



T.C.

ANKARA YILDIRIM BEYAZIT UNIVERSITY  
GRADUATE SCHOOL OF SOCIAL SCIENCES

**A DAILY EXAMINATION OF WORK AND NON-  
WORK TIME EXPERIENCES IN PANDEMIC  
WORKING ARRANGEMENTS**

MASTER THESIS

**TUĞBA AYDOS**

DEPARTMENT OF PSYCHOLOGY

Ankara, 2022

T.C  
ANKARA YILDIRIM BEYAZIT UNIVERSITY  
GRADUATE SCHOOL OF SOCIAL SCIENCES

**A DAILY EXAMINATION OF WORK AND NON-  
WORK TIME EXPERIENCES IN PANDEMIC  
WORKING ARRANGEMENTS**

**TUĞBA AYDOS**

DEPARTMENT OF PSYCHOLOGY

**Assist. Prof. Dr. Emine İNAN**

**Assist. Prof. Dr. Derya KARANFİL**

Ankara, 2022

## APPROVAL PAGE

The thesis study, “A Daily Examination of Work and Non-Work Time Experiences in Pandemic Working Arrangements” prepared by Tuğba AYDOS is approved unanimously / by majority votes by the jury as Master’s thesis in Ankara Yıldırım Beyazıt University Social Sciences Institute Department of Psychology.

JURY MEMBER	Institution	Signature
Assist. Prof. Dr. Emine İNAN	Ankara Yıldırım Beyazıt University	
Approved <input type="checkbox"/> Denied <input type="checkbox"/>		
Assist. Prof. Dr. Yasemin KAHYA	Social Sciences University of Ankara	
Approved <input type="checkbox"/> Denied <input type="checkbox"/>		
Assist. Prof. Dr. Funda Salman	Ankara Yıldırım Beyazıt University	
Approved <input type="checkbox"/> Denied <input type="checkbox"/>		
Assist. Prof. Dr. Yankı SÜSEN	Ankara Yıldırım Beyazıt University	
Approved <input type="checkbox"/> Denied <input type="checkbox"/>		
Assist. Prof. Dr. Ece BEKAROĞLU	Ankara Hacı Bayram Veli University	
Approved <input type="checkbox"/> Denied <input type="checkbox"/>		

Thesis Defense Date: 31.08.2022

I certify that this thesis fulfils the requirements to be deemed a master’s thesis at Ankara Yıldırım Beyazıt University, Institute of Social Sciences, Department of Psychology.

Director of the Institute of Social Sciences

Title, Name and Surname

Prof. Dr. Yaşar YİĞİT

## **PLAGIARISM PAGE**

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work. Date (31-08-2022)

Name, Last name: Tuğba AYDOS

Signature:



## ACKNOWLEDGEMENTS

Foremost, I would like to express my sincere thanks to my supervisors, Dr. Emine İnan and Dr. Derya Karanfil, for their continuous support and invaluable guidance throughout the process. Their professional advice and positive criticism enabled me to improve my research. I was lucky to have two advisors who always assisted me with patience and filled my gaps in knowledge. I would also like to express my gratitude to my thesis committee members, Dr. Yasemin Kahya and Dr. Funda Salman, for letting my defense be an enjoyable experience and for their insightful comments and suggestions. I am grateful to Assoc. Prof. Sedat ŞEN for helping me to learn HLM through Ayeum. In addition, I would like to thank Prof. Dr. Cem Şafak Çukur for giving direction to my life by giving me this advice. "Do your best at all times since you never know what life will throw at you."

I would like to thank my parents for always offering support and love. Mom, thank you for telling me I'm wonderful even when I don't feel that way, and things are not going well. I am extremely thankful to my brother for making me laugh when things became overwhelming. Grandmom! Thank you for being there to lean on whenever I need it! I would like to give a special thanks to my second family. Words cannot express how grateful I am to my parents-in-law and elder sisters for having my back.

