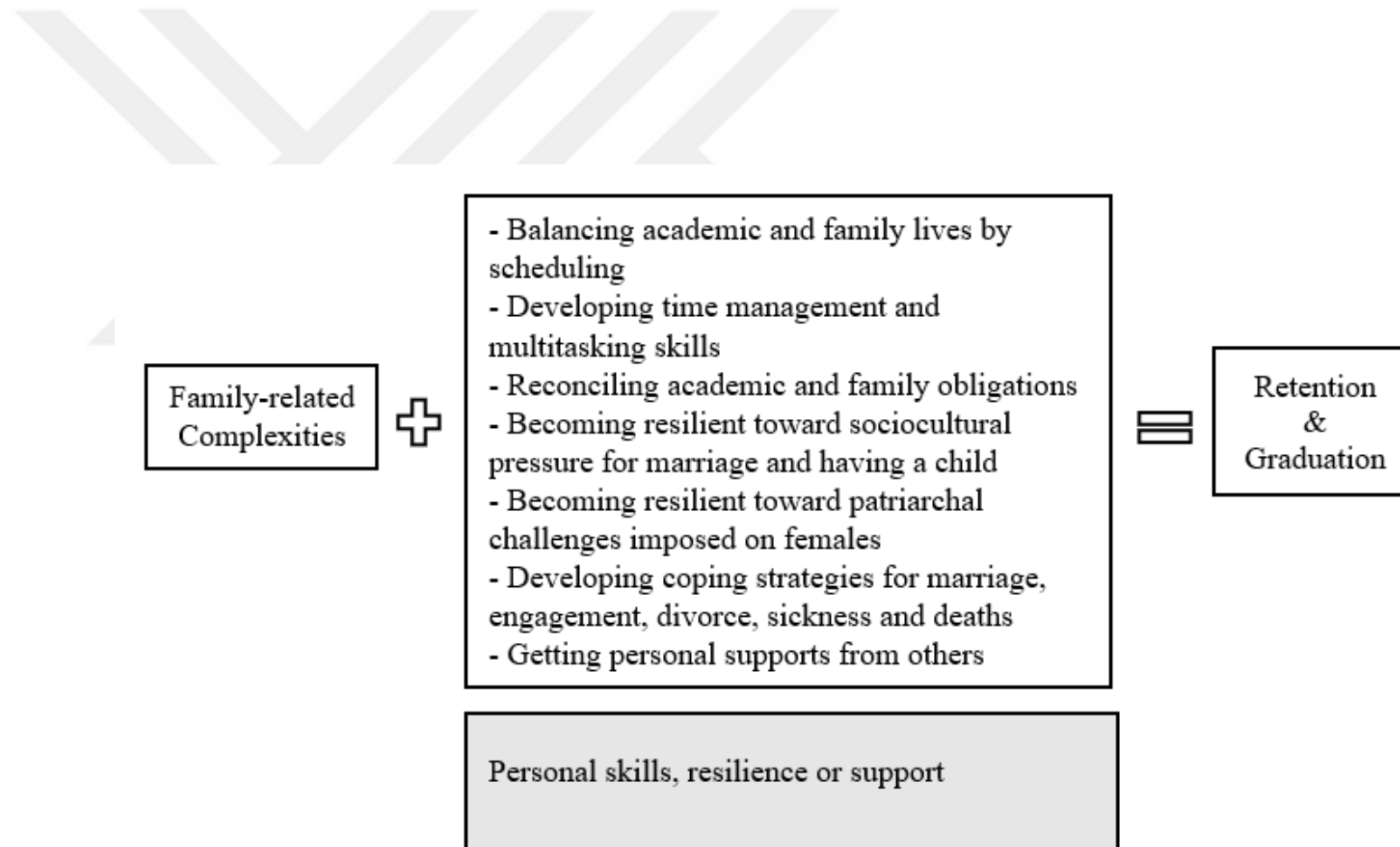


Figure 14. The outcomes of family-related complexities

6.1.2 Work-related complexities

According to the findings, the second category of personal complexities is the work-related complexities of the participants. Doctoral students and dropouts who participated in this study were adults. They did not have sufficient scholarship or funding opportunities in Türkiye to sustain their lives and education. Therefore, they had to work during their doctorate. All 24 doctoral students who participated in this study had full time jobs. 13 of them were working in university settings as lecturers or research assistants. The rest of them were working in non-academic settings. The majority of them thought that they had middle-income level.

As to doctoral dropouts, one out of 16 participants is unemployed and one of them works part-time. In other words, 14 of them have full time jobs. Four out of 16 doctoral dropouts work in university settings as lecturers, which means that 11 of them work in non-academic settings. The majority of them thought that they had middle-income level.

Three doctoral students mentioned their exhaustion from overwork, which in turn influenced their academic studies in a negative way as emphasized by one of them:

Working during a doctorate is hard. Indeed, it is one of the hardest things ever. Of course, it affects me a lot. In my personal life, I do not have much time to devote to myself. I have already been working, and I do not currently have any academic title. We work a lot in my workplace. So, it is very difficult for me to carry out architectural works as an architect and to study or produce academic content after returning home in the evening (FDS 19).

A female doctoral dropout working as a lecturer also mentioned the negative effect of working full time during her doctorate on her academic productivity as below:

If you attend lectures for twenty-four hours or thirty hours a week, you can neither write a thesis nor write an article. It is very difficult, believe me. Of course, the negative experiences in the workplace are also tiring and they

are reflected in your studies. That is the reason why I was very tired during my courses. I really felt tired even at that stage (FDD 2).

The participants in this study had a tendency to start and continue their doctorate in free public universities considering their budget. A doctoral student (FDS 4) said: *“If we do our doctorate in a public university, it doesn't affect our finances much. It would probably affect a lot in a foundation university.”* and a male dropout participant (MDD 3) also added that *“I preferred a public university as it was free.”*

In contrast to several other countries, Türkiye lacks the funds or scholarship opportunities to support doctoral students. That is one of the reasons why the majority of the students in the nation want free public schools for their doctorates. While there are some project-based options or assistantship programs enabling students to earn money during their doctorate, they are limited in amount or duration. Therefore, doctoral students in the country have to work to sustain their adult lives and responsibilities.

One doctoral student and two dropouts reminded the researcher about the financial expectations of society from males. Male doctoral students and dropouts feel extra sociocultural pressure to work during their academic journeys in Türkiye as highlighted by a dropout participant here:

Our society wants an alfa man figure working for the family and earning money. If you are doing a PhD, you suffer a lot financially. You struggle to complete your doctorate, but others see you as a useless man as you are still studying, which is psychological mobbing (MDD 15).

Male doctoral students in Türkiye are under more cultural pressure leading them to start a ‘proper’ job immediately and to give the work priority over their academic pursuits because they are more linked to masculine roles in their society.

In addition to being tired because of their work, 15 doctoral students and six dropout participants implied that they could not manage their time, and that it was challenging for them to get time off from their workplace for their doctoral courses or academic tasks. A female doctoral student working as a nurse assessed her own situation as follows:

As a nurse, I am at the clinic and I work in the intensive care unit. There was also a period during which I worked in COVID-19 pandemic intensive care. It is really tiring. You know, when you are among the patients, negative things happen all the time. You are already tired, and your doctorate is also in a health-related area. When you come back home, you again talk about similar topics, which is a disadvantage. In addition, getting time off from work is not possible most of the time for us. Especially during the pandemic, it was unconditionally forbidden. I mean, it is difficult to arrange doctoral courses based on my work at the clinic (FDS 18).

One female doctoral dropout said that she was accepted for a teacher training program in the USA. However, she could not suspend her doctorate in order to attend that program. That was the reason for her drop out. The quotation below shows her dilemma:

I was working as an English teacher, and I was accepted for a one-year professional teaching assistantship program in the USA to improve myself in my profession. Therefore, I just wanted to suspend my doctoral education. I aimed to come back to it after that program to continue my academic life. However, the university did not approve it. I had to quit it because of work-related issues. I mean, I prioritized my professional life (FDD 7).

Moreover, those who are working are often paid less when they are able to get off hours or days for their doctoral education as underlined by a male doctoral student below working as a teacher:

I can say that a doctorate is actually a threat to your finances because at least one day off is needed for a doctorate. Then, the workplace has to reduce your hours from your weekly schedule. This affects me in a bad way as I am paid less. Not working is not possible in my case. It can be possible for those supported by their family, but it is not possible for me. I have to work. A doctorate would be much easier without working. I could have

concentrated much more on my studies. I could have spent a lot more time and come up with much better products, but that is definitely not possible in my circumstances (MDS 10).

Seven doctoral students and four dropouts stated that working in a different city made their doctoral journey more complicated. Five doctoral students and two dropouts declared that working in a different city was more challenging as they were also paid less for such off hours or days. In parallel to this, three students also added that getting time off from the workplace to conduct academic studies gave rise to a financial burden for them since they are paid less for the sake of free hours or days. They could not manage time and had financial difficulty, which was also emphasized by two doctoral students conducting their studies in the same city as their workplace. What is more, when these individuals got time off for their doctorate from their workplace, they were paid less or did not get any incentive for it, which is even more challenging for those who spend much on their long-distance travels as mentioned by a student below:

My university is in a city different than my workplace. Moving from one city to another is of course very challenging in many ways. If I had a chance to go back to those times, I would definitely select a university in the same city regardless of its ranking. By doing so, I would not harm myself mentally, physically and financially. Luckily, I live with my family, I spend my entire salary on traveling and accommodation. What is even worse, my workplace is a university, but they do not provide any academic incentive for us (FDS 1).

A female participant had to leave the doctoral education available in another city because of her work-related issues and financial situation. She explained it as follows:

I started my PhD before the pandemic. I had some plans to start a new life in Ankara. However, I had to return to my hometown during the pandemic because all the courses were given online. In that distance education process, I could not work full time. I worked part-time in my hometown in an archaeological setting. My financial situation had a very negative impact

on my doctoral education. When the pandemic was over, I could not afford to move back to Ankara and start an academic life there again. My part-time job was not available there. This was the main factor in dropping out (FDD 5).

Specifically, 15 doctoral students and six dropouts emphasized the difficulty of working full time during a doctorate. Four students and one dropout underlined the difficulty of working especially outside of academic settings during their doctoral studies as highlighted by a female dropout participant here:

The biggest handicap for people pursuing an academic career and working in other settings is that they do not have a sense of belonging either to their workplace or to the university. People in the workplace think and behave differently than our professors at the university or academic people around us. If someone worked in an academic setting, he or she could feel that sense of belonging. This is an important feeling as it supports you. Otherwise, you leave things unfinished (FDD 6).

Doctoral students working outside of the academic settings are not happy and productive in academia at all. They work a lot, become exhausted and even feel burned out under the effects of harsh working conditions and long hours of work periods in the country. Additionally, they often have difficulty adapting their work schedule to that of a doctorate. At this point, they struggle to have time off from their workplaces to follow their doctoral tasks. When they fail to get the necessary time off and change their schedules, they tend to leave their education.

Even when they can follow their academic schedule with the required adaptations in their work schedules, they are often paid less for such off hours or days. In addition, their workplaces do not allow or pose a problem for any academic development activity including attending conferences. The situation of students working in distant settings or cities is even worse. They suffer a lot physically, mentally and financially to remain in their education.

What is even worse is that academics and academia can be disconnected from these realities and unwilling to make accommodations for doctoral students who are working. Students, for instance, find it difficult to take educational breaks for work or career-related reasons.

On the contrary, two doctoral students working in academic settings found it more challenging during their doctorate as emphasized by a female student below working as a research assistant as a part of the Academic Training Program (ÖYP):

As I work as a part of ÖYP at the university where I carry on my doctoral studies, I am under the pressure of a strict contract. If I leave this work, I will pay compensation for my mandatory service, which makes me think twice about it. I hope to finish my doctoral degree in a year and return to my main university to complete that mandatory service. Frankly speaking, things did not go as I had expected in academia. I even want to change my field. There is a strict hierarchical work environment here (FDS 17).

Another student working in a university as a part of ÖYP stated that he was challenged by becoming jobless all of a sudden because of a decree-law applied in the country.

I was the research assistant of the same university and program as a part of ÖYP. All of a sudden, I became jobless with a decree-law applied in the country. I lost all my rights without reason, which was highly traumatic for me in many ways. I had difficulty focusing on my doctoral courses and continuing to them. Now, I work at another university as a lecturer. Today, I have just learned that my objection to that dismissal has been approved and I can go back to my position (MDS 14).

Three doctoral students and one dropout thought that working in academic settings during a doctorate was helpful to retain and graduate as stated by a male doctoral student:

Working as a research assistant at is crucial for improving human relations and getting into an academic culture. Here we learn how to prepare the exam programs, how to prepare the curriculum and the assignments given by the faculty members and how they organize classes. We help them with similar tasks. As you work in this setting, you see that the exam weeks are busy and people are in a bad mood for instance. You empathize with them.

In addition, you interact with the students. You have a chance to understand their expectations. Therefore, you will easily put yourself in the shoes of different members of a university as a future academic (MDS 9).

It should be taken into account that there is a distinction between the cases of doctoral students working in academic settings and those working in non-academic settings. In fact, those in academic settings also face many complexities including financial problems and the threat to be dismissed depending on their work positions and titles. Although there are exceptions, working in an academic setting is helpful for many students as they more easily remain in their degrees until graduation.

Taking into account that these individuals are more exposed to academia both as a student and a worker, there is a potential for them to become fatigued from it easily. Nonetheless, individuals who are employed outside of academia feel physically and psychologically distant from their degree, which poses a dropout risk. Essentially, the quality of the work setting and the community in it is what matters most. The main issue here is that doctoral students feel neither like full time students nor like full time employees. They sometimes cannot find the balance and lose their direction in both ways. In the long run, this causes various problems in both areas.

Three doctoral students stated that their doctoral education positively contributed to their work and vice versa. A female doctoral student talked about it as below:

While I am working as a teacher, I am also doing my doctorate in the same field. I had a chance to observe the classes, environment and school. As I have work experience in the field, I have better academic products. The classroom environment can sometimes become a research site for me. I also use information gathered via my doctoral studies here in my workplace. I think that a doctorate is a degree that should be achieved with work. The private sector can be different. I work in a public school. Otherwise, I would be away from the field. Indeed, I did not work during the first term of the master's program, but I had friends who worked in private schools. I experienced that their views were different and meaningful. Now that I also

have work experience and I can have a different perspective as I observe the field (FDS 12).

Eight doctoral students and three dropouts suffered from not being supported financially during their doctorates. Some of them also suffered from unemployment or underemployment during their educational journeys as mentioned by a male dropout (MDD 9): *“Unemployment and related financial problems had a butterfly effect on my motivation, which reflected in my academic failure.”* In addition, a female doctoral student (FDS 9) among also stated that having a doctoral degree would not increase her income level or work status in the future as follows: *“I want to change my work or the country where I work. Otherwise, the doctorate will not provide any financial privilege or any prestige for me.”*

Many students struggle to find full time jobs during their doctorate. Interestingly, employers are inclined to select their future employees from those with PhD titles because of the fact that graduate degree experiences generally have a beneficial impact on the workplace. Likewise, work experience can contribute positively to doctoral education. However, doctoral students are not preferred as future employees because they need to spare some of their total time and energy for their education.

Similarly, a male doctoral student (MDS 11) highlighted the insignificance of being well-educated in Türkiye considering the economic burdens during a doctorate and not having additional economic returns with the degree as follows: *“It is worthless studying more and more in such a country where your education has no return.”*

A better future and income level in Türkiye are not necessarily assured by having a good education. Unfortunately, unfair and unequal income distributions

exist in the country. For instance, even for the same profession, someone with only a primary school diploma can make more money. Furthermore, the rates of unemployment and underemployment population are even higher than those indicated by the national data. In the particular case of PhD holders, these individuals face the risk of underemployment or unemployment, too. Additionally, considering the nonexistent economic benefits of a PhD, these students are discouraged from pursuing their doctoral studies or obtaining a degree. From a wider perspective, economic instability and societal corruption in the country have almost doubled recently, which dramatically influenced doctoral education.

Two dropout participants mentioned the negative financial effects of the housing problems they faced during their doctoral education. A male dropout (MDD 8) said: *“A doctoral student should not have any concerns about working and accommodation. They should have a dormitory and project support.”* The other dropout participant elaborated on the issue like this:

I had always lived in such a minimum economic condition. I stayed in a dormitory as long as I could. When my dormitory period expired, I tried to find very cheap houses as I could not afford others, but cheap houses were always problematic. So, I had to move many times. I mean, I could not live a standard life like other people did, which was very tiring and depressing. I know that I would live like others with a standard job and life if I did not do my doctorate (FDD 13).

Six doctoral students underlined the positive financial influence of the COVID-19 pandemic and online education during their doctorate as they did not spend much on accommodation and other daily expenses. A female student (FDS 20) summarized it like this: *“During the first term of my courses, studying in a different city was financially challenging for me. After the pandemic, the courses were given online and helped me overcome my financial concerns. The pandemic was helpful in that sense.”*

Students who are pursuing PhD degrees sometimes struggle to cover their basic needs, including housing and food even when they are employed with a reasonable salary. Many universities do not provide housing or dining options for their doctoral students. Distance education, which came into effect during the worldwide COVID-19 pandemic and was criticized in many respects, was advantageous to students in this regard as some of their worries were eliminated to some extent. Ultimately, students find it challenging to concentrate on their academic tasks while trying to address their basic needs, which lowers their overall motivation and likelihood of completing the degree.

Five doctoral dropouts stress the necessity of solving financial problems to be able to conduct doctoral studies, especially in Türkiye. One of them said that:

It is very difficult to get a doctoral or a master's degree without solving financial problems. On the one hand, life goes on and you need money. On the other hand, there is something academic that needs to be focused on. You cannot focus on both sides. If financial support was provided for us and the conditions were improved, it would be easier to handle (FDD 4).

Eight doctoral students and one dropout found conducting academic studies financially challenging as researchers needed to pay for experiments, translations, publications and conferences. From this point of view, one doctoral student and one dropout pointed out the urgent financial support needed for doctoral students in the country for such expenses. A female student (FDS 16) expressed it like this: *“We have economic challenges. We need to pay for publications or their translations. I pay for them myself. This is also the case for conferences. I think we need to be supported financially as do other students in other countries.”*

Due to the fact that some academic expenses, such as experiments, translations, conferences and publications, are covered by students themselves, a doctoral degree itself is financially challenging. Students must receive financial

assistance for such scientific costs regardless of their employment situation and level of income. Only then can they contribute to science without being limited by financial concerns.

Finally, there are many work-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 23.

Table 23. Work-related Complexities

Theme 1:	Personal complexities
Category 2:	Work-related complexities
Codes:	1. Need for money 2. Lack of financial support 3. Overwork and exhaustion 4. No time and energy for academic productivity 5. Sociocultural pressure on males to work 6. Difficulty of managing time 7. Difficulty of getting time off from work 8. Being paid less for spending time for a doctorate 9. Being physically and mentally away 10. Paying extra for travelling 11. Financial burdens of conducting research 12. Negative influences of working outside of academia 13. Positive influences of working in academia 14. Difficulty of managing work-study schedules 15. Disconnection of academia from financial realities 16. Transferring work experience to academia 17. Transferring academic knowledge to workplaces 18. Preference of employers for doctoral graduates 19. No additional economic return of a doctorate 20. Negative influences of economic instability 21. Financial burden of such basic needs as housing 22. Positive financial influences of COVID-19 pandemic

These work-related complexities can significantly affect student retention and graduation in doctoral education. These difficulties frequently result from the dual commitments of Turkish students who have to engage in professional and advanced academic work. At this point, all stakeholders should facilitate flexible scheduling, offer financial aid, promote a supportive academic and professional environment in

order to lessen the impact of work-related difficulties on student retention and graduation from a doctorate. Only then will doctoral students be able to manage their work-study balance and have a better chance of completing their degrees on time.

As shown in Table 24 and Figure 15 on the following pages, similar work-related complexities experienced by the participants can result in retention or dropout depending on socioeconomic status, scholarship or funding opportunities, workplace, collegial and academic support, social welfare, transfer of learning, flexible and alternative working and learning options.



Table 24. The Outcomes of Work-related Complexities

Work-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Need for money 2. Lack of financial support 3. Overwork and exhaustion 4. No time and energy for academic productivity 5. Sociocultural pressure on males to work 6. Difficulty of managing time 7. Difficulty of getting time off from work 8. Being paid less for spending time for a doctorate 9. Being physically and mentally away 10. Paying extra for travelling 11. Financial burdens of conducting research 12. Negative influences of working outside of academia 13. Positive influences of working in academia 14. Difficulty of managing work-study schedules 15. Disconnection of academia from financial realities 16. Transferring work experience to academia 17. Transferring academic knowledge to workplaces 18. Preference of employers for doctoral graduates 19. No additional economic return of a doctorate 20. Negative influences of economic instability 21. Financial burden of such basic needs as housing 22. Positive financial influences of COVID-19 pandemic	- Having a high socioeconomic status - Having financial support from the family - Accessing to scholarships or research fundings - Getting work-life-study balance - Developing resilience and coping strategies toward sociocultural pressure on males to work - Developing time management by scheduling - Having a supportive workplace and colleagues - Working in an academic setting - Having a work close to the campus - Balancing work-life-study balance by scheduling - Having a supportive academic setting - Being able to transfer workplace knowledge to the academia - Being able to transfer doctoral knowledge to the workplace - Working in a setting supporting doctoral students - Living in an economically stable place - Meeting such basic needs as housing easily - Having distance learning alternatives	- Not having a high socioeconomic status - Not having financial support from the family - Not accessing to scholarships or research fundings - Not getting work-life-study balance - Not developing resilience and coping strategies toward sociocultural pressure on males to work - Not developing time management by scheduling - Not having a supportive workplace and colleagues - Not working in an academic setting - Not having a work close to the campus - Not balancing work-life-study balance by scheduling - Not having a supportive academic setting - Not being able to transfer workplace knowledge to the academia - Not being able to transfer doctoral knowledge to the workplace - Not working in a setting supporting doctoral students - Not living in an economically stable place - Not meeting such basic needs as housing easily - Not having distance learning alternatives
	Socioeconomic status, scholarship or funding opportunities, workplace, collegial and academic support, social welfare, transfer of learning, flexible and alternative working and learning options	

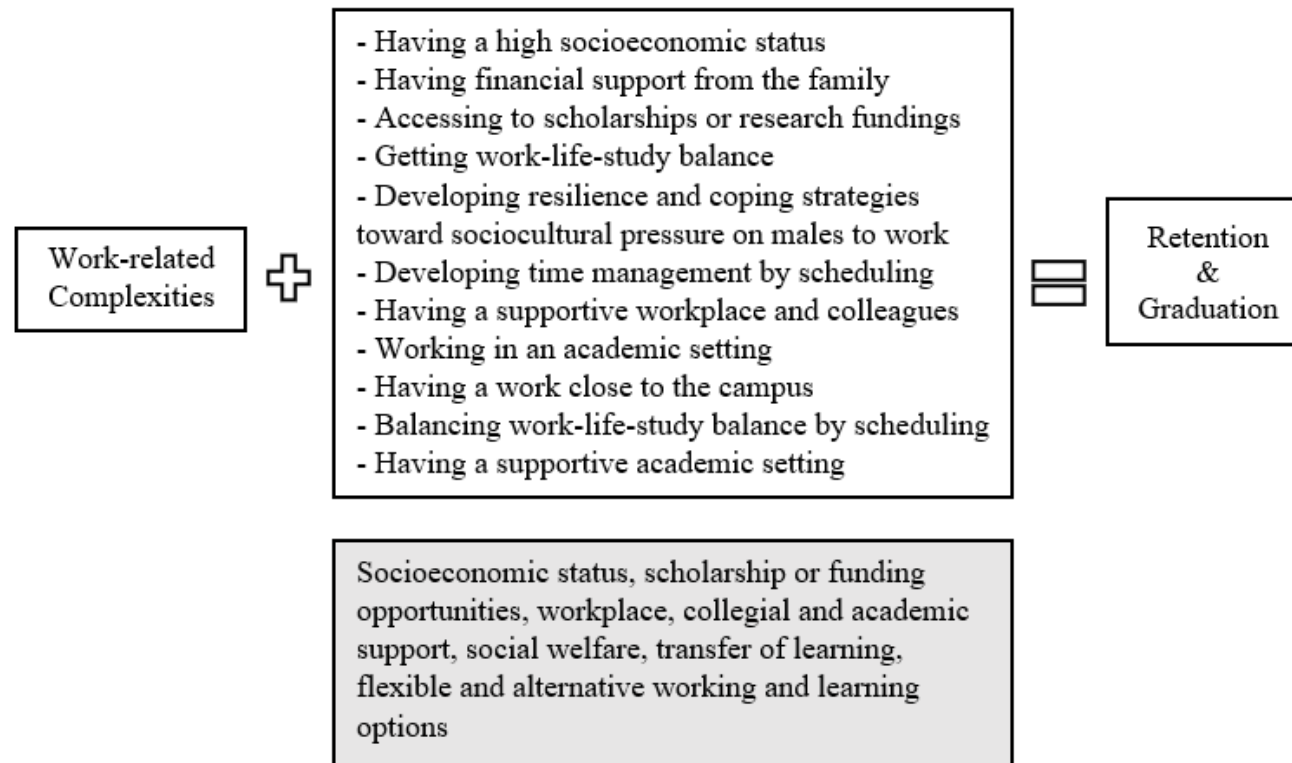


Figure 15. The outcomes of work-related complexities

6.1.3 Socialization-related complexities

According to the findings, the third category of personal complexities is socialization-related. On the one hand, 15 doctoral students and four dropouts mentioned the negative influences of doing a doctorate on their social lives as they had limited time for socialization. A male doctoral student said:

Doctorate affects our social life negatively for sure because there are always many tasks related to our thesis, proposal, funds, projects, people and publications in our minds. We cannot focus on one thing with these thoughts. Unfortunately, we cannot attend many social events. For example, my family is familiar with academia because my brother is an academic. However, they are still asking me why I do not attend family meetings, holiday events and weddings. I cannot explain my struggle even to my family members (MDS 23).

Students are under pressure to follow and complete numerous academic obligations on time. In this case, individuals may not possess the time management skills, especially if they are unable to multitask. Furthermore, they avoid being a part of any social activity since they believe they will not enjoy it as they are more preoccupied with academic obligations in their minds. Doctoral education limits their socialization level and quality, which is attacked and questioned by their limited social surroundings, including their families.

A male doctoral student underlined the negative influences of a doctorate on the socialization level of students even when they are in such environments as follows:

We try to sacrifice some things to be social, which is my own perspective. We have to balance academic life with social life. Otherwise, doing only a doctorate can damage our human side. Therefore, balancing is important at this point. For example, we attended the wedding of a friend. We observed that academics do not know how to dance. However, people from other sectors do it better than us. They are obviously more social in many ways (MDS 9).

What is more interesting is that people in academia occasionally fail to take necessary actions to socialize even when they become a part of a social event or community in comparison to non-academic people. Some of the students are aware of their anti-social behaviors and make an effort to avoid them. However, they are also aware that their socialization level remains low and their social abilities are limited compared to others.

One dropout participant explained that not being on the university campus because of his work negatively affected his socialization as below:

I spent the time that I would devote to my doctorate to earn money. I did not spend much time on the campus to be integrated into it and people. Unfortunately, the financial return of a doctorate is not immediate. It may be four, six or seven years later after receiving that title. Remember Maslow's hierarchy, a person whose basic needs are not met is in the doctoral process, which is a big problem. I preferred to meet my own needs financially, and I had to push the doctorate aside (MDD 9).

Students, particularly working adults, are not fully and socially integrated into their academic environments. They do not devote enough time to their academic communities in their universities. Being isolated from academic contexts has a detrimental effect on doctoral success and inclusion in the community.

Similarly, a female doctoral student (FDS 12) said: *“I did not even see the face of my university during the course period because of the pandemic. We are the children of the pandemic.”* In addition, a female dropout (FDD 5) underlined the isolative effect of the pandemic and distance learning, which was a handicap for their socialization during those times by saying: *“I could not think that being away from the university would affect me this much during the pandemic”*.

Students who received online education as a result of unforeseen incidents such as the COVID-19 pandemic or local earthquakes are more isolated and take longer to assimilate into academic and non-academic networks. Online education

compared to in-person instruction causes students to be more socially isolated and results in mental and physical damage.

On the other hand, four doctoral students and two dropouts thought that there was no negative influence of doing a doctorate on their social lives as mentioned by a female doctoral student below:

Doctoral education opens some new friendship doors for people. You also improve yourself socially. For example, I have new friends at the university. We share something in common with them. I think it is helpful. They understand your problems better. The environment is different than our workplace. A doctorate provides us with a closer and better network, which is useful both academically and socially (FDS 12).

Six doctoral students and one dropout stated that academic environments and networks made them more social as given in the quotation of a male student below:

I started working at a foundation university at the beginning of 2019. I knew most of the people here from my university where I did my doctorate. Therefore, it was an especially good thing for me. I joined a new group that I knew and felt comfortable with. In addition, the social environment both in the workplace and out of it was amazing. We went out in the evening and had fun with them (MDS 14).

Three students mentioned the constructive effects of any kind of environment on their doctoral education as noted by a male doctoral student (MDS 2): *“I cannot say that I have made many concessions in my social life. Indeed, the people around you during your doctorate affect you. In my case, their effects are positive and beneficial to me.”*

Doing a doctorate and being a part of academic contexts has the potential to improve students' socializing level and quality. Doctoral students prefer to be surrounded by academic communities because they believe that such communities share and care for one another more effectively. They have a beneficial impact on

students by giving genuine assistance. It means that students prefer to connect with others who have a similar background or goals to them.

Besides, three students and one dropout highlighted that doing a doctorate made them more privileged in the eyes of people, which in turn made them more socialized as stated by a male doctoral dropout (MDD 9) here: *“In fact, this education has a prestigious influence on your social life. Being a doctoral student, especially in a good university and telling people about it have positive social contributions.”*

Having a doctoral degree or being a student to obtain it promotes social prestige because it reflects expertise and admiration. Individuals in social communities desire to interact with these students.

In fact, there are many socialization-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 25.

Table 25. Socialization-related Complexities

Theme 1:	Personal complexities
Category 3:	Socialization-related complexities
Codes:	1. Limited or no time for socialization 2. Avoiding social activities 3. Limited social skills 4. Low level and quality of socialization 5. Isolation in social activities 6. Developing anti-social behaviors 7. Being socially away from the campus 8. Being isolated from academic contexts 9. Partial integration into academic environments 10. Long term isolative influences of COVID-19 11. Positive social influences of doing a doctorate 12. Positive social influences of academic networks 13. Constructive influences of being social 14. Being privileged in social settings

Recognizing and addressing these socialization-related difficulties encountered by doctoral students in Türkiye is crucial. All stakeholders should aim for betterment in social academic integration, community involvement, peer relationships, effective mentoring as well as cultural and societal perspectives toward doctoral students. All these aspects can help doctoral students be more socially integrated into their academic work, which help them continue their studies and graduate on time.

As shown in Table 26 and Figure 16 below, similar socialization-related complexities experienced by the participants can result in retention or dropout depending on their qualified and enough involvement especially into academic communities with academics. In addition, the bold overlapping parts in Table 26 and Figure 16 indicate that each person can sometimes perceive the same experience differently, which result in different outcomes. For example, some students see the positive influences of socialization on their retention. However, some students think that socialization cause them to leave their programs.

Table 26. The Outcomes of Socialization-related Complexities

Socialization-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Limited or no time for socialization 2. Avoiding social activities 3. Limited social skills 4. Low level and quality of socialization 5. Isolation in social activities 6. Developing anti-social behaviors 7. Being socially away from the campus 8. Being isolated from academic contexts 9. Partial integration into academic environments 10. Long term isolative influences of COVID-19 11. Positive social influences of doing a doctorate 12. Positive social influences of academic networks 13. Constructive influences of being social 14. Being privileged in social settings	- Sparing time for socialization - Avoiding social settings and activities - Improving social skills - Becoming antisocial - Exposing to high quality social settings and people - Involving in social activities - Exposing to university campus - Exposing to academic contexts - Integrating fully into academic environments - Exposing to face-to-face learning - Transferring doctoral knowledge to social environments - Socializing with academic communities - Using academic works and titles in social settings	- Sparing time for socialization - Avoiding social settings and activities - Not improving social skills - Becoming antisocial - Not exposing to high quality social settings and people - Not involving in social activities - Not exposing to university campus - Not exposing to academic contexts - Not integrating fully into academic environments - Exposing to distance learning - Not transferring doctoral knowledge to social environments - Not socializing with academic communities - Not using academic works and titles in social settings
	Qualified and enough involvement especially into academic communities with academics	

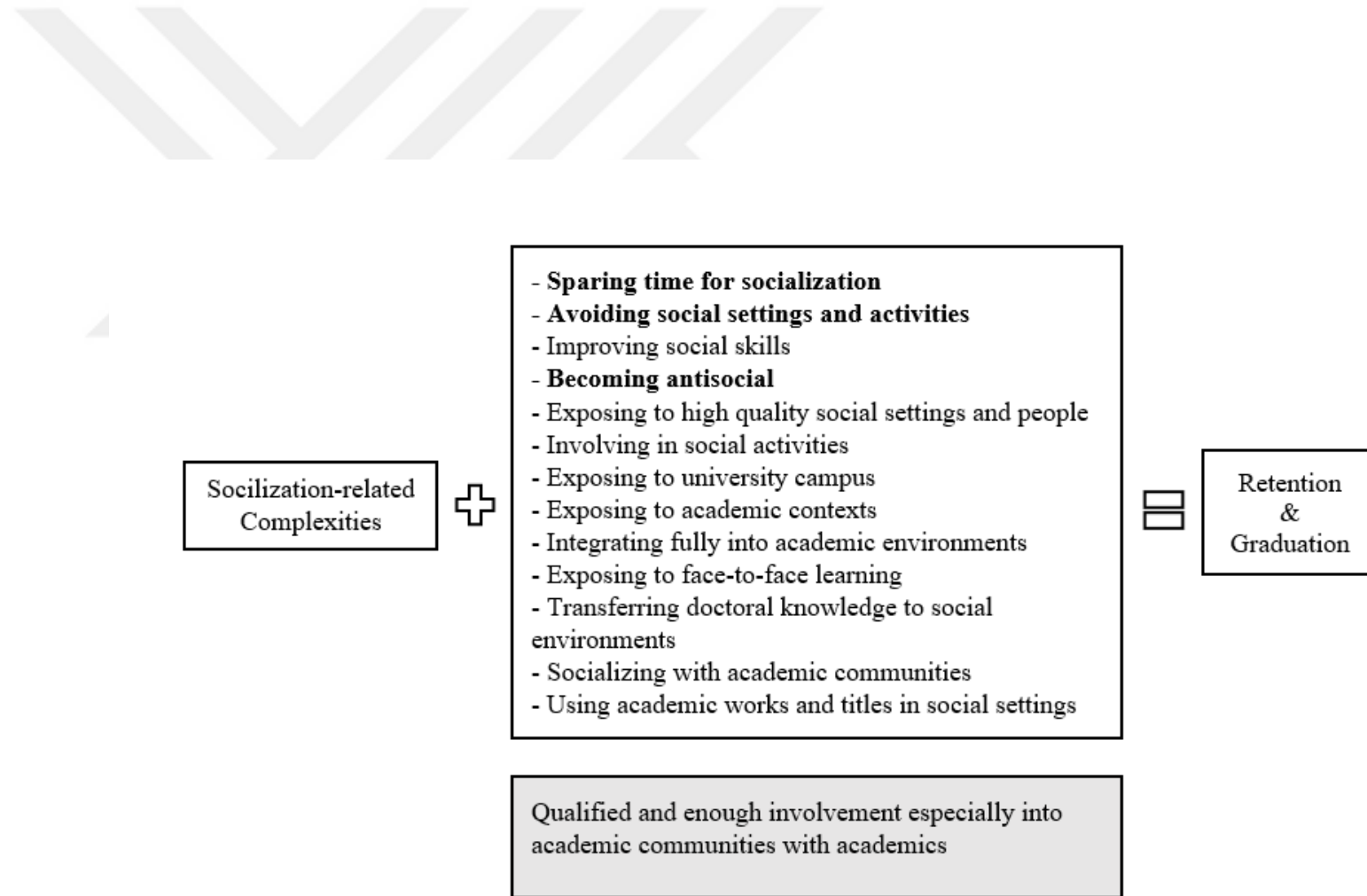


Figure 16. The outcomes of socialization-related complexities

6.1.4 Value-related complexities

According to the findings, the fourth category of personal complexities is value-related complexities. The findings showed that the value attributed to academia and doctoral education by the participants in this study has diminished over time, which in turn has influenced their retention and graduation.

Nine doctoral students and five dropouts specifically emphasized that they valued academia, doctoral education and PhD titles beforehand. They claimed that they lost their faith in academia and science, especially in Türkiye as they were psychically and mentally exhausted from everlasting personal, institutional and academic complexities during their education. One of the students put his personal opinions about academia and his doctorate into words below:

I was expecting an increase in my salary at least as I got a title and got better in my doctorate. I could not actualize any of my ideals. I thought it would be a very enlightening and satisfying process. A doctorate is a bit different than a master's degree because not everyone can get one. Now, I can say that I see it more as a regret. I don't think my efforts will be rewarded in any way. Academia takes a lot out of my life. It takes my energy and motivation. I am so tired. I am struggling, I do not know how many years it will take to become an associate professor if I can be a doctor. Therefore, I can say that my initial thoughts have changed negatively. My perception has also totally changed. I thought that a doctorate certainly provided a lot to a person, but it is something that takes more. In addition, I cannot say that I like the institution in academic respects. The faculty members are disappointed. I have already finished a master's program in a similar field so I could integrate it into my doctorate and improve it. However, this vision was not given to me by the academics in my doctorate. I had to work on the things they wanted. I always had to struggle with being different. Therefore, a doctorate will not do much for me. In particular, when we think about Türkiye, dissertations like term papers with very controversial and unethical methodologies are accepted in many universities to be a doctor. I feel that there will be no gain with this title but a lot of pain (MDS 6).

The findings also showed that two students and two dropout participants attributed pragmatic values to a doctoral degree and they dropped out easily if they lost hope for realizing them. For example, they expected to have an academic career path and a

change in their work or social status. They believed that they had no place in academia even when they got their doctoral degrees. One of them (FDS 12) also added: *“The system needs to be changed. We cannot see ahead. The main problem starts after getting the degree. There is no academic position waiting for us. Nobody wants such a future considering today’s financial struggles in Türkiye.”*

Moreover, 18 students and seven dropouts regarded doctoral education in Türkiye as quite long, intense, demanding and tiring. One of the dropouts compared the cases of other countries and stated:

I finished my master’s program in the UK. Everything was facilitated there as it is in many other countries. Doing a doctorate in Türkiye did not teach me anything and I thought that all of my hard work had been in vain. . Now, I can only say that doing a doctorate in Türkiye is regrettable. It is not worth getting lost among the wheels of this system. I believe that life is very short. I lost my physical and mental health this way. I have been trying to recover myself for years through therapy (FDD 13).

In Türkiye, students who started their doctoral studies with positive feelings and high expectations begin to wonder if it is worthwhile to finish. They face numerous challenges on their route to graduation. As a result, students’ psychological and physical well-being decline along with their motivation. They want to get ‘a real benefit’ from this degree. After all of these long-term efforts, students might lose their urge to retain and graduate because there are no direct pragmatic outputs such as an increased salary or a higher position. All in all, there are few value-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 27.

Table 27. Value-related Complexities

Theme 1:	Personal complexities
Category 4:	Value-related complexities
Codes:	1. Decreasing value of academia 2. Decreasing value of academic titles 3. Losing initial interest for the title 4. Feeling worthless in academia 5. Finding contextual challenges for the title in vain

It is possible to conclude that there is a changing nature of doctoral degrees, and the value attributed to them by students also changes in Türkiye. Indeed, many students enroll in these programs for practical reasons. The notion of a doctoral degree need to be reconsidered, and the right incentives should be put in place to support its transformative aspect from the perspectives of current learners and recent dropouts.

As indicated in Table 28 and Figure 17 below, similar value-related complexities perceived by the participants can result in retention or dropout whether being valued in academia or not. In addition, having real benefits of the academic title such as additional financial opportunities can affect students positively on their way to graduation.