Ayça, thank you for being there for me. You always offered me wisdom and encouraged me. I am so lucky to have you. My dear Çiğdem, I am so fortunate to have a friend like you. Thank you for helping me out with the remedy at the last moment. I also want to thank my FRIENDS who have always been there by my side.

I would like to thank myself for not giving up in the most challenging times, for believing in me and for working tirelessly to reach my goal.

Most importantly, I would like to thank my beloved husband, Bilge Safa Aydos, who provides constant encouragement and unending love. You bring out the best in me! Thank you for your warmth and patience in helping me stay motivated. You are a shining part of my life :)

Last but not least, I would like to thank all participants for their enthusiastic participation.

## **ABSTRACT**

### **A Daily Examination of Work and Non-Work Time Experiences in Pandemic Working Arrangements**

Aydos, Tuğba

M.Sc., Department of Psychology

Supervisors: Dr. Emine İnan/Dr. Derya Karanfil

August 2022, 103 pages

COVID-19 has highlighted the importance of flexible work arrangements. It is believed that this unexpected and compulsory change in the working pattern also affects the psychological processes of the employees. Basic psychological needs, post-work recovery, work engagement, self-compassion, and positive affect are all extensively covered in the literature. Still, they have not been discussed together in terms of the effect of work patterns. In this context, the present study aimed to examine the relationships between these concepts and to investigate the possible moderator effects of the working patterns. 87 participants were included in the diary study. A regression technique called hierarchical linear modeling was used for the study's data analysis. According to the study's findings, the need satisfaction was mediating variable between work engagement and positive affect. Additionally, relaxation showed a mediating effect between need satisfaction and positive affect, but psychological detachment did not show the mediator effect. The moderation analyses did not show the moderating effects of self-compassion on the relationship between need satisfaction and positive affect and general work engagement on the relationship between psychological detachment from work and positive affect. The psychological detachment was a moderator of the relationship between work engagement and positive affect. In addition,

the day-specific working place moderated the relationship between psychological detachment and positive affect. The day-specific working place also moderates the relationship between need satisfaction and positive affect. Furthermore, the limitations and strengths of the study and suggestions for future studies are discussed.

**Keywords:** Basic psychological needs, recovery experience, work engagement, self-compassion, positive affect



## ÖZ

Pandemi Çalışma Düzenlemelerinde İş ve İş Dışı Zaman Deneyimlerinin Günlük Çalışma ile İncelenmesi

Aydos, Tuğba

Yüksek Lisans, Psikoloji

Tez Yöneticileri: Dr. Emine İnan/ Dr. Derya Karanfil

Ağustos 2022, 103 sayfa

COVID-19, esnek çalışma düzenlemelerinin önemini vurgulamıştır. Çalışma düzenindeki bu beklenmedik ve zorunlu değişikliğin çalışanların psikolojik süreçlerini de etkilediğine inanılmaktadır. Temel psikolojik ihtiyaçlar, iş sonrası iyileşme, işe bağlılık, öz-şefkat ve olumlu duygulanım literatürde kapsamlı bir şekilde ele alınmaktadır. Yine de çalışma biçimlerinin etkisi bağlamında birlikte tartışılmış değildir. Bu bağlamda mevcut çalışma bu kavramların arasındaki ilişkilerin incelenmesini ve çalışma düzeninin olası düzenleyici etkilerini araştırmayı amaçlamıştır. Günlük çalışmasına 87 katılımcı dahil edilmiştir. Çalışmanın veri analizi için hiyerarşik doğrusal modelleme adı verilen bir regresyon tekniği kullanılmıştır. Çalışmanın bulgularına göre ihtiyaçların doyumu iş bağlılığı ve pozitif duygulanım arasında aracı değişken rolü oynamıştır. Ek olarak, gevşeme, ihtiyaç tatmini ile olumlu duygulanım arasında aracılık etkisi gösterirken, psikolojik uzaklaşma aracı etki göstermemiştir. Düzenleyici değişken analizlerinde temel psikolojik ihtiyaçların doyumu ve pozitif duygulanım ilişkisinde öz şefkatin, işten psikolojik uzaklaşma ve pozitif duygulanım ilişkisinde genel işe bağlılık düzeyinin moderatör etkisine rastlanmamıştır. İşten psikolojik uzaklaşma, işe bağlılık ve pozitif duygulanım ilişkisinde düzenleyici değişken olarak rol almıştır. Ek olarak, güne özgü çalışma yeri, işten psikolojik uzaklaşma ve pozitif duygulanım ilişkisinde düzenleyici değişken olmuştur. Güne özgü çalışma yeri ayrıca ihtiyaç doyumu ve pozitif duygulanım ilişkisinde de düzenleyici değişken rolü almıştır. Ayrıca, çalışmanın sınırlılıkları, güçlü yanları ve gelecek çalışmalar için öneriler tartışılmıştır.

**Anahtar kelimeler:** Temel psikolojik ihtiyaçlar, toparlanma deneyimi, iş baęlılıęı, öz-şefkat, pozitif duygulanım



# TABLE OF CONTENTS

ABSTRACT .....	i
ÖZ.....	iii
LIST OF TABLES .....	viii
LIST OF FIGURES.....	ix
LIST OF ABBREVIATIONS .....	x
CHAPTER I.....	1
INTRODUCTION.....	1
1.1 Overview.....	1
1.2 Flexible Working in Times of The Covid-19 Pandemic .....	3
1.3 Telework .....	4
1.3.1 Remote Working: Benefits and Challenges .....	5
1.4 Work Engagement.....	8
1.5 Basic Psychological Need Satisfaction.....	10
1.5.1 Basic Psychological Need Satisfaction in Remote Work .....	12
1.6 Work Recovery .....	13
1.6.1 Dimensions of Recovery Experiences .....	16
1.6.2 Recovery and Basic Psychological Needs Satisfaction .....	18
1.6.3 Recovery as Mediating Mechanism.....	19
1.6.4 General Work Engagement: As Boundary Construct.....	19
1.7 Self-Compassion .....	20
1.8 Working Patterns As Moderator .....	22
1.9 The Present Study .....	24
1.9.1 Hypotheses and Research Model .....	25
CHAPTER 2 .....	27
METHOD .....	27
2.1 Participants .....	27
2.2 Measures.....	28
2.2.1 Basic Psychological Need Satisfaction & Frustration Scale .....	28

2.2.2 Well-Being Measures .....	28
2.2.2.1 The PANAS Scales.....	29
2.2.2.2 Satisfaction with Life Scale .....	29
2.2.3 Recovery Experience Questionnaire.....	29
2.2.4 The Utrecht Work Engagement Scale (UWES).....	30
2.2.5 Self-Compassion Scale (SCS).....	31
2.2.6 Baseline Demographic Information Form.....	31
2.2.7 Daily Demographic Information Form.....	31
2.3 Procedure .....	31
2.4 Statistical Analysis .....	32
CHAPTER III.....	34
RESULTS .....	34
3.1 Overview.....	34
3.2 Data Screening .....	34
3.3 Correlations Between the Study Variables and Descriptive Statistics .....	35
3.4 Hierarchical Linear Modelling: .....	38
3.4.1 Hypotheses Testing .....	39
3.4.1.1 <i>Test of moderation hypotheses</i> .....	43
CHAPTER IV.....	53
DISCUSSION.....	53
4.1 Overview.....	53
4.2. Findings of the Research .....	53
4.2.1 Discussion of the Results Concerning the Mediating Effect of Psychological Need Satisfaction.....	53
4.2.2 Discussion of the Results Concerning the Mediating Effects of Recovery Dimensions .....	54
4.2.3 Discussion of the Results Concerning the Moderating Effect of General Work Engagement .....	55
4.2.4 Discussion of the Results Concerning the Moderating Effect of Daily Psychological Detachment.....	56