Table 28. The Outcomes of Value-related Complexities

Value-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Decreasing value of academia 2. Decreasing value of academic titles 3. Losing initial interest for the title 4. Feeling worthless in academia 5. Finding contextual challenges for the title in vain	- Being valued as a doctoral student - Being motivated to get the academic title - Benefiting from the title for academic or non-academic purposes - Feeling valuable in academia - Developing resilience toward contextual challenges	- Not being valued as a doctoral student - Not being motivated to get the academic title - Benefiting from the title for academic or non-academic purposes - Not feeling valuable in academia - Not developing resilience toward contextual challenges
	Feeling valuable in academia and getting real benefit from the academic title	

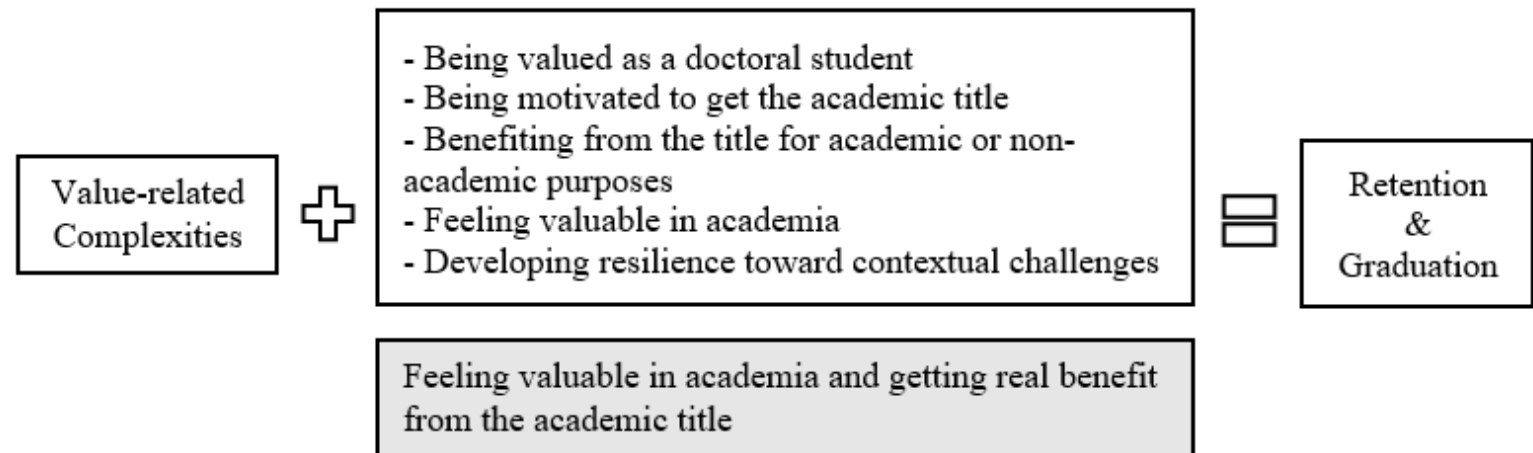


Figure 17. The outcomes of value-related complexities

6.1.5 Personal support-related complexities

According to the findings, the last category of personal complexities is the personal support-related complexities of the participants. Interestingly, all participants hesitated to mention their personal support mechanisms during doctoral education. They could not make sense of them. Furthermore, there was a big difference between doctoral students and dropouts in terms of the number and quality of their personal support mechanisms. 18 doctoral students and five dropouts underlined the support of their families during their educational journey and any kind of educational decision as stated by one of them below:

My family members support me and motivate me even though they cannot totally understand my studies. My mother is a high school graduate and tells me that she could understand a bit of my undergraduate studies, but now she feels totally disconnected from the content. She just emphasizes that I should do my best (MDS 10).

Nine doctoral students and two dropouts told the researcher about the support of their romantic partner. A male doctoral student highlighted the financial and psychological support of her wife like this: *“My personal support mechanism is my wife. I sometimes behave aggressively or differently. She ignores or handles such situations. She also supports me financially if necessary”* (MDS 24).

Personal support can be defined differently by each student. However, the necessity for personal support during a PhD for anyone cannot be ignored taking all of the hardships into consideration. Personal support can include things like giving affection, motivating and offering financial assistance. In such circumstances, family members and love partners are the key sources of support for students pursuing doctorates. They might not demand academic assistance from them, but they do need to be personally loved or encouraged on their way to graduation by these people.

14 doctoral students and five dropouts mentioned the support of their peers or friends. According to these participants, their friends were always behind them during their doctorate, which made them motivated and forced them to continue until graduation.

Peer support is sometimes more useful than any other type of support for doctoral students. It is easier and more meaningful for a student to open up to someone who has had similar experiences. Furthermore, a peer can provide academic assistance while also adding to the mental health of a learner.

Five doctoral students and three dropouts added the support of a specific supervisor or academic. A female dropout (FDD 12) was thankful that her supervisor supported her all the time and made her life easier. In the same vein, a female student (FDS 18) noted that her supervisor supported her and arranged some break times for certain goals to motivate her. A male doctoral student stated that:

I received a lot of support from my supervisor. For example, we meet regularly every two weeks and talk about my thesis. In addition, she is also accessible for my personal problems. So, I have not felt that I have not been supported at any stage (MDS 14).

Doctoral students, particularly those in their thesis stages, see their supervisors as academic and personal guides. When they receive any kind of support from their supervisors, they feel more motivated. Students who receive regular and substantial help from their supervisors are more likely to complete their doctorate and graduate on time. In this regard, the process of selecting a supervisor is critical. Students should be assigned supervisors depending on their personal and academic needs.

Three doctoral students explained the support of their workplace and workmates. One of them (FDS 3), working as a teacher, stated: *“I cannot forget the support of my friends in the school. They always tell me not to give up and to get that*

title.” Another doctoral student (MDS 21) said that his colleagues motivate him to finish his studies. Another male student added:

I work with other six people in the office. Their behaviors toward me are very nice and motivating. They always support me a lot. They encourage me to plan meetings with my supervisor. They even find some thesis topics, ideas and methods for me. They do their best (MDS 23).

Doctoral students are typically working-age adults. They spend most of their time at their workplaces with their coworkers. Therefore, the support of their work environment is positively reflected in their doctorate. When they receive support from the workplace and people, they will have more opportunities to manage their academic timetables without being hampered by the work. What is more, those working in academic contexts or with academic people can also get assistance for their academic work from them.

Besides, a male dropout participant gave the legal support of a specific educational union during his or her dropout experience as an example of a personal support mechanism as follows:

It was a time of struggle for me. I was a member of a specific educational union during that time as a lecturer. They provided legal support for me as I was subject to mobbing. They helped me, but I believe that I personally overcame such situations with my personal efforts (MDD 10).

Doctoral students sometimes need to be supported by a legal organization for such critical issues as mobbing in academia. However, there is no such community in the country protecting the ethical rights of doctoral students and supporting them in many ways.

One male doctoral student highlighted that nobody outside of academia including family members and romantic partners can personally support a doctoral student (MDS 9) as quoted here: “*My parents are illiterate. They do not have*

academic knowledge and perspective. Even when I call for their support, they are not qualified enough. This is also the case for others around us outside of academia, which causes extra struggles for us.”

Two doctoral students and one dropout regarded themselves as their own personal support mechanisms during their doctorates. The female dropout participant (FDD 1) stated: *“I had no personal support mechanism during those times. I think, I would not want such support because nobody could understand my case and perspective better than me.”*

Seven dropout participants emphasized that there were no personal support mechanisms for them. One of them, as a full time employee in an organization with two children, criticized that:

There were no such personal support mechanisms for me during those tough times. Nobody supported me, including my family members and my husband. My colleagues started to do a master’s degree. My boss did not allow me to go to my doctoral courses so that others could not find the courage to get time off for their education. I could not stand out against all of these things and I dropped out (FDD 4).

Unfortunately, many doctoral students do not receive personal support from their families, partners, friends, peers, workplaces and coworkers. They feel mentally alone and alienated, which has various personal and academic consequences, including dropout. Doctoral students with no or limited personal support mechanisms might easily lose desire and direction on this difficult journey. They should be somehow backed up, at least on a personal level.

To summarize, there are multiple personal support-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given in Table 29 on the following page.

Table 29. Personal Support-related Complexities

Theme 1:	Personal complexities
Category 5:	Personal support-related complexities
Codes:	1. Getting support from family members, friends, colleagues and romantic partners 2. Getting extra support from academics and peers 3. Getting support from legal unions 4. Lack of personal support 5. Lack of systematic personal support mechanism

Personal support mechanisms have a significant part in retaining students in a PhD program. Individuals might have difficulty in overcoming obstacles on their way to graduation without the support of their surroundings, including family, friends, or colleagues. As shown in Table 30 and Figure 18 below, similar personal support-related complexities perceived by the participants can result in retention or dropout depending on the availability and accessibility of qualified personal support mechanisms such as family members, friends, colleagues, romantic partners, academics and peers.

Table 30. The Outcomes of Personal Support-related Complexities

Personal Support-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Getting support from family members, friends, colleagues and romantic partners 2. Getting extra support from academics and peers 3. Getting support from legal unions 4. Lack of personal support 5. Lack of systematic personal support mechanism	- Having enough personal support from family members, friends, colleagues and romantic partners - Having enough personal support from academics and peers - Having enough support of legal unions - Having access to available personal support mechanisms	- Not having enough personal support from family members, friends, colleagues and romantic partners - Not having enough personal support from academics and peers - Not having enough support of legal unions - Not having access to available personal support mechanisms
	Availability and accessibility of personal support mechanism	

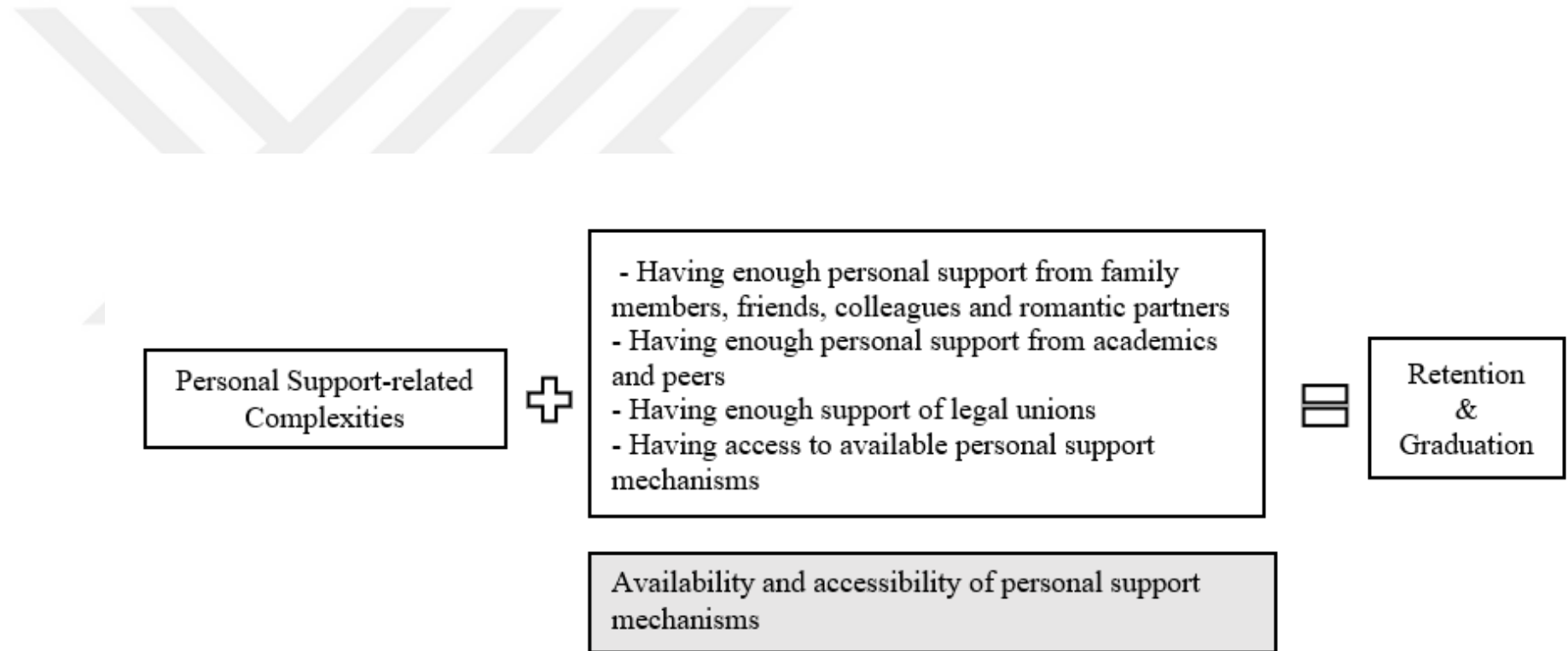


Figure 18. The outcomes of personal support-related complexities

6.2 Theme 2: Institutional complexities

The second research question of this study investigates the understanding of students and dropouts about the institutional complexities that influence their retention and graduation. Institutional complexities have a significant influence on student retention and graduation in doctoral education. Such complexities greatly shape the decisions of doctoral students about whether to stick with their initial Goals to get the degree or give up. In light of the study's conceptual framework and data analysis guided by the second research question, institutional complexities revealed from this study can be categorized as a) program-related, b) university-related and c) institutional support-related complexities.

6.2.1 Program-related complexities

According to the findings, the first category of institutional complexities is program-related complexities the participants experienced. Research participants complained about the doctoral programs. In particular, the complexities regarding doctoral programs were revealed based on the decision and selection processes of the participants, which were also reflected in their retention and graduation processes in these fields or programs.

In particular, three doctoral students and six dropout participants claimed that they had decided to continue their doctoral education in the same or similar field as their undergraduate or master's program. One of the dropout participants summarized it like this:

I completed my undergraduate and master's studies here in this program. I wanted to do my doctorate here because I know the department. I mean, I have had a chance to experience everything in this department and my interaction with the people is quite good (MDD 11).

Students tend to continue their doctoral studies in a familiar environment. They might select the programs or universities that they know because they have had positive experiences during their undergraduate or master's degrees. They might also choose these programs to stay in their comfort zones.

14 doctoral students and nine dropouts stated that their decisions were shaped by the program or field itself. They wanted to study in a specific program. A female doctoral student (FDS 19) said: *"I wished to be part of this program to be an academic in the future. The field/program itself was my only criterion."* In addition to this, a male dropout participant added:

I believe that a student who will start a doctorate should have decided on his/her field of study beforehand. You cannot change it after enrolling in the program. Unfortunately, 90% of doctoral students select their programs without thinking about their interests and they cannot continue. I personally started with scientific concerns and I selected the program on philosophy to satisfy that curiosity (MDD 10).

The academic careers of doctoral students have already advanced. Most of them are more conscious of their scientific interests and aptitudes after obtaining their master's degrees. Therefore, they base their choice of doctoral program on their scientific needs and concerns.

Two doctoral students and two dropout participants stated that they selected their doctoral programs without thinking of any more details as their idol professors were working in those programs. One of them pointed out that:

I just wanted to work with a specific supervisor on my dissertation. S/he is a professor who has completed the graduate journey in the USA. After completing my master's program, I was aware that the most important thing was not the program or field, but the supervisor with whom you worked. That is why I only applied to this program ignoring other options (FDS 13).

Two doctoral students and one dropout participant were guided by their professors to specific doctoral programs as mentioned below:

My professors, especially one of them, guided me all the time. He also had a wife working in the same program or field. He became a professor. We were together in a group of eight or ten people, and we had a very nice atmosphere. He was always helping me as a mentor in this regard. He was very talented in the field and was one of the best professors in Türkiye (MDD 15).

Students' academic role models and peers might serve as guides for their future educational actions, such as beginning a doctorate. Students rely on the wisdom and academic experiences of these people who have been part of the system for a considerable amount of time. For many, the first step toward success is to enroll in a doctoral program offered by these role models or take courses taught by them.

Three doctoral students and one dropout participant had to study in a specific program as a part of ÖYP, which means they also had a position to work there. A male doctoral student explained his obligation as follows:

It is a bit of a compulsory action for me. I am a research assistant here with a 50D position and there are no doctoral graduates in our department. For these reasons, I have been assigned here. We, students with 50D positions, can study in a different city or university. In such cases, The CoHE moves our position to that university (MDS 23).

ÖYP (Academic Training Program) is a program applied specifically in Türkiye. The program is basically designed to help graduate students find research assistant positions in Turkish universities and gain the qualifications necessary to become faculty members in the future. Students who can find and be selected for such positions can work at the university where they do their doctorate until they finish it. Therefore, doctoral students selected for ÖYP cannot have many other university or program alternatives to start their doctorate.

Additionally, two doctoral students emphasized the innovative and up-to-date sides of their programs, influencing their decisions and retention. One of them (FDS

17) claimed that: *“I had many other options as a part of ÖYP. I selected here because our department is up-to-date in the field with many opportunities.”*

Moreover, one dropout participant (FDD 5) highlighted the importance of laboratory opportunities in the program and said: *“I needed a laboratory to conduct my studies and this program had its own laboratories full of materials.”*

Students who study in particular fields, such as genetics, value the physical conditions, materials and opportunities of their programs because their doctoral studies will be shaped by them in many ways. For them, these up-to-date facilities are essential when choosing their program.

A student and two dropouts underlined the essentiality of having friends within the same program for their selection and retention criteria. The doctoral student (MDS 22) noted: *“We have started the doctorate together with my friends, applied with them and been accepted. Their encouragement is great. I do not feel alone.”*

Two doctoral students overrated the team with which they were studying as a criterion for their selection and retention. One of them said:

As you know we work with doctors and physicians. They are my teammates in the program. I have never experienced anything negative from any of them. I am able to talk with them. We compare things in our own fields. My sibling is in another field or program and her or his environment is a little chaotic. They mostly focus on the financial outputs and ask for the financial results of academic work from one another (FDS 18).

Students have a tendency to select their programs if their friends or peers are there.

They want to be in an academic community that they are familiar with. They also

enjoy the support of their friends or peers on their educational adventures. In

addition, students also value their colleagues greatly if they have to work in teams to complete their doctoral studies.

Lastly, 11 doctoral students out of 24 underlined that they had to start and continue the doctoral programs to which they were accepted. One of them (FDS 4) stated: *“Upon finishing the master’s program, I decided to move to this city. I aimed at public universities as they were free. I applied to several programs at different universities. I was accepted only to this current one.”*

Selection and placement criteria for doctoral programs are challenging in Türkiye. In addition, the quotes of programs are limited in number compared to undergraduate levels. On the other hand, the processes that potential students use to make decisions are also important when discussing their retention. Some students do their best to be accepted into free public universities for their doctoral degrees. Students who don't have a certain university in mind typically dismiss other requirements from consideration and struggle to get accepted into one of the programs offered in their surroundings. For them, a university or program is not very important, but doing a doctorate in any place matters. This might show a high initial motivation to start. However, this might also cause a decrease in motivation to remain in the program because they have not selected it on purpose based on many factors.

To conclude, there are several program-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given in Table 31 below.

Table 31. Program-related Complexities

Theme 2:	Institutional complexities
Category 1:	Program-related complexities
Codes:	1. Choosing programs without being critical 2. Targeting specific programs 3. Preferring familiar fields or programs 4. Preferring familiar teams or academic communities 5. Prioritizing research sites and physical opportunities 6. Prioritizing professors in a program 7. Prioritizing the suggestions of professors 8. Prioritizing friends and peers in a program 9. Prioritizing innovative programs 10. Prioritizing previous positive experiences 11. Sustaining the comfort zone 12. Being obliged to a program for ÖYP 13. Choosing programs they are accepted to

In fact, the process by which students make decisions and choose their PhD programs can be a good indicator of their retention. Individuals with clear criteria can make an effort to be selected for a specific program. In this sense, they might also show resilience to remain in the program and graduate on time. On the contrary, students who have not shown great effort to be selected for a doctoral program or those who have randomly selected their programs can struggle a lot to continue. In other words, they are more susceptible to the effects of personal, institutional and academic challenges encountered during the doctorate.

As shown in Table 32 and Figure 19 below, similar program-related complexities perceived by the participants can result in retention or dropout depending on their decision-making processes. Those who can get enough information regarding the programs and academics before applying for doctoral degrees can retain more easily. In addition, volunteer choices also make these students feel happy and integrated to be continued. Unfortunately, students who have less information about their programs and academics tend to leave their programs as they do not feel happy and integrated. Furthermore, students often drop out of the programs if they made compulsory choices.

Table 32. The Outcomes of Program-related Complexities

Program-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Choosing programs without being critical 2. Targeting specific programs 3. Preferring familiar fields or programs 4. Preferring familiar teams or academic communities 5. Prioritizing research sites and physical opportunities 6. Prioritizing professors in a program 7. Prioritizing the suggestions of professors 8. Prioritizing friends and peers in a program 9. Prioritizing innovative programs 10. Prioritizing previous positive experiences 11. Sustaining the comfort zone 12. Being obliged to a program for ÖYP 13. Choosing programs they are accepted to	- Having enough information about the program and academics - Focusing on specific learning and research needs - Being more clear about future expectations - Being in a familiar program with familiar people - Having voluntary choices	- Having not enough information about the program and academics - Not focusing on specific learning and research needs - Being less clear about future expectations - Not being in a familiar program with familiar people - Having compulsory choices
	A voluntary and in-depth decision-making process	

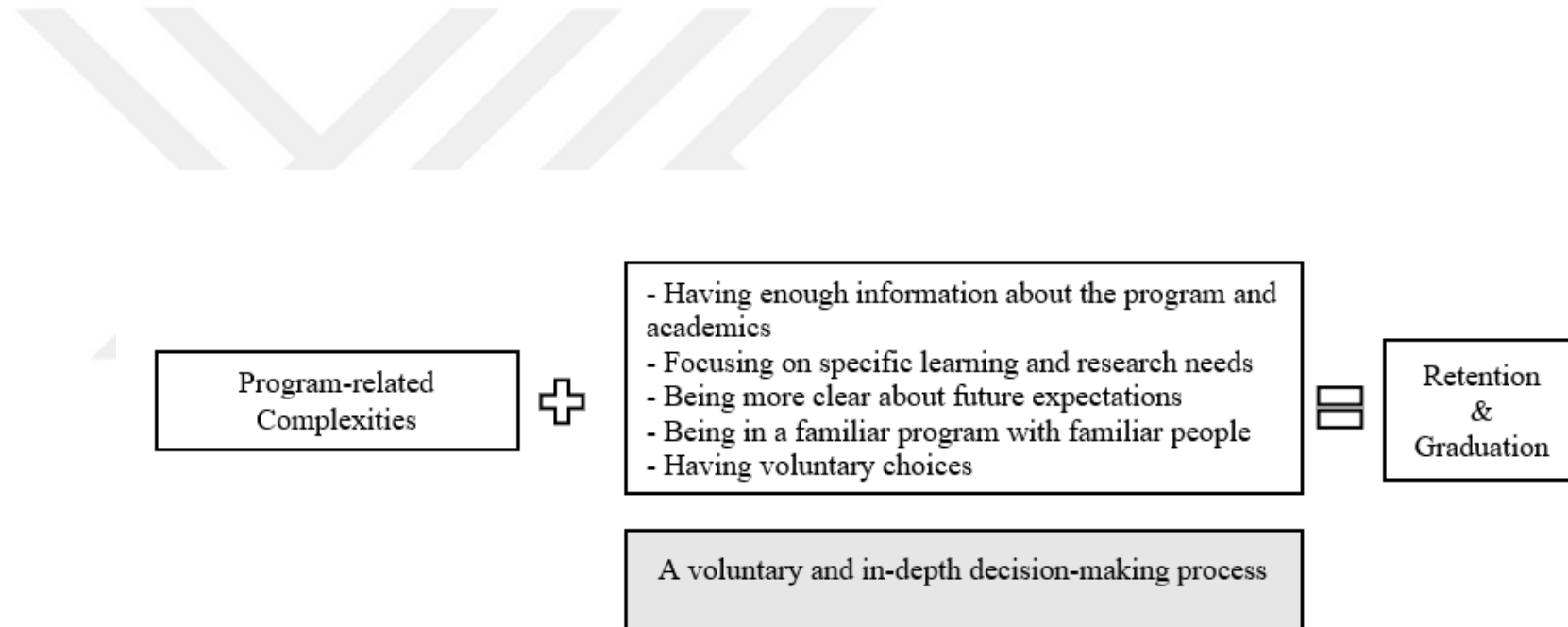


Figure 19. The outcomes of program-related complexities

6.2.2 University-related complexities

According to the findings, the second category of institutional complexities is the university-related complexities of the participants. The participants in this study talked about their universities. Specifically, the complexities regarding universities were revealed based on the decision and selection processes of the participants, which were also reflected in their retention and graduation processes at these universities.

Eight doctoral students and eight dropouts cared about the institutional culture full of quality in many terms, a decent history, a diverse culture and remarkable etiquette while deciding on their institution. These features of the universities also helped doctoral students retain. On the other hand, those who were disappointed in these features had a tendency to drop out more easily. A male doctoral student elaborated on it as follows:

Firstly, the researchers at the university are good and successful. They have proven their knowledge and skills globally. It is one of the institutions where you can get a quality education in Türkiye. Secondly, I feel like I am at home whenever I walk through the campus full of respectful and democratic people. I think everyone would call this university their home. Therefore, it is more than a university for me. I have excellent friends here and I learn a lot from them, too. One of them is very interested in cinema and is constantly inviting us to watch movies. Another one is keen on literature. I mean, many people are interested in such different subjects. Lastly, these people can discuss issues in civilized manners regardless of their religious, political and cultural beliefs. In other words, you put forward your ideas and this provides an opportunity to be more creative. I love the climate for these reasons (MDS 14).

Doctoral students favor universities that have a decent, long history and a diverse culture. They rely on the academic success of such universities in their countries. They feel that these institutions offer the community and environment they need to advance both academically and emotionally. For other universities that lack

excellence and culture, education might be like that of a high school. In this regard, they will not contribute much to doctoral students.

A male doctoral student (MDS 6) gave priority to the academic ambiance and said: *“The university and the academic staff here really had the academic spirit.”*

Another female student (FDS 4) added that: *“The rector is also important in academia. Ours is very social and in touch with the students. He has a network in the USA.”* Additionally, three students underlined the importance of other such staff such as in student affairs and institutions. One of them (MDS 8) noted that: *“I think, other staff is also important. They are so helpful and informative at our university.”* One male student (MDS 11) put stress on the support staff provided for them and stated: *“Support staff helps us reach data and for other things.”*

15 doctoral students and seven dropouts emphasized the quality and reputation of academic staff conducting research as a key reason to start studying there and to continue. One of the dropouts put it into words like this:

As I said before, if you start an academic career in this field, working with such people is a good opportunity. In other universities, you may need ten or twenty years to learn such things or to develop a network. However, the academic staff here is so qualified that you can do it in a very short time. I think that this is the most important motivating factor. It is a great chance to work with the number-one people in their field, the teaching staff is of really high quality. In other words, I think. In other words, these two factors were my biggest motivation (MDD 11).

Three doctoral students wanted to diversify their academic experience and change their institution. In other words, they started and continued their doctoral education in a new setting different from their undergraduate or master’s institution. One of them (FDS 4) stated: *“My primary aim is to do my undergraduate, master’s and doctoral studies in different institutions as I like diversity and cosmopolitanism.”*

Doctoral students mostly select their universities with academic concerns as expected. As a result, they prioritize academic excellence, quality and research at the center while choosing universities. They aim to be surrounded by academic people including staff with good reputations and to develop academic networks. Some students even change their university for their doctoral degree on purpose to experience new academic settings and people.

Seven doctoral students and six dropouts thought more about practicality and preferred the most convenient university located close to themselves. A male dropout (MDD 16) simply stated: *“I chose the closest university to me. That was all.”* In parallel to this, a doctoral student (FDS 13) chose the institution in which she had already been working for her doctorate for practical reasons and added: *“I had good cooperation with my supervisor and the institution during my internship. I met her or him via my internship and worked together part-time.”* Moreover, a male doctoral student (MDS 23) also mentioned the location of the university allowing data collection and said: *“The most advantageous part of this institution is to have natural laboratories around it for me so that I can easily conduct my field studies.”* He also mentioned extra research units at the university based on its location close to the field.

For practical motives, graduate learners often choose to attend an institution near their homes or workplaces. At this point, it should be underlined that many universities in Türkiye do not provide any housing for their doctoral students and their families. Unfortunately, they also lack work opportunities or scholarships for their doctoral students. Under these circumstances, doctoral students have to live and work outside the university campuses, which affects their retention negatively in return.

Only one dropout student (MDD 3) specifically mentioned free education offered by the public university and said: *“We have limited options. We try to find public institutions with the free education to conduct our doctoral studies.”*

Some students prefer to attend free public universities for their doctorate. Thus, they ignore the programs and opportunities provided by foundation universities in the country. They do not want to cope with extra financial burdens arising from their education.

Five doctoral students and one dropout highlighted the essentiality of such opportunities as laboratories and materials offered by the institution to doctoral students. One of them (FDS 20) reported: *“The laboratories at this university are really good and I appreciate it.”*

Students aspire to pursue their doctoral degrees at a university that has the environment and resources they will require. Otherwise, they will fall short of their intended academic goals particularly if their line of education necessitates laboratory-based research.

Three doctoral students took the university's instructional language into account. One of them (FDS 12) declared: *“An English-medium university helps me not to forget the language and allows oneself to follow new studies in the world.”*

Future scholars are supposed to learn a foreign language and follow international academic research. In this sense, the medium of instruction plays a key role in selecting a university for their doctorate. Doing a doctorate in a Turkish university where English is the primary language in instruction will contribute to the personal and academic improvement of doctoral students, which is especially the case of countries such as Türkiye where the use of English is not common. Even if

doing a doctorate at an English-medium university has its own challenges, it will help doctoral students be global citizens and scientists.

Three doctoral students mentioned the campus environment of their universities positively. One of them (MDS 11) said: *“The campus itself is good and motivating. The atmosphere is nice.”* One of them (MDS 14) also added diversity and a different atmosphere at the university campus. Four other doctoral students found their institutional environment relaxing and free for academic progress. One of them (FDS 19) said: *“Our institution is full of free thoughts. We have real discussions with open-minded people.”*

Apart from all these given above, national or international opportunities provided by the university as stated by three students (FDS 4, MDS 6, FDS 19); the student-centered environment of the university as stated by two students (MDS 6, FDS 18); the international reputation and corporate culture of the university as stated by a student (MDS 6); meritocracy in the university stated by a student (FDS 19) and cooperation with the sector as stated by a student (MDS 21) were found in the study as among the key institutional complexities.

For doctoral students, university campuses and their general culture are important. They prefer to be in environments that are positive and inspiring. They value university campuses with a free-thinking culture. Indeed, doctoral students are aware of the value of circumstances that support their ideas and work as critical thinkers. Furthermore, they also want to be a part of democratic and meritocratic societies with a strong reputation and opportunities on the national and international levels. To summarize, there are several university-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in

doctoral education. A visual summary of these complexities are given in Table 33 below.

Table 33. University-related Complexities

Theme 2:	Institutional complexities
Category 2:	University-related complexities
Codes:	1. Prioritizing the university culture, history and etiquette 2. Prioritizing academic excellence 3. Prioritizing emotional atmosphere 4. Prioritizing student affairs and institution 5. Prioritizing support staff 6. Prioritizing overall quality and reputation 7. Prioritizing unfamiliar experiences and settings 8. Prioritizing location and practicality 9. Prioritizing extra research units and resources 10. Prioritizing data collections facilities 11. Prioritizing English medium instruction 12. Prioritizing student-centeredness 13. Prioritizing cooperation with the sector 14. Prioritizing democratic and meritocratic environment 15. Prioritizing positive campus climate 16. Prioritizing national and international opportunities

Doctoral students study at a specific university for a variety of reasons and their choices are often influenced by a combination of personal, institutional and academic motives. To be more precise, individuals want to study at institutions which are famous for their excellence in their fields and have professors with good reputations. They highlight the importance of opportunities as well as location, culture and environment for their betterment. The process of selecting a university for doctoral studies should involve extensive research, consultation with academic mentors, and even visits to target institutions. Students either apply to multiple universities and undergo a decision-making process before making a final decision or they just select a single university and make an effort to be selected for it. In both cases, the choice of university should align with the student's academic and career goals as well as their personal preferences and circumstances to increase retention rates.

As given in Table 34 below and Figure 20 on the following page, students who go through in-dept decision making process before voluntarily applying for a university can continue their studies more easily. On the other hand, those who have compulsory choices and less information about target universities can easily give up later.

Table 34. The Outcomes of University-related Complexities

University-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Prioritizing the university culture, history and etiquette 2. Prioritizing academic excellence 3. Prioritizing emotional atmosphere 4. Prioritizing student affairs and institution 5. Prioritizing support staff 6. Prioritizing overall quality and reputation 7. Prioritizing unfamiliar experiences and settings 8. Prioritizing location and practicality 9. Prioritizing extra research units and resources 10. Prioritizing data collections facilities 11. Prioritizing English medium instruction 12. Prioritizing student-centeredness 13. Prioritizing cooperation with the sector 14. Prioritizing democratic and meritocratic environment 15. Prioritizing positive campus climate 16. Prioritizing national and international opportunities	- Having enough information about the university - Focusing on specific learning and research needs - Being more clear about future expectations - Having voluntary choices	- Not having enough information about the university - Not focusing on specific learning and research needs - Being less clear about future expectations - Having compulsory choices
	A voluntary and in-depth decision-making process	

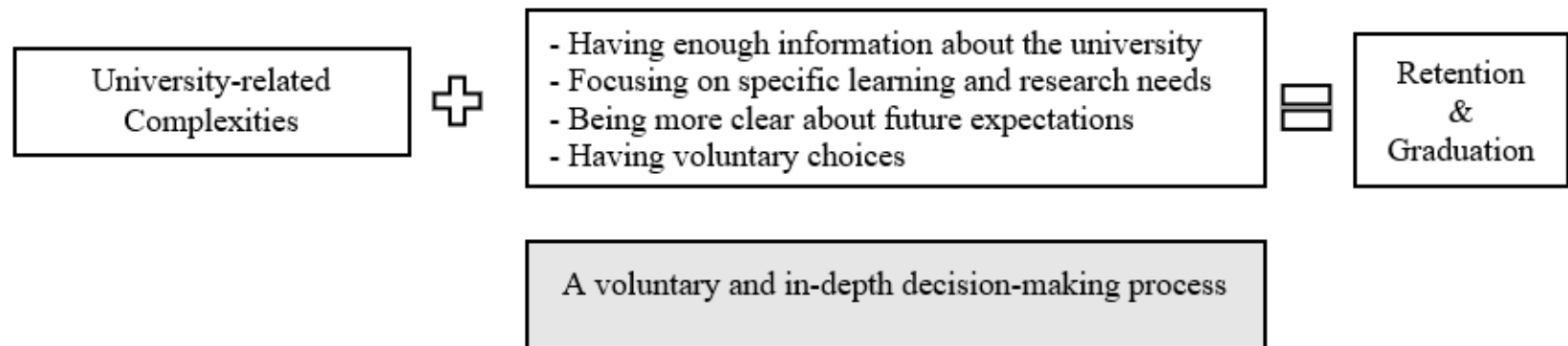


Figure 20. The outcomes of university-related complexities

6.2.3 Institutional support-related complexities

According to the findings, the last category of institutional complexities is institutional support-related complexities of the participants. The participants had difficulty listing and explaining their experiences regarding institutional support mechanisms. Dropout participants, as opposed to doctoral students, had little or no institutional support during their doctoral education and their dropout process.

Three doctoral students and six doctoral dropouts specifically expressed that there was no institutional support for them as quoted below:

I think that it is more than necessary to have such institutional support telling me "I'm here for you, calm down". This is a need not just for me, but for everyone in the doctorate. I needed such support, but it didn't exist in my case (FDD 6).

A male doctoral student also highlighted the same issue here:

There was no support mechanism for me. As I said before they just appointed a thesis supervisor to me towards the end of the second semester. We only had our thesis supervisor when we needed to ask anything about our academic lives. I really don't know of any other institutional support mechanisms (MDS 2).

On the other hand, three doctoral students and two dropouts said that there were available support mechanisms for them even though they were limited in quality and quantity. One of the students stated:

I do not remember any institutional support except from a faculty member helping with any issue. We took a course from him with my PhD student boyfriend. That course really motivated us. He tells us that we can consult him no matter what. He has somehow supported us. He is unfortunately not my supervisor, but he always helps me whenever I need it. He is more important to me than my supervisor. I have not received or heard of any other institutional support until now (FDS 3).

Unfortunately, many doctoral students and doctoral dropouts cannot envision an institutional support mechanism. At first glance, they do not even comprehend the concept of institutional support. In Türkiye, universities lack institutional support

mechanisms or they lack orientation programs to introduce their existing institutional support mechanisms, if any, to their doctoral students. For many students, their supervisor or a faculty member is the only institutional support provided by their universities. They find it limited.

Only one female doctoral student gave student groups and clubs as an example of an institutional support mechanism and added:

There are student groups and clubs in my field as an institutional support mechanism. The university also has other hobby clubs. For example, I go diving. There are many other clubs at the university and I am able to do the things that I want to do there. I do things that I cannot afford (FDS 4).

Three doctoral students mentioned the psychological support unit of their universities. A male doctoral student among them also talked about orientation programs and regular student meetings as examples of institutional support mechanisms. He said:

I sometimes receive e-mails regarding support mechanisms. There are units where the university provides psychological support for the students. Apart from that, there are orientation programs and student meetings that foster collaboration. The rector organizes a dinner for these meetings. These examples have recently attracted my attention. By the way, I do not think that they provided them during the pandemic (MDS 11).

Two doctoral students and one dropout participant regarded the technology transfer center at their universities as a support mechanism. One of them (MDS 23) said:

“Almost all universities have a technology transfer center and they can be seen as an institutional support.”

Two doctoral students listed the guest house and leisure center of their university as institutional support mechanisms. One of them noted (MDS 22) that:

“These places are cheaper for us to stay and enjoy time, which is an important feature.” From a similar perspective, the other student (MDS 23) also mentioned the

cafeteria as support provided by the university for them. In addition, the career center mentioned by a female dropout (FDD 5); the staff in the institute mentioned by a male dropout (MDD 10) and collaboration with the development center mentioned by a female dropout (FDD 12) were given as examples of institutional support mechanisms.

Moreover, limited scholarship opportunities stated by two doctoral students (FDS 4, FDS 7); the library and database of the university stated by two doctoral students (FDS 4, FDS 20); office programs stated by a student (FDS 7); laboratories and materials stated by three doctoral students (MDS 11, FDS 20, MDS 22); and limited funds and budgets stated by a doctoral student (MDS 11) were given as examples of institutional support mechanisms. These examples were also listed as academic support mechanisms. Therefore, the quotes and detailed findings have been added to the related part of the following chapter.

For some doctoral students and doctoral dropouts, institutional support mechanisms include facilities such as cafeterias, libraries, databases, office programs, laboratories, research resources, funds and budgets. Universities also offer support systems for students and dropouts in the form of career centers, psychological support units, recreational centers, guest houses, and technology transfer centers. In short, there are several institutional support-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given in Table 35 on the following page.

Table 35. Institutional Support-related Complexities

Theme 2:	Institutional complexities
Category 3:	Institutional support-related complexities
Codes:	1. No or limited institutional support 2. Online or offline facilities 3. Low in quality 4. Not being aware of the existing ones 5. Psychological support units 5. Institutional staff 6. Faculty member or supervisor 7. Student groups or clubs 8. Regular student meetings 9. Orientation programs 10. Limited funds, budgets and scholarships 11. Library and databases 12. Office programs 13. Career and development centers 14. Technology transfer office 15. Leisure center 16. Cafeteria 17. Guest house

Turkish universities lack fundamental institutional support mechanisms for their students, especially for their doctoral students. Despite having a few support systems and units to help their students, their number and functionality are restricted. Even worse, universities neglect to inform students of the institutional support systems they already have in place.

As indicated in Table 36 and Figure 21 on the following pages, similar institutional support-related complexities perceived by the participants can result in retention or dropout depending on the availability and accessibility of qualified institutional support mechanisms such as research units or programs.

Table 36. The Outcomes of Institutional Support-related Complexities

Institutional Support-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. No or limited institutional support 2. Online or offline facilities 3. Low in quality 4. Not being aware of the existing ones 5. Psychological support units 5. Institutional staff 6. Faculty member or supervisor 7. Student groups or clubs 8. Regular student meetings 9. Orientation programs 10. Limited funds, budgets and scholarships 11. Library and databases 12. Office programs 13. Career and development centers 14. Technology transfer office 15. Leisure center 16. Cafeteria 17. Guest house	- Having enough institutional support - Having enough institutional support units and facilities - Having access to available institutional support mechanisms	- Not having enough institutional support - Not having enough institutional support units and facilities - Not having access to available institutional support mechanisms
	Availability and accessibility of personal support mechanisms	

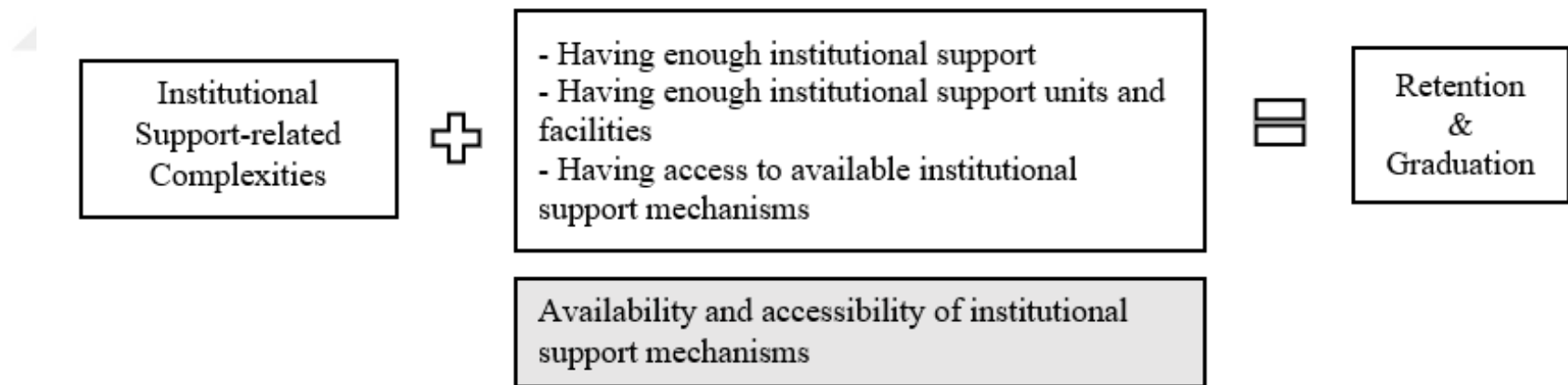


Figure 21. The outcomes of institutional support-related complexities

6.3 Theme 3: Academic complexities

The third research question of this study explores the understanding of doctoral students and dropouts about the academic complexities influencing their retention and graduation. Academic complexities also have an important influence on student retention and graduation in doctoral education. These complexities greatly shape the decisions of doctoral students about whether to continue their education or drop out. Based on the data analysis guided by the third research question and the conceptual framework of the study, academic complexities revealed from this study can be categorized as course stage-related, qualifying stage-related, thesis stage-related, supervisor-related, faculty-related, committee-related and academic support-related complexities.