4.2.5 Discussion of the Results Concerning the Moderating Effect of Self-Compassion	57
4.2.6 Discussion of the Results Concerning the Moderating Effect of Working Pattern on The Relationship Between Recovery Experience (Psychological Detachment) and Positive Affect .....	57
4.2.7 Discussion of the Results Concerning the Moderating Effect of Working Pattern on The Relationship Between Psychological Need Satisfaction and Positive Affect .....	58
4.3 Contributions of the Current Study .....	59
4.4 Limitations and Suggestions for Future Studies .....	60
REFERENCES .....	62
APPENDICES .....	86
APPENDIX A.....	86
APPENDIX B.....	87
APPENDIX C.....	89
APPENDIX D.....	90
APPENDIX E.....	91
APPENDIX F.....	92
APPENDIX G.....	93
APPENDIX H.....	94
APPENDIX I.....	96
APPENDIX J.....	97
APPENDIX K.....	98
APPENDIX L.....	99
APPENDIX M.....	100
APPENDIX N.....	101
APPENDIX O.....	102
APPENDIX P.....	103

**LIST OF TABLES**

Table 1 .....35  
Table 2 .....36  
Table 3 .....37  
Table 4 .....39  
Table 5 .....40  
Table 6 .....43  
Table 7 .....44  
Table 8 .....45  
Table 9 .....46  
Table 10 .....48  
Table 11 .....49  
Table 12 .....51  
Table 13 .....52

## LIST OF FIGURES

Figure 1 .....	26
Figure 2 .....	45
Figure 3 .....	48
Figure 4 .....	49
Figure 5 .....	52



## **LIST OF ABBREVIATIONS**

BPNSF: Basic Psychological Need Satisfaction & Frustration

COR: Conservation of Resources Theory

COVID-19: Coronavirus Disease 2019

HLM: Hierarchical Linear Modelling

ILO: International Labor Organization

NA: Negative Affect

PA: Positive Affect

SDT: Self-Determination Theory

SC: Self-Compassion

SWLS: Satisfaction with Life Scale

TURKSTAT: Turkish Statistical Institute

WE: Work Engagement

# **CHAPTER I**

## **INTRODUCTION**

### **1.1 Overview**

Working population in Turkey was reported as 47.2% (TURKSTAT, 2021). One way to develop workforce is promoting psychological health of employees (Kundi et al., 2020). However, crisis situations create unexpected changes and endanger psychological well-being (Zürcher et al., 2020). COVID 19, a crisis situation, was categorized by The World Health Organization (WHO) as a pandemic (WHO, 2020). The pandemic (COVID-19) significantly affected different aspects of individuals' lives, including their mental and physical health (Holmes et al. 2020).

Aside from emerging 'unknown' health issues, COVID 19 is related to major changes occurred in social and working life (Carnevale & Hatak, 2020). Due to the pandemic, many companies have been forced to move to flexible or remote working strategies (Gigauri, 2020). Research and practices in this area are still in their early stages, but there is a rising awareness of the potential adverse effects of remote working (Grant et al., 2013). As a result, the current study has three objectives: a) to examine which factors best predict employees' psychological well-being during the pandemic, b) to investigate the effects of changing working conditions on psychological well-being, and c) to examine the psychological processes and relationships that affect the psychological well-being.

Work engagement is critical for both employees and organizations and is considered as an indicator of well-being (Bakker & Demerouti 2008). Work engagement is accepted as the opposite of burnout (Bakker, Schaufeli et al., 2008). Therefore, it is important to test the relationship between work engagement and positive affect and the concepts that mediate this relationship. The first issue is to test whether psychological need satisfaction has a mediating effect on the relationship between work engagement and well-being. Although research evidence indicated that basic psychological need satisfaction has positively predicted positive affect (Baard et al., 2004; Mancini, 2008; Mayer et al., 2008; Ryan, 1995; Ryan & Deci, 2000a; Ryan & Deci, 2017), its effect as a mediator variable has been limitedly studied.

Self Determination Theory emphasizes three basic psychological needs (autonomy, competence, and relatedness) for well-being (Ryan, 1995). Psychological needs satisfaction is also essential for employee motivation (Ryan & Deci, 2017). It is critical to investigate the impact of need satisfaction on well-being and the concepts that mediate this link. Psychological need satisfaction significantly predicts after-work recovery. Meeting basic psychological needs improves recovery processes by replenishing energy resources (van Hooff & Geurts, 2015). Although previous research clearly shows a positive link between psychological need satisfaction and psychological well-being, its function in the daily recovery process has gotten little empirical attention (van Hooff et al., 2018). The second hypothesis of the study is to test the indirect effect of recovery experiences (psychological detachment and relaxation) on the relationship between psychological need satisfaction and well-being.

In literature, common findings indicate that work engagement and psychological detachment from work are related (Sonnentag & Kühnel, 2016). However, in literature, there are mixed results on how work engagement and psychological detachment affect each other (Shimazu et al., 2016; Sonnentag, Binnewies et al., 2010). Sonnentag, Mojza et al. (2008) found that person-level work engagement moderated the relationship between psychological detachment and positive affect. Third, the present study investigates the moderation effect of general work engagement on the relationship between psychological detachment and positive affect.

Sitaloppi et al. (2009) found that recovery is a moderator variable between strain processes (work exhaustion and job control) at work and positive affect. Gaudinoo and Stefano (2021) reported that work engagement act as a protective factor when the psychological detachment from work is low. In line with the literature, the fourth hypothesis of the study is to test the moderation effects on the relationship between work engagement and positive affect.

Fifth, self-compassion is positively associated with well-being (Babenko et al., 2019). Dev et al. (2020) found that self-compassion predicted better quality of life and lower burnout, and self-compassion acted as a moderator variable between stress and burnout. Self-compassion would improve self-determined motivation in achieving mastery of a goal (Neff et al., 2005). Self-compassionate athletes have more autonomy (Mosewich et al., 2011). Based on the literature, it seemed reasonable to expect that positive affect outcomes should

be positively predicted by psychological need satisfaction and moderated by higher levels of self-compassion. Therefore, it was hypothesized that self-compassion moderates the relationship between psychological need satisfaction and positive affect. Positive affect is stronger among those with a high level of self-compassion.

Studies on working patterns yielded inconsistent results. Some of these studies have highlighted the negative effects of remote work (Marimuthu & Vasudevan, 2020; Rigotti et al., 2020), while others have highlighted positive impacts of remote work (Abilash & Siju, 2021; Gajendran & Harrison, 2007). Lastly, the current study hypothesized that the working patterns moderated the relationship between need satisfaction, recovery experiences, and well-being.

In the following sections, first, a brief summary of the literature on the changing working patterns during the pandemic period and the psychological effects of flexible working practices are mentioned. Next, the concepts of work engagement, basic psychological needs, post-work recovery experience, and finally self-compassion are introduced, literature studies on the relevance of each of them to psychological well-being and related concepts are presented. The aim and importance of the study were explained by adding hypotheses and the research model. Lastly, the current research examined two-level models where days were nested within individuals. Nested data can be effectively analyzed using multilevel modeling. Therefore, multilevel approach was adopted in the present study. Level-1 variables were obtained from 5-day daily data, while level-2 variables were obtained from baseline measurements. Level-1 and level-2 variables are shown in the presented research model (see figure 1).