6.3.1 Course-stage-related complexities

According to the findings, the first category of academic complexities is the course-related complexities of the participants. In Türkiye, doctoral students have to pass their course stage successfully as the first main academic challenge during their doctorate. In other words, they are required to fulfill the objectives of the course stage in order to go on with their studies. 12 out of the 24 doctoral students who participated in this study were in their course stages. Eight out of 16 students dropped out of their doctoral education during their course stages. The findings showed that the participants had positive and negative experiences about their course stages.

Ten doctoral students and one dropout regarded the course stage of the doctorate as the smoothest stage of this journey. A female student expressed it like this:

I am in my course period right now and I do not face any difficulty at all. I just take courses and do assignments. I know that this stage is like a honeymoon. During my thesis stage of the master's degree, I had many personal and social hardships. However, the course stage in the doctorate is unproblematic as opposed to those times (FDS 16).

When the overall difficulty of doctoral education is considered, the course stage can be seen as a transition period to be an independent scholar. During these years, students attend classes and learn more about the academic content and engage in the academic community.

Six doctoral students and one dropout participant believed that the course stage was a structural period in terms of given courses, assignments, presentations or translations. That is the reason why they also regarded this stage as less challenging than such other stages as qualifying and thesis. A dropout participant told about it as follows:

The course period of my doctorate was really unproblematic. I took all the courses and completed them in a year with the highest GPA. That was not a challenge. We are accustomed to being students. Therefore, if you even focus slightly on the courses, you can pass them successfully (MDD 3).

Similarly, a female doctoral student compared her course stage to other stages of her doctorate and added:

I was working during my course stage. So, I completed my courses in two years. Still, that period was completed without any problem for me. At least, there is a beginning and an end for that period to follow. However, this is not the case after the course period in the doctorate. I wanted to leave it so many times just for this reason. This is my eighth year in doctoral study and I still do not see any end point. There is no time and task flow to follow for me. The supervisor changes them all the time. I am regretful to start this journey (FDS 1).

Doctoral students often know what to expect and how to handle it during their course phases because they have already experienced similar periods during their undergraduate and master's degrees. In other words, during the doctoral program's

course phases, they hardly ever face unforeseen difficulties. Students find this more structured phase of doctoral education easy and manageable. The qualifying and thesis stages, however, are more difficult for students than the course stage since they are more unfamiliar to them and contain more unanticipated difficulties.

Eight doctoral students and seven dropouts also regarded their course stage as less challenging. Besides, they specifically found their courses theoretically efficient.

One of them said:

There were obligatory courses to be taken and credits to be achieved. The only goal of the course period was that. It was not tough to achieve the credits with those classes. In addition, those courses were theoretically well organized. Therefore, my dropout experience is not related to the course stage of my doctorate (FDD 1).

On the other hand, a male doctoral student (MDS 22) stated that he had applied for courses and found them more engaging and beneficial for a future scientist.

Some students believe that the course stage in doctoral education is effective in terms of theoretical content and overall application. For them, having a syllabus to follow and credits to be completed is enough at this stage. The expectation of doctoral students from the course stage is not high and extraordinary.

Three students and two dropouts underlined the importance of the professors delivering doctoral courses as well as their theoretical contents. One of the dropouts mentioned it like this:

I am aware that the courses given to me were theoretical enough to prepare me for the next stages of academia. In particular, the competence of my professors was very high. They were scientists with high reputations. So, I did not experience any problem at that point. Their approaches, behaviors and attitudes towards us in the courses were more important and motivating at that point (MDD 9).

For some other students theoretical content is efficient in the course stage to prepare them for other challenging stages of a doctorate. However, the qualifications of the

professors delivering the courses are more important. Learners possess the ability to learn course materials and theories autonomously. At this time, it might be more advantageous for them to build an academic network by meeting highly competent faculty members in courses. In addition, as future researchers, they might pick up good teaching techniques from these professors.

A male doctoral student (MDS 10) said: *“I enjoy my courses in doctorate. As opposed to master’s courses, we try to produce such scientific works as articles within the scope of each course. That is why I like my doctorate, my courses and my tasks.”* He focused on the end products achieved through doctoral courses.

Doctoral students expect to have courses with scientific outcomes, such as publications. In this sense, doctoral courses should be designed differently compared to undergraduate or master’s courses. When doctoral students engage in scholarly activities in their courses, they can become more motivated and productive.

A male doctoral student emphasized the essentiality of course and faculty diversity in doctoral education. He elaborated on his ideas based on his experience as quoted below:

We had very diverse courses and professors during the course stage. I mean we could select courses and the instructors delivering these courses. There were not many compulsory courses. Even the same course was given by many people, which was important for me as a doctoral student. We mostly preferred instructors who went abroad, actualized themselves and knew the most up-to-date programs. By the way, there were not many compulsory courses (MDS 9).

Having elective courses instead of compulsory ones was reported as another notable factor in starting and continuing doctoral education by seven doctoral students. One of them (FDS 18) said: *As we are at the level of a doctorate, the number of compulsory courses is limited. We mostly have electives fortunately so that we engage more in courses based on our expertise.”*

Five doctoral students thought that having the right to take the courses given at other universities was one of the benefits of the course stage for doctoral students. One of them (MDS 15) added: *“We did not have many courses in our program, but I had a chance to take courses from other universities as a guest student.”*

Future academics and experts are raised through the coursework given in universities. Hence, a range of classes need to be available to those seeking a PhD to help them become more knowledgeable in their respective disciplines. For instance, diverse elective courses should be offered to doctoral students rather than forcing them to take haphazard mandatory courses. Students should have the option of taking elective courses from other universities if their own university does not offer electives in an area of interest.

A female student found her courses useful since they are up-to-date and integrated with technology. She elaborated on it as below:

There were also technology-integrated courses. For example, one of my courses was about Artificial Intelligence (AI). We learned how to transfer developmental behavior disorders or personality traits to AI, which was interesting and beneficial as opposed to typical theoretical courses. In my opinion, these courses are the strength of doctorate (FDS 5).

Graduate learning should be able to keep up with the most recent breakthroughs in science and technology. Doctoral students should be exposed to the relevant material and procedures in their courses. Those students who can expose such content in their courses can feel more knowledgeable and confident.

Additionally, two female students believed that having doctoral courses on the same day was both tiring but convenient for them while working. One of them said:

I was working in a different city. I had two off days. I drove to the city in which I was taking my courses one day. The other day, I was taking courses.

It was tiring but manageable only that way as I could not attend courses on other work days (FDS 7).

As working-age adults, individuals want their classes to be scheduled on a single day. They do this in an effort to continue working as usual without taking many days off. Universities should take this into consideration while arranging the schedules of doctoral students. However, taking many doctoral courses in one day can be both difficult and pointless for some students in the long run.

Moreover, five doctoral students mentioned the influence of the pandemic period on their courses. For them, courses delivered online during the COVID-19 pandemic made their lives easier. One of them (FDS 20) specified it like this: “*I easily completed my course stage online and this helped me morally and financially.*”

Online courses, offered for various reasons, are often considered simple to pass in Türkiye. In fact, online classes might be more comfortable for doctoral students to take than in-person ones. Additionally, these students can prefer online classes to avoid incurring extra costs like accommodation.

The participants in this study also criticized their doctoral courses and the course stage for various reasons. Eight doctoral students and seven dropouts regarded their courses and course stage as inefficient for preparing themselves for other stages of the doctorate. One of them highlighted it as follows:

Even if we do not have any compulsory courses, the number of electives offered and the faculty are highly limited. Theoretical courses have twenty-three years of old content. Moreover, you can take many of these courses during your master’s degree, especially at the same university. You can take courses from other departments, but they are not related to your field. I mean, there is serious inefficiency in doctoral courses (MDD 8).

In parallel to these opinions, five students and two dropouts criticized experiencing the same courses delivered by the same lecturers with the same contents and products as mentioned by one of them here:

I can say that my undergraduate courses taught me more than my doctoral courses. The courses are really bad for the doctorate. I mean they are 'empty', not deep and new. My friends also say it. We always get into trouble with my friends while selecting the courses. We know that we will not learn anything new with the same repeating courses and lecturers (FDD 13).

In reality, required doctoral courses should be structured differently from those for master's degrees. However, many programs in Türkiye do not operate in this manner. Students feel that they repeat the same content and do not learn new information. When students continue their doctoral studies at the same university, they often receive the same courses from the same professors. What is more, they cannot find on-target elective courses to be able to diversify and intensify their doctoral learning.

One of the doctoral students (MDS 8) and one of the dropouts (FDD 6) stated that they just completed their courses without learning or thinking deeply. One of them (FDD 6) specifically said: *"The courses were not efficient. They were quite far from doctoral-level depending on the professors. Sometimes, we had idle times in the courses."*

Another five students and three dropouts in the study criticized the simplicity and commonality of the courses given in the doctorate. A female student (FDS 17) said: *"There were few courses in my doctorate and I did not learn new things. They were random research-based lectures requiring investigation and writing something. They were not informative."*

In comparison to other educational levels, the doctoral course stage should be aimed at stimulating deeper learning and innovative thinking in students while

yielding scientific work. In this respect, the syllabus for the course and the teaching methods employed in it should be carefully planned. Additionally, educators should be able to facilitate advanced learning in these courses.

In addition, four students and four dropouts mentioned that the courses were not up-to-date and changed from lecturer to lecturer. One of them (MDD 14) expressed: *“In my opinion, courses and course contents should definitely be structured in advance. At the moment, it is up to the lecturers. They constantly change the content and the timing of the courses based on their incompetence.”*

Moreover, the canceled courses were not repeated according to three students and two dropouts. One of them (FDS 7) said: *“Some professors attended their courses. However, some of them canceled the courses without even informing us. For example, they were telling us that they would be abroad and canceling the courses. They did not offer make-up. Money matters for them.”*

Doctoral education and courses, as one of the highest levels of learning, should not be left in the hands of unprofessional people. Administrators and educators should be more aware of the learning needs of their students at this stage. In addition, they should not cancel or postpone their courses without informing their working-age students. It is critical to underline that doctoral students make sacrifices to attend their courses and they desire to get a quality education.

Three doctoral students specifically found the courses taken in their doctorate meaningless and unnecessary. One of them (FDS 4) stated: *“Doctoral courses should facilitate specialization in the field, but they are generally like a bit more advanced version of graduate level. In my opinion, they are very similar. I had thought that they would be more intense and deeper.”* One of them (MDS 2) compared the system in Türkiye to Europe and said: *“The system in Türkiye is different from other*

countries. For example, there is no course stage in Europe. They do not take any compulsory courses. They just take courses if they want or need them.” In a similar way, one of the male students elaborated on this issue like this:

The course period was too much for me. It was very intense, but manageable for me. again, it was not in a way that we would have a lot of difficulty with. However, the duration of this period could have been shorter and more intense. I think that taking courses for two years is bad (MDS 11).

According to three doctoral students and one dropout, the doctoral courses given at Turkish universities cannot foster expertise. A female dropout expressed it as below:

I started a PhD because I thought that the courses would be more effective, but the courses in the doctorate were the same as the courses in the master’s. There were no changes. That’s why I lost my motivation. My initial goal was to improve myself in order to have an impact. I need to learn economics or politics, but they are not given. I stuck with the available courses, which will not make me an expert (FDD 7).

One dropout participant (FDD 1) criticized and said: *“There were no elective courses, but we were assigned certain courses and attended them.”* On the other hand, three doctoral students and four dropouts believed that the elective courses were so-called electives since they were limited in number. One of them mentioned the situation as follows:

We do not have any compulsory courses, but there are not too many course options. All of the courses are electives. Typically, we have twenty-two classes in total. However, only three of them are available this semester. So, it is not feasible to take the courses shown in the program (MDS 10).

In Türkiye, doctoral students find themselves in a relatively structured coursework phase when they are accepted into programs. Their learning needs and future expertise are not much taken into account during the initial selection process. They all enroll in the same courses as their previous master’s degrees, and the majority of these courses do not provide fresh knowledge or advance their level of skill.

Unfortunately, the coursework period is not flexible and students cannot shape their course stage independently.

A female student (FDS 18) criticized the missing fieldwork and practices

during the course stage in the time of the worldwide pandemic. She told:

“Unfortunately, we could not go deeper into practice in doctorate during the

pandemic. I had a better chance for fieldwork while I was in graduate school.” In a

similar vein, another female student found the courses too crowded to be able to

allow applications. She (FDS 7) added: *“We need to practice speaking in the courses*

depending on our field. As there were many students, only the lecturers could talk.

So, I do not feel knowledgeable and skilled in this sense.” A female student (FDS 4)

elaborated it like this: *“The number of students in doctoral programs should*

certainly be less. There should be face-to-face interactions and applications through

courses.”

More in-depth learning is supposed to be adopted in doctoral programs. As a

result, universities need to take fewer students into their doctoral programs so as to

facilitate intensified learning processes. Additionally, fieldwork or applications

should be an essential component of this higher-level education for many disciplines.

Unfortunately, not all PhD programs around the nation are like this. Universities are

forced to increase their quotes and the increasing number of students might cause

professors to change their strategies. Moreover, students became aware of the need

for face-to-face interaction and deep learning through applications throughout the

global pandemic.

In addition, two dropouts thought that having workshops or seminars instead

of structured courses would be more beneficial. One of them (FDD 7) said: *“Maybe*

workshops can be organized. There is no need for structured, already existing

courses. For example, I would like to meet a person who has done longitudinal research.”

Doctoral courses can be more beneficial for students when they go beyond their current structured versions. They can be redesigned in the form of seminars or workshops, allowing students to engage in real-life and up-to-date content. This will also help them to meet new people and expand their academic networks.

Two doctoral students were in trouble with the end results of the courses as they did not produce any scientific work to pass the courses. One of them (MDS 9) stated: *“In my opinion, an ERIC article should be achieved as a result of a course, especially for research courses.”*

When evaluating their coursework, individuals pursuing PhD programs are more concerned with the products as a whole. Upon completion of every course, they aim to have an output. At this higher level of study, they need to generate scientific works both individually and in groups rather than solely learning theories and listening to lectures.

On the one hand, two students (FDS 19, MDS 21) and two dropouts (MDD 3, MDD 8) found the diversity and number of courses in the doctorate limited. On the other hand, three working participants (FDS 4, MDS 6, MDS 8) dreamed of a compact and limited number of courses in order to attend them on the same day. A female dropout (FDD 4) underlined the necessity of flexibility in doctoral courses and said: *“The structure of the courses and the perspectives of faculty members should definitely change. Maybe, the course stage can be more flexible or done in a different way to help working students.”*

Doctoral students, especially those with full time work, desire a flexible course-stage design in their doctorates. The repetitive courses with similar contents

are time-consuming and demotivating for them. While improving their quality, doctoral courses' quantity can be decreased. Furthermore, the length and timing of the courses can be planned in accordance with these adult students' work schedules. Students can only attend their classes on a regular basis and with motivation after that.

Moreover, two students (MDS 15, MDS 23) and three dropouts (FDD 2, FDD 5, FDD 8) had difficulty finding field-specific courses for themselves. Interestingly, a doctoral student wanted to enroll in an anxiety-related course, but she could not find it. She (FDS 12) also added: *“I think, doctoral students are generally anxious people for many reasons. To reduce their anxiety and stress levels, a course like stress management should be offered to everyone. Even the most relaxed person can be stressed in a doctorate.”* Finally, a dropout participant highlighted that some specific courses, like statistics, are harder than others for doctoral students.

Doctoral students might have difficulty finding field-specific courses in their programs. Unfortunately, they often take courses that will not contribute much to their expertise, most of the time with an urge to complete credits. In these circumstances, courses do not significantly broaden their knowledge. Additionally, for a variety of reasons, some doctoral courses might be harder than others.

In this regard, it is risky to evaluate the course stage while taking a number of courses into account. All in all, there are specific course stage-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given in Table 37 on the following page.

Table 37. Course Stage-related Complexities

Theme 3:	Academic complexities
Category 1:	Course Stage-related complexities
Codes:	1. A smooth transition period 2. More structural and anticipated 3. Less challenging stage 4. Familiar and manageable 5. Limited number and diversity of courses and faculty 6. Simple and common courses 7. Old fashioned syllabuses 8. Theoretically engaging stage 9. Crowded classes 10. Cancelled courses with no reason and make-up 11. Time for developing academic networks 12. Limited number of so-called electives 13. More obligatory courses 14. Need for flexibility 15. Need for innovative and useful courses 16. Repetition of master's degree courses 17. Not allowing deeper and critical thinking 18. Not providing expertise 19. Lack of fieldwork 20. Lack of seminars or workshops 21. Lack of field-specific courses 22. Lack of scientific production 23. Inadequate to prepare for the next stages 24. Meaningless and unnecessary 25. Practicality of online courses 26. Exhaustion from full-day courses 27. Practicality of full-day courses

Taking doctoral courses is one of the main requirements for getting a doctoral degree in Türkiye. It primarily consists of several obligatory courses with a few electives. Unfortunately, available courses fail to effectively move beyond master's-level principles and techniques. Students have to focus on earning credits instead of being ready for further doctoral stages and academic competence.

As given in Table 38 and Figure 22 on the following pages, similar course stage-related complexities perceived by the participants can result in retention or dropout depending on the overall flexibility and practicality of the course stage.

Table 38. The Outcomes of Course Stage-related Complexities

Course Stage-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. A smooth transition period 2. More structural and anticipated 3. Less challenging stage 4. Familiar and manageable 5. Limited number and diversity of courses and faculty 6. Simple and common courses 7. Old fashioned syllabuses 8. Theoretically engaging stage 9. Crowded classes 10. Cancelled courses with no reason and make-up 11. Time for developing academic networks 12. Limited number of so-called electives 13. More obligatory courses 14. Need for flexibility 15. Need for innovative and useful courses 16. Repetition of master's degree courses 17. Not allowing deeper and critical thinking 18. Not providing expertise 19. Lack of fieldwork 20. Lack of seminars or workshops 21. Lack of field-specific courses 22. Lack of scientific production 23. Inadequate to prepare for the next stages 24. Meaningless and unnecessary 25. Practicality of online courses 26. Exhaustion from full-day courses 27. Practicality of full-day courses	- Having on-target and diverse courses - Having less crowded classes - Having access to more elective courses - Having new and deeper content - Having more practicality and flexibility - Having experiential learning with scientific productions	- Not having enough on-target and diverse courses - Having crowded classes - Having less access to elective courses - Having old and repetitive content - Having less practicality and flexibility - Having less experiential learning with scientific productions
	Flexibility and practicality of the course stage	

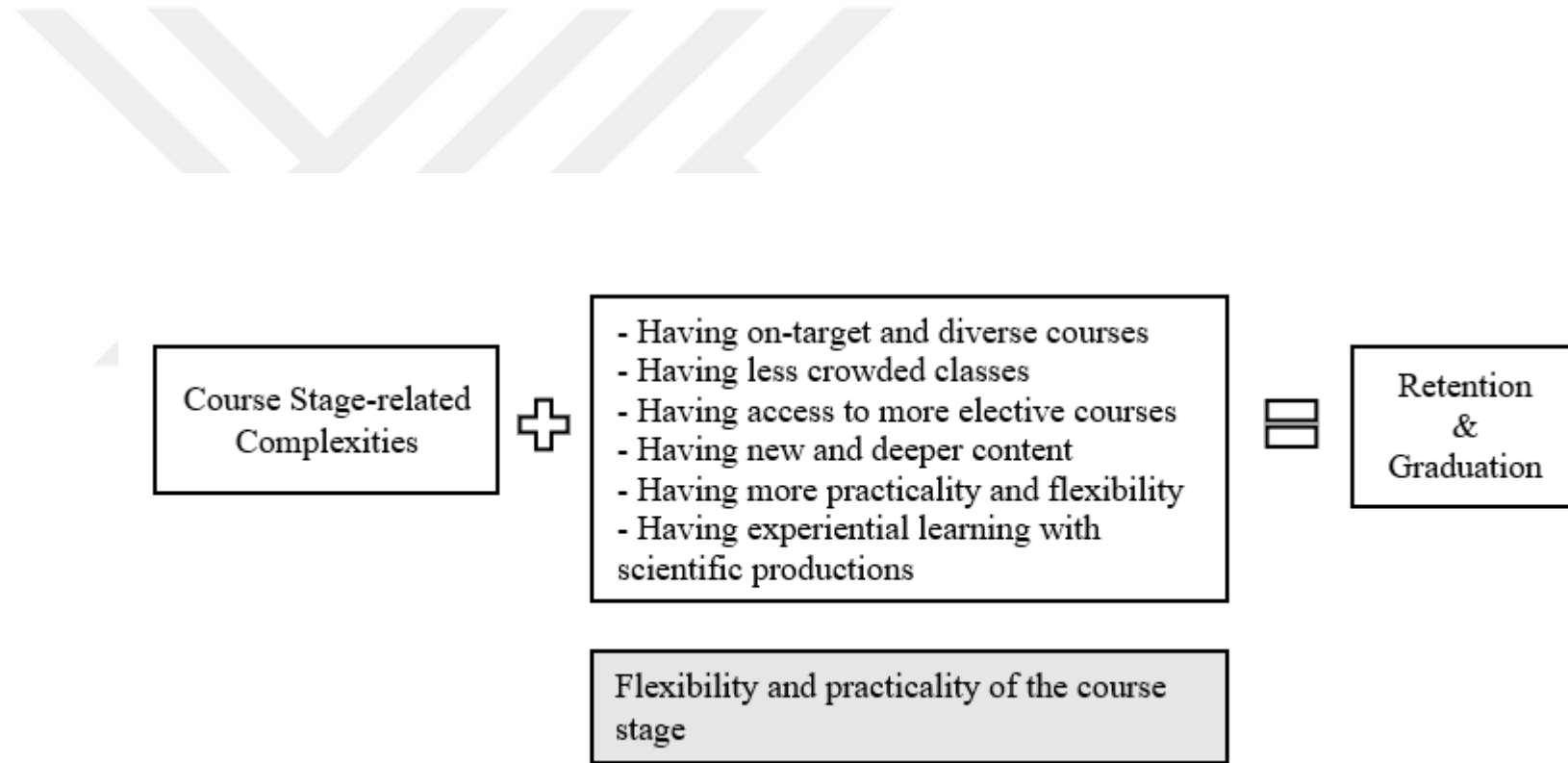


Figure 22. The outcomes of course stage-related complexities

6.3.2 Qualifying stage-related complexities

According to the findings, the second category of academic complexities is the qualifying stage-related complexities of the participants. After completing their course stages, doctoral students have to pass a qualifying exam in Türkiye, which is another academic challenge for them. Four out of the 24 doctoral students who participated in this study and were in their qualifying stages. Two of them failed their first trials and were preparing for their second chance to pass the written and verbal exams. Three out of the 16 doctoral dropouts who participated in this study left their programs during their qualifying stages. Based on the data, those participants who were able to pass their courses had mostly negative experiences and feelings about their qualifying stages.

Only two doctoral students stated that their qualifying stage was challenging but unproblematic as they could pass it. One of them (MDS 14) said: *It was the most difficult test I took in my life, but I enjoyed it. I studied well and passed it. The jury said that they felt like they were in an intellectual conversation not in an exam.*"

The qualifying stage, including written and verbal exams, is a new experience for many doctoral students as they have never experienced a similar examination before at other educational levels. Typically, doctoral students are worried about this unknown concept and process. However, they are frequently aware of how difficult it is and work very hard to prepare for it. These students can pass the written and verbal tests if they are cognitively ready. In addition, a supportive environment and people can ease their tension and increase their success.

When it came to the influence of courses on the qualifying stage, a male dropout (MDD 9) stated: *"I did not take the qualifying exam, but I am sure the courses I took were preparing me for this exam."* Nonetheless, two doctoral students

had totally different ideas. They put the blame for their negative experiences in the qualifying exam on their courses. One of them (MDS 15) expressed: *“I do not think that we are qualified enough to pass this exam after taking courses. Even when we are good at our own fields, we cannot make connections and have discussions at this basic level.”*

In general, the graduate courses are not efficient enough to prepare students for the next stages of their doctorate. Students somehow pass their courses, but they do not feel knowledgeable and skilled enough to sustain the discussions required in the qualifying exams.

At this point, a male student (MDS 11) added: *“Of course, the qualifying stage was challenging especially while working. One needs to study for a long time to pass it while remembering the basic knowledge delivered via our courses.”*

To be prepared for this demanding stage of the doctorate, students need to have abundant free time. They need to revise the knowledge in their courses and add fresh information. However, this is more difficult than anticipated, especially for those who work full time. These working students have to prioritize their work and devote a lot of time to it. Even though they sometimes set aside time in their schedules to study for the qualifying exam, they might still feel mentally worn out to do so.

Moreover, a female student said: *“I wish we had a course about our legal responsibilities or rights so that we could face challenges more easily in such problematic phases of our doctorate.”* She also thought that having such courses would help the graduates in their workplaces.

Doctoral students who encounter difficulties during their qualifying phases might need to solve certain unforeseen issues on their own. As a result, they might

feel more exhausted or demoralized. Before running into such problems, they need to become familiar with their legal obligations and rights. Therefore, a relevant course can be added to their curricula or their institutes can host seminars.

Additionally, three students (FDS 1, MDS 2, FDS 4) and one dropout (FDD 1) found the written part of the qualifying exam more standard and less challenging since the human factor was limited for it. One of them (FDS 1) said: *“I took the written exam first and passed it because it was standard and I wrote answers for almost all questions. The rubric was clear for marking my paper.”* Besides, two students and one dropout found the verbal part of the qualifying exam more challenging and problematic for many reasons, including a lack of standards. One participant (MDS 2) expressed: *“I failed in the qualifying exam. Our jury wanted all of the students to repeat this exam without proper reasons. They even said that this was a tradition. Your future depends on their mood during the verbal part.”*

Two dropouts (MDD 8, FDD 13) regarded this stage as a lottery considering the lack of standards. Similarly, three other students (FDS 1, MDS 2, FDS 4) emphasized that the jury could deliberately take such negative actions in the first qualifying exam not to pass any student. Hence, the qualifying stage could be totally difficult or easy based on the jury members as stated by a dropout participant (FDD 13). That is one of the reasons why a student (MDS 23) had a high anxiety level towards the qualifying stage and jury members.

Considering the two parts of the qualifying exam, many students might find the verbal part to be more challenging. Many of the institutions in the country lack defined regulations and applications for it. During this verbal exam, students are unsure of what to accomplish and how to perform it. Additionally, they often do not see the marking criteria beforehand. Moreover, there is no specified subject or time

limit for this exam. People's mindsets and moods can significantly affect the result, which increases the existing fear of doctoral students towards this exam.

Six students and two dropouts regarded this stage as frightening. One of them (FDS 20) said: *"It is frightening for me and for many other students to pass this stage because there is limited time and many challenges in it."* Moreover, two students (MDS 6, FDS 20) and two dropouts (FDD 1, MDD 3) noted that the qualifying exam was unlimited in terms of its content and the jury could ask anything, which made the stage scientifically challenging.

The qualifying stage and exam tend to cause doctoral students a lot of anxiety since they perceive a likelihood of unforeseen difficulties and time constraints.

A male dropout specifically mentioned the insistency of external members in asking unrelated questions during the verbal part of the exam. He (MDD 3) said: *"Naturally, there were external members in the exam. Those responsible for different courses at their own universities were asking questions about them. We had to answer questions that we had not learned at our university."*

Internal members can support their students during this exam with or without consciousness because they are more familiar with their students' scientific potential. On the other hand, external members might personally and professionally feel more distant from the students while evaluating them. They can create more anxiety and difficulty during the exams for these students, on purpose or not.

Another dropout participant thought that these negative behaviors during any stage were related to the culture and the professors raised in it. She (FDD 13) elaborated on it like this: *"I had also been abroad for academic reasons and saw that people helped me to pass each challenge. Unfortunately, in our culture professors behave like soldiers of enemies towards us."*

A male student (MDS 2) felt the negative relationships among jury members during his exam, which was reflected in his success. From the perspective of two dropouts (MDD 8, MDD 10), the jury members in different stages of doctorate were away from guiding their students. One of them (MDD 8) added: *“The jury members were in an ego race among themselves. They behave negatively to block the students of others.”* In such a negative environment, a student (FDS 1) and a dropout (MDD 10) felt that even their supervisors were not on their side to support them. This was also the case with another dropout (FDD 6) and she felt lonely and depressed during the qualifying stage. A male student (MDS 21) found this stage nonsense and useless by saying: *“I am totally against such an exam. I think it does not serve its main purpose. It is a place to show egos for the jury members and they do not try to reveal your knowledge and skills.”*

The sociocultural context might produce unfavorable conditions and outcomes in the qualifying exams. For instance, it is probable to anticipate a hierarchy between Turkish students and professors, which can make students feel more anxious. What is more interesting is that the professors might not be friendly towards their colleagues. The jury members should behave professionally and prioritize their academic identities instead of their egos.

Two students (MDS 2, MDS 6) criticized the system as the jury members were assigned top-down irrespective of their academic and non-academic features, which also caused negative results.

The selection process of internal and external jury members for the qualifying exam should be more professional. The jury should be assigned based on their academic qualifications, considering their availability and volunteerism. Furthermore, students should be given information beforehand for their jury

members. In a similar vein, the jury members, especially external ones, should be knowledgeable about the students and their field.

In conclusion, there are several qualifying stage-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 39.

Table 39. Qualifying Stage-related Complexities

Theme 3:	Academic complexities
Category 2:	Qualifying Stage-related complexities
Codes:	1. A challenging and problematic stage 2. A new and frightening experience 3. Not being ready for it with the course stage 4. Devoting a long time for preparation 5. Feeling exhausted and demoralized 6. Lack of standards 7. Depending on the jury 8. Causing health issues 9. Unlimitedness of time and content 10. Problematic relationships 11. Feeling lonely 12. Hierarchical negative behaviors 13. Egoist and elitist behaviors 14. Sociocultural negative behaviors

The qualifying stage is a novel experience for doctoral students and is rife with numerous obstacles for Turkish students. Students usually feel inadequate to pass the less standardized written and verbal qualifying exams. They are also extremely challenged by many relationship problems which are away from student-centeredness, which increases the overall complexity. As shown in Table 40 and Figure 23 on the following pages, similar qualifying stage-related complexities perceived by the participants can result in retention or dropout. When this frightening stage is more standardized and constructive for the students, they find ways to pass it.

Table 40. The Outcomes of Qualifying Stage-related Complexities

Qualifying Stage-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. A challenging and problematic stage 2. A new and frightening experience 3. Not being ready for it with the course stage 4. Devoting a long time for preparation 5. Feeling exhausted and demoralized 6. Lack of standards 7. Depending on the jury 8. Causing health issues 9. Unlimitedness of time and content 10. Problematic relationships 11. Feeling lonely 12. Hierarchical negative behaviors 13. Egoist and elitist behaviors 14. Sociocultural negative behaviors	- Having a less challenging and standardized qualifying period - Having supportive jury members - Having constructive feedback and guidance	- Having a more challenging and less standardized qualifying period - Not having supportive jury members - Not having constructive feedback and guidance
	A standardized and constructive qualifying stage	

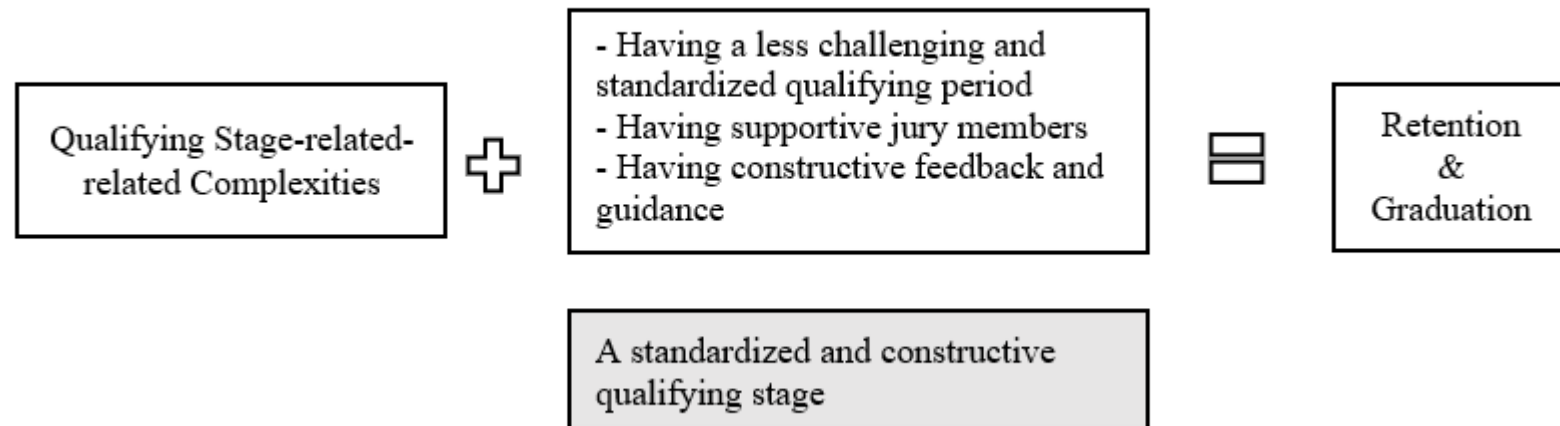


Figure 23. The outcomes of qualifying stage-related complexities

6.3.3 Thesis-related complexities

According to the findings, the third category of academic complexities is the thesis stage-related complexities of the participants. Thesis-related complexities reserve an important place in this study. 12 out of the 24 doctoral students who participated in this study were in their thesis stages. Four out of the 16 doctoral dropouts left their programs during the thesis stage. Both doctoral students and doctoral dropouts explained how challenges and conflicts experienced before and during the thesis process influenced their retention and expected graduation. Unfortunately, almost no participant mentioned their thesis with enthusiasm.

Particularly, three students (MDS 6, FDS 7, MDS 24) referred to the difficulty of conducting a deeper, authentic study in their doctorate by emphasizing the challenge of finding new, original and up-to-date ideas. For example, one of them (MDS 6) expressed that he had to find out an original idea to study enabling higher-level knowledge in the doctorate. In addition, three students (FDS 1, FDS 3, FDS 17) and two dropouts (FDD 6, MDD 10) mentioned that it was highly challenging to get approval for their thesis topics from their supervisors, faculty members or departments. One of them (FDS 1) also expressed that finding a supervisor for her thesis was chaotic as the number of academics studying the topics in her mind was limited, which made her thesis stage longer and unbearable.

Many doctoral students who have already finished writing their master's thesis are familiar with the thesis writing process. Even though they are less in numbers in Turkish HE, some students might enroll in joint PhD programs and begin directly to their doctoral studies without completing a master's degree. In spite of this circumstance, doctoral theses are expected to be more complex and in-depth than those in master's programs. That is the reason why a lot of students initially fail to

find new areas or topics that allow for an in-depth study. Additionally, it might be difficult to continue without the academic community's approval on the selected topic. Unfortunately, not finding an academic supervisor who is knowledgeable about the same or related subjects is another common concern for doctoral students.

Moreover, one student (FDS 1) and two dropouts (FDD 2, FDD 13) criticized the fact that there was no end limit for the content and the timing of the thesis stage.

The thesis phase of a doctorate might occasionally take longer time and effort than other stages. In reality, thesis writing is the most difficult part of a study because it calls for more independent effort and is less restricted by time constraints. This stage might be more confusing for students in this sense. Furthermore, new content can be added to the existing study by extending the planned time for graduation.

A student (MDS 9) and two dropouts (FDD 7, MDD 10) underlined that the courses taken in the doctorate were not applicable during the thesis stage and academic interactions with high-quality people were an obligation to fill that knowledge gap. On the contrary, a student (MDS 10) and a dropout (MDD 9) thought that the courses taken in the doctorate were helpful during the thesis stage.

The thesis stage can be less difficult when students are able to tie their coursework to their thesis writing phase. Otherwise, students may need to acquire or enhance their knowledge in different ways in order to deal with the knowledge-related inadequacies at this stage, which is extra time and energy-consuming for them.

In addition, another three students mentioned that financial support, funding or sponsorships were required to conduct doctoral-level studies. One of them (MDS 11) added: *“It is impossible to sustain my study without a project support and a laboratory. I cannot afford it. To be able to get such limited grants, I need to write*

projects apart from my own thesis, which is extra demanding.” In parallel to this, a dropout participant compared the opportunities in Türkiye and other countries for doctoral students and concluded that academic work was like torture here. He also said:

Doctoral students and scientists in our country should not suffer from challenging project support or missing materials or laboratories. When I was abroad, I just wrote the necessities for my research on a post-it and put it on my table. Then, a technical staff brought it for the next day. My task was to focus on my study not the materials or places required for the experiment. Here, you will write a project and provide an invoice to get them. Nobody will have either pleasure or enthusiasm. Is it science? It is just a movie without an end. Really. Until you conduct your study, your excitement will already be over (MDD 16).

The participants in this study also experienced challenges related to data collection for their theses. A female student (FDS 1) found the data collection process challenging because of the excessive number of participants and unmanageable data. Similarly, a male student (MDS 23) also felt lost in the data. On the other hand, two dropouts (MDD 8, FDD 13) stated that reaching data in Türkiye and conducting field studies were challenging, especially in some fields. Additionally, two students (MDS 14, FDS 17) had difficulty in data collection processes during the pandemic. Moreover, a male dropout (MDD 2) had to leave his studies as his data was found outdated after a while.

The thesis writing process requires data collection and analysis by its scientific nature. Particularly in some fields, gathering and evaluating data might be more laborious and costly. Doctoral students are often unable to afford it. At this point, they put a lot of effort into research projects, providing limited funding or laboratories. When they aim to benefit from limited budgets through scientific projects, they have to work a lot for these projects, too. Additionally, reaching out to data and managing big data are also demanding for many Turkish students. In an

ideal situation, doctoral students should not be restricted by financial obstacles from conducting their advanced studies. Moreover, they should be supported to reach, collect and analyze their data sets.

A male dropout participant (MDD 3) overemphasized the difficulty of conducting an independent thesis study for a doctorate. According to him, this stage itself was extra challenging and tiring, especially for those who were working hard and could not focus deeply on their studies. Similarly, a female dropout (FDD 13) stated that she was working out of academia wearily and that her battery had already run out until she passed to the thesis stage. She also mentioned the demotivating and challenging behaviors of the faculty including the supervisor during these demanding times. A male student (MDS 11), working in a different city, felt isolated from the university, academics and academic studies. Another male dropout participant, who was also working full time, criticized the quality of the thesis studies in Türkiye as follows with similar feelings:

Writing a doctoral thesis is not a hobby. Instead, one should be really focused and spend spare time on it. This is not the case for me or many others working full time. I know that it is not impossible. However, I believe that it is a kind of disrespectful act not to make it your main focus. Under such conditions, we see many unrelated, unqualified, down-and-dirty thesis studies in our country (MDD 15).

The feeling of inadequacy and isolation throughout the thesis stage can be more prevalent for working students outside of academic settings. While working outside, they are more physically and mentally disengaged from their thesis studies. It should be underlined that an unsupportive environment and people can make their academic and psychological difficulties worse.

A doctoral student (MDS 14) said that he had difficult times when he was suspended from his job at a university. He could not focus on his ongoing thesis

studies with such psychology during those unemployment times and job-seeking processes.

Although doctoral students who are working find it challenging to write their theses owing to challenges at work, those who are unemployed or actively looking for work find it hard to concentrate on their research.

Two students (FDS 1, FDS 17) and two dropouts (MDD 9, MDD 10) felt extremely alone during their thesis stages. One of them put this into words as below:

There should be community work for doctoral students if possible. We have to study alone. I think a group of doctoral students can finish a doctoral study by focusing on one part of it. They can also earn money in that way. Frankly speaking, everything is on your shoulders as a doctoral student. Is this how it should be? This is cruel. Everyone needs support in some way. A doctoral student is a human being after all. He or she cannot reach everyone and do everything alone (MDD 9).

The thesis writing process for a doctorate is an individual and isolated work for many students. They might feel lonely and psychologically brittle. What is more, they might experience academic inefficiency in conducting such an intense study on their own. For these reasons, doctoral students should be supported academically and psychologically in many ways. In addition, community-based academic or non-academic activities can be designed to increase their motivation and resilience.

Only three students (FDS 18, FDS 20, MDS 22) mentioned their thesis stages positively to some extent. One of them (MDS 20) stated: *“I like having a bounded topic and time during this stage as opposed to the qualifying stage.”* The other student (MDS 22) felt lucky to have field support given to him during this stage, whereas another student (FDS 18) was happy to have access to data easily in her workplace.

Getting any kind of support or experiencing a fruitful process in the thesis stage can influence students positively, which seems to be missing in Turkish cases.

In a nutshell, there are some thesis stage-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 41.