## **1.2 Flexible Working in Times of The Covid-19 Pandemic**

World Health Organization declared COVID-19 as a pandemic on 11 March 2020 (WHO, 2020). Due to the pandemic, governments have taken various precautions. The shutdown of schools, universities and some businesses, hygiene and mask rules, social distance rules, and restriction hours for particular age groups are some precautions taken to reduce the spread of the virus (Spurk & Straub, 2020; Turkish Ministry of Interior, 2020). Measures taken to slow down the rate of spread of the virus have also led to changes in the business world (International Labour Organization [ILO], 2020). In terms of working life, many companies were closed, employees lost their jobs, some professional groups switched

to a remote work system, and so many people who did not want to lose their jobs were seeking ways to keep up with the new routine and kept their jobs under challenging conditions (Rigotti et al., 2020). In the pandemic, new working models and practices that ensure social distance in working hours have been adopted (Görmüş, 2020). In order to prevent the spread of Covid-19, some workplaces have adopted flexible working hours, reducing their working hours, or switching to a shift system to decrease density in offices (Gigauri, 2020). Remote working techniques are one of the precautions used to minimize the spread of the coronavirus and protect people. At the start of 2020, many governments issued suggestions to businesses to encourage and enable remote employment (Belzunegui-Eraso & Erro-Garcés, 2020). Many firms have focused on digitalization and remote work to mitigate the economic consequences of the Covid-19 problem (Gigauri, 2020). Due to the pandemic, remote employment, which provides social isolation, has become more popular than ever (Görmüş, 2020). After the pandemic, the rate of teleworking in Europe has reported as 40% (ILO, 2020).

### **1.3 Telework**

Telework is a job or service that is performed online and allows for the execution of work utilising information and communication technology (ICT) at a distance (Belzunegui-Eraso & Erro-Garcés, 2020). When telework first emerged, it was predicted that everyone would work remotely in the future. However, despite the passage of almost fifty years, the expectation did not happen; social and organizational factors, such as people's need for face-to-face communication and the nature of the job, have slowed the rate of teleworking spread (Eurofound & ILO, 2017).

Working styles evolve throughout time, and it is expected that practices like working from home will become more popular (Kavi & Koçak, 2010). Today's conditions, the developments in information and communication technologies, the emergence of internet-based jobs, and the increase of knowledge of workers have made it possible to work from anywhere (Eurofound & ILO, 2017). Information and communication technologies have promoted interest in and demand for remote work in Turkey and the rest of the world. Remote working has also taken its place in Turkish Labor Law legislation (Turkish Labor Law, 2003).

The general justification of the labor law numbered 4857 was changed by emphasizing the development of technology and the needs of the era. With the additional paragraph added to Article 14 of the Labor Law No. 4857 titled “On-call work and remote work”, remote work is defined as follows:

*Remote work is a business relationship established in writing, based on the principle that the employee performs the act of working within the scope of the work organization created by the employer at home or outside the workplace with technological communication tools. (Remote Working Legislation, 2021)*

### **1.3.1 Remote Working: Benefits and Challenges**

Telework is a flexible working practice that keeps employees away from the stress of the workplace by providing space and time flexibility (Abilash & Siju, 2021). Telework is being embraced by EU countries to reduce travel congestion and increase female employment (Peters et al., 2003). Teleworking enables employers to have the chance to work with people from all over the world (Abilash & Siju, 2021). With flexible working, both employers and employees can avoid various costs. For example, employees reduce expenses related to travel, gas, clothing, food and beverages (Kavi & Koçak, 2010). Teleworking allows businesses to have a more flexible organizational structure while also decreasing office costs and employee absenteeism (Peters et al., 2003). During the pandemic, working from home has also a motivation-boosting impact on employees' health and safety (Akbaş-Tuna & Türkmenadağ, 2020).

The difference between remote work and telework is that teleworkers use information and communication technologies, but remote workers are not required to use electronic equipment (Vartiainen, 2021). Besides the benefits, there are also some challenges of remote working. Wang et al. (2020) classified the difficulties of remote working into four categories: loneliness, work-family conflict, ineffective communication and procrastination; all of them negatively affect the productivity and well-being of employees. Loneliness and work-family conflict are the most frequent difficulties encountered in the teleworking literature (Mantymaki et al., 2022). Although remote working provides flexibility and numerous opportunities, it hinders people's sense of belonging (Ens et al., 2018). According to Richardson and McKenna (2014), the most common challenge of remote work was employees' fear of being "forgotten" because employees who are unable to build social

relationships and who are forgotten by their superiors would not be able to advance in their professions. In another study conducted during Covid-19, more than three-quarters of the participants reported that they were depressed, had sleep disturbances, and felt angry (Marimuthu & Vasudevan, 2020). Similarly, according to a study conducted during the pandemic, those who work from home, though that isolation would weaken social relations (Kılıç, 2020). In addition, the disruptions experienced in communication and the inability to communicate within the office prevented the employees from helping their teammates, made doing work more difficult (Akbaş-Tuna & Türkmendağ, 2020). Although online reporting and monitoring options are available in remote work, constant communication is extremely important (Gigauri, 2020).

Another construct examined in the teleworking literature has been work-family conflict. In literature, findings regarding work-family conflict are split into pre-pandemic and pandemic periods. In pre-pandemic times, teleworking was related to decreased work-family conflict and increased relationship quality with their supervisors (Gajendran & Harrison, 2007). These findings are not consistent with the findings of the studies during the pandemic period. For instance, employees who switched to the remote working system during the pandemic period experienced work-family conflict and had difficulties in their relations with their superiors (i.e., Akbaş-Tuna & Türkmendağ, 2020; Rigotti et al., 2020; Wang et al., 2020). An understanding that employees are perceived as 24/7 available by employers might increase this conflict (Rigotti et al., 2020). In the pandemic, many employers who misinterpret flexible working have tried to spread the job duties throughout the day by stretching the working hours (Akbaş-Tuna & Türkmendağ, 2020). In Kılıç's research (2020), employees wanted to return to their classic working pattern after the pandemic because when working remotely, working hours lasted all day, and that caused the blurring of the boundary between work and home, which increased the workload. Hall and Richter (1988) examined this process, thinking that the transitions between work and home could identify the main problems in the relationship between the two spaces. "Daily transitions," as defined by Hall and Richter (1988) explores the physical and psychological transitions that occur during the time spent traveling from home to work and from work to home. They emphasized that this process is important. They suggested an average distance of thirty minutes from home to work. In teleworking, on the other hand, since people generally work from home, there is no chance to ensure these daily transitions occur. Hartig et al. (2007) state that teleworkers consider their house less healing than office workers. In

teleworking, the high transparency between home and work might create a detrimental effect on the work-life balance (Zijlstra & Sonnentag, 2006). Employees, who can not get away from work mentally during the after-work hours, might not reach daily transition, resulting in work overtime, increased workload, and job stress (Morganson et al., 2010).

Another challenge of remote work is that it is difficult to maintain physical and psychological balance and discipline at home (Akbaş-Tuna & Türkmendağ, 2020). The transparency of the border between work and home makes focusing on work difficult to while working from home (Verma & Uy, 2021). However, the "border" between work and home is not always referred to as the physical boundary. Boundary; is a phenomenon with a physical, mental, psychological, and social structure (Standen et al., 1999). In this context, the concept of psychological detachment from work (not thinking about work during non-working hours, avoiding work activities, and mentally getting away from work) is important (Sonnentag, Binnewies et al., 2008). The next day, employees who provide mental distance from work come to work less tired and have less work-related anxiety (Sonnentag & Fritz, 2007; Verma & Uy, 2021). Although alternatives such as working from home have reduced the spread of the virus, it has caused the destruction of borders and work-family conflicts (i.e., Akbaş-Tuna & Türkmendağ, 2020; Rigotti et al., 2020; Wang et al., 2020). In remote work, the feeling of not being able to get away from work and the tendency to work long hours inhibit the restorative effect of the house (Lundberg & Lindfors, 2002).