Table 41. Thesis Stage-related Complexities

Theme 3:	Academic complexities
Category 3:	Thesis Stage-related complexities
Codes:	1. A deeper and authentic stage 2. Challenging and tiring 3. Challenges of finding original ideas 4. Challenges of getting approvals 5. Challenges of finding the right supervisor 6. Unlimitedness of time and content 7. Need for more independent effort 8. Not being ready for it with the course stage 9. Time and energy consumer 10. Lack of financial support 11. Lack of research facilities 12. Positive influences of supports 13. Negative influences of life events 14. Challenges of data collection and analysis 15. Challenges of field studies 16. Being tired in previous stages 17. Unfavorable behaviors of faculty and supervisors 18. Being mentally and physically away 19. Feeling inadequate and isolated

The thesis stage is an extremely demanding period for many Turkish doctoral students as they are required to write an original study independently. Unfortunately, they encounter a lot of challenges based on the complexity of the thesis writing process and its specific requirements. Additionally, the sense of psychological and scholastic inadequacy can also be doubled without getting support during this period.

Table 42 and Figure 23 on the following pages show that similar thesis stage-related complexities perceived by the participants can result in retention or dropout. Students who go through a more standardized and constructive thesis period under the supervision of supportive academics can conduct their independent study more successfully.

Table 42. The Outcomes of Thesis Stage-related Complexities

Thesis Stage-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. A deeper and authentic stage 2. Challenging and tiring 3. Challenges of finding original ideas 4. Challenges of getting approvals 5. Challenges of finding the right supervisor 6. Unlimitedness of time and content 7. Need for more independent effort 8. Not being ready for it with the course stage 9. Time and energy consumer 10. Lack of financial support 11. Lack of research facilities 12. Positive influences of supports 13. Negative influences of life events 14. Challenges of data collection and analysis 15. Challenges of field studies 16. Being tired in previous stages 17. Unfavorable behaviors of faculty and supervisors 18. Being mentally and physically away 19. Feeling inadequate and isolated	- Having a less challenging and standardized thesis period - Being more ready to conduct an independent study - Having supportive supervisors and jury members - Having regular constructive feedback - Feeling integrated into academia	- Having a more challenging and unstandardized thesis period - Not being ready to conduct an independent study - Not having supportive supervisors and jury members - Not having regular constructive feedback - Not feeling integrated into academia
	A standardized and constructive thesis stage	

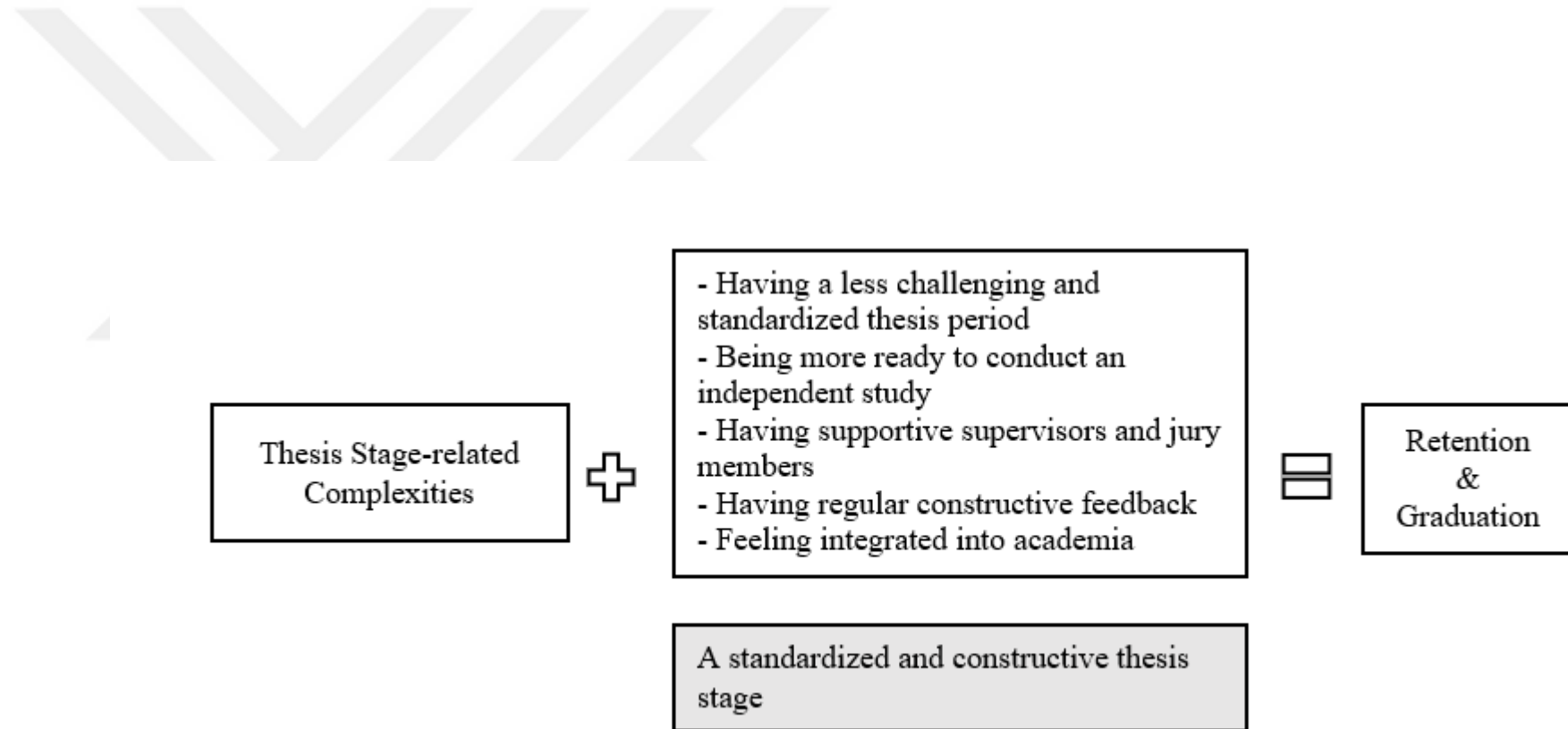


Figure 24. The outcomes of thesis stage-related complexities

6.3.4 Supervisor-related complexities

According to the findings, the fourth category of academic complexities is supervisor-related complexities of the participants. Along with overseeing thesis studies and serving as a mentor for students, supervisors are one of the key characters in doctoral education as role models. The findings of this study showed that having a problematic academic or non-academic relationship with a supervisor has a significant influence on students' retention and graduation.

Among all participants, 12 students and four dropouts stated that they had standard relationships with their supervisors. They meant that they did not experience any specific negative problems arising from their own supervisors during their doctoral education. Specifically, five students and one dropout participant among them regarded their supervisors as supportive and visionary.

Keeping in mind the crucial role of support mechanisms and the guiding roles of supervisors in doctoral education, having a supportive supervisor is necessary to foster retention and graduation rates. Doctoral students who have good personal and professional relationships with their supervisors are expected to be more productive.

A male student thought that supervisors had their own responsibilities and needed to contact students only for critical issues. He also added:

I think that we should not blame our supervisors. For example, mine is 70 years old and has other work to finish. I should ask him about critical issues and he should intervene in them if necessary. At the beginning, I could not understand him. I loved linguistics and wanted to study with such a well-known supervisor in the field. I even sent a few messages on social media to start a conversation with him during my undergraduate years. I had hard times understanding him for the first two years of my doctorate. Afterward, I adapted myself to his style. Now, we can communicate with him with a smile on our faces (MDS 9).

Two students (MDS 11, MDS 23) and three dropouts (FDD 1, MDD 3, FDD 5) were aware of the workload of supervisors in academia. They thought that supervisors

should have fewer students and workload to be more functional. One of the students (MDS 11) also expressed that he could not demand more from his supervisor remotely while he was working in a different city.

The fact that supervisors are academics with several additional responsibilities in their private and work lives should be emphasized emphatically. Put another way, a supervisor's primary responsibility is not to mentor doctorate students. As a result, there must be a positive dynamic in a dialogue between a student and supervisor. As adults, students should be conscious of their own obligations and seek assistance when necessary. Supervisors, on the other hand, might set up a timetable and study plan for their students. They might be able to lead them more readily if they do this. At this point, having fewer students and being in a close environment with these students will increase communication. All in all, maintaining positive connections later on can greatly depend on the initial interaction with the supervisors and the planning of a written or verbal contract with them.

A female student paid attention to the importance of selecting supervisors for students themselves. She wanted to study with an innovative supervisor who was knowledgeable in the field and not similar to her in terms of personality. By doing so, she aimed to balance their relationship. She expressed it as follows:

I am stressed. I chose someone who is the opposite of me in personality. Someone who is more comfortable, but logical. I believe that when both sides are stressed, a blast will happen. My supervisor is also knowledgeable about everything and an innovative, open-minded person, and her/his suggestions are very good in that respect. We can choose our supervisors in our university, which is good (FDS 12).

Like the previous student, five other students criticized the process of assigning random supervisors to doctoral students by their university or department without

considering their opinions. Among all, a female student compared supervisor selection processes in doctoral education to marriage processes and said:

It is actually like a marriage. You should be able to select a supervisor compatible with you. You have to be compatible with that person, too. S/he will suggest a topic to you and guide you on your way. In addition, we should learn from each other. Unfortunately, this is not the case (FDS 7).

Doctoral students are often aware of their own personalities, study styles and academic needs. Therefore, they can select the most appropriate supervisor for themselves. However, some universities assign supervisors to doctoral students without getting their opinions. They do not take their personal and academic features into account. In general, such top-down procedures negatively influence the initial motivation of the students. Indeed, doctoral students should be able to select their own supervisors. In the case of assigning supervisors to students without getting their opinions, good personal and academic matching should be ensured.

Unfortunately, most of the participants in this study mentioned problematic and negative relationships which reflected in their motivation to continue their doctoral studies. Four students (FDS 3, FDS 7, MDS 10, MDS 11) and four dropouts (MDD 3, FDD 5, FDD 6, FDD 10) told about the lack of communication with their supervisors. They could not reach their supervisors when they needed them or a communication gap between them arose during any possible conversation. Among all, MDS 11 and MDD 3 felt that their supervisors were extra authoritarian and it was impossible to convince them to do anything. FDS 7 felt inferior because of the negative humiliating behaviors of her supervisor towards her.

Doctoral students become demotivated to continue their studies if their supervisors make their academic lives even more difficult. They feel down when they engage in inappropriate or hierarchical communication with their mentors.

Additionally, five students (FDS 3, FDS 7, MDS 10, MDS 11, FDS 17) and one dropout participant (MDD 3) stated that they could not strike a balance together with their supervisors. A male student (MDS 8) and two dropouts (FDD 7, MDD 8) underlined that being an academic was not enough to be a supervisor. They added that those who were not knowledgeable and visionary could not contribute to doctoral studies.

A good academic might not necessarily be a good supervisor all the time. This means that helping someone with their thesis is a difficult endeavor that calls for different abilities than being an academic. As a result, some of them might not intentionally or unintentionally give their thesis students much assistance. Hence, supervisors can be given seminars or workshops to improve themselves on this issue.

A male dropout (MDD 9) noted that supervisors could not help students to find positions in academic settings and added: *“I was not working in a university. I wish I could. My academic supervisor did not guide to find such positions as assistantships.”*

Although supervisors might think of helping their students only with their theses and academic tasks, doctoral students can expect more from them. Students often see their supervisors as the only ones helping them in academia. Consequently, they believe that supervisors can do more than guiding a thesis. From the perspective of students, they can even find a decent academic job for their students.

Some of the participants had to change their supervisors for different reasons or they had to work with a co-supervisor during their doctoral education. Three students (FDS 1, MDS 6, FDS 7) and two dropouts (FDD 6, MDD 10) stated that they had changed their supervisors based on their negative experiences. For example, one of the dropout participants (MDD 10) mentioned that his supervisor was

suspended from the university and a new supervisor was assigned to him. In addition, two students (FDS 1, FDS 7) and two dropouts (FDD 6, MDD 10) told the researcher about the difficulty of continuing their studies with a new supervisor as they needed to start from the very beginning. One of them also felt the difficulty of working with a co-supervisor and said:

A co-supervisor was assigned to me and it was a good idea as my own supervisor was in a different city. However, this cost me a lot of time. I had to persuade both of them most of the time as they expanded the study as well as the number of participants. Then, the analysis part took my 2-3 years (FDS 1).

Moreover, changing a supervisor is not an easy process in Türkiye as stated by three students (FDS 7, MDS 11, FDS 17). One of them put this into words as below:

If you want to change your supervisor, the department and the faculty question this. This is a negative thing in Türkiye. The system itself has been formed in that way and it is really difficult to change supervisors. You really have to fight with them so that you can change (FDS 17).

Doctoral students might have to change their supervisors for many reasons.

However, this procedure is not easy at all. In addition, people might find it offensive and students can feel this pressure on their shoulders. Even when they are able to change their supervisors or add a co-supervisor to their studies, the challenges can be doubled for them to persuade these new people for their already existing studies.

Lastly, one student (FDS 7) and four dropouts (FDD 6, MDD 10, FDD 13, MDD 16) mentioned unethical behaviors of supervisors in Turkish higher education. According to FDS 7, some supervisors have ideological prejudices against students wearing a head scarf. She also observed that some supervisors put pressure on their students so that their names were included in the publications even if they did not contribute to them.

FDD 6 thought that supervisors see their students as a source of income in Türkiye and added: “*Supervisors should not see us as a source of money. They receive a fee for each doctoral student assigned to them, but they disappear even for our scheduled meetings. Why do they earn that money?*” In addition, MDD 10 and MDD 13 said that supervisors put their own students above in academia. Moreover, they sometimes hinder the process of students on purpose as stated by MDD 16. He also criticized the fact that his supervisor had not informed him when he was suspended from the university.

Unfortunately, some supervisors intentionally act badly toward their own students due to ideological reasons. Furthermore, some supervisors incline to discriminate against other students while supporting their own. For some, being a supervisor is just a way to make money. Unethical and unprofessional practices of supervisors affect the motivation and retention of students.

To sum up, there are many supervisor-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 43.

Table 43. Supervisor-related Complexities

Theme 3:	Academic complexities
Category 4:	Supervisor-related complexities
Codes:	1. Standard relationships 2. Workload of supervisors 3. Being physically and mentally away 4. Positive influences of volunteer selection 5. Negative influences of top-down assignments 6. Problematic relationships 7. Lack of communication 8. Being extra authoritarian and humiliating 9. Feeling inferior 10. Lack of supervisory skills 11. Lack of knowledge and vision 12. Lack of guidance for academic positions 13. Challenges of having co-supervisors 14. Difficulty of persuading people for changes 15. Challenges of bureaucratic procedures 16. Unethical behaviors of supervisors 17. Ideological conflicts

Supervisors have a key role in doctoral education particularly in shaping thesis studies and guiding students. Supervisors, with their other obligations, try to mentor their students. Nonetheless, they do not receive any professional education or support to be good supervisors. In this sense, they try to find their own ways. The personal and academic match between a student and a supervisor is highly important for the rest of the study. Students who can select their own supervisors based on their personal and academic needs might start their studies with initial motivation and continue. The personal and professional attitudes of supervisors are also critical.

Table 44 and Figure 25 on the following pages show that similar supervisor-related complexities perceived by the participants can result in retention or dropout. Students who can select their own supervisors based on their personal and academic needs can feel more integrated and productive during their doctorates. At this point, finding the right supervisor and getting regular guidance play a key role in retention.

Table 44. The Outcomes of Supervisor-related Complexities

Thesis Supervisor-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Standard relationships 2. Workload of supervisors 3. Being physically and mentally away 4. Positive influences of volunteer selection 5. Negative influences of top-down assignments 6. Problematic relationships 7. Lack of communication 8. Being extra authoritarian and humiliating 9. Feeling inferior 10. Lack of supervisory skills 11. Lack of knowledge and vision 12. Lack of guidance for academic positions 13. Challenges of having co-supervisors 14. Difficulty of persuading people for changes 15. Challenges of bureaucratic procedures 16. Unethical behaviors of supervisors 17. Ideological conflicts	- Having a voluntary selection - Finding the right supervisor based on personal and academic needs - Having a supportive supervisor - Having regular and constructive guidance - Feeling integrated into the academia - Having an ability to follow bureaucratic procedures - Being open to changes - Being open to communication	- Not having a voluntary selection - Not finding the right supervisor based on personal and academic needs - Not having a supportive supervisor - Not having regular and constructive guidance - Not feeling integrated into the academia - Not having an ability to follow bureaucratic procedures - Not being open to changes - Not being open to communication
	A supportive and constructive supervision	

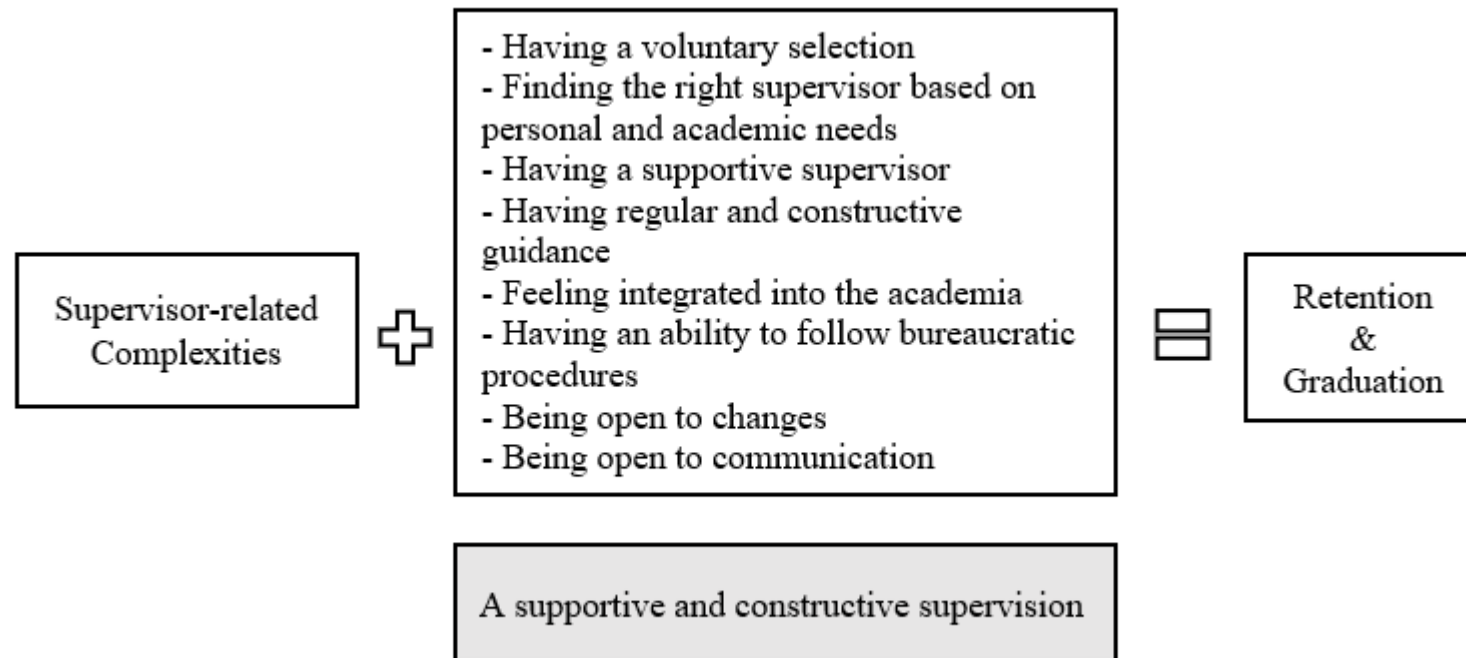


Figure 25. The outcomes of supervisor-related complexities

6.3.5 Faculty-related complexities

According to the findings, the fifth category of academic complexities is the faculty-related complexities of the participants. The participants mentioned their experiences and relationships with the faculty regarding their retention and graduation.

15 doctoral students and eight dropouts had positive relationships with the faculty. They underlined that they were not so close with them or in deeper relationships. They meant that they were aware of the limits of their relationships with the faculty. One of the dropouts put this into words like this:

In the doctorate, the faculty members think that they are raising future academics for their own positions. They have such an ideal goal, of course. My relationship with them was good as I loved them all. I had positive memories with them. Still, they were not my friend, there was a student-teacher relationship between us you know (FDD 1).

Only one male student (MDS 22) stated that he had friendly relationships with his faculty by adding: *“There is no status difference between us. I can easily knock on their doors, go inside, drink tea and chat with them. We are friends even outside the campus area. I see that they have such relationships with other doctoral students, too.”*

Another female student (FDS 3) mentioned the pandemic times while talking about the faculty and said: *“During online education in the pandemic, I did not have much information about them. Those in online classes were very friendly towards me and I could reach them whenever I wanted. However, we did not have face-to-face relationships.”*

A female student (FDS 19) thought that foreign faculty members or those who studied in other countries beforehand had a more friendly approach towards their students. They had liberal approaches and relationships compared to Turkish faculty members.

In doctoral education, there are fewer students compared to undergraduate and master's levels. Therefore, faculty members might know their doctoral students better and develop close relationships. In general, doctoral students also like their faculty members and have friendly professional relationships with them. Surprisingly, foreign faculty members or Turkish professors with foreign educational backgrounds are more constructive and friendly towards their students.

Two doctoral students (MDS 11, FDS 17) and one dropout participant (FDD 6) criticized the fact that the hierarchy in relationships was so visible in their cases. For a female student (FDS 17) and a female dropout (FDD 4), such undesirable relationships were accompanied by mobbing. The faculty members were in favor of their own students working with them according to a student (FDS 17) and a dropout (MDD 10).

Unfortunately, doctoral students also encounter unfavorable situations like mobbing or prejudice from their professors. When it comes to the students they know, faculty members might tend to act kindly.

A male student (MDS 10) underlined that the relationships with each faculty member were not standard but different. He experienced some specific toxic relationships in which some faculty members put such negative pressure on students that they had to write their names on their academic projects or publications even if they had not contributed. Similarly, another male student added:

Each faculty member is different from the others. There are a lot of extreme cases. For example, one can make a student cry in front of others by insulting him or her. There are many of them with whom we are afraid to talk because of such negative behaviors. There are also ones who can talk with the department for you and support you like a friend whenever you need it (MDS 6).

The personal characteristics of faculty members can be totally different from one another even though their professional sides are similar to some extent. On one hand, some professors can be more hierarchical and humiliate their students. On the other hand, some professors behave like friends or family members. Thus, overgeneralizing the personal and professional attitudes of faculty members is not appropriate.

Two students (FDS 4, MDS 10) specifically mentioned the difficulty of reaching the faculty members causing them to feel alone and disrupting the required feedback process in their doctorate. One of them likewise another two dropouts (FDD 5, FDD 6) expressed this negative situation and added that the faculty members always regard students and their work as insufficient as quoted below:

I cannot say that my relationship with the faculty members is very positive. It's not negative, either. They are a little cold toward us. I am really having a hard time for reaching them right now. They never liked the work or approved of it. They are always negative, but there is no one to show me how to do it. Everyone is very busy and in pursuit of their own business (FDS 4).

Two dropout participants also mentioned their faculty members negatively like they were their enemies. One of them specifically stated:

I have left my doctorate and I do not want to go back and complete it. My negative ideas have not changed. I think that the doctoral program is still weak, it doesn't add anything new to many people. In addition, the faculty members see doctoral education and students as a way to be cruel and torture. So, they are not motivating (MDD 14).

A female student (FDS 7) and a female dropout (FDD 4) observed that some of their faculty members were egoists and elitist towards their students. They actually meant that they looked down on their students. One of them also felt discrimination against students with headscarves and added:

There are certain professors in our department who behave badly towards those with headscarves. Everybody knows and warns us not to take their courses. I actually have no problem with their ideas. For example, they can drink alcohol, which does not bother me. However, they might have problems with me ideologically. They might believe that I am standing somewhere ideologically (FDS 7).

From a different perspective, a male student thought that the behaviors of the faculty were misunderstood by students in most cases. He continued as follows:

We, doctoral students, can hear some bad things and might perceive them personally. Indeed, we need to hear them in order to learn this job well. We also hear that bad comments and behaviors are not directed at us, but are for our improvement. Psychological support should be offered then (MDS 8).

Doctoral students sometimes feel the hierarchy imposed on them by their faculty members. Students have difficulty reaching out to these kinds of professors. Moreover, they might avoid communicating with them as they are underestimated by them. Under these conditions, doctoral education cannot go beyond being torture for many. On the other hand, some professors might behave badly on purpose for the improvement of their doctoral students, which is misinterpreted by students.

Even though many of the participants wanted to mention their personal and professional relationships with their faculty, a female dropout (FDD 7) talked about their academic side. She noted that her faculty was not academically successful but was socially strong and motivating. Doctoral students might see their faculty members as powerful either socially or academically. They can get more from them when they are advanced on both fronts. To conclude, there are some faculty-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given in Table 45 on the following page.

Table 45. Faculty-related Complexities

Theme 3:	Academic complexities
Category 5:	Faculty-related complexities
Codes:	1. Standard relationships 2. Hierarchical relationships 3. Friendly relationships 4. Toxic relationships 5. Unethical behaviors 6. Feeling alone and isolated 7. Difficulty of reaching to faculty 8. Difficulty of getting constructive feedback 9. Egoist and elitist behaviors 10. Misunderstood feedbacks

Faculty is important for those pursuing PhD programs. At this higher-level educational degree, students need to be able to get in touch with their faculty members with ease and maintain polite conversations by knowing their limits. By doing so, they can be integrated into the community. It is possible to see in Table 46 and Figure 26 below that similar faculty-related complexities perceived by the participants can result in retention or dropout depending on the received support and constructive guidance from the faculty members.

Table 46. The Outcomes of Faculty-related Complexities

Faculty-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Standard relationships 2. Hierarchical relationships 3. Friendly relationships 4. Toxic relationships 5. Unethical behaviors 6. Feeling alone and isolated 7. Difficulty of reaching to faculty 8. Difficulty of getting constructive feedback 9. Egoist and elitist behaviors 10. Misunderstood feedbacks	- Having more friendly relationships - Having access to faculty members - Having supportive and constructive guidance - Feeling integrated into the academia	- Not having friendly relationships - Not having access to faculty members - Not having supportive and constructive guidance - Not feeling integrated into the academia
	A supportive and constructive guidance	

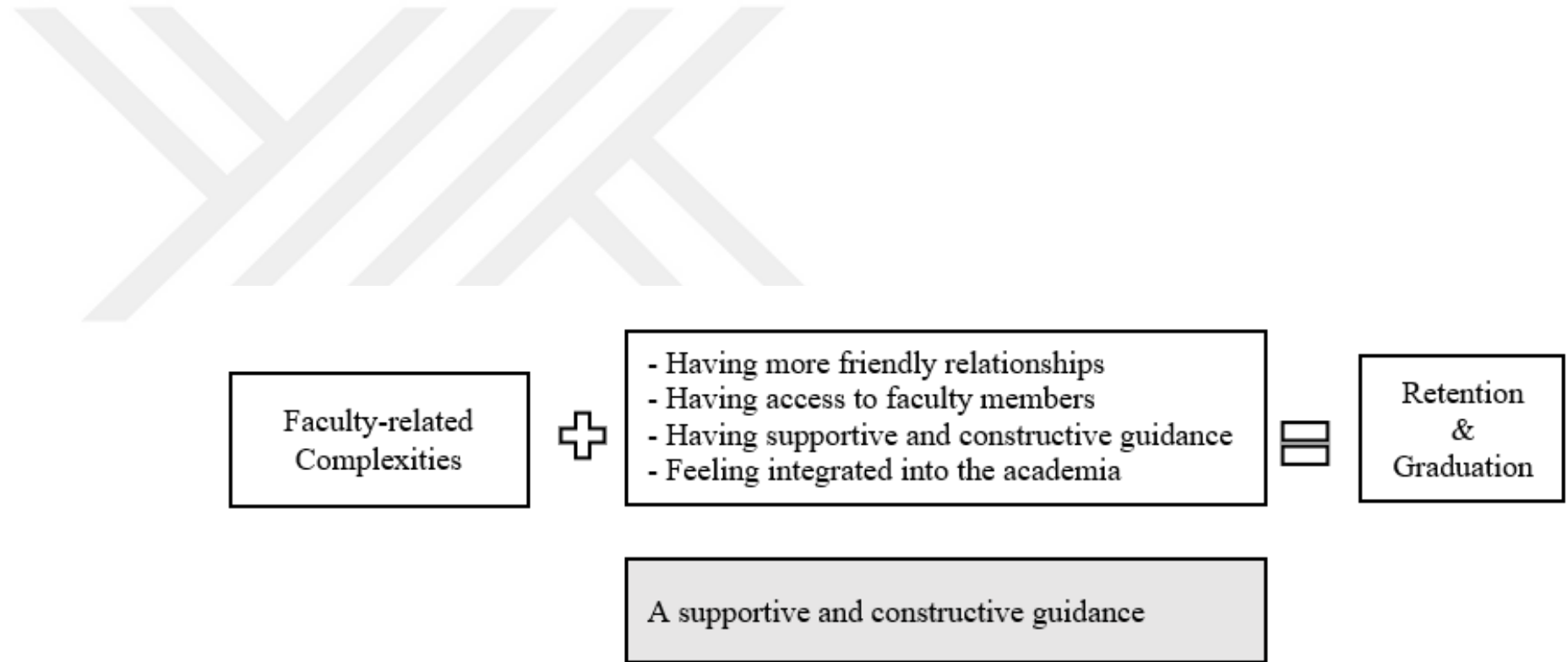


Figure 26. The outcomes of faculty-related complexities

6.3.6 Committee-related complexities

According to the findings, the sixth category of academic complexities is the committee-related complexities of the participants. The committee, referred also as the jury, consists of internal and external members, and is expected to offer students frequent comments and guidance in any meetings or exams during the doctorate. By doing so, these academics work with the assigned supervisor to help students sustain their academic studies and graduate.

The findings of this study showed that only four doctoral students (MDS 9, MDS 11, MDS 14, MDS 22) stated that they had positive relationships with their committee members. Three of them also added that the committee members had good relationships among themselves as academics, which was reflected in their relationships with students. They believed that academics had their own favorite academic groups as mentioned by a male student below:

I have very good communication with my committee members both academically and socially. They are competent. There was no problem with the committee for my qualifying exam, proposal defense or the first thesis monitoring meeting. I just realized that I was talking about very abstract things. Therefore, they extended the meeting by fifteen days. Then, I expressed my study fifteen days later. I tried to build it on my field experience to develop a scale and an achievement test. I saw that they started to accept my ideas after the second and third meetings. I also think that their communication with each other is good. They might not be the same in another meeting or group. (MDS 9).

Two doctoral students (MDS 10, MDS 11) stressed how crucial it is that students can choose their committee members. Likewise, another male student emphasized the importance of having personally positive committee members studying the same or similar topics for improvement as well as the importance of selecting them voluntarily by stating:

I have good relationships with my committee members. Actually, their personal characters and academic backgrounds are in accord with mine. I

have wanted to work with them. For example, I work digital activism, but I also have a member who works as a translator because I also look at the identity of the translator in my study. They are sincere enough to talk or consult on something. The external committee member also works in activism and she is one of my previous professors. Therefore, I can say that I am getting along well with them in many senses. However, the qualification committee was not like this. We didn't decide on the committee for it, the department assigned the committee members top-down (MDS 6).

Doctoral education requires different types of meetings and presentations. First, students attend a proposal defense presentation to get approval from the committee for their planned research and methodology. Although there are different procedures and practices in each university, doctoral students need to attend regular thesis progress committee meetings in each academic term after getting approval from their committee members. Students can rarely find members for their own committees. In general, the members of the committee are decided by the thesis supervisor or the department, which is expected as they are familiar with the community. However, they might select academics regardless of their field of study. Qualified academics studying the same or similar topics can be more helpful for the betterment of the students and their studies. If the assigned members have friendships or professional attitudes, this will reflect positively on the students and their studies.

Three students (MDS 2, FDS 17, MDS 21) and two dropouts (MDD 3, MDD 8) thought that the committee members had bad relationships among themselves as their personal and academic egos were fighting against one another during the meetings. One of them (FDS 17) also stated that she felt alone during thesis monitoring meetings as her supervisor did not support her against other members. She also criticized the fact that she had no right to select even her supervisor. Her department automatically assigned supervisors to doctoral students. Similarly, another female student (FDS 1) also felt alone in front of the committee as her

supervisor was not by her side. She thought that her supervisor behaved worse towards her than others during such meetings.

Even though there are different academics in the thesis committee progress meetings, students still expect to get a lot of guidance and support from their own supervisors. The relationship between the committee members and the way the supervisor leads them during the meetings can positively or negatively influence the progress.

Two dropouts (MDD 8, FDD 13) mentioned the negative influence of unstandardized committee meetings, hostile behaviors and the changing ideas of the members on their studies and motivations. A female student noted that the committee members could be more student-centered and motivating. She elaborated on her idea as follows:

During our thesis meetings, our supervisors and other members stress their own opinions. The most challenging point for us is that everyone has different ideas, and they cannot come together. This is one of the things that bothers us the most. We are not at their academic level and we cannot think as deeply as they do. However, they can empathize with us and be more on the side of the students so that they can motivate us to go on and finish our studies (FDS 3).

Each committee member can insist on imposing his or her own beliefs instead of striking a compromise. This might affect students' motivation and academic performance significantly. The thesis progress committee meetings should be scheduled to track students' improvement and provide them with useful feedback. In other words, professional goals should take precedence over personal ones during these sessions.

Dropout participants in this study had more negative experiences and ideas about their committees as opposed to doctoral students. Two dropouts (FDD 2, MDD 3) criticized the constant change of members in their committees. One of them also

mentioned the negative influence of external members studying different topics as well as his struggles to find new members for his committees as quoted below:

Interesting and different things happened in my committees. A member wanted to leave my study because he had a problem with another member. Then, I had to find a new member and nobody wanted to contribute to it. As students, we have to beg especially for external members. What a pity! The system should be different. For example, we can present our thesis proposal in such a way that those who want to be part of it can find us. In an alternative way, our supervisors can find them. Anyway, the new member had nothing to do with my thesis topic as he was studying something else. Therefore, things did not work for me with such a puzzle-like committee (MDD 3).

The negative attitudes of committee members, especially external ones, can influence the overall motivation and success of students adversely. In addition, changing these committee members regularly can be challenging and problematic for students and the future of their doctoral studies. To sum, there are several committee-related complexities perceived by both Turkish doctoral students and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 47.

Table 47. Committee-related Complexities

Theme 3:	Academic complexities
Category 6:	Committee-related complexities
Codes:	1. Friendly relationships 2. Toxic relationships 3. Prioritizing their favorite students 4. Positive influences of volunteer selection 5. Importance of supervisory leadership 6. Unstandardized meetings 7. Hostile and changing ideas 8. Lack of student-centeredness 9. Imposing personal ideologies 10. Feeling alone and isolated 11. Negative influences of external members 12. Difficulty of finding new members

Committee members have an essential place in navigating a doctoral journey. This higher-level degree requires regular committee meetings. The personal and professional attitudes of members, including those of thesis supervisors, can affect doctoral studies in positive or negative ways.

As seen in Table 48 and Figure 27 below, similar committee-related complexities perceived by the participants can result in retention or dropout depending on the received support and constructive guidance from the committee members.

Table 48. The Outcomes of Committee-related Complexities

Committee-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Friendly relationships 2. Toxic relationships 3. Prioritizing their favorite students 4. Positive influences of volunteer selection 5. Importance of supervisory leadership 6. Unstandardized meetings 7. Hostile and changing ideas 8. Lack of student-centeredness 9. Imposing personal ideologies 10. Feeling alone and isolated 11. Negative influences of external members 12. Difficulty of finding new members	- Having more friendly relationships - Having access to committee members - Having supportive and constructive guidance - Feeling integrated into the academia	- Not having friendly relationships - Not having access to committee members - Not having supportive and constructive guidance - Not feeling integrated into the academia
	A supportive and constructive guidance	

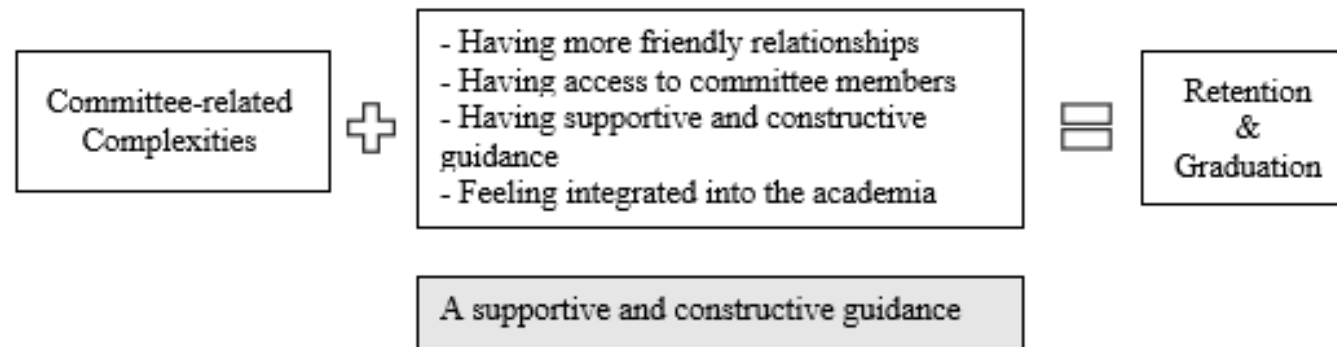


Figure 27. The outcomes of committee-related complexities

6.3.7 Academic support-related complexities

According to the findings, the last category of academic complexities is the academic support-related complexities of the participants. The participants had difficulty listing and explaining their experiences regarding academic support mechanisms. Nonetheless, the academic support mechanisms mentioned by the participants in this study were more than personal and institutional support mechanisms. Furthermore, doctoral students, as opposed to doctoral dropouts, could mention more academic support mechanisms.

Nine doctoral students and five doctoral dropouts expressed that there were no academic support mechanisms based on their experiences. They also added that even if there were such support at their universities, they had no information regarding them. One of the students specified this issue as quoted below:

Apart from my supervisor and friends, there is no academic support. For instance, a friend of mine who is very good at statistics helps me academically. So, I can say that there are friends to support you academically, but this is not a systematic support mechanism. There should be an academic support system or center for every student in the university (MDS 14).

Two students (FDS 3, FDS 7) and two dropouts (MDD 8, MDD 15) found the quantity and quality of academic support insufficient. A male dropout stated:

Doctoral students are alone. They are in a deep sea and try to reach the shore by swimming themselves. There is no academic unit or person helping them on their way to the shore. I do not think that the available ones are good. For example, the people in our regular meetings and exams can function as an academic. Unfortunately, they do not provide academic support. They even make the situation worse and more complicated (MDD 8).

Doctoral students are not equipped with many academic opportunities and facilities during their studies. Interestingly, they are not aware of the existing ones in their universities or within the whole system. They get academic help from their

supervisors or friends if necessary. However, there should be various and systematic support mechanisms for doctoral-level students apart from their supervisors and friends. In addition, these students should be informed about the available support.

Four male students (MDS 10, MDS 22 MDS 23, MDS 24) and one male dropout (MDD 15) regarded the project unit or the scholarship unit of their universities as an example of academic support since these units helped them earn money through their academic work.

Two students (FDS 12, FDS 17) listed language and editorial support centers of their universities as good examples of academic support mechanisms for all including doctoral students. One of them also mentioned the writing center of their university as follows:

We have a language support unit at our university that is open to all students. I know that there is an editor there for everyone. We also have a writing center. I think, they should be organized to target only doctoral students so that we can improve ourselves and our thesis more effectively (FDS 12).

A male student (MDS 14) underlined the positive influence of having a library with many databases at his university on his studies. Hence, he regarded it as an example of academic support based on his experiences.

A female student believed that having a well-qualified supervisor was enough support for doctoral students. She also added:

There is no need for multiple support mechanisms. We are mature enough to follow the tasks assigned under the custody of a supervisor. I had not experienced any supervisor support. Therefore, I needed of academic support, too. However, I watched tutorial videos, followed specific YouTube channels and found some academic programs on the internet to improve my studies (FDS 7).

Extra academic workshops or tutorials given by the university or the library were regarded as academic support by a male dropout participant (MDD 3). Two students

(FDS 5, FDS 7) mentioned tutorials about some programs like EndNote delivered through online education as academic support at their university. In addition to these, two students (MDS 15, FDS 19) mentioned informative e-mails or meetings about scholarships given by such organizations as TÜBİTAK (The Scientific and Technological Research Council of Türkiye) as examples of academic support. Moreover, office or data analysis programs such as EndNote or SPSS provided freely for the students were seen as academic support by a female student (FDS 17).

Another female student talked about a student meeting organized during the pandemic at her university. She (FDS 12) said: *“There was an academic support meeting on Zoom during the pandemic, but I did not attend. I heard that it was like a conversation with all graduate students.”*

Doctoral students view anybody who can aid them, including supervisors, peers, libraries, writing centers and activities like seminars and tutorials as a support system contributing to their overall academic betterment.

Lastly, a male student (MDS 10) emphasized the importance of freedom for doctoral students while talking about academic support mechanisms. He said: *“If we had a little more freedom as doctoral students, we would have the capacity to shape our own education without any academic support mechanisms.”*

Doctoral students might not need extra academic support if they feel qualified in their field. Still, they sometimes feel demotivated and restricted by the environment and people to go further and finish their studies. Therefore, it is important to foster a steady, positive and constructive academic system instead of supporting them with additional academic units or facilities. All in all, there are some academic support-related complexities perceived by both Turkish doctoral students

and doctoral dropouts that influence their retention in doctoral education. A visual summary of these complexities are given below in Table 49.

Table 49. Academic Support-related Complexities

Theme 3:	Academic complexities
Category 7:	Academic support-related complexities
Codes:	1. Lack of academic supports 2. Not being aware of available supports 3. Lack of quality and quantity 4. Positive influences of project units and scholarships 5. Positive influences of language and editorial supports 6. Positive influences of writing centers 7. Positive influences of libraries and databases 8. Positive influences of research programs and tutorials 9. Positive influences of a qualified supervisor 10. Positive influences of informative emails and meetings 11. Positive influences of online meetings 12. Need for freedom not support

Academic support mechanisms are an essential part of doctoral education. Each Turkish student can succeed in their doctoral studies in a better way with the necessary academic support. Even though students list some academic people or units in their universities as their support mechanisms, they might not be aware of the existence of other people or branches. Furthermore, some students do not think that they need extra academic support for their studies under a supervision of a well-qualified academic. As given in Table 50 and Figure 28 on the following pages, similar academic support-related complexities perceived by the participants can result in retention or dropout depending on the availability and accessibility of qualified academic support mechanisms such as research units or programs.

Table 50. The Outcomes of Academic Support-related Complexities

Academic Support-related complexities	Outcomes	
	Retention & Graduation	Dropout
1. Lack of academic supports 2. Not being aware of available supports 3. Lack of quality and quantity 4. Positive influences of project units and scholarships 5. Positive influences of language and editorial supports 6. Positive influences of writing centers 7. Positive influences of libraries and databases 8. Positive influences of research programs and tutorials 9. Positive influences of a qualified supervisor 10. Positive influences of informative emails and meetings 11. Positive influences of online meetings 12. Need for freedom not support	- Having enough academic support - Having enough academic support units and facilities - Having access to available academic support mechanisms	- Not having enough academic support - Not having enough academic support units and facilities - Not having access to available academic support mechanisms
	Availability and accessibility of academic support mechanisms	

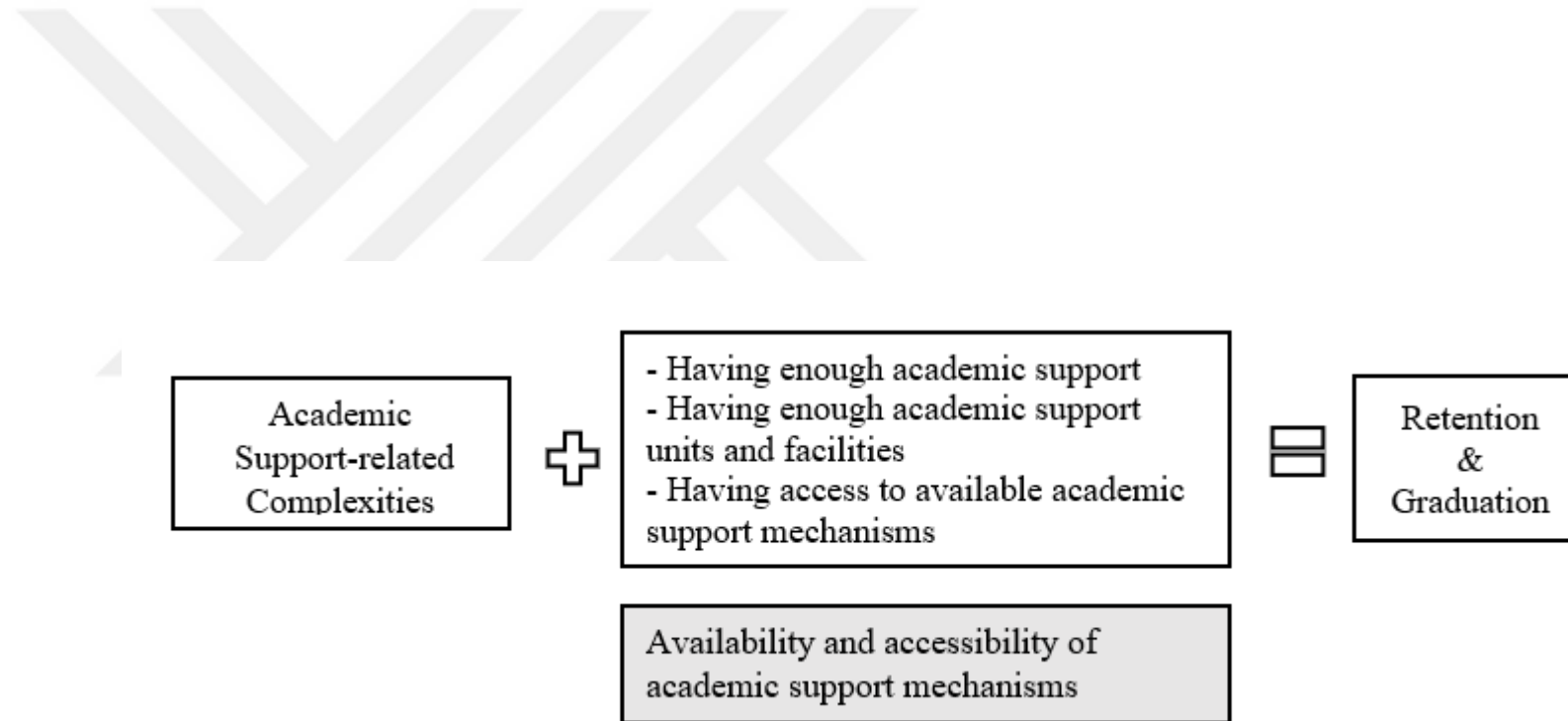


Figure 28. The outcomes of academic support-related complexities

6.4 Summary of findings

The findings of this study indicate that there are personal, institutional and academic complexities perceived both by Turkish doctoral students and dropouts. In this section, these findings are summarized under sub-headings and aggregated summary tables are given in appendices.

6.4.1 Summary of personal complexities

As shown in an aggregated form in Appendix G, this study results in five main personal complexities: Family-related, work-related, socialization-related, value-related and personal support-related complexities. They are also summarized here.

6.4.1.1 Family-related complexities

Every Turkish doctoral student and dropout experiences numerous personal complexities during their individual educational paths. They struggle to strike a balance between their personal and academic lives. It appears to be difficult for all of them to maintain their household obligations and responsibilities while pursuing a doctorate. However, those who are married with children face greater difficulties because their domestic responsibilities are fourfold. Students are unable to spend much time with their families due to the demanding nature of their education, which requires hard mental work at each level.

In Türkiye, both male and female students are under pressure to marry and start a family. However, women are more influenced by this sociocultural pressure than men. Furthermore, they are also negatively affected by patriarchal norms to a greater extent. As opposed to their male cohorts, females are inherently expected to

provide more care for their families in such patriarchal cultures. As a result, they struggle more to finish graduate school and get their diploma on time.

Regardless of gender, all students experience a number of expected and unexpected situations, such as marriages or deaths during a doctorate. These life events can easily hinder their resilience to continue. At this point, having any form of support system can influence their decision to pursue the degree or not. To put it another way, students who experience similar family-related challenges might drop out of their doctoral education if they are not supported.

6.4.1.2 Work-related complexities

In Türkiye, it is not easy even for doctoral students to find high-level positions with satisfactory salaries since the economy is quite unstable. Moreover, employers do not prefer students as their future workers, and having a doctorate does not bring much economic return. Workplaces force individuals to work full-time with no time off for the doctorate or they pay less. Ironically, employers appreciate intellectuals with a doctoral degree for their own long-term benefits.

Turkish doctoral students need to earn money since there are not enough financial supports such as scholarships. Besides, males feel sociocultural pressure on their shoulders to find a full-time job. Universities lack housing and dining opportunities for doctoral students. Hence, students struggle to meet their basic needs. They are also financially challenged by the research expenses. The COVID-19 pandemic and distance education have alleviated the financial pain of doctoral students since most of them are with their families. Therefore, almost all students work in academic or non-academic jobs because of financial concerns. In both cases, they encounter positive and negative work experiences. They have a chance to

transfer them to their doctorates. Similarly, they can transfer their academic knowledge to the workplace.

In particular, non-academic positions can make doctoral students feel isolated from academia. Those who work in other cities spend extra on traveling to reach their universities. Furthermore, they feel physically and mentally disconnected from the doctorate even when they have academic jobs.

Unfortunately, doctoral students often feel exhausted after a typical work day for any academic task. In general, they also spend their free time completing extra work. Additionally, they have difficulty managing their time and balancing their work-study schedules. Students think that academia is unaware of the financial realities experienced by doctoral students. Under these circumstances, their doctoral work lacks focus and quality. What is even worse, those with little or no support might drop out of their doctoral education.

6.4.1.3 Socialization-related complexities

Doctoral students have no or limited time for socialization in their busy work and study paces. Most of them avoid participating in social activities in an effort to manage their limited time for academic assignments. If this happens as a routine, individuals have a tendency to develop anti-social behaviors. Even when they try to be social, they feel that they are totally integrated into groups with limited social skills. This means that the level and quality of their social involvement are quite low.

On the one hand, doctoral students do not feel totally integrated into academic communities. They are generally physically away from university campuses as working adults. This causes partial social involvement into academic environments.

In addition, the COVID-19 pandemic and distance education have doubled the isolation of doctoral students from academia.

On the other hand, being a doctoral student often brings easy access to social environments. In social settings, a doctorate provides prestige for individuals among others. This increases their socialization. Moreover, students find their academic networks helpful for socialization. For some, being social has a constructive and positive effect on their doctoral studies. This implies that students with little or no social integration might drop out of their doctoral education.

6.4.1.4 Value-related complexities

Each doctoral student and dropout has some changing personal ideas regarding the value of academia and academic work in Türkiye. Before starting this demanding journey, they attribute positive meanings to having a doctoral degree. In addition, they have personal and academic self-confidence. Unfortunately, their initial positive thoughts are replaced with negative ones due to the overall deterioration of academia in the country. After starting their doctorates, students face the truth that this academic title does not bring promised returns for many of them. Unfortunately, the context-based challenges reinforce their negative feelings towards academia and academic titles. Above all, Turkish doctoral students feel worthless in academia. Under these conditions, they have a tendency to drop out of their doctoral programs, especially when they are not supported.

6.4.1.5 Personal support-related complexities

Turkish doctoral students have difficulty making sense of personal support because systematic personal support mechanisms are missing. Those who can get emotional

support from their family members, friends, colleagues and romantic partners can overcome personal challenges. Nevertheless, the personal support of academics and peers is more useful in helping them sustain their studies. This implies that doctoral students need emotional support along with academic support. In addition, they find the support of people who have experienced similar situations more meaningful. Unfortunately, students with little or no personal support drop out of their programs when they face challenges. Hence, it is possible to infer that systematic personal support mechanisms are required to increase student retention and graduation.

6.4.2 Summary of institutional complexities

As shown in an aggregated form in Appendix H, this study results in three main institutional complexities: Program-related, university-related and institutional support-related complexities. They are also summarized here.

6.4.2.1 Program-related complexities

The decision-making processes of Turkish students for their future doctoral programs are highly critical in shaping their retention. If students go through critical thinking processes before applying to a specific program, they will continue their education as their expectations are probably met. Otherwise, students give up easily in case of any challenge. Unfortunately, many students chose their programs without thinking deeply about them. What is even worse, they sometimes start a program for which they are accepted even if it is not their target. Moreover, those students employed by universities under the ÖYP program have to choose appropriate programs and positions. These kinds of obligations often hinder their retention and graduation.

Taking into account their previous academic experiences, some students want to be part of innovative doctoral programs, considering their research sites, physical opportunities and academic staff. In this sense, the suggestions of professors also play a key role in shaping their decisions. Turkish students also tend to be in their comfort zones. This means that they are often unwilling to change their undergraduate or master's program and university to eliminate uncertainty. Therefore, they want to study in familiar programs with a familiar academic community, including friends, peers and teams.

6.4.2.2 University-related complexities

The decision-making processes of Turkish students for their future universities are also important to understand their retention. These students seem to have more criteria when selecting their universities. For most of them overall quality and reputation of universities are the main criteria. Hence, they actually prioritize academic excellence in universities. In this regard, national and international opportunities are considered. The long and prestigious culture, history and etiquette of universities are also valued by students. In line with these, democratic and meritocratic applications, student-centeredness, positive campus climate and emotional atmosphere are taken into account. All these potentially increase student retention and graduation.

For some doctoral students, location and practicality, extra research units and resources, data collections facilities, English medium instruction and cooperation with the sector are essential to get the degree. A few students aim to go beyond their comfort zones by experiencing unfamiliar, new universities. Even so, they care about

the student affairs and institution since they are among the main supports at doctoral-level.

6.4.2.3 Institutional support-related complexities

Turkish doctoral students have difficulty making sense of institutional support because systematic institutional support mechanisms are missing. In addition, students are not aware of the existing institutional supports or they find their qualities low. Some doctoral students regard such branches as psychological support units, career and development centers, technology transfer offices, leisure centers, libraries, cafeterias and guest houses as institutional support mechanisms in their programs or universities. Nonetheless, they do not totally know their functions and benefits. Some doctoral students see online or offline facilities, orientation programs, office programs, databases, student groups or clubs, regular student meetings, funds, budgets and scholarships as institutional supports provided by their programs or universities. However, they underline the missing quality and quantity.

Interestingly, many students think that supervisors, faculty members and institutional staff can help them in this context as support. Nonetheless, those who can get systematic institutional support during their education can overcome challenges. The lack of such support hinders their retention and graduation on time. In fact, doctoral students need personal and institutional support along with academic support to fulfill their goals. Hence, it is possible to infer that more systematic institutional support mechanisms are required to increase student retention and graduation.

6.4.3 Summary of academic complexities

As shown in aggregated forms in Appendix I and Appendix J, this study results in seven main academic complexities: Course stage-related, qualifying stage-related, thesis stage-related, supervisor-related, faculty-related, committee-related and academic support-related complexities. They are also summarized here.

6.4.3.1 Course stage-related complexities

Turkish doctoral students find their obligatory course stages structural and anticipated. This theoretically engaging phase of a doctorate is not a new experience for them. They criticize common courses with old-fashioned syllabuses that are very similar to those of a master's degree. Therefore, repeating knowledge does not allow for the deeper and more critical thinking processes required for their expertise. In addition, the number and diversity of faculty delivering these courses are also limited. Unfortunately, academics sometimes cancel their doctoral courses without announcing them. What is even worse is that make-up sessions are not scheduled for the missing weeks. Under these circumstances, doctoral students lose interest to continuing for the next stages.

In Türkiye, classrooms are crowded and lack an intellectual atmosphere. The number of obligatory courses is abundant, but electives are highly limited. In this sense, they are like so-called electives. The existing courses are not innovative and useful because they lack fieldwork, field-specific content and scientific production. During this stage, doctoral students expect to experience more through specific seminars or workshops. Otherwise, they are not motivated to continue.

The course stage in a doctorate is less challenging with familiar content and structure for students who have already completed various educational stages in their

lives. Indeed, students can manage this phase by basically completing the assignments or passing the exams. Working students find full-day courses practical but exhausted. For all students, online courses are more practical. Regardless of the form of course delivery, the first stage of the doctorate functions as a smooth transition period during which students can develop academic networks. Students think that flexibility and improvements are necessary. Otherwise, completing this simple stage is meaningless to get a high-level degree. In other words, courses are inadequate for preparing future scholars for the next stage.

6.4.3.2 Qualifying stage-related complexities

Turkish doctoral students find the qualifying stage of a doctorate more challenging and problematic for them. Considering their previous educational have experienced, this is the first time they experience such a new and frightening phase. In addition, this stage generally lacks standard procedures. The unlimitedness of time and contents make this stage harder. It takes a lot of time and work for learners to pass the qualifying exam under stress, but the end result is often dependent on the approach of the assigned jury, which causes physical and psychological health issues on students. Hence, they can easily feel exhausted and demoralized to continuing their studies.

Unfortunately, doctoral students do not feel ready for this stage after completing their courses. Students experience unethical and hierarchical behaviors during this stage. They think that academics have problematic relationships among themselves, which is unprofessionally reflected on students. Some students, especially those who completed their master's degree in abroad, realize that egoist and elitists behaviors are common in Turkish academia. Under such sociocultural

atmosphere, doctoral students feel lonely and struggle a lot to continuing their doctorates.

6.4.3.3 Thesis stage-related complexities

For Turkish doctoral students, the thesis stage of a doctorate is also challenging and tiring because they are required to find original ideas. In addition, there are no time or content constraints. Therefore, this stage consumes more time and energy compared to other stages. Students who have completed their course and qualifying stages do not feel ready for this deeper and more authentic stage. Unfortunately, they have already become tired in previous stages. When they reach this stage, conducting independent research becomes more demanding. At this point, they often feel inadequate and isolated, especially when they are physically and mentally away from the campus.

Conducting independent research is not easy for Turkish students who have passed through very structured and memory-based educational phases. Even though they are under the supervision of an academic during this stage, they still struggle to get approvals, access to limited research facilities, get limited financial support, access to the field, collect data and analyze data. Top it all, matching with the right supervisor is also a rarely seen case. Students are not only challenged by the nature of research but also by the unfavorable behaviors of academics. These students want to leave their studies if they are not supported, especially when they face life events such as marriages, sicknesses or deaths. When all these are taken into account, the thesis stage might be the most retention-hindering phase resulting in many failures and dropouts.

6.4.3.4 Supervisor-related complexities

Most of the Turkish doctoral students have problematic relationships with their supervisors. In some hierarchical universities, students are assigned top-down supervisors and try to maintain a standard relationship with them. Some of these supervisors can be more authoritarian and humiliating. Unfortunately, doctoral students feel inferior and lose interest in getting the degree. When students voluntarily select their supervisors based on their personalities and scientific needs, they face fewer challenges.

In Türkiye, the excessive workload of supervisors and slow bureaucracy make doctoral education long-lasting and exhausting. For students, persuading people for any change is highly difficult. Unfortunately, some supervisors lack communication and supervisory skills. Moreover, they sometimes even lack academic knowledge and vision. However, doctoral students expect academic guidance both for their doctoral studies and for future academic positions. What is even worse is that some supervisors demonstrate unethical behavior. For example, they force students to put their names on academic publications without contributing to them. Additionally, they get into ideological conflicts with their students.

Some working students are physically and mentally away from the university campus. Therefore, they feel more challenged by their supervisors. When doctoral students have a co-supervisor for any reason, the progress can be harder for many of them. All in all, having the right supervisor and co-supervisors is one of the turning points in a doctorate that shapes student retention.

6.4.3.5 Faculty-related complexities

Turkish doctoral students generally maintain standard relationships with faculty members. They think that academic environments have a hierarchical system and toxic relationships are quite common in Türkiye. Therefore, reaching faculty is difficult at the necessary times. Unfortunately, some faculty members do not provide constructive feedback to doctoral students. In addition, they display unethical behavior along with egoist and elitist behavior. Under these circumstances, students can feel alone and isolated, especially when they are physically away from campus. All these hinder student retention in doctoral education.

Nonetheless, there are also academics who see doctoral students as their colleagues and maintain friendly relationships. Furthermore, the feedback of faculty can sometimes be misunderstood by doctoral students. Indeed, feedback is essential for their academic improvements. Therefore, they should not be taken personally.

6.4.3.6 Committee-related complexities

Turkish doctoral students generally maintain standard relationships with committee members. However, there are also two extremes: friendly or toxic relationships. At this point, the voluntary selection of committee members by students themselves can have positive influences on student retention. The leadership of supervisors is also critical for this aim from the very beginning. After a while, finding new members or changing them is challenging. When top-down procedures are followed, doctoral students encounter unstandardized meetings with hostile and constantly changing behaviors. The committee meetings lack student-centered atmospheres. Unfortunately, some committee members impose their personal ideologies and prioritize their own students. In this regard, external members can treat doctoral

students more harshly. Students who feel alone and isolated, especially when they are not physically close to the academic communities, tend to leave their programs.

6.4.3.7 Academic support-related complexities.

Turkish doctoral students have difficulty making sense of academic support because systematic academic support mechanisms are missing. In general, these students are not aware of the existing academic supports or they find their qualities and quantities low. Some doctoral students find project units and scholarships, language and editorial supports, works of writing centers, libraries and databases, research programs and tutorials, informative emails and meetings and online meetings very useful and necessary for their academic advancement, which in turn affects their retention positively.

Some students think that a qualified supervisor can compensate for missing academic support mechanisms. Still, well-functioning and systematic academic support mechanisms will definitely increase retention by allowing students to overcome academic challenges more easily. Furthermore, doctoral students want freedom instead of so-called support. When they feel free to raise their voices, they believe that many existing problems will automatically disappear.

6.5 Summary of Chapter 6

Chapter 6 presents the findings coming from the data of doctoral students and doctoral dropouts. The findings of this study are covered under three main themes with their sub-themes: (1) personal complexities (family-related, work-related, socialization-related, value-related and personal support-related), (2) institutional complexities (program-related, institution-related and institutional support-related)

and (3) academic complexities (course stage-related, qualifying stage-related, thesis stage-related, supervisor-related, faculty-related, committee-related and academic support-related). All these themes and their sub-categories influencing student retention and graduation in doctoral education are given with related quotes and their interpretations. In addition, tables and their aggregated forms are included in the texts and appendices to make the content more visible.



CHAPTER 7

DISCUSSION

This chapter includes a general discussion of the findings given in Chapter 6 within the scope of relevant literature, contextual background and conceptual framework on student retention and graduation, or dropout in doctoral education. The implications of the study are embedded in this chapter. Accordingly, the chapter consists of four main parts: (1) Background profile of participants who pursue doctoral education, (2) Goals of participants who pursue doctoral education, (3) Similar challenges with different outcomes in doctoral education and (4) Composite interaction perspective for complexities in doctoral education.

7.1 Background profile of participants who pursue doctoral education

It is critical to overview the background profile of the research participants who are current doctoral students and recent doctoral dropouts in Türkiye. This particular context seem to have challenges and opportunities for these participants coming from various backgrounds. Based on this study, it appears that background characteristics of these individuals have direct or indirect impact on their retention and graduation, or dropout.

The findings coming from 24 students and 16 dropouts show that current doctoral students and recent doctoral dropouts have a great potential to represent a distinct group in Turkish higher education. These participants come from similar, but diverse backgrounds with a range of demographics, experiences, cultures and viewpoints (Devos et al., 2017; Nettles & Millett, 2006). In parallel to this, these adult participants can go through various personal, institutional and academic

challenges or opportunities based on their background characteristics and lifestyles (Astramovich et al., 2004). For instance, some participants of this study might have had limited financial background for their advanced studies. However, they could receive more personal support from their family members in this collectivist society.

It appears that most of the participants start a doctoral program immediately after completing their master's degrees without a break. Within the scope of this study, they can be categorized as 'traditional students' who plan to study full time in a university (Laing et al., 2005). On the other hand, a few participants, especially those from the dropout category, can be seen as 'non-traditional students' who start a doctorate not immediately after their master's degrees. These non-traditional students might feel and behave more like a part-timer in a university (Laing et al., 2005). Although traditional and non-traditional students have similar motivations and goals for starting their doctoral education, non-traditional students who are not regularly visible in the school setting might have more risk of attrition (Kim, 2002) as they get frequently disused to living like a student (Levine, 1993) with their family roles (Kim, 2002).

As emphasized by almost all of the research participants, these individuals intend to start their doctoral studies as full-time 'traditional students' and want to be close to the campus at the beginning. However, most of them have indispensably experienced distance or online learning during and after the COVID-19 pandemic. Therefore, many participants have inevitably become away from their universities and ended up being part-time students in Türkiye within the scope of this study. Accordingly, most of the participants have started to attend online doctoral courses, check email boxes, respond to WhatsApp messages, or organize meetings on Zoom instead of going directly to the universities and visiting their professors face-to-face.

Although the participants of the study do not visit their campuses every day, they are supposed to maintain a constant contact as students with their professors and supervisors as if they were on campus. In this sense, globalization and digitalization might have facilitated communication and accelerate the interaction for them. Therefore, the participants of this study who pursue doctoral education or who have recently left their degree can be conceptualized as ‘post-traditional students’ within the scope of this study. There are also a few participants who for some compulsory reasons like moving have started their doctoral studies in one university and transferred to another one in order to complete their degrees. These participants can be regarded as ‘transfer students’.

The models and theories constructed after the millennium incorporate a few elements referring to the place of digitalization in retention. Accordingly, Rovai’s Composite Persistence Model (2003) emphasizes that computer literacy is an integrated part of student skills developed prior to the admission as an important indicator to persist in higher education. As to distance or online education, Park and Choi’s Revised Model of Dropout from Distance Learning in Organizations (2009) and Choi’s Conceptual Model for Adult Dropout in Online Degree Programs (2016) see technical issues as an internal factor shaping persistence or dropout for adult learners. Based on the research findings, these traditional frameworks need to be updated with more digital elements for doctoral students who experienced the COVID-19 pandemic and engaged greatly in distance or online learning.

While there are commonalities in all HE students, the existence of diverging features of the research participants highlights the necessity of studying doctoral students and dropouts in isolation to discuss their retention effectively (Devos et al., 2017). Even though the backgrounds of HE students in relation to their retention

rates have broadly been discussed in the related literature (Donaldson & Townsend, 2007; Kasworm, 2003; Kasworm & Marienau, 1997; Sissel et al., 2001), the focus is rarely on doctoral students (Kerns, 2006). The research findings show that a critical lens is required to extend the HE agenda on student retention to doctoral-level students so that on-target methodologies by considering their backgrounds can be reached (Harvey et al., 2016; Coryell, J. E. & Murray, K. 2014; Drago-Severson, Asghar & Gaylor, 2003; Young, 2001).

According to Spady's Theory of Student Departure (1970), Tinto's Student Integration Theory (1975), Pascarella's Attrition Theory (1980), Bean and Metzner's Student Attrition Theory (1985), Kember's Model of Dropout in Distance Education (1989), Bean and Eaton's Psychological Theory (2000), Rovai's Composite Persistence Model (2003), background characteristics such as age, gender, family, finance and education can play a key role in shaping retention and graduation, or dropout. In close parallel to these, but with nuancing focus on distance or online education for adults, Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009) and Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016) also echo the place of the same elements in retention.

Research findings indicate that all these background characteristics of doctoral students and dropouts who participated in this study can influence their overall commitment and involvement as also suggested by Tinto's Student Integration Theory (1975), Astin's Student Involvement Theory (1984) and Cabrera's Integrated Retention Model (1992). This means that backgrounds of the participants who start a doctoral degree can give some clues about their future

success or failure (Barasa & Omulando, 2018; Groenvynck et al., 2013; Maher et al., 2004; Matheka et al., 2020).

7.1.1 Demographic background of participants who pursue doctoral education

Research findings underline that gender comes into play as an important indicator shaping retention and graduation, or dropout in doctoral education based on the perceptions of current students and recent dropouts who participated in this study. The gender of the participants were equally represented on purpose for this study. Accordingly, 12 female and 12 male doctoral students were interviewed. As to dropouts, there were 8 female and 8 male participants. The statistics about the demographics of the participants mentioned in this section can be seen in the methodology section in detail.

When the population of Türkiye is compared in terms of gender in doctoral education based on TÜİK (2021) reports, the percentage of men who have PhD is almost equal to that of women. For example, men who hold PhD degrees constituted 0,5 percent of the whole population in 2021. On the other hand, women who hold PhD degrees constituted 0,4 percent of the whole population. If the average percentages are taken into account for the years between 2008 and 2021, the average is 0,4 for men whereas it is 0,3 for women. It should be also noted that the overall population of Türkiye consists of 50,1% males and 49,9 % females (TÜİK, 2023).

There are research participants from each group in different stages of doctoral education. This means that the participants are doctoral students and dropouts from freshman to seniors for this study. They are in their course, qualifying or thesis stages. In addition, these participants are coming from different institutions. It can be inferred from these findings that these participants regardless of their gender have

access to doctoral-level education in Türkiye. When the ages of the participants in relation to their genders are considered within the scope of this study, there is no significant differences. The participants from both categories have similar ages, which is conceptualized as ‘working-age’ (Wlodkowski, 2008) interval in this study.

Based on the accounts of the participants, access does not guarantee success all the time. Although the statistics of men and women who are at the beginning of their doctoral education are comparable in Türkiye, challenging experiences differ during the journey, which will be discussed in section 7.3.2 in detail. The models and theories given in this study see gender as the entry level characteristics having an impact on retention and graduation, or dropout. In this Turkish case, gender comes into play in the midst of doctoral education. Therefore, how challenges and opportunities are perceived by females and males after enrolling in a doctoral program might become more of an issue in this context.

When it comes to the marital status of the participants, doctoral students are either single or married. In comparison, there is a wider range of marital status among dropouts. For the latter group, there are single, married, engaged, divorced and widowed individuals. The experiences shared by these participants give the impression that such diverse marital status of them can be the reason or the result of their dropout action. This means that their personal lives influence their education and vice versa. For instance, the participant who struggle in his personal life because of the terminal illness of his father along with conflicts in his marriage could not stand the challenges of the doctorate. Finally, he ended up divorcing from his wife and dropping out of the degree. It needs to be emphasized that this is one of many dropout stories in relation to marital status. It should be underlined that the models and theories given in this study do not relate retention and graduation, or dropout to

marital status as they mainly focus on higher education as a whole. However, this element is a good indicator for retention phenomenon of the research participants of this particular study.

It is apparent that age comes into play as the most important background characteristic of the participants, influencing their retention in direct or indirect ways. Therefore, it needs to be addressed deeply. Wlodkowski (2008) categorizes adult learners into three groups in terms of their age intervals. Accordingly, individuals from 18 to 24 are named as ‘younger adults’, individuals from 25 to 64 named as ‘working-age adults’, and individuals from 65 and above are named as ‘older adults’. The ages of the participants are ranging from 26 to 57 for this study as given in the methodology section in detail. Therefore, all the participants are working-age adults with mature lifestyles and responsibilities (Wlodkowski, 2008). The models and theories given in this study do not see these students as working-age adults since they mostly address undergraduate students who do not work. In addition to this, they mostly underestimate the influences of their age-related challenges and opportunities while discussing their retention and graduation, or dropout.

The perceptions of the participants show that unlike other age groups, adults – including doctoral students and dropouts – are supposed to be more independent and self-directed in their learning actions (Knowles, 1984). In fact, research participants can be specifically addressed within the framework of andragogy in this sense (St. Clair & Kapplinger, 2021) to develop a more efficient doctoral curriculum design and delivery by employing specific techniques and ideas. This is the most fundamental, yet crucial, step in increasing student retention and graduation rates while eliminating further dropouts.

A series of presumptions regarding adult learners is put forward by the Theory of Adult Learning (Knowles, 1984). Malcolm Knowles has proposed the idea of andragogy as a way to facilitate teaching and learning processes of adult learners, covering doctoral students, more practically compared to other researchers (St. Clair & Kapplinger, 2021; Loeng, 2018; Henschke, 2015). Accordingly, the participants' 'experience', 'self-concept', 'readiness to learn', 'motivation' and 'orientation to learning' (Knowles, 1984, p. 12) are different from other HE students. Although this theory lacks empirical proof (Loeng, 2018), using five principles of Knowles (1984) seem to be essential and relevant to overview the demographic background of the research participants in this study, which is missing in the given models and theories.

7.1.1.1 Experience

It can be drawn from the research findings that the participants of this study accumulate a certain amount of work, life and family experiences as they grow up, which signals that "As people become mature, they accumulate a growing reservoir of experience that becomes an increasing resource for learning." (Knowles, 1984, 12). Individuals can use this reservoir as a richer and higher-level source of learning (Merriam, 2017) during their doctorates. If they can use their life experiences to make their studies more meaningful by sharing them with others, they might feel more motivated to learn and continue their studies (Galbraith & Fouch, 2007; p. 37). Some of the participants in this study who have a chance to integrate their experiences into their doctorates might feel more involved and engaged to go on. Additionally, some of the participants in this study who can accumulate meaningful academic experiences in their previous educational stages can be more willing and ready to pursue a doctorate. They aim to become professional researchers (Carvalho

& Freeman, 2022). Therefore, the recognition of previous experiences and integration of them into the doctoral programs can be considered highly essential to increase retention rates based on the perceptions of the research participants.

Given that many of the participants in this study are working-age adults with families, they probably have significant adult obligations and duties (Martinez et al., 2013; Leijen, 2012), which might often interfere in their learning processes. In this sense, their work, life and family backgrounds are also supposed to be more colorful compared to other learners, which suggests that their studies can actually be more meaningful if they are connected to the existing real-life challenges or opportunities. It seems that, however, this is not a common case for these participants. Even though the participants of this study bring their backgrounds to the educational settings, they cannot consciously turn these experiences into learning opportunities for their doctoral studies, which might seriously influence their retention and graduation, or dropout.

The findings of this study also underline that the quantity and quality of the research participants' involvement to academia influence their sense of belonging, which might also result in retention and graduation, or dropout. These participants need to be attached to learning and academia in various ways and levels. This can help individuals feel thrilled to go on for a doctorate (Carvalho & Freeman (2022). When some of the participants in this study cannot develop a sense of attachment, they might have a risk of failing to remain in doctoral education. In other words, the research participants might drop out of their studies if they lose faith for it. Students can be demotivated when they do not see any personal and scientific growth (Peltonen et al., 2017). One of the best techniques to increase belonging and retention among these participants can be integrating real life experiences in doctoral

programs in Türkiye. It should be emphasized that experiences might generally be more valuable than given courses for many students (Perkins & Mael, 2022). What is more striking in Türkiye is that research participants are sometimes conscious of pursuing a doctoral degree in which they embody their backgrounds together with their experiences in order to be scholarly connected. For example, many participants select doctoral programs or thesis topics in relation to their already existing work experiences or statuses. When this is the case, the initial motivation for starting to a doctorate and future retention might be positively enforced by such conscious steps (Holton & Finn, 2018; Cresswell, 2012; Blunt 2007).

The experiences of the research participants highlight the significance of developing an appreciation of the complex characteristics and lifestyles of adults pursuing a doctorate and offering adequate personal, institutional or academic support mechanisms for them. Precisely, any support should be provided through the most optimized forms (Owens et al., 2020) for these participants on their way to graduation.

7.1.1.2 Self-concept

Adaptable to Turkish context based on the research findings, doctoral students appear to have a distinct self-concept referring to their perceptions and understanding of themselves (Knowles, 1984; Marsh & Shavelson, 2010). Their self-concept includes their beliefs, feelings, and attitudes about their personal identities, skills and traits. Self-concepts of the research participants can inevitably be shaped by a multitude of circumstances, including their personal, institutional and academic experiences in this specific context.

When it comes to the academic self-concept of these participants, it can be considered as the particular beliefs, perceptions and attitudes of students about their academic performance and competence (Lent et al., 1997). Therefore, academic self-concept can be closely linked to GPA (Awad, 2007) and career commitment (Ülkü-Steiner et al., 2000) in the academic domain. All the research participants have high GPA scores in their previous educational levels. From the perspective of Ostrove et al. (2011), academic self-concept is a good sign of student retention and degree completion as it predicts interest in academia and belonging to this community. It actually helps individuals develop cognitive and intellectual abilities (Ghazvini, 2011).

What is more, the academic self-concept of each research participant might be totally different since they do not go through standard practices and paths in terms of their programs, universities and supervisors. Accordingly, each participant can be socialized into academic habitus at central, peripheral or marginal levels (Weng, 2019). Furthermore, the sources of such socialization processes and academic self-concept for the participants can differ in various contexts (Gebauer et al., 2020).

Following on the perceptions of the research participants, taking these abilities and conditions as a ground, many doctoral students can develop self-regulation strategies to cope with any challenges on their way to graduation (Bandura, 1997; Koribská, 2018; Mareš, 2013; Ordaz-Villegaz et al., 2014). On the other hand, some participants with lower self-concepts can struggle a lot to survive in doctoral programs when they face challenges. In the long run, those participants who positively engage in their studies and have remarkable success tend to remain in their doctoral programs and complete them, which might result in a higher self-concept (Curtin et al., 2012). For instance, a participant emphasized that he could not engage

in self-reflective processes because he did not know his actual potential during his doctoral education. After a while, he started to lose his motivation to finish the degree because of personal and academic failures. Finally, he dropped out of the program. As explained by him, he could not find any support to boost his deteriorated self-concept and rebuild his confidence.

7.1.1.3 Readiness to learn

The accounts of doctoral students and dropouts in this study indicate that readiness to learn seem to influence their retention. This means that “As people become mature, their readiness to learn becomes oriented increasingly to the developmental tasks of their social roles” (Knowles, 1984, 12). In line with their meaningful experiences and academic self-concepts discussed in the previous sections, the participants of this study seem to possess a strong drive to acquire knowledge and finish their degrees in the given time if they really need that knowledge or degree. For example, most of the doctoral students who participated in this study are working outside of academia and choose the fields that are relevant to their work. This match appears to raise the readiness to learn and the likelihood of retention and graduation.

The concept of readiness can be viewed as complex abilities and knowledge necessary to address the issues that research participants encounter at every stage of their doctorate (Conley, 2007). The research participants feel physically and mentally more mature and ready to learn new knowledge and skills on their own in graduate schools, which might positively influence their success and retention at the beginning (Wattakiecharoen & Nilsook, 2013). Besides those who have academic aims, most of the participants in this study might start doctoral education primarily to improve their research skills. Indeed, such scholarly skills are required for professional or social

roles in their lives (Meerah, 2010). In recent times, higher-level research skills have become essential both in public and private sectors (Mari et al., 2008). In this sense, the research participants underline that they need to engage in contextualized materials and contents. The educational contents and materials should be in close relation to their real-life situations (Dudung et al., 2021) so that students can value them. Universities should design their doctoral programs in such a qualified and expanded way that they can meet the autonomous research needs of these students (Gibbons, 2002), and increase their readiness and retention.

According to the perceptions of the research participants, universities should focus more on self-directed learning strategies in which doctoral students identify learning needs, define learning objectives, develop and implement instructional strategies, and assess the acquired learning on their way to becoming independent researchers (Kiilu et al., 2018; Kolo & Zuva, 2018, Kuruliszwili, 2015; Nisperos, 2014). In other words, self-directed learning seems to be a necessary trait for individuals for situations, like doing a doctorate, where they must overcome obstacles (Guglielmino, 2008). The study shows that self-directed learning, also conceptualized as student-centered learning or individualized learning (Smith, 2014), is often missing in the current curriculum design and delivery, which might trigger doctoral students to leave their programs at any stage. As noted by Robinson (2003), self-directed learning also fosters resilience and coping strategies for doctoral students, which can be thought particularly fundamental for their retention.

It appears that even though a lot of research participants are eager to start doctoral programs and are ready to meet their needs, their learning and teaching needs might not be often met in universities. This mismatch can accelerate dropouts (Starr & DeMartini, 2015). Furthermore, it is apparent that the research participants

in this study rarely go through reflective actions toward their learning processes considering their needs in the country. Apart from the contextual reasons, reflectivity can be seen as a considerably new concept in learning for many students (Danielewicz, 2001), including the students and dropouts who participated in this study.

Nonetheless, the research participants as future scholars should particularly hold a regular reflective practice which is a ‘critical underpinning of growth and learning’ (Ryan, 2005, p. 1). Through such active analysis and construction of meaning, the minds and behaviors of students can be more dynamic and they can be more eager to go further in their studies (Willig, 2001). By adopting a critical and reflective stance, the research participants might look deep into their scholarly learning and teaching roles, which can be shaped by their social roles (Bray et al., 2000). Doctoral students and dropouts who participated in this study seem to come from highly structured and traditional learning backgrounds, and they appear to fail to be critical and reflective even towards their own learning. Under these conditions, they might have difficulty in pinning their learning needs and readiness before and during their doctoral education, which might hinder the possibility of the degree completion.

It should also be noted that the forms of required readiness also vary in the doctoral timeline (Dreher & Dreher, 2011) among the research participants. The types of readiness can commonly be academic, technology, reading, writing, research, capstone and professional readiness (Salter et al., 2019). Nevertheless, the participants in this study experience inadequacies in different forms of readiness at different stages of their doctorate, which might often result in leaving the journey uncompleted. Indeed, a prospective student, especially in the 21st century, should

have a basic level of readiness in each form to be selected. Accordingly, the selection and admission phase appears to have a critical role in predicting the possible failures or successes in the following stages of a doctorate. Based on the accounts of the research participants, doctoral education might fail to provide these forms of readiness for the prospective and current students. This means that a new doctoral curriculum design and delivery appears to be required in Türkiye taking the needs of students into account.

The findings of the study also highlight that doctoral students need to have cognitive and dispositional skills so as to be academically ready to comprehend the theoretical and practical sides of their fields on their way to becoming self-directed, independent researchers (Cantwell et al., 2015). The participants in this study mention that they need technological readiness equipped with appropriate resources and digital literacy skills. These can be considered as some of the basic necessities to be a scholar (Kumar & Coe, 2017; Stelma, 2011). Additionally, students need to be ready to understand and apply scientific information deeply while drawing critical judgments from them as experts (Wisker, 2015). The reading readiness should be accompanied by a writing readiness in a doctorate so that students can write their assignments and papers for publication (Aitchison & Lee, 2006), which seems to be highly challenging for the participants of this study.

When all these are taken into account, most of the participants in this study do not seem to be scientifically endowed with required mental and behavioral abilities to sustain their higher-level, independent studies. This might inevitably open the door for dropout somehow or other. All these initial forms of readiness have an actual potential to prepare a ground for research readiness that helps students conduct academic research using scientific methodologies (Pival et al., 2008). Most of the

research participants seem to lack research readiness even though they completed their master's degrees with a success. Students who have this potential can develop capstone readiness as PhD students if their advanced level reading, writing, technology, and research needs are met (Baker & Pifer, 2011). It appears that doctoral courses might be inadequate to meet such needs of the participants based on the research findings. As the final phase, research participants are expected to be professionally ready. This can help them serve as a steward of their fields (Salter et al., 2019) and to move further in their careers (Mello et al., 2015; Robertson, 2017). Nevertheless, most of the participants in this study perceive that they are not ready for such professional future even during their final stages in doctoral education in light of the findings of this study.

Keeping in mind that all these forms of readiness are associated with the learning needs of doctoral students and related to retention and graduation in a doctorate, the accounts of the research participants hints that overall educational system might fail to prepare individuals for aforementioned forms of readiness in any stages of a doctorate in the Turkish context. Metaphorically, the research participants are expected to create a sophisticated dish in a certain amount of time, but they lack the necessary ingredients, equipment and expertise.

It should not be forgotten that being admitted to a doctoral program for a prospective student; completing the first semester and fundamental studies for a new student; passing the qualifying stage for an old student; graduating upon completion of a thesis for a PhD candidate; and functioning as a future scientist after graduation can be considered as the core thresholds or academic needs in a doctoral journey requiring a lot of readiness (Salter et al., 2013). The findings of this study indicate that the traditional design of higher education seems to be quite away from preparing

ready-made individuals for a doctoral degree in these regards. That is one of the reasons why some of the participants of this study who can enroll in doctoral programs might fail to progress and complete their degrees.

7.1.1.4 Motivation

As the research findings highlight, doctoral students seem to have internal motivations as adults at the beginning. Knowles (1984, 12) asserts “As people mature, the motivation to learn becomes internal.” Therefore, most of the research participants start, continue and finish their PhD studies driven solely by internal motivation rather than by outside forces (Cheon et al., 2016; Miller et al., 2017; Orsini et al., 2018). Tinto’s Integration Model (1975, 1993) and Bean’s and Metzner’s Student Attrition Model (1990) also underline the importance of motivation in degree completion.

However, the level of motivation might change in each stage due to the severity of experienced challenges (Wiegerová, 2016). Based on the account of research participants, these individuals start their degrees with high internal motivations. However, their motivation seems to gradually decrease in each stage of doctorate. When they are not supported, they might lose their resilience even during the first years of a doctorate. In other words, research participants might generally show the highest internal motivation during their coursework year while the examination and thesis phases might result in lower motivation because students see it as the most challenging experience (Sverdlik & Hall, 2020), which is also the case for many participants of this study. Although doctoral students are motivated and supported by their environment (Onwuegbuzie et al., 2014; Tanaka & Watanabe, 2012) at the beginning for starting and getting the degree worldwide, ongoing

national or university-based support is significant to increase their internal motivation during all stages of this complex academic journey (Lynch et al., 2018). It is apparent that these are also missing for the students and dropouts who participated in this study.

In line with the previous discussions, the internal motivation of doctoral students to complete their studies can be highly influenced by their relationship with supervisors (Ellis, 2001; Gearity & Mertz, 2012; Ives & Rowley, 2005; Murphy et al., 2007; Solem et al., 2011; Walsh, 2010; Zhao et al., 2007); satisfaction with the program and socialization into the community (De Welde & Laursen, 2008; Herzig, 2002; Lovitts, 2001; Stubb et al., 2011). This is also applicable to the participants of this study based on their own accounts. The participants can overcome any other obstacles on their way to graduation if they are in accord with their supervisors and programs beyond question. In this way, they might feel integrated more in academic communities and desire to be part of it soon by getting the degree. Additionally, the lack of internal motivation (Gardner, 2009; Herzig, 2002; Kinman & Jones, 2003; Lovitts, 2001) might cause psychological challenges and result in attrition (Sverdlik & Hall, 2020) in any context. Therefore, initial motivation can be regarded as the most powerful drive that leads to retention and graduation in a doctorate on a global scale (Brown & Watson, 2010; Dewett et al., 2005; Hegarty, 2011; Ivankova & Stick, 2007; O'Meara et al., 2013; Onwuegbuzie et al., 2014) covering Türkiye.

The internal motives for the research participants to start and continue a doctorate might be increasing their intellectuality (Dust, 2006; Leonard et al., 2005; Wellington & Sikes, 2007); having a powerful interest in their discipline (Austin, 2002; Brailsford, 2010; De Welde & Laursen, 2008; Walford, 2006); gaining research skills and experience (De Welde & Laursen, 2008; Dust, 2006; Stubb et al.,

2012) and contributing to personal and societal change (Dust, 2006; Wellington & Sikes, 2007). Moreover, having internal motivation can enhance comprehension of learning actions since the research participants, as adults, have psychological urges and inherent demands that motivate them to act (Deci & Ryan, 2000). On the other hand, the participants in this study are often addressed without paying attention to their internal motives shaped by their andragogical drives based on the research findings. Hence, they can easily lose their interest to be scholars. When viewed from this perspective, it might be difficult for them to get the title and serve for national development. Within the scope of this study, motivation in doctoral education for the research participants seems to function in two ways: It might help the participants start learning, and learning might influence the participants' ability to maintain their desire to finish the degree. To put it another way, their learning and performance increase if the research participants are motivated before or during this learning process to meet their learning objectives (Schunk et al., 2008).

The study reveals that although the place and importance of internal motivation in doctoral learning are often overshadowed by other factors, external factors can also be critical especially for the future employment of the individuals and the title obtained from the degree (Brailsford, 2010; Dust, 2006; Fish & Fish, 2010; Leonard et al., 2005; Stubb et al., 2012; Wellington & Sikes, 2007). It can be inferred that the participants in this study who acknowledge that learning is feasible and guarantees employment become more externally driven to finish their degrees and establish new learning objectives for themselves in this sense. Hence, they might base their decisions and progressive actions about their education on external motivators, such as getting a promotion or having a new position with this title. From a different perspective, family support is seen as a key external motivator in

education even for adult students who are mature and independent compared to children (Onwuegbuzie et al., 2014; Tanaka & Watanabea, 2012). For this group of learners, being physically and mentally involved in social atmosphere of academia is also critical to progress (Gardner, 2010; Lovitts, 2001). Beyond that, engaging in cooperative activities with other learners or the faculty can also increase retention (Ferguson, 2009; Hancock, 2007). When the participants of this study are considered, such external motivators are often missing in their doctoral journeys, which is the case of dropouts in particular.

In connection with motivation, the learning styles of doctoral students can vary with age and experience in life (Brookfield, 1986). In the Turkish context, learning styles of the research participants seem to be often ignored although they are highly critical in shaping degree completion based on their accounts. These students can learn and be motivated in unique ways for various reasons and at different periods. However, in the difficult circumstances of today, participants' judgments and behaviors are also frequently influenced by external personal, institutional, and academic issues.

Participants of this study tend to develop motivated mindsets and retention strategies towards their degree completion when they receive personal, institutional and academic support. In relation to self-determination theory (Deci et al, 2001; Deci & Ryan, 1985; Ryan & Deci, 2006; Niemiec & Ryan, 2009; Vansteenkiste et al., 2010), such supports contribute to intrinsic and extrinsic motivation as well as autonomy, relatedness and competency of these individuals (Cardona, 2013), which might result in a higher level of degree completion in the long run. The study also points out that goal setting together with these motivational aspects can be

considered essential for starting, continuing and finishing a doctorate in all settings (Antony, 2002; Gardner & Barnes, 2007), including Türkiye.

In general, most of the participants started their doctoral degrees without setting actual goals. Their immediate rush to continue this next level of education sometimes comes from their desire to postpone adult life under the harsh conditions of the country. In other words, some of the participants have an inclination to stay as students because life is too complicated and expensive otherwise. Karaduman (2018) conceptualizes this behavior that might be typical to Turkish graduate learners as avoidance-oriented motivation. For example, male Turkish graduate students, especially master's students, can avoid military duty or employment by starting a degree. Hence, they delay such responsibilities (Bayar et al., 2017; Tsutsui-Kimura et al., 2017). In a similar vein, some of the participants in this study might have started their degree to avoid some responsibilities in their adult lives. Interestingly, they might not totally devote themselves to this challenging level of education and fail to finish it because of the same responsibilities. In other words, some of the participants might have an inclination to stay as students because life is too complicated and expensive otherwise. However, they cannot devote themselves also to the doctoral degree and fail to complete their degree.

Seven motivational background aspects proposed by Lovitts (2001) are closely linked to doctoral completion of students and dropouts participated in this study. Accordingly, a lot of research participants might need a feasible thesis topic; they might need a supportive and competent supervisor; they might need strength, independence and motivation to endure complexities; they might need to set personal goals and deadlines; they might need limited or no employment during a doctorate; they might need to delay employment or they might need to get external incentives

like an increased income level upon graduation. It is quite possible to have all these seven motives during a doctorate for some of the research participants. However, a new doctoral curriculum design and delivery fostering these factors should be aimed at the country so that each doctoral student can be more motivated to finish the degree. It is evident from the outcomes that a large number of research participants experience complexities related to these factors on their way to graduation.

Based on the accounts of the research participants, it is possible to highlight that the academic performance and intention to stay in education might be affected adversely based on the motivational factors (Gardner, 2009; Sheldon et al., 2004). When the learning environment cannot enhance motivation, dropouts become common (Lavigne, 2007). Furthermore, the overall atmosphere in which doctoral learning takes place should concentrate on students' abilities to increase their motivation to continue and finish (Nota et al., 2011). From the perspective of Hinkle et al. (2014), the fields of study cannot change the motives a lot considering the differences in learning experiences. This study reveals that the research participants from different disciplines seem to be equally motivated to graduate with a doctoral degree.

In general, research participants who are doctoral students or dropouts from all disciplines can be motivated to be a doctor. This is considered as one of the primary motivational elements for doctoral students in globe (Basalla & Debelius, 2007). They also want to go further in their personal lives and professional careers (Ivankova & Stick, 2007; Jablonski, 2001; Leonard et al., 2005; Scott et al., 2004; Wellington & Sikes, 2006). Nevertheless, the participants in social sciences might lose their motivation to graduate more easily compared to those in other fields. To put it on more realistic grounds, these participants seem to have more limited career

options in Türkiye, and might lose their faith in personal and professional improvement when challenged during the journey. Besides, the master's degree experiences of them might also affect the motivation towards a doctorate (Wiegerová, 2016). All these should be gathered and taken into account to ensure retention in doctoral programs.

7.1.1.5 Orientation to learning

Based on the accounts of research participants, orientation to learning is more centered on their real-life problems in doctoral education. “As people become mature, their time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly their orientation towards learning shifts from one of subject-centeredness to one of problem-centeredness.” (Knowles, 1984, 12). In addition, problem-solving is one of the most fundamental 21st century competencies expected from specialized and independent doctoral students (Rashid, 2019).

In Türkiye, doctoral education is a more theoretically-oriented degree designed to primarily raise research experts in specific fields (Bakırcı & Karaman, 2010) although it might not often go deep into this aim in practice. Graduates of this higher-level degree are supposed to have competencies in tune with the century, including solving problems skills (İnce & Korkusuz, 2006; Sayan & Aksu, 2005), but they theoretically learn them without immediately synthesizing and applying them in real-life situations as mentioned by many participants in this study. In addition, the current curriculum and instruction in universities might not offer such appropriate pedagogical grounds for future scholars who can solve social problems with critical perspectives (Giroux, 2009).

Indeed, a doctorate can be one of the most ideal educational levels examining phenomena to understand them better. It also has a huge potential to allow authentic forms of problem-solving skills based on realities. When students have a chance to be a member of such systems on their way to becoming an ‘organic intellectual’ (Gramsci, 1971, 10), development can be achieved in societies with radical actions (Micheletti, 2010). Most of the participants in this study do not regard themselves as one of the milestones of change in their nations because they seem to perceive that they are highly undervalued. Moreover, the repetitive educational content cannot make them good problem-solvers and critical thinkers based on the research findings.

Without a new doctoral curriculum design and delivery, and integrating necessary skills, students cannot face the challenges of their own lives and solve serious problems in their societies (Giroux, 2009; Bernstein, 2005). Moreover, the practical side of adult learning, including such higher-level competencies, makes it more meaningful for the learners (Reischmann, 2015). To put it another way, the participant of this study might desire to quickly apply their scientific knowledge to challenges, which can keep them motivated to finish their degrees on time. The instructors have a key role in a sense that they can foster problem-based cases for their students while appreciating their critical perspectives (Freire, 1991), which seems to be missing in the educational system as argued by the research participants.

By recognizing this local need, doctoral programs should enhance students' capacity for critical thinking and develop thoughtful scholars in Türkiye. This might be achieved by equipping them with hard and soft skills to handle global issues (Bosch, 2018; Bosch & Casadevall, 2017). Moreover, Bloom's Taxonomy (1956) can be used to as a basis for a better doctoral curriculum design and delivery (Repko

& Szostak, 2017) considering the importance of metacognitive skills (Mayer & Alexander, 2016) and the necessity to promote higher-level problem-solving skills in Turkish HE. Taking into account the academic and non-academic careers of PhD holders, the risk of not transferring research skills to their positions is apparent in this study while facing the complexities of the century (Hoyne et al., 2016). Accordingly, doctoral students should be open-minded and situate their learning into broader contexts to formulate solutions to local and global problems, which can be achieved through interdisciplinary approaches (Bosch & Casadevall, 2017). Transferable skills in programs and independent students to navigate their learning can be considered necessary for success in doctoral education based on research findings.

Interdisciplinarity helps doctoral students solve real-life problems by transferring their knowledge effectively to new contexts (Repko et al., 2017). In other words, doctoral students will not be confined to their own disciplines and can easily speak from a wide range of situations (Huber et al., 2007). However, based on the accounts of research participants in this study, doctoral programs might fail to go beyond in this sense. As stated by Johnston et al. (2011), education contributes to the critical self-concept of individuals who are aware of sociopolitical problems in the world with its transformative focus. This criticality not only involves the reconstruction of a critical self for the participants but also involves the conscious application of advanced abilities and comprehension for overall national development. With such a critical stance, doctoral students can critique and challenge the problems of everyday life and find solutions for them (Brookfield, 2005). In the long run, they can question the uneven power relations and seek justice through collective actions formed by formal or informal knowledge, critical reasoning, reflectivity and environment (Barnett, 2015). This study reveals that what Giroux

(2009) argues for the intended outputs of educational processes might also be valid for the doctoral education in Türkiye as well because it should provide such an educational setting and content enabling students to become critical thinkers, socially conscious and active citizens who can solve real-life issues while challenging existing knowledge.

On the other hand, Capper et al. (2006) specifically note that the environment aiming to increase the problem-solving skills of doctoral students for national development should be safe because students need to feel secure to challenge the existing ideas and practices by taking risks. In addition, an anti-oppressive model should be adopted in face-to-face or online doctoral environments with the aim of ensuring volunteer participatory actions among students (Aguilar, 2017; Guerra et al., 2013). In other words, doctoral students, as adults, might need an open discourse that allows them to change their traditional perspectives and develop a new stance in life (Brookfield; 2005; Mezirow, 1991). Herman (2009) also states that a more top-down doctoral environment can also shape and transform societies with the creation of knowledge, but lacks critical discourse for betterment. Based on the perceptions of the research participants, Turkish HE system seems to lag behind academic autonomy and freedom for many years, and doctoral programs might not be transformative enough as they do not seriously provide students with the necessary elements as summarized by Barnett (2015) below:

... the space to become themselves, to bring their understanding to bear on situations and, in the process, make them their understanding; to understand themselves in relation to situations requiring insight and learning including their own limitations, and to develop the capacity for critical insight in action (p. 69).

The accounts of the participants show that they might not adequately exposed to critical learning environments and such approaches as experiential learning (Kolb,

1984); integrative learning (Huber et al., 2004) and transformative learning (Taylor & Cranton, 2012) in doctoral education. Indeed, these students should have a chance to explore and learn to become leaders to solve complex problems (Perry, 2020). They might also need to relate their academic knowledge to the outside world in this century as they need to engage in civil society to contribute to the public good (Deem, 2020) during and after their doctorate. All these are crucial, yet missing, in Turkish HE, as mentioned by the research participants.

Accordingly, Turkish universities should navigate their doctoral students with an interdisciplinary perspective. Universities are responsible for providing transferable higher-order skills to students (Patterson, 2019). The ever-changing atmosphere in the world can only be kept up with radical actions, not with traditionality in doctoral education (Cardoso et al., 2021). The current doctoral curriculum design and delivery in Türkiye seem to continue with traditionality without much taking responsibility for national development. Even though such theory-based traditional systems are often criticized, alternative orientations are still not found powerful enough to prevail (Archbald, 2008) in the world. If this is the case, doctoral students should at least have multiple mentors helping them develop such a critical self and ease the complexities of the scholarly experience (Mullen et al., 2010). Furthermore, course learning and teaching materials should expose doctoral students to critical, global topics such as social justice to develop their consciousness (Capper et al., 2006; Marshall & Hernandez, 2013). Even when they exist, they appear to be mostly repetitive and might not prepare a ground for facilitating active learning in Türkiye based on the research findings.

As this section on background profile of the research participants draws to a close, it should be noted once again that many participants seem to be aware of their

background characteristics in relation to five basic andrological principles.

Nevertheless, such idealized thoughts can be suppressed in reality and masked by the decreased value attributed to certain races, genders and classes within specific contexts (Loeng, 2018; Sandlin, 2005) such as Türkiye. Additionally, the principles of adult learning might sometimes be wishful thinking for doctoral-level research participants in this collectivist and patriarchal context where their voices are often muted. For example, individuals might totally demand leaving their learning responsibility to their professors rather than being self-directed learners (Håkansson, 2007; Larsson, 2006). Still, the aforementioned assumptions of the Theory of Adult Learning define who prospective doctoral students are and how their backgrounds can influence their retention and graduation, or dropout.

7.1.2 Financial background of participants who pursue doctoral education

Students from wealthier backgrounds are more likely to enroll in higher-level educational programs in Türkiye (Caner & Okten, 2012), which might not very relevant for the findings of this study. Most of the participants of this study come from middle-income families. They also see themselves having middle-income if they are employed. In other words, they do not see their family backgrounds and current situations prosperous. The participants of the study from relatively poorer backgrounds might be financially dependent as they work full time and might not receive much financial support.

The more these participants feel marginalized in financial terms, the more they have difficulty retaining their doctoral studies. This implies that educational system itself might reproduce already existing segmentation in the country (Altinyelken et al., 2015). Participants from relatively poorer backgrounds see higher

education as a golden gate opening to a more prosperous life. Nonetheless, the reality is not that simple. As highlighted by Perkins and Mael (2022), students face academic and social expenses throughout their education unequally, which causes physical, social and mental disconnections from the degree. This is quite relevant for the target participants.

None of the study participants have any relatives who completed a doctoral degree. This means that they are first-generation doctoral students who are the first in their families to pursue a doctoral degree (Hutson et al., 2022). This is one of the reasons why they feel alone and helpless in their close circles. In addition to this, they are unable to make their own way into a doctorate autonomously in financial terms. Under this situation, some students might have a tendency to attribute their degree to an authority outside of the family (Croissant, 2001). What is more interesting is that higher-income level students can obtain scholarships or grants easily even when they do not need them (Marcus, 2015). In the same vein, life standards and networks rich in opportunities might open those individuals similar gains.

Indeed, some universities get into agreements with the business sector to provide funding for research or to construct facilities like residence halls, cafés, or bookshops on campuses. In line with this marketing strategy, the research participants especially those from poorer financial background, end up being clients of powerful sponsors. In the globe, many students find ways to start and continue to their doctorate, they might not be totally self-directed or free in their decisions (Giroux, 2009). Even if they continue and finish their studies, the quality of their academic work might be lower because they participate in a doctorate without contributing much to common good under these neoliberal conditions (Aronowitz,

1998). It would be problematic to expect authentic and critical scientific products from the participants of this study who experience the similar dilemma. Without a doubt, they might be incentivized to choose financial support over quality and autonomy in research.

As discussed in this section, the research participants in this study with their similar and diverging demographic and financial background together with their ‘experience’, ‘self-concept’, ‘readiness to learn’, ‘motivation’ and ‘orientation to learning’ (Knowles, 1984, p. 12) often receive their master’s degrees with success. Then, they decide to pursue a doctoral degree for academic or non-academic purposes. In a nutshell, individuals might aim to be academics upon their doctoral graduations or they might follow a career path outside of academia. The following section presents the goals of these participants who pursue doctoral education.

7.2 Goals of participants who pursue doctoral education

The existing conceptual models and theories given in this study do not relate the initial academic or non-academic interests of individuals specifically to their future successes or failures, especially in the context of doctoral education. However, the goal commitment suggested by Tinto’s Student Integration Theory (1975) and Tinto’s Revised Student Integration Theory (1993) for the whole higher education system can be reinterpreted accordingly. For this study, the terminology used in these models and theories as commitment can be conceptualized as over or lower commitment. In general, the research participants can start their doctoral degrees with over goal commitments. Notwithstanding their initial over commitments, they might end up having lower commitments to academia when their dreams turn into realities on their way to graduation. The participants of this study can be mainly

categorized into two groups: those seeking academic career paths and those seeking non-academic career paths (Elkana, 2006) based on their initial goal commitments.

7.2.1 Participants seeking academic career paths

The majority of research participants who finished their master's degrees with success tend to continue for a doctoral degree in order to go further in their academic careers. This is quite expected as doctoral education is essentially considered a structured path towards developing scholars, and it has a significant impact on shaping the mindset of future academics at micro and macro levels (Austin & Sorcinelli, 2013; Austin & Wulff, 2004; Boden et al., 2011; Murray & Ozanne, 1997). In this sense, the participants pursuing doctoral education in Türkiye with academic purposes might have the potential to contribute much to their nations in the global arena where interdisciplinary research capacity competes in today's world (Firat, 2001).

As highlighted by Marginson (2010), countries see their research capabilities as the basis of national and global sustainment in the age of knowledge societies. This seems to be definitely the case for Türkiye that overvalue access to doctoral education and any kinds of lifelong learning opportunities for its citizens as perceived by doctoral students and dropouts participated in this study. Indeed, the country critically tries to protect its shaky global place and even aims to move up ladders as a developing country through increasing the quotas and numbers of doctoral programs. In line with this trend, the requirements of these programs are also changing in the country (Bakırcı & Karaman, 2010). Indeed, this is not a specific case of Türkiye. As knowledge re/production and re/circulation become one of the top concerns for emerging economies, both the number and function of

doctoral programs within an entire system are increasing (Mitra et al., 2011). In such developing contexts, doctoral education can be at the core of both personal and national investment not only for raising academics, but also for raising the status of the nation (Altbach, 2013; UNESCO, 2008; United Nations, 2000). By doing so, Türkiye might give way to neoliberal policies promoting the idea of having more human capital for the betterment. What is even more critical is that governments which give priority to their doctoral education maintain this unfair, global competition (Olssen & Peters, 2007).

Under these circumstances, the research participants who start a doctoral degree with more humanistic and academic purposes might encounter with a system that is under the harsh effect of neo-liberalization and marketization in the country. Not only in Türkiye but also in many other countries doctoral systems do not primarily aim to raise academics any more. It should be noted that orientations towards capitalism and marketization might weaken social, economic, and educational equality (Brown, 2009) especially in developing countries – including Türkiye – facing more instability (Altbach, 2004; Knight, 2008) as can be inferred from the research findings of this study.

Based on the accounts of the research participants, individuals who start their doctoral studies to become academics can be challenged by such realities upon their enrollments. Moreover, doctoral programs might fail to raise academics having an expertise on specific areas of research. Beyond this, they cannot raise academics as responsible citizens who can contribute developments in their society. This clashes with the idea of transformative consumer research trend that claims that academia should improve the welfare on an individual and societal levels by prioritizing

positive implications and usefulness in research (Mick, 2004) as argued by many participants in this study.

The fear and insecurity of taking risks and engaging in social criticism among public intellectuals are common in today's world (Giroux, 2009). This is even doubled in Türkiye, which might oppress academia and academics to take on responsibility for any radical action as emphasized by the participants in this study. Furthermore, research and development expected from researchers and academia is far more reduced to marketized ideas instead of humanistic actions in the country. In this way, society as a whole is often neglected (Angus, 2007). Therefore, not only finding academic positions upon graduation but also preserving humanistic sides as future activists might become challenging for participants who start their doctorates with over commitment to their initial career goals to become academics in Türkiye.

The participants who start their doctoral degrees with academic purposes might sometimes end up being profit-seekers rather than skeptics in the country. They are somehow negatively influenced from the returns of this era when the lines separating the public and commercial sectors are becoming increasingly hazy, which deteriorates universal morals (Bok, 2003). As mentioned before, doctoral programs have instrumental missions to raise researchers (Walker et al., 2012). For this aim, they involve their students in scholarly work and communities. Therefore, participants who seek academic career opportunities can engage in intellectual processes in Türkiye. This intense learning opportunity and environment can inevitably enrich their personality (Walker et al., 2012). In the country, having a doctoral degree or PhD title is a prerequisite for academic positions. Even though academia has deteriorated in recent years and the perceptions of people towards this career choice have changed in negative ways, it is still among one of the most

prestigious job alternatives for many in a way that it also extends overall personal and intellectual growth as can be understood from the perceptions of the participants.

Based on the research findings, holding a doctoral degree can also provide an increased payment and position for those who work in university settings as research assistants or instructors, which might bring increased welfare standards for them. In other words, getting a doctoral degree has a big potential to open the door for an academic position or guarantees the job security of those who are already in the higher education system. In addition, being a part of academia might present these students with more involvement and networking opportunities.

The study reveals that the degree of socialization of PhD students – including Turkish ones in this study – occurs differently (Golde, 1998), and novice students try to become the full members of the environment as future academics (Austin, 2002). During this immersion process, research participants are exposed to the media and role models, formal and informal instructions, scientific activities and productions (Weidman et al., 2001). The quality and quantity of socialization of the research participants can shape their future identities. This means that if they are given effective and deeper engagement opportunities in academia, they will maintain their initial desire to become an academic in future. Otherwise, their passion towards an academic career choice might be lured away. Apart from providing socialization into information, universities should also consider immerse their students as citizens of the world into necessary norms and values (Giroux, 2009) as argued by many doctoral students and dropouts who participated in this study. In other words, doctoral education should go far beyond preparing students for academic positions, but it should enlighten them and create initiatives that benefit society as a whole by freeing the minds of human agency (Freire, 1994; Giroux, 2010). Doctoral education

seems to overvalue theoretical information as it must be. Undervaluing the aforementioned fundamental concerns should instead be an unintentional and spontaneous aspect of doctoral students' development, as they ultimately lead to the disappointment of participants with academic expectations.

7.2.2 Participants seeking non-academic career paths

The majority of research participants who finished their master's degrees with a success tend to continue for a doctoral degree without concerning about a future career in academia. They want to enhance their personal growth and get increased salary or positions in their sectors. This is especially applicable to the private sector. The participants in this study seeking non-academic career paths think that a doctoral program both comprises more than merely coursework leading to a diploma, and it refines research skills, fostering professional development, learning how to learn, and incorporating philosophical and ethical questions (İnce & Korkusuz, 2006). If this is the case, doctoral education can raise the likelihood that these prospective graduates would be more effective in the workforce, and as a result, it is seen as a way for them to better serve in economic terms (Rossigliosi et al., 2014; Sharp, 2002).

Globally, universities aim to grow graduate workforce with such skills that make them visible in their business (Moreau & Leathwood, 2007) and bring more financial benefits (Guterman, 2003). That is the reason why social sciences are often perceived as useless since they do not, in this sense, instantly convert into jobs or profit (Giroux, 2009). This is also the case in Türkiye. The participants who have non-academic purposes upon graduation are mostly from other institutes in doctoral education. On the contrary, many of the participants who are in social sciences institutes have more academic career choices in their minds.

The findings of this study reveal that individuals can extend their academic and non-academic networks through their doctoral studies via socialization in doctoral education (Gardner, 2008). In addition, they might become more prestigious among their colleagues and they can even find ways to socialize into their future workplaces during their education by picking up the knowledge, skills, and behaviors required to make a constructive contribution to any community (Weidman et al., 2001). For the students and dropouts who participated in this study, the level of socialization can be different in different programs or universities based on the provided facilities. Moreover, their introvert or extravert personality can shape their socialization during and after the degree.

Following the account of the participants, an academic title can also equip individuals with a raise in salary and status, which brings increased welfare standards for them. Indeed, getting a doctoral degree can open a way for betterment in success and wealth for them. In close line with Bourdieu's (1986) classification of capital, the title contributes more to the participants' social, cultural, and economic capitals. These intellectuals become more responsible for the social, cultural, and economic development of their nations. For instance, a doctoral degree might help people advance in their career; this can result in a pay increase, which can be an example of rising economic accumulation in the country.

Based on the perceptions of the participants in this study, public and private sectors have recently overvalued partnerships between university-industry-government, which suggests that knowledge is needed for national and international development. In line with this, both sectors prioritize employees who hold a doctoral degree because they need such qualified labor force to actualize their objectives more efficiently (Alhas, 2006). Interestingly, the study showed that these sectors might

expect their prospective employees to have finished their doctoral education before their job application. They do not facilitate necessary conditions for their current employees to start and continue a doctoral degree.

However, investing more in research and development services, valuing doctoral degree holders for their expertise and seeing them as human capital might contribute negatively to the humanistic aims of higher education. Those participants who start their doctoral education with non-academic goals does not necessarily mean high quality in the future labor force of the country. As the access to doctoral education together with motivation increase, credential inflation also increases. Hence, doctoral degree holders in any sector appear to become the part of knowledge production and circulation in the country, which sometimes occurs unconsciously. Under this circumstances, the social change might be far from the ideal, and it might be more of a cog in the capitalist machine as can be drawn from the findings.

It can also be inferred from the research findings that expecting from individuals who have doctoral titles to ‘help us find our way to a more human future’ as suggested by Chomsky (2000, p. 34) can be a dream. When the current doctoral curriculum design and delivery is considered, it might be a wishful thinking to desire betterment in national welfare because it lags behind raising reflective intellectuals up to the mark. This moves people away from potential to further the growth of equality, freedom, and reason (Freire, 1994; Giroux, 2010).

7.2.3 Disappointment leading to change of goals and emotions

The study implies that the participants’ positive emotions and feelings towards doing a doctorate and getting the title might change over time since they face negative realities on their way to graduation. This means that the participants who start their

doctoral education to pursue an academic career path might be disappointed and change their career choices towards non-academic sectors or vice versa.

As underlined by Habibi (2017) and Esen (2020), the number of students with doctoral degrees is rising in Türkiye; however, the future for this qualified labor force is not brilliant in academic and non-academic environments due to the socioeconomic atmosphere in the country. Almost all participants who start their doctoral education to follow academic or non-academic career paths feel disappointed especially in recent years with increasing youth unemployment (Aksu et al., 2011) and degenerated meritocracy in the country (Koksal, 2018).

Even though the participants of this study need scholarly activities and are ready for them, they might value entry-level public service jobs concerning long-standing youth unemployment in the country (Aksu et al., 2011). What is even worse is that the already degenerated meritocracy in the country continues to suffer (Koksal, 2018). Accordingly, a doctorate cannot bring many personal or professional benefits in reality as mentioned by many participants in this study. Therefore, the participants in this specific Turkish context can easily give up and leave their programs especially when they realize that they are not endowed with transferrable skills either to their social or professional lives (Mantai & Marrone, 2022). Nonetheless, it should not be forgotten that educational systems can differ based on national legislations (Altbach, 2013) in their selection, evaluation, and instruction missions (Clifton, 2009), which might affect academic and non-academic skills presented to the students.

7.3 Similar challenges with different outcomes in doctoral education

The study indicates that the participants of this study experience similar challenges during their doctoral education. Nevertheless, the number and quality of their support systems can be different from one another. Based on the accounts of Turkish doctoral students and dropouts who participated in this study, the influences of these similar challenges can be different from person to person, which might result either in retention and graduation, or dropout.

7.3.1 Work-life balance

According to the findings of this study, the social context makes doctoral students ‘in-between’ (Mimirinis & Ahlberg, 2021) state of mind and lifestyle because they work and study concurrently. In general, the research participants who pursue a doctoral degree cannot have a chance to find an academic ground to work. To clarify, research participants seem to devote a large portion of their time outside of academic communities, particularly in the workplaces with their co-workers. This means that their workplace experiences might often be irrelevant for their doctorates.

Similarly, the knowledge and skills gathered via a doctoral degree might be meaningless for their works. When this is the case, ‘the doctoral trajectory can be a solitary activity accompanied by uncertainty and a temporary sense of displacement’ (Alexander et al., 2014, p. 172). The same inference can be made for the dropouts participated in this study. In addition, doctoral programs might sometimes fail to value work and life experiences of the participants for a more permanent and an advanced learning.

As noted by Bayne et al. (2014), distance learning models of HE institutions also hinder students from being part of a physical campus and aggravate their

detachment problem from their education. During and after the COVID-19 pandemic, many of the participants have experienced such detachment from their physical learning environments and recognized the vital role of face-to-face learning interactions (Carvalho & Freeman, 2022). At the same time, the place of online learning and the use of technology have reconceived as extra valuable for them since they facilitate creative and higher-level learning opportunities in a doctorate (Bayne et al., 2020). This means that online learning can help the participants in this study gain new information while making use of the existing ones. On the other hand, the symbolic value of physical settings and opportunities including peer learning cannot be ignored as they contribute more effectively to the scientific progress and identity development of doctoral students (Bayne et al., 2020; Barnacle & Mewburn, 2010; Meschitti, 2019).

What is interesting is that the research participants were able to retain their doctoral studies more easily and creatively during the lockdown restrictions of the COVID-19 pandemic because they could balance their work and study. However, they felt lonely and disconnected. At this point, it can be inferred from the perceptions of the participants that the total transition of doctoral education to virtual environments can definitely be a challenging idea as it would cause irreversible displacement (Gourlay, 2021; Gourlay & Oliver, 2018; Fawns, 2019). Still, partial and gradual integration of online learning opportunities can increase student retention and graduation in doctoral programs as it allows the co-presence of these individuals in multiple settings (Carvalho & Freeman, 2022), which seems to be quite relevant for Turkish HE. It seems that the research participants can manage their time effectively and balance their work-life tasks without stressing about traveling, budgeting and being extra tired through online doctoral courses or

practices. A new doctoral curriculum design combining online and face-to-face tools is necessary to open a way for individualized but collaborative practices in this sense (Lam et al., 2019). This can alleviate and embellish the arduous doctoral journeys of doctoral students in the long run.

The outcomes of the study also show that formal or informal workplace learning is one of the most primary sources of gaining experience (Tynjälä, 2008). Research participants mostly mention their work experiences negatively and irrelevant to their learning journeys. Indeed, informal socialization/tacit, incidental and self-directed learning happen in their workplaces, and they sometimes are not aware of it (Schugurensky, 2000). In addition, workplace learning contributes positively and spontaneously to any other learning experiences of the participants in their daily and academic lives even if they do not realize it (Hann & Caputo, 2012).

Based on the findings, work-related responsibilities and positions of doctoral students might sometimes not align with their studies. As a result, the participants of this study find continuing their education more challenging while struggling to balance their academic studies with their personal and professional lives. The fact that some of the participants have the opportunity to work in academic settings should be emphasized at this point. Compared to the participants who work outside of academia, they find it easier to connect their professional experiences with their doctorates because they are endowed with more academic knowledge and skills in their workplaces (Ünlühisarcıklı, 2018). Nevertheless, the number of the research participants working in university settings appears to be limited and they might occasionally have unfavorable or non-academic professional experiences. Accordingly, a new doctoral curriculum design and delivery seems to be required to help these participants develop a reflective comprehension process of their previous

experiences and knowledge, especially by putting their workplace learnings into the center (Armsby, 2013). By doing so, Recognition of Prior Learning (RPL) can also be integrated better into Turkish doctoral education context, and all doctoral students can be taught how to connect their previous learning experiences to their ongoing doctoral studies. In other words, RPL can open a way for increasing retention and completion (McAlpine et al., 2020). To be more specific, an obligatory prior learning portfolio can be organized for each student to prepare personal and professional grounds for increased retention and learning (Conrad, 2008).

Within the context of this study, all the given models and theories are missing to define the essentiality and place of prior learning portfolio of doctoral students. Tinto's Revised Student Integration Theory (1993) named some personal and academic skills of HE students as pre-entry attributes. On the other hand, Bean and Eaton's Psychological Theory (2000) see them as entry characteristics. When it comes to Rovai's Composite Persistence Model (2003) put such student characteristics under the prior to admission phase. Nonetheless, these models or theories do not relate highlighted prior learning elements directly to doctoral students. In addition, they do not specify how to recognize them by institutions before or during admission. With the country's living conditions getting worse and life becoming tougher, Turkish doctoral students and dropouts who participated in this study might be more concerned with issues much beyond learning. For financial reasons, a large number of the participants have to work in non-academic positions. They need an income not just to get by, but also to pay for their educational expenses. Self-funded studies; however, result in lower motivation and performance as opposed to those funded by grants for them (Horta et al., 2018). As further discussed in section 7.4, the research participants are forced to produce and publish

more before completing their studies especially under the harsh knowledge-driven atmosphere in the world (Arora & Gambardella, 2010; Jackson, 2013; Pinheiro et al., 2014). In this situation, fund-based productions and publications contribute to academic collaborations positively (Defazio et al., 2009; Ubfa & Maffioli, 2011).

Nevertheless, many participants in this study perceive that they might fall behind this global doctoral collaboration and competition levels due to highly limited or temporary support for their research in the country. This might have a negative influence on their drive to finish and stay engaged. On the contrary, European or American students are offered multiple-year, appropriate levels of research fundings (Marsh & Klima, 2022). Expectably, they proceed and finish their doctorates with more success (Wright & Cochrane, 2000). The study shows that dropping out of a program might be more common at the beginning of the course or thesis period in a doctorate especially when students do not have any funding or scholarships (Wollast et al. (2018).

In addition, a few participants can become more visible thanks to their increasing and qualified publications that are supported by on-target funds. (Inanc & Tuncer, 2011; Lee & Bozeman, 2005). Consequently, this provides them with a variety of prospective job options (Bloch et al., 2014; Pinheiro et al., 2014). Many participants seem to lack even basic funds and scholarships resulting in many advantages. Furthermore, certain fields can have a higher chance of receiving prominent financing in graduate schools (Groenvynck et al., 2013) and the participants in those fields tend to complete their studies more easily. This might contribute to the reproductions of inequalities by prioritizing some disciplines in academic realm.

On the other hand, some doctoral students – as might as well be argued for Turkish students – who are eligible for public funds or private grants face challenging situations such as ongoing deadlines and anxiety while working on a particular project (Araújo, 2008). As they constantly pursue new funding or grants on specific subjects, they risk losing their focus and motivation to continue their doctoral education (Horta et al., 2018). Moreover, the system gives priority to temporary grants or funds for doctoral students rather than positions with permanent employment (Araújo, 2008; Horta et al., 2018). This seems to be a common case in developing countries such as Türkiye as argued by the participants of this study. It is critical to provide more and better funding possibilities as well as jobs for Turkish doctoral students. It appears that Turkish participants need more financial support including continues and non-refundable stipends. The overall quality will rise along with retention and graduation rates in this way. This study interestingly indicates that ÖYP, which was designed and put into action in Türkiye to provide academic positions for doctoral students and permanent academic jobs for doctoral graduates, seems to have failed in utility and expected returns. The research participants benefiting from this academic training program regarded it as a disappointment because they were mostly challenged by bad behaviors and workload rising from strict hierarchy in their workplaces that are public universities.

When all these factors are considered, the majority of research participants might have difficulty balancing their family and work life alongside with their academic studies, and they see this as the real obstacle for their retention and graduation. It is crucial that these individuals do not have to bear any extra burden during their studies. Instead, they should be able to acquire worthwhile knowledge

through experiential practices embedded in a doctorate while bridging them to their careers and personal lives (Byrne-Jiménez & Orr, 2007).

7.3.2 Gender-specific challenges

As mentioned before in section 7.1.1, gender is viewed by the models and theories presented in this study as an entry-level element that shapes retention and graduation, or dropout. However, it fits into the framework for this Turkish case especially during the educational processes in doctoral education. Both females and males have almost equal access to doctoral education in the country based on the national statistics (TÜİK, 2023). Taking this into account, the number of participants from both genders was purposefully balanced in this study.

This study shows that even though students regardless of their gender have almost equal access to doctoral education in Türkiye at the beginning, men and women mention different experiences on their way to graduation or dropout. Female participants perceive even a minor challenge in a doctorate more intensely than males because of the existing household roles passed on to them. When the national statistics (TÜİK, 2021) on gender taken into account, females seem to fall behind males in Türkiye in terms of literacy, education and employment. Even those women who can finish higher education programs have an employment rate of 67,6 percent compared to that of men which is 84,6 percent. It should be noted that this HE statistics tend to cover educational levels from undergraduate to doctorate. In addition, national statistics for doctoral students and dropouts might not be transparent in the country. Nonetheless, percentages regarding academic workforce based on gender is provided by TÜİK. Accordingly, the number of female professors and other faculty members is rising in each year. Still, gender equality in terms of

academic employment, especially for higher positions, appears to be far beyond in Türkiye. For instance, only 33,2 percent of professors are women in the country.

As highlighted by Ampaw and Jaeger (2011), the degree completion rates of female students in particular might also be significantly impacted by their marital status. In line with this, female participants in this study seem to be more challenged to complete their doctoral studies as they perceive male-dominance in and out of academia, especially when they are married with children. In addition, female participants in this study also underline that they lack the necessary support as mothers. It is apparent that they need more days off and services that facilitates childcare during their doctoral education.

According to Crockett et al. (2018), the perceived privilege of males in the literature can cause researchers to ignore the specific needs of male doctoral students, particularly in female-dominated fields, which can hinder the success of these students (Michel et al., 2015). In line with this, male participants in this study also list gender-specific challenges. Aumann et al. (2011) underline that male students are under an obligation to care for their families financially and to take on greater responsibilities as husbands or fathers, which seems to be the case in Türkiye even for single males based on the research findings. Male students are more concerned about financial issues and they feel anxious or guilty about studying instead of earning money in specific cultures (Suarez et al., 2020) such as Türkiye. Compared to female participants, they are more stressed about completing their doctoral degrees on time to start a life while facing many complexities (Cao, 2001). These are also the experiences of many male students and dropouts participated in this study.

Misra and Castillo (2004) suggest that stress can be perceived differently in each culture. Culture does not refer to overall country, but the climate of any

community towards genders. Parallel to this, women in male-dominated doctoral programs are found to experience a poorer sense of their own academic worth, less sensitivity to family difficulties from their departments and a lower level of career commitment (Ülkü-Steiner et al., 2000), which appears to be the case for many female participants of this study in their academic cultures. To eliminate such problems at the beginning, doctoral programs can admit students from both gender equally.

Meira et al. (2023) states that the stress level of female graduate students is higher, and their quality of life is lower as opposed to male students based on a study in dental programs. This is applicable to female participants in this study regardless of their fields. However, the number of children, the amount of daily sleep, concurrent work and study tasks, leisure time, physical activities and the existence of support have a great potential to change the psychological and physical well-beings of doctoral students towards these issues from the same perspective.

Gürsel-Bilgin and Bengü (2021) have found out that an individual's well-being is influenced by various factors, including their financial condition, job satisfaction, social networks, and physical, mental, emotional, and social health. These factors collectively shape an individual's overall level of happiness and contentment in life. Therefore, they might also be critical in shaping educational decisions. Male participants in this study seem to be more concerned about financial and job-related issues whereas female participants seem to be more emotionally dissatisfied with their well-beings. Despite the changes in elements causing stress among genders, overall level of happiness and contentment in life can be considered as common challenges in Türkiye.

Baker (2010) emphasizes that the gender disparity in academia is influenced by family customs and behaviors. In light of this, a lot of research participants, especially married women with children, argue that they are missing out on life since they have to work, take care of their families and study at the same time. In an ideal society, this would have been an equal burden on the male participants. However, the findings show that female participants are disproportionately feel like their marriages interfere with their studies. It can be also inferred from their experiences that female participants have the pressure of the societal roles that are imposed on them especially within such patriarchal societies as Türkiye. That is why, some participants deliberately remain unmarried throughout their doctoral studies since they avoid taking on additional responsibilities. It is noted by Carter et al. (2013) that the cultural norms surrounding women's passivity and submission to male authority can lead to conflicts between the social interactions and academic achievements of women. Expectedly, women pursuing advanced degrees are supposed to be more analytic and pragmatic in their actions. Therefore, female students and dropouts who participated in this study can be more critical and activist to change already existing gender norms. However, such traits are often linked to being 'unwomaned' in some cultures where males are seen as superior (Onayemi, 2020)., That is the reason why some females might deliberately stay single in such contexts.

Although a more egalitarian way of living has been achieved in recent generations and this allowed men to contribute more to tasks such as childcare and cooking (Aumann et al., 2011; Livingston & Parker, 2019), it is still essential that traditional gender roles should be broken away at least for academic couples through shared household responsibilities (Cole et al., 2019). If this is not achieved, female students in traditional societies will continue to suffer. An unfortunate case comes

from a doctoral female participant who talked about her family and academic overcommitments that are invisible even for her husband who is an academic.

Keeping all the challenges of the doctoral journey in mind, spouses should not have fixed roles at home, and they should do what they can personally and professionally do (Labosier & Labosier, 2011). For this aim, the findings of this study imply that Turkish couples need to maintain open-dialogue to share the burden of life. The analysis by Khan (2019) in Pakistan stresses that changes must also be made to the education system. This might also be a necessity for Türkiye based on the perceived gender roles among the participants. Universities should empower married female doctoral students via inclusive policies and processes so that they can ensure that female students are treated equally to men culturally and contextually. This can help students complete their studies effectively when multitasking. Otherwise, females might feel even more hopeless and despondent about completing their degrees. In addition, childcare services and additional support services should be provided for female students by their universities as mentioned before. For similar purposes, their family members should be given supportive seminars to raise their awareness and help.

On the contrary, Suarez et al. (2020) emphasize that marriage can help students receive multiple support mechanisms including emotional and financial ones even though they still need to balance academic and family roles (Sverdlik et al. (2018). Based on the accounts of the participants, relationships play a mutual role in student retention and graduation (Perpiczka & Balkin, 2010). In general, having an emotional partner supporting students increases retention and the likelihood of degree completion for the research participants. However, there are some males ignoring academic lives of their partners and expecting full time household roles

from them, which accelerates dropouts among female participants. Although Hoskins and Goldberg (2005) highlight that support for providing open communication mechanisms for doctoral students, especially single ones, is critical to retaining them, married participants need such support in particular based on the findings of this study. In addition, all doctoral students should benefit from peer support mechanisms integrated into their programs (Pederson & Daniels, 2001), regardless of their genders and marital statuses. As for the findings of this study, participants are in need of more community support, especially from their peers in different programs. Universities should take this into account and develop community support mechanisms or communal activities for their doctoral students.

7.3.3 Curriculum in doctoral education

The participants of this study argue that educational system does not allow independence and autonomy with long-established traditional approaches. This is also an ongoing debate in the world (Elgar & Klein, 2004). In this regard, the content, structure and processes in current doctoral programs are often criticized by the research participants. It is apparent that the existing design is not functional for raising future scholars (Van de Ven et al., 2015). This is applicable to the Turkish case. Universities are aware of the necessity of reforming their doctoral curriculums to assist their students and increase retention (McCormack, 2004). They somehow achieve this ideal, at least for graduate programs, through their passionate professors even when the system does not allow them to do so directly. To put it in another way, research participants underline that some professors challenge the traditional curriculums and approaches. One male participant, for instance, described one of his professors as his role model as he had the ability to question the status quo. The

professor seemed to inspire his PhD student to continue and contribute to change in this way. Such academics dare to practice their own liberated way in their classroom, which is often appreciated by the participants who are aware of the difficulty of macro level bureaucratic changes in the country. At this point, a hidden curriculum can also be used to improve graduate competencies (Koutsouris et al., 202; Rossouw & Frick, 2023). Nonetheless, even this is the case, universities still continue to lose their prospective doctoral graduates because they ignore the key role of a self-directed learning approach in their curriculum (Cox, 2015; Pyhalto et al., 2009).

The research participants who enroll in universities emphasize that they pass through a multiple-choice examination and a teacher-centered system. Although there are exceptions, even undergraduate and master's levels of curriculum delivered in many universities are also away from learner-centeredness as argued by the participants of this study. In this atmosphere, the participants in this study perceive that they continue to be exposed to the same traditional system for quite a long time. They have the necessary accumulated knowledge and ability provided with the existing curriculum to pass compulsory exams, which might contradict with the concept of 'organic intellectual' of Gramsci (1971, p. 10). By doing so, the present doctoral curriculum might not contribute much for its primary and secondary missions that are repeatedly rearticulated throughout this dissertation.

It should be noted that graduate education seems to be a new experience even for very successful participants in this study coming from such a traditional system and curriculum. When the participants of this study need to develop an independent and autonomous self-concept all of a sudden during a doctorate, they are highly challenged. In addition, this might be one of the reasons why doctoral education and its scientific products cannot go much beyond the high school level in the country as

emphasized by some participants of the study. A self-directed learning approach integrated thoroughly into programs can allow these adult students to become more autonomous and help them facilitate their own learning journeys (Cox, 2015; Knowles, 1984).

As repeatedly emphasized by many participants from different stages of their doctoral studies, doctoral curriculum design and delivery are not flexible, but extremely traditional and memory-based especially during the course period. What is even worse is that this period might not necessarily prepare research participants for any further flexibility in the qualifying or thesis stages or in employment. Based on the accounts of these participants, the number of elective courses is limited in doctoral programs, and they are delivered by the same instructors. To improve the existing doctoral curriculum design and delivery, interdisciplinary approach with many elective courses should be integrated into doctoral education.

It can be inferred from the findings of this study that learning how and when to take control of their learning is also important (Porter et al., 2020) not only for future scholars, but also for lifelong learners and active citizens who graduated from a doctoral degree. Nevertheless, encouraging doctoral students to be autonomous does not mean giving them total control over every aspect of their research (Lofstrom & Pyhälto, 2020). Supportive and encouraging conditions, guidance and education, necessary opportunities and resources together with a new flexible curriculum design can stimulate such self-directed learning and environments (Pata, 2009) even for the research participants who are challenged by the traditional system.

The findings of this study also underline that doctoral students, even within the same program, might have different learning styles, academic interests and skills. The participants in this study argue that they are exposed to the same curriculum that

results in gaining standardized credentials for students (Semper & Blasco, 2018; Zajda & Rust, 2016). A flexible curriculum in doctoral education that aims for specific objectives for national development seems to be beyond necessity for such countries as Türkiye where the explicit and hidden curriculum are used together (Collini, 2012). This also allows the faculty to be adaptable and creative in their instruction by integrating new technologies.

As mentioned in section 7.1.2, ‘experience’, ‘self-concept’, ‘readiness to learn’, ‘motivation’ and ‘orientation to learning’ of these adult learners proposed by Knowles (1984, p. 12) need to be considered when developing a new design in doctoral education. Furthermore, taking the discussions about the given models and theories in section 7.1.1 for these aspects into account is also necessary.

7.3.4 Quality of programs and universities

Each research participant seems to experience doctoral education itself and the complexities on their way to graduation differently based on their unique characteristics and lifestyles. The qualities of their programs and universities also shape this. As perceived by the participants in this study, a doctorate is an extremely long and insurmountable journey. Individuals regardless of their personal and professional capabilities can find it challenging (Olang’o et al., 2022). The given models and theories in this study are not directly about doctoral education in Türkiye. Hence, they do not include elements to be interpreted for improving quality in the Turkish HE. Nevertheless, keeping their relations to other sub-headings given in other sections of this chapter into mind can definitely be meaningful.

As the highest academic degree, doctoral education is an intensely life-changing experience by its nature even for the participants in this study with life-

hacking skills because students often need to think and behave differently to see new directions in troublesome situations (Sherlock, 2015). Accordingly, programs, universities and also supervisors should be endowed with multiple personal and professional skills (Protivnak & Foss, 2009) to navigate them. Thus, the inherent complexity of doctoral education can be overcome. It can be drawn from this study that the participants are aware that the investments to increase the number of doctoral programs and universities might guarantee an increase in such human power.

Based also on the accounts of the participants in this study, students consistently undergo transitions in their academic journeys in which they are creating new scholarly identities and responsibilities (Cast, 2003; Leshem, 2017). The complexities start even before starting this long journey for some prospective students (Clarke et al., 2013). At the anticipatory stage, students gather information about doctoral programs and universities so that they try to enroll in programs in line with their personal needs and social roles (Lamar et al, 2019). In addition, they begin to conceptualize the culture of target institutions. According to the perceptions of the research participants, they might be either not critical enough to make sense of this stage, or they might be manipulated by the advertising or promotions of the programs and universities. Therefore, this stage should be planned and practiced in a disciplined way by all parties at first glance.

During their course, qualifying and thesis stages, students develop scientific knowledge and identities in a formal way with many responsibilities guided mostly by their programs and faculty members (Gardner, 2008). Some informal stages such as peer learning or cohort activities can also occur during these formal steps (Weidman et al., 2001). From the viewpoint of research participants, universities might mostly fail in formal and informal actions. This, in turn, might cause a sharp

and constant decrease in quality. The expectations and practices of the faculty, the coursework and the overall program can also shape the identity of future researchers as essential elements of quality (Jorgensen & Duncan, 2015). In fact, all these are revealed to be related to the socialization of research participants in terms of knowledge acquisition, investment, and involvement (Weidman et al., 2001). Motivating doctoral students to stay in their programs, engage in scholarly activities and graduate on time largely depends on their socialization level to higher education (Gardner & Barnes, 2007). Therefore, formal and informal ways of socialization process and their success in institutions should be highlighted to increase completion (Johnson et al., 2017). For these aims, many programs and universities might not go beyond sending emails or organizing a few events as criticized by some of the participants.

During the last few decades, there has been a profound shift in doctoral education as a result of overall massification and globalization in the world (Cardoso et al., 2022), which is also the case in Türkiye. This situation was not navigated properly and inevitably gave rise to an increase in enrolment numbers in HE (Carvalho & Cardoso, 2020), but a decrease in educational quality in the long run. In addition, a large number of participants in this study with diversified profiles start to expect better standards and higher positions from their future employment with their degrees (Bernstein et al., 2014; Nerad & Trzyna, 2008). Indeed, the doctoral degree and the title gained a new value for all positions in the labor market (McAlpine, 2020). Additionally, this higher level of education became the reflection of the social, political, and economic context of a particular age and society.

In the current local and global context, doctorate education has started to be seen and used by nations as a powerful tool to enhance their research, knowledge,

and innovation so that they obtain a competitive advantage over other knowledge societies and economies (Bao et al., 2018; Bernstein et al., 2014; Nerad, 2020) as discussed also in section 7.2.2. Consequently, countries focus on implementing neoliberal HE policies and practices to transform the traditional way of doctoral curriculum design and delivery into a new model with current ideals (Balaban, 2020). Nonetheless, neoliberal mindsets might become widespread hindering quality assurance as implied by a few participants in this study.

Thus, a more democratic concept of doctoral education is required in this atmosphere to raise individuals who can stand against neoliberal policies and pressures (Sörlin, 2006). Moreover, universities have adapted and mobilize their traditional teaching and learning methodologies in doctoral programs because of the COVID-19 pandemic (Tucker et al., 2021). The pandemic period has especially showed that connections and supports provided by programs are universities are vital for the growth of doctoral students (Wang & DeLaquil, 2020) and for the overall quality in education, which might be missing in Türkiye as stated by some participants in this study. Pandemic times have also shown that distance or online education might be a challenge for the quality but a facility to maintain education for working-age participants of this study.

On the other hand, any new changes and attempts created a continuum with a more traditional or Humboldtian conception of doctoral education together with a new or emerging conception of doctoral education. Although this multidimensional change in doctoral education has helped the existing objectives, methods, organization and process be improved, it has also reduced doctoral education into employability and competence (Cardoso et al., 2022). What is more, the current trends have resulted in diversified forms and contents in doctoral programs in the

light of the needs and expectations of doctoral students who are future employees (Kehm, 2020), which might not be applicable to Turkish universities based on the research findings.

Additionally, macro-level studies and policies underline internalization of doctoral education considering the global competitive atmosphere (Ryan, 2012) while micro-level studies policies try to give voice to students (Xu, 2023). These multidimensional attention has helped cultural complexities influencing doctoral approaches and supervisory systems be uncovered (Weng, 2020); personal complexities be identified (Pappa et al., 2020) and the issue of agency be addressed in general terms (Phan et al., 2019). For the Turkish case, the voice of doctoral students and dropouts seem to be underestimated for such a multifaced improvements as argued by themselves in this study. Furthermore, there is still more need to extend the understanding of doctoral approaches and practices to transform it into a more democratic concept (Giroux, 2009) in many systems.

Without a doubt, doctoral education itself is a complex process with personal, institutional and academic dynamics that present constant challenges and opportunities to the participants in this study at micro and macro levels. Nonetheless, institutions can foster a supportive environment for their students by recognizing and resolving these challenges emerging from the inherent nature of doctoral education and recent changes. This is overemphasized by the participants in order to improve the existing programs and universities. By doing so, it is possible for all nations to continue growing and to make their students critical agents in solving the problems of the world that is changing quickly (Bauman, 2007).

The overemphasis on theoretical content over reflective, critical and collaborative pedagogical practices in a doctorate might be a big failure (Bolgatz,

2005) in Türkiye as discussed in the previous section at length. In such a system, the research participants tend to leave their programs that do not offer them much. Decisively, the faculty members should have a dialogue-based conversation with students starting from the early stages of the doctorate to increase mutual understanding while prioritizing their learning needs (Renshaw, 2004). With similar purposes, understanding the readiness of doctoral students about their needs should be the most initial and crucial step for the faculty to optimize individualized learning opportunities (Klunklin et al., 2010). At this point, the field of research participants might also shape their learning needs. For example, a nurse might need to learn his/her ethical rights while a teacher needs to improve pedagogical skills (Burns & Richards, 2009; Kocaman et al., 2009; Yuan et al., 2012). Based on the findings of this current study, doctoral education appears to be highly missing a colorful palette of courses, lecturers and facilities to meet the learning needs of students. Under these circumstances, it cannot be expected from the research participants to praise their programs or universities.

Apart from being endowed with self-learning skills for their personal and professional needs, graduate students also need to engage in their learning at any time and any place (Cohen, 2012). However, the HE system is not very flexible in this sense for these working-age adult learners as the findings of this study highlight. This might give rise to undesirable failures and dropouts. Furthermore, some participants seem to need additional support in a doctorate because of the challenging aspects of the direct transition into a somewhat student-centered learning environment (Kell, 2006). This again means that prioritizing learning needs to increase readiness is necessary for success and completion in a doctorate; however, it might be different and developmental in each stage of it (Gardner, 2009). It is worth

noting that many other personal, institutional or academic factors might cause departure from the degree (Rockinson-Szapkiw et al., 2016), but participants' level of readiness and learning needs help them move further (Kiley, 2009). In line with this, the number of dropouts in graduate schools is higher during the first term since they are not ready to be a doctoral student and they do not immediately meet their needs (Salter et al., 2019). Universities should support their prospective and current students as well as their graduates considering the great challenges of the long doctoral journey (Kumar & Coe, 2017) by prioritizing their needs to ensure success and quality.

The role of doctoral education cannot be reduced to graduating smart students who complete the requirements of the programs, and giving the PhD titles to them. In fact, a transformative design is essential for these future stewards by ensuring their transition from dependence to independence and by meeting their needs as well as providing support to increase their readiness in any phase of the doctorate towards any challenges (Walker et al., 2012; Salter et al., 2019). To clarify, students might go through key phases with challenging thresholds starting before their admission to the doctoral programs and continuing after upon graduation. Based on the accounts of the participants, Turkish HE system appears to reduce such elements necessary for increasing quality in doctoral education into numbers on paper.

7.3.5 Conducting an independent research

Academic success with good GPA records might not be enough for doctoral students to develop a proper academic self-concept. It is evident that those who took part in this research cannot totally socialize in an academic environment because of the current doctoral curriculum design and delivery, as well as their distant lifestyles

from the campus, which might hinder the process of socialization forming one's self-concept (Helus, 2011), Indeed, the extent to which research participants feel welcomed into the university's academic culture is revealed as one of the primary distinctions between those who can complete their programs and those who cannot (Bean, 1980; Demetriou & Schmitz-Sciborski, 2011; Hausmann et al., 2007; Kuh et al., 2005; Mbuva, 2011; Tinto, 1993).

For minority groups, the adjustment and integration processes into the academic culture and the development of academic self-concept can even be more painful, which causes higher rates of dropouts (Locks et al., 2008) especially during the first semester (Nouroozifar, 2023). All participants in this study need theoretically to learn about equity, diversity and inclusion while practically experiencing them in their own journeys (Perez, 2020) to continue and complete their studies. Based on the research findings, the participants might also need to internalize such ideals to contribute to development and betterment in their nations.

Seeing that most of the participants in this study enter their doctoral programs with little research experience (Borders et al., 2014), institutions should find ways to increase the socialization of doctoral students into academic culture so that they feel like they belong to the community, and have a better academic self-concept and success. When these participants feel like they are members of their departments, they do not easily drop out of their programs while facing different challenges (Lovitts, 2001). In addition to this, the participants need research positions or projects to remain in their programs to feel themselves as an internal part of their research career (Ostrove et al., 2011).

When the presented models and theories are closely examined, Spady's Theory of Student Departure Theory (1970) focuses on social integration. However,

Tinto's Revised Student Integration Theory (1993) sees social and academic integration as the core of retention as indicated by the name of the theory. In the same manner, Kember's Model of Dropout in Distance Education (1989), Cabrera's Integrated Retention Model (1992; 1993), Rovai's Composite Persistence Model (2003), Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009) and Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016) separate integration into social and academic factors based on Tinto's model. On the other hand, Pascarella's Attrition Theory (1980) regards institutional integration as an educational outcome rather than a part of the process. Astin's Student Involvement Theory (1984) presents five essential postulates for involvement. Bean and Metzner's Student Attrition Theory (1985) generalizes social integration variables. Bean and Eaton's Psychological Theory (2000) underestimates integration and does not fit it into the frame. It should be emphasized that all these aforementioned models and theories stress the importance of integration for retention. Nevertheless, they were designed for undergraduate students or non-traditional online adult learners. This means that a new model is required for doctoral students that includes 'academic' and 'social integration' both as an outcome and the central part of the process.

The current study also shows that the participants doing a doctorate are older and more mature than those at other educational levels as expected. "As people become mature, their self-concept moves from one of being a dependent personality toward one of being a self-directed human being." (Knowles, 1984, 12). In other words, their self-concepts are considered to move towards being more independent as they grow up. Accordingly, their ability to be independent might change in each stage of the doctorate by aging through higher-level learning and socialization

(Austin, 2002). Nonetheless, being mature and older is not enough to develop a researcher identity for these participants without providing research experience and environment (Kuo et al., 2017; Lamar & Helm, 2017; Lambie & Vaccaro, 2011). This means that Turkish participants in this study can be independent in their personal or professional actions in life; however, they might still remain dependent for their research on others as they mostly fall back developing scholarly identities without necessary level of socialization.

It should be noted that developing a self-concept, specifically an academic one, takes longer time (Purkey & Schmidt, 1996). This applies the same for the participants in Türkiye. It is shaped by exciting or devastating events, professional helps, relationships and everyday experiences (Lamar et al., 2019). For example, a doctoral student might need to revise a submitted paper in a short time and this can be thought of as a devastating event. The daily and professional support coming from the faculty can positively influence the self-concept of this student (Gelso, 2006; Lamar & Helm, 2017). The more academic learning occurs, the more doctoral students develop independent researcher identities with the help of rising academic self-concept (Lamar et al., 2019). Although Turkish participants have to take many courses for their academic learnings, they still do not feel themselves as independent researchers. This points out that doctoral curriculum design and delivery lack points to develop researchers. Keeping in mind the primary aim of PhD training is get people ready for their future life (Austin, 2002; Johnson et al., 2017; Weidman & Stein, 2003), universities should always think about how to facilitate the transition of their doctoral students into the faculty and culture (Austin & McDaniels, 2006) to positively contribute their academic self-concepts and identities.

It is expected that the learning actions of these adult students become more autonomous and self-directed during their doctoral years as also mentioned in other relevant sections. In other words, the dynamic and ever-evolving quality of their academic self-concept inevitably urges doctoral students to become independent researchers (Purkey & Schmidt, 1996) even when they face personal, institutional and academic challenges. Nevertheless, this current study reveals that the research participants cannot behave independently and autonomously in their learning actions and academic tasks as much as expected even after completing all courses and projects. Based on the research findings, the participants complete limited credits during the course stage and start their theses without becoming well-equipped. This again shows the necessity that doctoral curriculum design and delivery should be transformed in a way that it should raise autonomous researchers. However, the given models and theories do not take this into consideration as their target is undergraduate students. Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009) and Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016) also lack autonomy despite the fact that they are based on adult online learners who need to be autonomous and independent.

Culture also shapes the ideas and behaviors of people (Hofstede, 2001). The goals as well as perceptions of people are under the influence of their environments (Nisbett et al., 2001; Shavitt & Barnes, 2019). Turkish participants cannot much behave independently in their personal and professional lives as their culture values collectivity. This influences their academic self, autonomy and well-being (Karasawa et al., 2011). In general, research participants have a self-concept that gives importance to harmonious interdependent actions ignoring their personal needs (Matud et al., 2019). Some of the research participants perceive that they cannot

think or behave freely in a setting where hierarchy and power rule. In addition, they might often be behaved in hierarchical ways in their programs. Ironically, these participants, at their higher-level educational stage, are supposed to be endowed with free minds and actions at least before graduation. All these gaps between an ideal doctoral education and the current cultural realities negatively influence retention and graduation (Holley & Gardner, 2012).

7.3.6 Supervisor-supervisee relationship

For many doctoral students and dropouts who participated in this study, not the system but their supervisors. Supervisors who help students look forward creatively and critically are the key sources providing a basis for independent actions on their way to graduation (Hashim, 2008). This is totally relevant for the findings of this study. The quality of personal and academic match between the supervisor and student is crucial in doctoral programs (Van Rooij et al., 2019) where students are often treated as mere recipients of knowledge and have difficulty being liberated through critical thinking and autonomy. Indeed, the quality of supervision shape the trajectory of a doctoral degree and dissertation (Mainhard et al., 2009) in the focal case of Türkiye as mentioned by many participants.

Some research participants are assigned top-down supervisors in doctoral programs without considering their specific needs. Instead, established and functioning doctoral supervision is required to increase satisfaction and the likelihood of completion and decreases the time spent for it (Wao & Onwuegbuzie, 2011; Zhao et al., 2007). Personal and professional skills of academics come into the stage to shape their doctoral supervision. In particular, accessibility and willingness of knowledgeable supervisors (Taylor et al., 2018);

their behaviors (Zhao et al., 2007) and abilities to establish and maintain good relationships (Ali et al., 2016; Fillery-Travis & Robinson, 2018) can be considered among these skills in many contexts based on the findings of this study.

Many doctoral students and dropouts participated in this study argue that they tend to leave their studies especially when they are required to conduct an independent work such as writing a thesis under the supervision of an academic since they feel lonely and dependent. Gruzdev et al. (2020) offers six supervision styles namely ‘superhero’, ‘hands-off supervisor’, ‘research practice mediator’, ‘dialogue partner’, ‘mentor’ and ‘research advisor’. Accordingly, research participants feel more productive and satisfied if they are supervised by a mentor or superhero with expert functions in their fields. Whenever these specialists pair up with research participants, it seems that they can overcome challenges more easily and finish their dissertations in given time. These mentors works as a collaborator during the whole process of producing scientific knowledge (Boehe, 2016) for them. On the contrary, it appears that hands-off supervisors are quite problematic as they ignore their students especially in such collectivist countries as Türkiye. Doctoral dropouts are mostly challenged by supervisors who lack communication and engagement (Gruzdev et al., 2020). In this Turkish case, not only doctoral dropouts but also current students might struggle to achieve harmony with their hands-off supervisors as can be inferred from their experiences.

There are very few participants who get on well with their professors in personal and academic terms. It is possible to infer from their experiences that there is often a mismatch in the student-supervisor system in doctoral education. Some of the research participants are automatically assigned random academics in many universities by ignoring their supervisory needs. Even when these participants are

allowed to select their own supervisors at some universities, many of them fail to find the perfect match. In fact, centralized HE models have standardized procedures from admission to graduation (Posselt, 2015). They do not make the selection of supervisors at the beginning possible. However, decentralized HE models can behave autonomously and give way to better matching in this sense (Nerad et al., 2022). For example, they at least match freshman students with qualified supervisors who have similar academic interests. It should be critically underlined here that almost all models and theories miss the essentiality of personal elements during such matchings as they focus intensely on the scientific features of the parties. Based on the research findings, universities do not seem to set a good example for this issue.

In addition to these problematic procedures, the number and quality of academics available in departments are extremely limited as mentioned by many of the participants in this study. Therefore, the participants often have to select a supervisor who is not their ideal choice, or they have no voice to select their own supervisors, which might either result in dropouts in the long run or decrease in quality. Moreover, supervisors might have to take on the responsibility of many other graduate students unwillingly, which negatively influences overall quality as perceived by these participants. Furthermore, academics might not be trained to be qualified supervisors. Besides, they mostly have unmanageable graduate student workload. On top of all, supervisors cannot receive guidance or support to provide better supervision. For these reasons, they also struggle and make the process up as they go along. Based on the accounts of the participants, the current supervisory system in doctoral education appears to be inadequate in many terms.

What is even worse is that all the given models and theories in this study consider only students as the main agency for retention because there is no

consideration of supervisory system in undergraduate education. Among all the existing models and theories, only Rovai's Composite Persistence Model (2003) and Park and Choi's Revised Model of Dropouts from Distance Learning in Organizations (2009) encompass advising and managerial support in relation to advisors' role in retention, but they do not include the system requirements from the viewpoint of supervisors including their workload, responsibilities and the like. However, supervisors should also be problematized and integrated in new models. Although this does not fall under the scope of this study, this dissertation indicates a very fundamental need to do that.

The study also reveals that different supervision styles correlate with different completion progress in doctorates, and supervisors differ in managing, enculturation, critical thinking, emancipation or developing a quality relationship (Lee, 2008). In general, hands-on approaches are more satisfying for students (Sinclair, 2004) in the sense that they enrich students' needs for autonomy by valuing their research interests, promote self-initiation, and are open to changes throughout the doctoral journey (Kumar & Kaur, 2019). All these elements positively contribute to the retention and graduation of the participants in this study. As a part of a collectivist society, these participants might easily feel isolated, demotivated and, hence, hopeless by hands-off approaches.

Additionally, feedback that is timely, constructive, and positive seems to increase the motivation of the research participants by meeting their needs. In this regard, doctoral students should also be offered challenges by their supervisors that allow personal and professional growth. Otherwise, they lose their motivation and interest to go on. Moreover, the participants sometimes get insufficient feedback or misinterpret the provided feedback. Supervisors should be constructive and careful

not to offend their students, considering the overall hardship of the process.

Furthermore, the need for relatedness can be met by supervisors offering support mechanisms to care for the overall well-being of students. As highlighted by Lynch et al. (2018), the quality of motivation is influenced by institutional supports and this is reflected in academic activities and success under the leadership of a well-qualified supervisor. What is interesting is that the participants in this study seem to value their supervisors above everything during this arduous journey. This means that they are under the great influence of their relationships with the professors on their way to graduation.

According to Armstrong (2010), an ideal supervisory environment and relationship can teach students how to plan, carry out and evaluate their doctoral learning while positing ownership of learning and its academic products. As highlighted by research participants in this study, the supervisory system in Turkish HE for doctoral students is not adequate in such terms. As mentioned by Mahmud and Bretag (2013), doctoral students often complain about abandonment, bullying and confused relationships as well as abusive, unethical, incomplete and ineffective supervision globally. Hence, supervisory system in doctoral education needs to be rethought and redesigned taking all these into account. On the contrary, qualified supervision with active ethical aspects can increase encouragement, integration and satisfaction in a doctorate (Lofstrom & Pyhälto, 2020), which might facilitate retention and graduation. In the context of doctoral education, ethics can be considered as the collection of such moral values as respecting autonomy, nonmaleficence, beneficence, fairness and fidelity (Godecharle et al., 2013; Kitchener, 2000). The participants especially those from the dropout category declare that the unethical and hierarchical behaviors of supervisors make them give up their

ideals. For example, a female PhD student employed as a part of ÖYP in a university mentioned the strict hierarchy and workload imposed on her by the faculty including her supervisor. This unfavorable atmosphere made her think of dropout.

Although family, peers or university might be the frequent channels for guidance used by the participants in this study in the academic sphere in Türkiye, the feedback and support received from the supervisors in a doctorate plays the most fundamental role in constructing academic identities in general (Anderson, 2020). Therefore, a good mentoring system somehow guarantees retention and hinders dropouts in a doctorate (Griffin et al., 2020) regardless of institutions and HE models. It can be inferred that the burning, initial desire to start and continue a doctorate in a certain program change over time based on the level, source and quality of supervision (Caballero, 2020). Supervisors with extra administrative roles and duties on their shoulders besides their elementary academic workload appear to motivate their students to finish their studies as gatekeepers helping them access to academic networks, resources and opinions (Lee, 2008) based on the findings of this study.

In particular, the key roles of supervisors should be rethought and redefined as they have a huge power to facilitate socialization opportunities and help learners succeed in doctoral programs (Rose, 2005). Many doctoral students and dropouts who participated in this study have socialization problems accompanied by communication problems with their supervisors, which might accelerate their dropouts. On the one hand, the academic identity and competencies of all these students can be regarded as significant internal predictors of student retention and graduation in doctoral education (Sverdlik et al., 2018).

On the other hand, personal and social lives of students, institutional support and socialization as well as financial status are among the external factors influencing the motivations of many participants in this study; however, the role of supervisors on student retention and graduation is well ahead (Ali & Kohun, 2006; Dominguez, 2006; Manathunga, 2002). To give an example, a male doctoral student stated that after losing his academic position as a research assistant, he struggled a lot with all external challenges. He was challenged by maintaining his social life, supporting himself financially in terms of both living and academic expenses, and getting support from personal and academic environment. The only positivity in his life during those times was his supervisor who helped him a lot. She made him continue his studies to get the degree.

Traumatizing experiences of students come mainly from the process of struggle to be independent, which directly affects their retention (Lofstrom & Pyhälto, 2012; Truong, 2010). As also mentioned in section 7.3.6, this is also the case for the participants in this study who also encounter many challenges in supervision during their education while trying to learn how to be an independent researcher. Accordingly, it should be underlined that the major factor regulating the doctoral experience of these students is the quality and quantity of supervision (Pyhälto et al., 2012). Even though the place of supervisors in doctoral education is fundamental, this element has almost no ground in existing retention models and theories.

7.4 Composite interaction perspective for complexities in doctoral education

The previous sections indicate that all the given discussions are embedded in one another although they are given under different sub-headings. As an example, while exploring the work-life balance of doctoral students, their background characteristics are also rearticulated. In the same vein, the supervisor-supervisee relationship section cannot be interpreted without recalling the current curriculum, programs and university designs in Türkiye. For these reasons, the researcher has come up with an illustration in order to show such intertwined and interrelated relationships among complexities. It has a potential to be a base for new models and theories.

Figure 29 on the following page demonstrates the main interactions and directionalities among the complexities together with their composite interactions. It has been developed based on the research findings to depict three formerly-believed-to-be-mutually-exclusive areas of complexities influencing retention and graduation, or dropout. Nonetheless, the analysis of the data also hints at three more possible aspects that influence retention and graduation, or dropout; these are the combinations of each complexity with another one.

For example, the code under the theme institutional complexity, named as focusing on specific learning and research needs, is influenced by personal complexities such as having or not having support from the family. This sometimes might not result in a direct dropout. At this point, it should be remembered that many more combinations and possibilities can be drawn for the existing themes, categories and codes in this study.

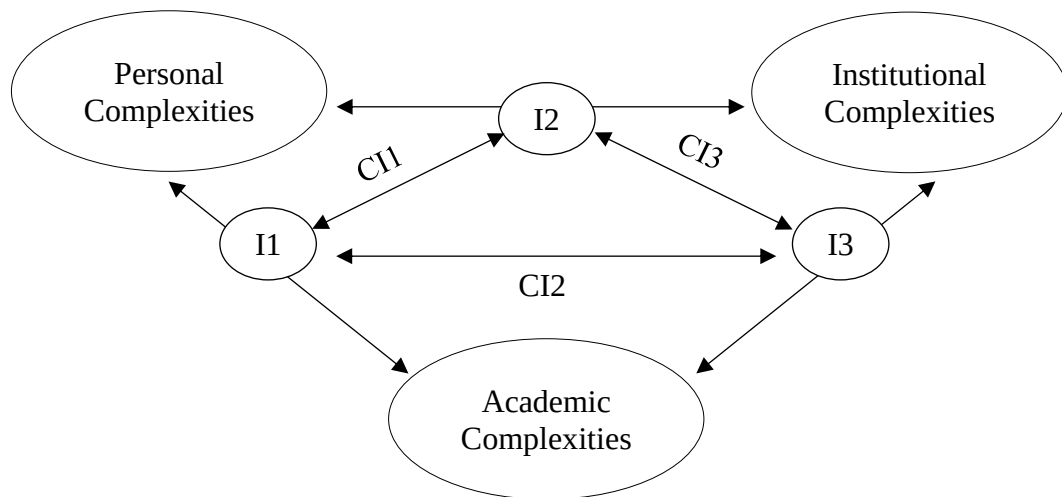


Figure 29. Composite interaction perspective for complexities in doctoral education

On the contrary, having or not having support from the family might even further push a doctoral student into retention and graduation. However, having or not having academic support from the supervisor when combined with the aforementioned personal code might lead to a different outcome: dropout. This points to the fact that when two codes from different categories or themes exist at the same time, they can work differently than they would in isolated cases, which is conceptualized by the researcher as a composite interaction taking the elements in Rovai's Composite Persistence Model (2003) into ground.

Therefore, as for the tables in the previous findings section together with the codes and categories in them, the possible combinations of each with one another should be taken into account to better understand student retention in doctorate because each combination might work like a different aspect in the Turkish context. It should be emphasized that these possible combinations might work differently or not work at all. This suggests a possible condition of enculturating into either collective or individualistic societies.

Although Spady's Theory of Student Departure Theory (1970), Tinto's Revised Student Integration Theory (1993), Pascarella's Attrition Theory (1980) and Kember's Model of Dropout in Distance Education (1989) see family as a background characteristics having an influence on retention, Cabrera's Integrated Retention Model (1992; 1993) gives encouragement from friends and family as an indicator of persistence. When it comes to Bean and Metzner's Student Attrition Theory (1985), Rovai's Composite Persistence Model (2003) and Choi's Conceptual Model for Adult Dropout in Online Degree Programs (2016), they consider encouragement from anybody as an essential part of the degree completion. It should be noted that all these models and theories are rooted in individualistic cultures. On the other hand, Türkiye is a collectivistic country compared to others (Civelek, 2023; Halub et al., 2012; Hofstede Index, 2024; Kağıtçıbaşı, 1997). Therefore, new models are necessary to where family, friends, peers or colleagues either encourage or discourage students in doctoral education.

The background of the given figure can be thought as the representation of the wider context of Türkiye. When the models and theories given in the conceptual framework of this study are analyzed, they evolve through time with added environmental or contextual elements. With the advance of technology, elements regarding the digital world such as computer literacy have recently been added to them. Accordingly, Rovai's Composite Persistence Model (2003) added computer-based interaction as a student skill that has an effect on retention in today's digitalized world. Still, they are more confined to dynamics within narrower contexts. In addition, the existing models and theories have Eurocentric elements for all HE students who study mostly in developed countries such as the United States, the United Kingdom or other European countries. This means that they might

subconsciously skip the first basic layers of Maslow's Hierarchy of Needs (1943) and focus more on the needs placed in the top layers of that pyramid while constructing their frameworks. Moreover, they do not cover contemporary elements such as digital literacy.

This urges the researcher to base her findings on the specific context of Türkiye in which doctoral students have to prioritize their 'Fundamental Life Retention' before academic retention. To elaborate, Turkish doctoral students have to allocate and devote most of their daily routine to meeting the first categories of Maslow's Hierarchy of Needs (1943). They might greatly struggle to manage their basic needs such as paying bills or groceries, finding housing or dining options as well as accessing to adequate physical or mental healthcare. In fact, this indicates the existence of a separate element called the matter of priority in this context. To put it into different words, fundamental needs in the first layers of Maslow's Hierarchy of Needs (1943) are taken for granted for the doctoral students in more prosperous countries including those in Europe whereas this might not be the case in the former situation.

As the discussion part draws to a close, it should be stressed once again that Türkiye, as a developing country, has a dense population of about 85 million with a 10,4% unemployment rate. At the same time, it has a higher youth population, about 15,2% of its overall population, with 19,4% youth unemployment rate (TÜİK, 2023). It has a relatively good position among its neighbors in the Human Development Index (2021), which not only measures the economic potentials of the countries but also the 'life expectancy,' 'education,' 'gross national income per capita' of their citizens. In other words, HDI is related basically to the connection between national and individual well-being (Žižek et al., 2023). What is even more striking about

Türkiye is that it has the highest inflation rate of 64,9 percent among all OECD countries compared to 5,7 average rate of other members (OECD, 2024)

When compared to other western countries with a more stable and higher national income per capita, Türkiye has fluctuating but upward socioeconomic trends. Accordingly, doctoral students in this developing country might have to compensate for this gap and keep up with their cohorts in developed countries, which might influence their retention positively or negatively. In the light of given statistics, this analysis indicates a very fundamental condition that needs to be taken into account: the need for contextualization in HE models and theories regarding retention and graduation, or dropout. As underlined by Altbach (2007c), many nations – including Türkiye– have been working and will be working to increase their doctoral capacities while simultaneously searching for the most effective models to reach their objectives. Accordingly, they need to update their local models considering context-dependent factors while mapping the leading international samples.

7.5 Implications

All these findings and discussions yield two main implications for the Turkish context: theoretical and practical. They are embedded under each sub-heading of the discussion section in detail. While concluding this section, they need to be rearticulated in short. From a theoretical perspective, comprehensive and contextualized fit-for-Türkiye retention models that include the country-specific dynamics applicable to doctoral education should be developed. In this regard, the perceptions of doctoral students and doctoral dropouts who participated in this study are quite valuable. Accordingly, doctoral students in this era should be regarded as

post-traditional students in new models. Especially after the COVID-19 pandemic, online and face-to-face elements in doctoral education should definitely be given a place. In the same vein, the necessities, such as technological literacy in this globalized and digitalized world, should also be part of new models. In addition, the family backgrounds of doctoral students should be included in such new models, considering whether they are first-generation doctoral students in their families. The gender of doctoral students as well as their marital statuses should be taken into consideration not only as an entry-level element, but also as an issue of support during the doctoral education. Challenges and opportunities based on gender and marital status should be addressed. Accordingly, new models should point out gender and marital-status specific support mechanisms for doctoral students.

The educational backgrounds of doctoral students should not be evaluated depending just on their GPA histories or the results of other tests because they are limited in understanding future retention. For this aim, 21st century learning skills, including critical thinking, problem-solving, collaboration, creativity, innovation, leadership and communication (González-Pérez & Ramírez-Montoya, 2022; Rashid, 2019), should be integrated into new models for doctoral students. Therefore, qualities such as academic writing skills that are necessary for the retention and graduation of a doctoral student should be aimed to be improved in the long run. ‘Literary skills’ including ‘information’, ‘media’ and ‘technological literacy’ as well as ‘life skills’ including ‘flexibility’, ‘adaptability’, ‘leadership’, ‘initiative’, ‘self-direction’, ‘productivity’, ‘accountability’, and ‘social-intercultural skills’ (González-Pérez & Ramírez-Montoya, 2022; Rashid, 2019) should also be involved in new retention models.

The personal characteristics of doctoral students should also be highlighted as they shape their doctoral trajectory (Ali & Kohun, 2006). The financial background of doctoral students should also be addressed in new models to systematize necessary fundings and scholarships to retain them. The age of these learners is the core element of a new model beyond argument since they are adults with many responsibilities in life, which might hinder their retention and graduation. In this respect, the Theory of Adult Learning (Knowles, 1984; p. 12) can feed the new models by highlighting the place of ‘experience’, ‘self-concept’, ‘readiness to learn’, ‘motivation’ and ‘orientation to learning’ of doctoral students to value their adult needs and characteristics. Moreover, the proposed illustration named Composite Interaction Perspective for Complexities in Doctoral Education can also be a base for future models to come up with new ideas for retention. Furthermore, the initial goals of students pursuing doctoral education should be part of future models before enrolment, and they should also be addressed during and after the education. By doing so, disappointments arising from changing emotions and goals can be supported. Moreover, the ‘in-between state’ of these working-age students should also be underlined in new models by keeping their work-life dilemmas into account to support and retain them.

New models should focus on a new doctoral curriculum design and delivery. The curriculum should assure flexibility, authenticity, independence, collaboration and quality based on the findings of this study. The faculty, supervisors in particular, should be trained and supported to ensure such aims in curriculum design and delivery. Programs and universities should also be part of this change. On the other hand, the effect of culture on values and behaviors should not be forgotten (Hofstede, 2001; Kağıtçıbaşı, 1997) while designing a new curriculum. Therefore, the content

and delivery in doctoral education of such a collectivist culture as Türkiye should; for instance, be more collaborative. Moreover, a new curriculum design and delivery should address fundamental models such as Bloom's Taxonomy (1956) and Maslow's Hierarchy of Needs (1943) to be more functional (Repko & Szostak, 2017).

From a practical perspective, micro and macro level actions should be processed by all the stakeholders according to new comprehensive and contextualized models. By doing so, it is possible to increase student satisfaction, academic performance, quality and overall retention in doctoral education. To elaborate, specific techniques and ideas should be employed especially by universities and the faculty for doctoral students in practice by prioritizing aforementioned theoretical implications. All core elements, including family background, financial background, educational background, gender, marital status, age and assumptions on adults' characteristics should be utilized for practical purposes.

Accordingly, students should be supported throughout the entire PhD program. In the course of the decision-making process, they should be provided with enough information and support to select the most appropriate program and university. During the admission processes, they should be required to present detailed data on their personal and academic backgrounds. At this phase, the needs and expectations of students should also be gathered and tried to be met. Additionally, they should be selected for the available programs in such a way that they meet the necessities expected of post-traditional students in this globalized and digitalized era. After enrolling in a program, these students should be exposed to an ongoing, intense learning process in which they improve their knowledge and skills

to become independent researchers. For this reason, self-directed learning should basically be aimed for these adult learners. Moreover, student-centered approaches should be employed while teaching the 21st century hard and soft skills listed above.

Doctoral students should be mentored in a meaningful way before, during and even after their doctoral education. They should be provided with real-life situations and connections during their doctoral education. The content and materials should be re/designed for this purpose. Last but not least, students should reach out to personal, institutional and academic support mechanisms in all stages of a doctorate. As a consequence, they can also be more resilient and reflective.

All these aforementioned theoretical and practical implications should be an ongoing debate starting with decision-making processes to ensure the retention and graduation of doctoral students. That is to say, they should be paid attention to prior to doctoral education, during the degree and upon graduation by all the stakeholders. Although they are important for the Turkish context based on the findings of this study, they also have a potential to increase the retention and graduation of doctoral students in other contexts.

7.6 Summary of Chapter 7

Chapter 7 discusses the findings within the scope of relevant literature, contextual background and conceptual framework on student retention and graduation in doctoral education under three sections: (1) Background profile of participants who pursue doctoral education, (2) Goals of participants who pursue doctoral education, (3) Similar challenges with different outcomes in doctoral education, (4) Composite interaction perspective for complexities in doctoral education and (5) Implications. To summarize, participants who pursue doctoral education have different

demographic and financial background. They try to get the degree for academic or non-academic purposes in Türkiye. Although they experience similar personal, institutional and academic complexities in doctoral education, their influences and outcomes can be different. For this specific study, a new conceptual model showing main interactions and composite interactions among personal, institutional and academic complexities in Turkish doctoral context has been developed. However, a new comprehensive fit-for-Türkiye retention model is still required. The theoretical and practical implications drawn from the findings of this study can be helpful while developing new models and implementing them.

CHAPTER 8

CONCLUSION

This chapter presents a conclusion for the study under four sections (1) recommendations for stakeholders, (2) limitations of the study (3) recommendations for further study and (4) reflections on the study. In particular, the chapter aims to advance this subject matter in light of its suggestions for all the stakeholders. In this manner, recommendations for further research are also given taking into account the possible limitations of the study. Finally, the reflection of the researcher within the given context and study is provided for the reader.

8.1 Recommendations for stakeholders

It is crucial to take the findings of this study, conducted in Türkiye, into account while developing a better-functioning doctoral curriculum design and delivery in Türkiye. This will be a multidimensional transformation process requiring the contributions of different stakeholders. Accordingly, some tangible suggestions based on the voices of doctoral students and dropouts are given in this section for the main parties.

8.1.1 For prospective doctoral students

The findings of this study provide the following particular recommendations for prospective doctoral students:

- Prospective doctoral students should specify their learning needs and expectations based on their particular goals.

- They should set some academic and non-academic goals for themselves and navigate them in a planned manner. Accordingly, they can have positions at universities upon graduation with the degree as an academic goal, or they can follow the path in industry with non-academic goals.
- They should go through an extensive decision-making process before, during and after the application phase considering their future plans.
- They should enroll in the most suitable program and university based on their personal, institutional and academic expectations.
- They should collect information about the target university and program through official websites.
- They should keep in contact with the administrators and the faculty to get more information, and to ask their possible questions through face-to-face meetings or emails.
- They should compare the available opportunities and challenges of the target university or program to those of others.
- They should keep in contact with the students of the target university or program to be more knowledgeable about their experiences and feelings.
- They should attend open-access lectures, seminars or orienteering activities organized by their the university or program.
- They should search for necessary support before their applications.
- They should prepare their environment including family members and friends for this arduous journey as far as possible.

8.1.2 For current doctoral students

The findings of this study provide the following particular recommendations for current doctoral students:

- Current doctoral students re/specify their learning needs and expectations based on their current and possible new goals.
- They should be planned and timely by setting deadlines and following them.
- They should follow the updates about their universities and programs through official websites.
- They should keep in contact with the administrators and the faculty to get necessary information and to ask their possible questions through face-to-face meetings or emails.
- They should especially have close relationships with their supervisors and peer community while spending quality time with them.
- They should search for and try to take advantage of the available opportunities of their universities or programs.
- They should search for necessary and immediate support to face existing challenges immediately.
- They should be in demand of more personal, institutional and academic support on their way to graduation. For example, they should demand more psychological or financial support from their institutions.
- They should attend academic and non-academic activities organized by their universities or programs.
- They should attend academic and non-academic activities organized by other universities or programs internationally.

- They should keep in contact with the alumni of their universities or programs to be more knowledgeable about graduate opportunities.
- They should set graduate goals for themselves and keep in touch with the related people or sector to clarify their future plans.
- They should attend their classes regularly, submit the assignments on time and search for ongoing feedback.
- They should reflect on their doctoral journeys through different ways such as keeping a journal.
- They should make their doctoral decisions, such as selecting courses or supervisors, with conscious minds based not only on their personal but also on their professional needs and features.
- They should try to keep their internal and external motivation active by meeting their personal and professional needs.
- They should be informed about future career options upon graduation by attending relevant seminars or keeping in touch with employers.
- They should try to improve their mental and physical well-beings through different ways such as doing sports.
- They should re/inform their environment, including family members and friends, for this arduous journey as far as possible.

8.1.3 For doctoral dropouts

The findings of this study provide the following particular recommendations for doctoral dropouts:

- Doctoral dropouts should reflect on their incomplete education through different ways such as keeping journals.
- They should be aware of the inherent complexity of doctoral education for everyone so that they do not feel alone.
- They should re/specify their current needs and expectations to consider completing their studies to get the degree.
- They should search for and get support to specify the complexities causing them to leave their journeys.
- They should also go over the existing support mechanisms and demand new ones.
- They should get necessary personal, institutional and academic support to restart.
- They should try to improve their mental and physical well-beings through different ways such as doing sports.
- They should keep in touch with other dropouts to reflect on the existing challenges and opportunities together.
- They should keep in touch with the current students to compare and contrast the challenges and opportunities.
- They should find such ways as changing their university to motivate themselves to go back to their education to finalize it.
- They should be part of academic and non-academic communities.

- They should reshape and navigate their career path in a planned manner with the necessary support.

8.1.4 For the faculty

The findings of this study provide the following particular recommendations for the faculty:

- The faculty, including supervisors, should be aware of their place in contributing to continuous improvement of doctoral curriculum design and delivery in Türkiye.
- They should continuously revise their selection and admission criteria and overall doctoral curriculum design and delivery.
- They should go into deeper in understanding the needs, features and expectations of their prospective students during the selection and admission stages.
- They should be more meticulous while implementing doctoral curriculum in light of the needs, features and expectations of their students.
- They should specifically adopt student-centered approaches in doctoral education.
- They should be more open to change and dialogue in order to improve their course contents, instruction designs and supervisory skills.
- They should attend relevant seminars or follow the guidelines to improve their existing skills.
- They should get regular feedback from students to revise doctoral education.
- They should aim to improve their teaching, research and supervisory skills through different ways such as attending international conferences.

- They should demand on-the-spot support mechanisms such as effective academic units or resources from the university in light of the needs, features and expectations of their students.
- They should demand updates from the university and share them with their students.
- They, especially supervisors, should be aware of their critical place as one of the best support mechanisms in doctoral education.
- They should get the responsibility of an equal number of doctoral students if possible.
- They should keep balance of sparing enough time for their doctoral students and other duties in order to function well.
- They should search for and get immediate support when they need it.
- They should follow bureaucratic procedures and inform their students.
- They should reflect on their teaching and supervising processes through different ways such as keeping journal.
- They should prepare timetables and set deadlines to track academic tasks.
- They should make a comprehensive meeting with their doctoral students to clarify the mutual expectations, set goals and deadlines.
- They should be open to dialogue with their students.
- They should be open to dialogue with all academics and academic branches.
- They should demand more from their institutions to improve their supervision and keep their motivation alive. For instance, they can ask for seminars to learn the rules and regulations of doctoral education.
- They should be given supervisory training to improve their knowledge and skills.

- They should give importance to bringing dropouts back to their programs by contacting with them and motivating them.
- They should keep communication channels open for students and dropouts.
- They should try to improve their mental and physical well-beings through different ways such as doing sports.

8.1.5 For administrators

The findings of this study provide the following particular recommendations for administrators:

- The administrators should primarily be aware of their roles and responsibilities to facilitate a better-functioning doctoral education.
- They should develop a deeper understanding of the dynamics involved in doctoral education.
- They should be ready and willing to take the necessary steps at the institutional level to increase retention and graduation while hindering dropouts in doctoral programs.
- They should regularly identify the areas for improvement from the perspective of different stakeholders.
- They should go into deeper in understanding the needs, features and expectations of their prospective and current students by implementing program-specific selection and admission procedures.
- They should get regular feedback from different stakeholders to improve existing opportunities while eliminating the challenges for them.
- They should regularly inform prospective students, current students, dropouts and the faculty for the rules and regulations in practice.

- They should send emails to the members of the university about facilities.
- They should present specific opportunities just for doctoral students such as accommodation or transportation.
- They should be kept in touch with the related people and sectors to present better research options and positions for their members.
- They should open ways for national and international projects and funds for their members.
- They should be open to dialogue with their members.
- They should open new innovative branches in the university while improving the existing ones.
- They should adopt the best practices and innovative strategies to enrich doctoral education.
- They should promote support mechanisms not only for their doctoral students and dropouts but also for the faculty in charge of doctoral education.
- They should increase the quality and quantity of the existing opportunities.
- They should provide mental and physical well-being facilities.
- They should provide mentorship for their members.
- They should make the voices of their members more hearable.
- They should provide systematic support mechanisms and make them more visible and functional.
- They should be open to change to increase the academic quality and reputation of their institutions.

8.1.6 For policymakers

The findings of this study provide the following particular recommendations for policymakers:

- Policymakers should be aware of the personal, institutional and academic complexities influencing student retention and graduation in doctoral education.
- They should aim for continuous improvement in doctoral curriculum design and delivery in Türkiye by contributing to the overall quality and efficiency of the higher education system.
- They should take the necessary micro- and macro-level steps to increase retention and graduation while eliminating dropouts.
- They should regularly collect data on student retention and graduation rates in doctoral education.
- They should take the needs, features and expectations of all stakeholders before preparing and implementing new policies.
- They should prepare alternative action plans and implement them when needed.
- They should open to dialogue with different stakeholders before offering and implementing micro or macro level policies.
- They should get regular feedback from different stakeholders for the existing and potential policies.
- They should balance the theoretical and practical content in doctoral education.
- They should open more functional research and development centers while improving the existing ones.

- They should demand universities to have mandatory support systems in each program for doctoral students.
- They should take steps to increase the number and functions of educational, financial and social support mechanisms in doctoral education.
- They should make national and international facilities accessible for the universities and their members.

8.1.7 For the field of higher education

The findings of this study provide the following particular recommendations for the field of higher education:

- The field of higher education should contribute more to the dissemination of knowledge in local and global literature by specifically addressing the phenomenon of student retention at the doctoral level.
- It should conduct more qualitative and quantitative studies on student retention and dropout.
- It should conduct more studies on students' needs, features and expectations.
- It should make the voices of all stakeholders hearable through comprehensive national and international studies.
- It should open a way for case studies highlighting the specific dynamics of the country.
- It should compare and contrast the cases of other countries to that of Türkiye.
- It should highlight the importance of doctoral education and raising individuals with doctoral degrees for national development in relevant studies.

8.1.8 For the nation

The findings of this study provide the following particular recommendations for the nation:

- The nation should contribute to the expansion of quality and quantity in the higher education.
- It should raise the number of PhD holders with higher-order abilities.
- It should invest more in its citizens and organizations.
- It should ensure that all relevant stakeholders take the required actions to improve doctoral curriculum design and delivery in the country.
- It should ensure that all relevant stakeholders take the required actions to increase student retention and graduation in doctoral education.

8.2 Limitations of the study

The findings of this study provide valuable insights. However, the specific sample, context, and methodology employed constrain these findings. Researchers and stakeholders should be aware of these limitations. One of the primary limitations of this qualitative study is its sample size and context. The study relies on a sample of 40 participants, excluding pilot ones, from a specific higher education context. Therefore, the findings gathered in a specific Turkish context might not be generalizable to other higher education systems, doctoral programs or institutions with distinct structures and cultures. It is essential to be conscious when applying these findings beyond the scope of this study directly.

This study, conducted during a specific time frame, can yield different findings at another time. It should not be forgotten that doctoral education is a dynamic notion influenced by local and global changes in policies. Thus, the

experiences and complexities reported by the participants might be influenced by the prevailing conditions at the time.

The participants in this study are volunteer doctoral students and doctoral dropouts. This might cause a selection bias because these participants can have different viewpoints and experiences in comparison to those who reject participating in the study. Additionally, participants who have encountered many challenges in their doctoral education might be more motivated to participate in the study, which might skew the findings towards more negative experiences. On the other hand, the findings are based on data gathered through semi-structured interviews. Participants can provide socially desirable responses. This can lead to an underreporting of the complexities faced during doctoral education.

The researcher's unique background, experiences and perspectives might have influenced data collection and analysis. Even though steps such as reflexivity and peer review have been taken to mitigate researcher bias, it cannot be completely eliminated in a qualitative study using an Interpretive Phenomenological Approach.

8.3 Recommendations for further study

The findings revealed in this study and the insights gained throughout the journey open up new lines of inquiry. Firstly, longitudinal studies and cross-cultural comparisons will be beneficial to fit into the evolving landscape of doctoral education on a global scale. The evolution of personal, institutional and academic complexities over time can be better understood through longitudinal investigations. Additionally, they can offer insights into the trajectories of doctoral students and doctoral dropouts. Cross-cultural comparisons can be used to identify cultural overlaps and differences.

Secondly, future research should consider reducing the sample size and including participants from a single institution with diverse backgrounds and personal characteristics. The findings of a case study that only explores one institution or program can be useful in bridging the gaps between parts and wholes. In a similar vein, more understanding can be attained by recognizing the cases of students from each particular stage, namely the course, qualifying, and thesis stages.

Thirdly, research assistants who are in pursuit of doctoral education can be taken as participants for a further study. As they are integrated more into the academic system and communities, their data can yield different findings. In addition, comparing the cases of participants from public and foundation universities can be fruitful. Moreover, combining qualitative and quantitative methods can also offer a more comprehensive understanding of the personal, institutional and academic complexities influencing student retention and graduation in doctoral education.

Furthermore, a nation-wide study can be more meaningful. For this purpose, the national data of CoHE can be used for an in-depth study. Lastly, further studies can be done to shed more light on the circumstances surrounding doctoral dropouts and assist those who desire to resume their studies. All in all, the voices of all stakeholders including supervisors, faculty members, committee members, curriculum specialists, administrators and policymakers should also be taken into account for further studies on the same phenomenon.

8.4 Reflections on the study

While getting closer to the end of this study on the complexities influencing student retention and graduation in doctoral education, the researcher needs to take a moment to reflect on her own journey and the insights gained throughout this research process.

The outcomes of this study reaffirmed the view of the researcher that doctoral education is inherently complex. It is a multifaceted experience that varies among individuals and is influenced widely by various factors both within and beyond the academic realm. The researcher, on her way to writing this dissertation, realized the influences of personal, institutional and academic complexities that play a role in her own educational path. She completed her doctoral courses and passed the qualifying stage during the worldwide COVID-19 pandemic. She collected her data and started writing her dissertation during the post-pandemic era.

A devastating earthquake happened in the eastern part of Türkiye causing some of her participants to lose their homes and families. Her university Boğaziçi as one of the most prestigious university in Türkiye was undergoing radical changes. Under such global and local conditions, she felt depressed and hopeless so many times by losing her motivation to complete this dissertation thinking over the profound effects of some unchanged personal, institutional and academic factors in her own life, country and the world.

The unfortunate stories of her participants also influenced her negatively. However, she re/learned to be reborn from her ashes. In addition, the researcher also realized her unique characteristics and lifestyle as a working-age adult woman. She felt that her full time non-academic work and mature lifestyle often overshadowed her academic studies. Furthermore, the specific challenges and opportunities of the

Turkish context and culture shaped her academic experiences like other participants. At this point, listening to the experiences of the participants in this study and making their silenced voices heard to some extent were invaluable for the researcher. Their context-based stories based on real-life educational challenges provided depth and richness not only to the research findings but also to the life of the researcher.

Throughout the research process, acknowledging personal biases and maintaining objectivity for a more honest and transparent exploration through reflexivity was not easy for the researcher who has similar experiences and ideas within the same context. Indeed, the researcher encountered unforeseen difficulties and the dynamics of qualitative research.

All in all, this dissertation on the personal, institutional, and academic complexities influencing student retention and graduation in doctoral education is a rewarding and enlightening endeavor for the researcher. Coping with her own personal, institutional and academic complexities and writing the dissertation transformed her into a lifelong learner. Above all, it was a great honor for her to finalize this thesis during the 100th anniversary of Republic of Türkiye.

The researcher hopes that the insights gained from this study will contribute to the betterment of doctoral curriculum design and delivery not only in Türkiye but also around the globe. She wants her study to serve as a tool for positive change and continued exploration of this critical area of research.

8.5 Summary of Chapter 8

Chapter 8 concludes the study under four sections: (1) implications of the study, (2) limitations of the study, (3) recommendations for further study and (4) reflections on the study. To summarize, the chapter highlights implications of this study. It also outlines the limitations acknowledging potential sources of bias and contextual constraints while suggesting directions for future research. Finally, it gives the researcher a place to reflect on her own doctoral journey.



APPENDIX A
CONSENT FORM (TURKISH)

Araştırmayı Destekleyen Kurum: Boğaziçi Üniversitesi

Araştırmanın Adı: A Phenomenological Study of Student Retention and Graduation
in Doctoral Education

Proje Danışmanı: Doç. Dr. Öğretim Üyesi Gülistan Gürsel Bilgin

Proje Eş Danışmanı: Prof. Dr. Fatma Nevra Seggie

Araştırmacının Adı: Emine Karaduman

Sayın Katılımcı,

Boğaziçi Üniversitesi Eğitim Bilimleri Bölümü Doç. Dr. Gülistan Gürsel Bilgin danışmanlığında ve Prof. Dr. Fatma Nevra Seggie eş danışmanlığında araştırmacı Emine Karaduman tarafından “A Phenomenological Study of Student Retention and Graduation in Doctoral Education” başlıklı araştırma çalışması yürütülmektedir. Bu çalışmanın amacı doktora eğitimini herhangi bir sebeple herhangi bir aşamada bırakan yetişkinlerin deneyimlerini anlamaktır.

Bu araştırmaya katılmayı kabul ettiğiniz takdirde öncelikli olarak sizinle ilgili demografik bilgi formunu doldurmanız beklenmektedir. Ardından araştırmacı tarafından sizinle yaklaşık 1 (bir) saat sürecek görüşme yapılacaktır. Görüşmelerde sizin izninizle ses kaydı alınacaktır. Ses kayıtlarınız sadece deşifre amaçlı kullanılacaktır. Ses kaydı için izin vermemeniz durumunda araştırmacı yalnızca görüşme notu tutacaktır. Bu araştırma bilimsel bir amaçla yapılmaktadır ve katılımcı bilgilerinin gizliliği esas tutulmaktadır. Analizlerde isminiz anonim kalacaktır. Size telefon ya da e-posta yoluyla gerekirse tekrar ulaşılabılır. Araştırmanın veri ve sonuçları bu araştırmanın yanı sıra bilimsel nitelikteki diğer akademik yayın ve

konferanslarda da kullanılacaktır. Verilerine sadece araştırmacı ve proje danışmanları erişebilecektir. Bu araştırmaya katılmak tamamen isteğe bağlıdır. Sizden ücret talep etmiyoruz ve size herhangi bir ödeme yapmayacağız. Yapmak istediğimiz araştırmanın size risk getirmesi beklenmemektedir. Katıldığınız takdirde çalışmanın herhangi bir aşamasında çalışmadan çekilme hakkına da sahipsiniz. Bu durumda size ait tüm veriler imha edilecektir. Araştırma projesi hakkında ek bilgi almak istediğiniz takdirde proje danışmanları Doç. Dr. Öğretim Üyesi Gülistan Gürsel Bilgin, Prof. Dr. Fatma Nevra Seggie ve araştırmacı Emine Karaduman’a e-posta ya da telefon ile ulaşabilirsiniz. Araştırmayla ilgili haklarınız ve şikayetleriniz konusunda Sosyal ve Beşerî Bilimler İnsan Araştırmaları Etik Kurulu’na danışabilirsiniz.

Yukarıdaki metni okudum ve katılmam istenen çalışmanın kapsamını ve amacını, gönüllü olarak üzerime düşen sorumlulukları tamamen anladım. Çalışma hakkında soru sorma imkânı buldum. Bu çalışmayı istediğim zaman ve herhangi bir neden belirtmek zorunda kalmadan bırakabileceğimi ve bıraktığım takdirde herhangi bir olumsuzluk ile karşılaşmayacağımı anladım.

Formun bir örneğini aldım ve çalışmaya katılmayı kabul ediyorum. ☐

Yüz yüze ya da online görüşmelerde ses kaydımın alınmasını kabul ediyorum. ☐

Katılımcının Adı-Soyadı:

İmzası:

Adresi:

Telefonu:

E-maili:

Araştırmacının Adı-Soyadı:

İmzası:

Tarih (gün/ay/yıl):

APPENDIX B

DEMOGRAPHIC INFORMATION FORM FOR DOCTORAL STUDENTS

1. Gender:
2. How old are you?
3. Do you work?
 - If so, what do you do?
4. Are you married?
 - If so, what is your spouse's job?
 - If so, what is the education level of your spouse?
5. Do you have children?
 - If so, what are their ages?
 - If so, do they work?
 - If so, what is their education level?
6. How would you describe your income level?
7. What is your mother's education level?
8. What is your father's education level?
9. Which university/department/program do you do your doctoral education in?
10. When did you start your doctoral education?
11. What is the medium of instruction of your doctoral education?
12. What stage of your doctoral education are you in?
13. What is the academic title of your thesis advisor?
14. Have you completed a master's degree?
 - If so, which university/department/program did you do your master's education in?

- If so, when did you start your master's education?
- If so, when did you complete your master's education?
- If so, what was the medium of instruction of your master's education?
- If so, what was the academic title of your master's thesis advisor?

15. Which university/department/program did you do your undergraduate education in?

16. What was the medium of instruction of your undergraduate education?

17. Is there anything else you want to add?



APPENDIX C

DEMOGRAPHIC INFORMATION FORM FOR DOCTORAL DROPOUTS

1. Gender:
2. How old are you?
3. How old were you when you dropped out of doctoral education?
4. Do you work?
 - If so, what do you do?
5. Did you work when you dropped out of doctoral education?
 - If so, what did you do?
6. Are you married?
 - If so, what is your spouse's job?
 - If so, what is the education level of your spouse?
7. Do you have children?
 - If so, what are their ages?
 - If so, do they work?
 - If so, what is their education level?
8. Were you married when you dropped out of doctoral education?
 - If so, what was your spouse's job?
 - If so, what was the education level of your spouse?
9. Did you have children when you dropped out of doctoral education?
 - If so, what were their ages?
 - If so, did they work?
 - If so, what was their education level?
10. How would you describe your income level?

11. How would you describe your income level when you dropped out of doctoral education?
12. What is your mother's education level?
13. What was your mother's education level when you dropped out of doctoral education?
14. What is your father's education level?
15. What was your father's education level when you dropped out of doctoral education?
16. Which university/department/program did you drop out of?
18. When did you start your doctoral education?
19. When did you drop out of doctoral education?
20. What was the medium of instruction of your doctoral education?
21. At what stage did you drop out of doctoral education?
 - If at thesis level, what was the academic title of your thesis advisor?
22. Have you completed a master's degree?
 - If so, which university/department/program did you do your master's education in?
 - If so, when did you start your master's education?
 - If so, when did you complete your master's education?
 - If so, what was the medium of instruction of your master's education?
 - If so, what was the academic title of your master's thesis advisor?
23. Which university/department/program did you do your undergraduate education in?
24. What was the medium of instruction of your undergraduate education?
25. Is there anything else you want to add?

APPENDIX D

SEMI-STRUCTURED INTERVIEW QUESTIONS FOR DOCTORAL STUDENTS

1. Why did you want to have doctoral education?
 - What was your goal to start your doctoral education?
 - What were the circumstances that led you to doctoral education?
2. Have you achieved these goals?
 - If so, what are the goals you have achieved? Can you elaborate with examples?
 - If not, what are the goals you have failed to achieve? Can you elaborate with examples?
 - Why do you continue your doctoral education if you have not achieved these goals?
3. How did you feel before you started your doctoral education? What made you feel that way? Can you elaborate with examples?
4. Have these feelings changed after you started your doctoral education?
 - If so, how did they change?
5. Do you experience challenges or opportunities during your doctoral studies?
 - If so, what are they? Can you elaborate with examples?
 - How does your personal life influence your doctoral education?
 - How does your social life influence your doctoral education?
 - How does your financial life influence your doctoral education?
6. Do you have motives that allow you to continue your doctoral education?
 - If so, what are they?
 - If not, how do you continue your doctoral education without them?

7. How is your thesis stage going?
 - What is the topic, methodology, etc. of your thesis?
 - When do you plan to submit your thesis?
8. What do you think about the relationship between you and your thesis advisor? Can you elaborate on why you feel this way with examples?
9. What do you think about the relationship between you and the faculty? Can you elaborate on why you feel this way with examples?
10. Do you have support mechanisms during your doctoral studies?
 - If so, what kind of support mechanisms do you have? Can you elaborate with examples? (Institutional, financial, familial, social, etc.)
 - If not, what kind of support mechanisms do you wish you had? (Institutional, financial, familial, social, etc.)
11. What are your plans for after your doctoral education? Were these plans the same when you started your doctoral education? If not, why did they change?
12. Are there any aspects of your doctoral education that you like and would like to see improved?
 - If so, what are they? Can you elaborate with examples?
13. Are there any aspects of your doctoral education that you find lacking and would like to see improved?
 - If so, what are they? Can you elaborate with examples?
14. Is there anything else you want to add?

If so, please state them.

APPENDIX E

SEMI-STRUCTURED INTERVIEW QUESTIONS FOR DOCTORAL
DROPOUTS

1. Why did you want to have doctoral education?
 - What was your goal to start your doctoral education?
 - What were the circumstances that led you to doctoral education?
2. Have you achieved these goals after you started your doctoral education?
 - If so, what are the goals you have achieved? Can you elaborate with examples?
 - If not, what are the goals you have failed to achieve? Can you elaborate with examples?
 - Did you drop out of doctoral education because you have not achieved these goals? Can you elaborate?
3. How did you feel before you started your doctoral education? What made you feel that way? Can you elaborate with examples?
4. Have these feelings changed after you started your doctoral education?
 - If so, how did they change?
5. What were the factors that made you drop out of doctoral education?
 - How did your personal life influence your doctoral education?
 - How did your social life influence your doctoral education?
 - How did your financial life influence your doctoral education?
6. How was your thesis stage going?
 - What was the topic, methodology, etc. of your thesis?
 - When did you plan to submit your thesis?

7. What do you think about the relationship between you and your thesis advisor? Can you elaborate on why you feel this way with examples?
8. What do you think about the relationship between you and the faculty? Can you elaborate on why you feel this way with examples?
9. Did you have support mechanisms during your doctoral studies?
 - If so, what kind of support mechanisms did you have? Can you elaborate with examples? (Institutional, financial, familial, social, etc.)
 - If not, what kind of support mechanisms do you wish you had during your doctoral education? If these had existed, would you still have dropped out? (Institutional, financial, familial, social, etc.)
10. How did it feel to drop out of doctoral education? Can you elaborate?
 - What did you experience, whether negative or positive, after you dropped out of doctoral education?
11. If you had the opportunity, would you complete your unfinished doctoral education?
 - If so, why?
 - If not, why not?
12. Are there any aspects of your doctoral education that you liked and would like to see improved?
 - If so, what are they? Can you elaborate with examples?
13. Are there any aspects of your doctoral education that you found lacking and would like to see improved?
 - If so, what are they? Can you elaborate with examples?
14. Is there anything else you want to add?

If so, please state them.

APPENDIX F

ETHICS COMMITTEE APPROVAL

Evrak Tarih ve Sayısı: 07.01.2022-46712

T.C.
BOĞAZİÇİ ÜNİVERSİTESİ
SOSYAL VE BEŞERİ BİLİMLER YÜKSEK LİSANS VE DOKTORA TEZLERİ ETİK İNCELEME
KOMİSYONU
TOPLANTI KARAR TUTANAĞI

Toplantı Sayısı : 26
Toplantı Tarihi : 05.01.2022
Toplantı Saati : 14:00
Toplantı Yeri : Zoom Sanal Toplantı
Bulunanlar : Prof. Dr. Ebru Kaya, Prof. Dr. Fatma Nevra Seggie, Dr. Öğr. Üyesi Yasemin Sohtorik İlkmen
Bulunmayanlar :

Emine Karaduman
Eğitim Bilimleri

Sayın Araştırmacı,

"Doktora Derecesinde Öğrenci Yıpranması ve Kalıcılığına İlişkin Fenomenolojik Bir Çalışma: Nedenler ve Sonuçları" başlıklı projeniz ile ilgili olarak yaptığınız SBB-EAK 2022/06 sayılı başvuru komisyonumuz tarafından 5 Ocak 2022 tarihli toplantıda incelenmiş ve uygun bulunmuştur.

Bu karar tüm üyelerin toplantıya çevrimiçi olarak katılımı ve oybirliği ile alınmıştır. COVID-19 önlemleri kapsamında kurul üyelerinden ıslak imza alınamadığı için bu onay mektubu üye ve raportör olarak Fatma Nevra Seggie tarafından bütün üyeler adına e-imzalanmıştır.

Saygılarımızla, bilgilerinizi rica ederiz.

Prof. Dr. Fatma Nevra SEGGIE
ÜYE

e-imzalıdır
Prof. Dr. Fatma Nevra SEGGIE
Raportör

APPENDIX G

AGGREGATED FINDINGS OF PERSONAL COMPLEXITIES

Theme:	Personal Complexities				
Categories:	Family-related Complexities	Work-related Complexities	Socialization-related Complexities	Value-related Complexities	Personal Support-related Complexities
Codes:	1. Struggle of balancing academic and family lives 2. Difficulty of sparing enough time for family 3. Challenges of studying with many family roles and responsibilities 4. Sociocultural pressure for marriage and having a child 5. Patriarchal challenges imposed on females 6. Hindering influences of marriage, engagement, divorce, sickness and deaths	1. Need for money 2. Lack of financial support 3. Overwork and exhaustion 4. No time and energy for academic productivity 5. Sociocultural pressure on males to work 6. Difficulty of managing time 7. Difficulty of getting time off from work 8. Being paid less for spending time for a doctorate 9. Being physically and mentally away 10. Paying extra for travelling 11. Financial burdens of conducting research 12. Negative influences of working outside of academia 13. Positive influences of working in academia 14. Difficulty of managing work-study schedules 15. Disconnection of academia from financial realities 16. Transferring work experience to academia 17. Transferring academic knowledge to workplaces 18. Preference of employers for doctoral graduates 19. No additional economic return of a doctorate 20. Negative influences of economic instability 21. Financial burden of such basic needs as housing 22. Positive financial influences of COVID-19 pandemic	1. Limited or no time for socialization 2. Avoiding social activities 3. Limited social skills 4. Low level and quality of socialization 5. Isolation in social activities 6. Developing anti-social behaviors 7. Being socially away from the campus 8. Being isolated from academic contexts 9. Partial integration into academic environments 10. Long term isolative influences of COVID-19 11. Positive social influences of doing a doctorate 12. Positive social influences of academic networks 13. Constructive influences of being social 14. Being privileged in social settings	1. Decreasing value of academia 2. Decreasing value of academic titles 3. Losing initial interest for the title 4. Feeling worthless in academia 5. Finding contextual challenges for the title in vain	1. Getting support from family members, friends, colleagues and romantic partners. 2. Getting extra support from academics and peers 3. Getting support from legal unions 4. Lack of personal support 5. Lack of systematic personal support mechanism

APPENDIX H

AGGREGATED FINDINGS OF INSTITUTIONAL COMPLEXITIES

Theme:	Institutional Complexities		
Categories:	Program-related complexities	University-related complexities	Institutional support-related complexities
Codes:	1. Choosing programs without being critical 2. Targeting specific programs 3. Preferring familiar fields or programs 4. Preferring familiar teams or academic communities 5. Prioritizing research sites and physical opportunities 6. Prioritizing professors in a program 7. Prioritizing the suggestions of professors 8. Prioritizing friends and peers in a program 9. Prioritizing innovative programs 10. Prioritizing previous positive experiences 11. Sustaining the comfort zone 12. Being obliged to a program for ÖYP 13. Choosing programs they are accepted to	1. Prioritizing the university culture, history and etiquette 2. Prioritizing academic excellence 3. Prioritizing emotional atmosphere 4. Prioritizing student affairs and institution 5. Prioritizing support staff 6. Prioritizing overall quality and reputation 7. Prioritizing unfamiliar experiences and settings 8. Prioritizing location and practicality 9. Prioritizing extra research units and resources 10. Prioritizing data collections facilities 11. Prioritizing English medium instruction 12. Prioritizing student-centeredness 13. Prioritizing cooperation with the sector 14. Prioritizing democratic and meritocratic environment 15. Prioritizing positive campus climate 16. Prioritizing national and international opportunities	1. No or limited institutional support 2. Online or offline facilities 3. Low in quality 4. Not being aware of the existing ones 5. Psychological support units 5. Institutional staff 6. Faculty member or supervisor 7. Student groups or clubs 8. Regular student meetings 9. Orientation programs 10. Limited funds, budgets and scholarships 11. Library and databases 12. Office programs 13. Career and development centers 14. Technology transfer office 15. Leisure center 16. Cafeteria 17. Guest house

APPENDIX I

AGGREGATED FINDINGS OF ACADEMIC COMPLEXITIES (PART 1)

Theme:	Academic Complexities						
Categories:	Course Stage-related complexities	Qualifying Stage-related complexities	Thesis Stage-related complexities	Supervisor-related complexities	Faculty-related complexities	Committee-related complexities	Academic support-related complexities
Codes:	1. A smooth transition period 2. More structural and anticipated 3. Less challenging stage 4. Familiar and manageable 5. Limited number and diversity of courses and faculty 6. Simple and common courses 7. Old fashioned syllabuses 8. Theoretically engaging stage 9. Crowded classes 10. Cancelled courses with no reason and make-up 11. Time for developing academic networks 12. Limited number of so-called electives 13. More obligatory courses 14. Need for flexibility 15. Need for innovative and useful courses	1. A challenging and problematic stage 2. A new and frightening experience 3. Not being ready for it with the course stage 4. Devoting a long time for preparation 5. Feeling exhausted and demoralized 6. Lack of standards 7. Depending on the jury 8. Causing health issues 9. Unlimitedness of time and content 10. Problematic relationships 11. Feeling lonely 12. Hierarchical negative behaviors 13. Egoist and elitist behaviors 14. Sociocultural negative behaviors	1. A deeper and authentic stage 2. Challenging and tiring 3. Challenges of finding original ideas 4. Challenges of getting approvals 5. Challenges of finding the right supervisor 6. Unlimitedness of time and content 7. Need for more independent effort 8. Not being ready for it with the course stage 9. Time and energy consumer 10. Lack of financial support 11. Lack of research facilities 12. Positive influences of supports 13. Negative influences of life events 14. Challenges of data collection and analysis 15. Challenges of field studies	1. Standard relationships 2. Workload of supervisors 3. Being physically and mentally away 4. Positive influences of volunteer selection 5. Negative influences of top-down assignments 6. Problematic relationships 7. Lack of communication 8. Being extra authoritarian and humiliating 9. Feeling inferior 10. Lack of supervisory skills 11. Lack of knowledge and vision 12. Lack of guidance for academic positions 13. Challenges of having co-supervisors 14. Difficulty of persuading people for changes 15. Challenges of bureaucratic procedures	1. Standard relationships 2. Hierarchical relationships 3. Friendly relationships 4. Toxic relationships 5. Unethical behaviors 6. Feeling alone and isolated 7. Difficulty of reaching to faculty 8. Difficulty of getting constructive feedback 9. Egoist and elitist behaviors 10. Misunderstood feedbacks	1. Friendly relationships 2. Toxic relationships 3. Prioritizing their favorite students 4. Positive influences of volunteer selection 5. Importance of supervisory leadership 6. Unstandardized meetings 7. Hostile and changing ideas 8. Lack of student-centeredness 9. Imposing personal ideologies 10. Feeling alone and isolated 11. Negative influences of external members 12. Difficulty of finding new members	1. Lack of academic supports 2. Not being aware of available supports 3. Lack of quality and quantity 4. Positive influences of project units and scholarships 5. Positive influences of language and editorial supports 6. Positive influences of writing centers 7. Positive influences of libraries and databases 8. Positive influences of research programs and tutorials 9. Positive influences of a qualified supervisor 10. Positive influences of informative emails and meetings 11. Positive influences of online meetings 12. Need for freedom not support

APPENDIX J

AGGREGATED FINDINGS OF ACADEMIC COMPLEXITIES (PART 2)

Theme:	Academic Complexities						
Categories:	Course Stage-related complexities	Qualifying Stage-related complexities	Thesis Stage-related complexities	Supervisor-related complexities	Faculty-related complexities	Committee-related complexities	Academic support-related complexities
Codes:	16. Repetition of master's degree courses 17. Not allowing deeper and critical thinking 18. Not providing expertise 19. Lack of fieldwork 20. Lack of seminars or workshops 21. Lack of field-specific courses 22. Lack of scientific production 23. Inadequate to prepare for the next stages 24. Meaningless and unnecessary 25. Practicality of online courses 26. Exhaustion from full-day courses 27. Practicality of full-day courses	-	16. Being tired in previous stages 17. Unfavorable behaviors of faculty and supervisors 18. Being mentally and physically away 19. Feeling inadequate and isolated	16. Unethical behaviors of supervisors 17. Ideological conflicts	-	-	-

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