Given major changes occurred in working life in pandemic, there have been limited study examining how employee's work attitudes (specifically work engagement) spill into off-work time in COVID 19 pandemic for people with remote working style. In the Covid-19 period, when many people work from home, it will be beneficial to examine the factors that affect employees' psychological wellbeing. Specifically, there has been an emerging need to examine: (a) whether work engagement spill into home life and influence employee wellbeing (i.e., positive affect) b) whether there are mediating mechanisms (i.e., need satisfaction and recovery strategies) underlying the work engagement and positive affect relationship, (c) whether the spillover of work engagement is more likely under certain conditions and among individuals having certain traits. Therefore, the current study aims to answer and examine these questions.

## 1.4 Work Engagement

Work engagement is defined as a state of well-being that includes positive, motivating, and satisfying feelings about work (Bakker, Schaufeli et al., 2008). Byrne et al. (2016) mentioned three expressions of work engagement: First, being excited about the job role and establishing an empathetic bond with others is the emotional expression of work engagement. Second, the intellectual expression of engagement to work includes curiosity about work, a complete focus on work during work performance, following the information, and thinking actively about work. And finally, being energetic and active at work is defined as the physical expression of work engagement.

Work engagement was defined as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli et al., 2002, p. 74). Vigor refers to a high level of mental energy and endurance, psychological resilience, the desire and enthusiasm to work even in difficult situations. Dedication refers to being committed to one's job role, strongly involved in the work, being proud of one's work, and finding it meaningful. Absorption is distinguished by positive emotions such as not being aware of the passing time at work, fully participating and concentrating, feeling happy at work, and not wanting to leave (Schaufeli & Bakker, 2004). Burnout is generally distinguished by cynicism and diminished professional competence, but work engagement is the positive opposite of burnout (Maslach et al., 2001; Schaufeli, & Bakker, 2004).

Employees with high work engagement experience positive emotions about their jobs and feel excitement and happiness (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004). The positive outcomes of work engagement on employees provide not only individual benefits but also a competitive edge at the organizational level with positive results and high-performance output (Katarina et al., 2019). Bakker and Leiter (2010) stated that when employees experience work engagement, they make a high level of effort in the face of challenging goals and reflect their energies on the work. But the same researchers also indicate that engaged employees experience a “flow”-like state, and the feeling of enjoying work results in more effective work actions. Vigor, dedication, and absorption, which are at the center of work engagement, lead to effective actions and turn into performance in many sectors (Bakker & Leiter, 2010; Bakker & Schaufeli, 2008). When employees have a low work engagement, they will perform poorly because of their lack of effort and concentration. Additionally, engaged employees have a strong desire to learn and are more likely to take

the initiative and engage in proactive activities at work (Sonnentag, 2003). Engaged employees tend to be more creative and productive (Bakker & Demerouti, 2008).

Bakker and Demerouti (2008) stated that engaged employees show high performance because it is thought that engaged employees generate their own resources, which encourages high performance and productivity. The same researchers also indicate that engaged employees are not workaholics; engaged employees also feel tired at the end of the day, but engaged employees enjoy working and often associate this fatigue with their success. In addition, unlike workaholics, they are not dependent on their work and find their work enjoyable (Maslach et al., 2001). Employees with work engagement perceive work as a demanding and challenging task rather than a stress factor, unlike those who experience burnout (Bakker, Schaufeli, et al., 2008).

Previous studies have conceptualized work engagement as a personal trait variable that fluctuates between individuals (Sonnentag, 2003). However, individuals do not show equal work engagement to their work every day, and the level of engagement of employees can vary from week to week or from day to day (Sonnentag et al., 2010). In addition, between-person studies cannot explain why an engaged employee sometimes performs below their own average. Many studies are reporting that work engagement fluctuates within individuals (i.e., Bakker, 2014; Xanthopoulou, & Bakker, 2013). As a result, within-person methods to work engagement research is becoming more popular (Bakker, Schaufeli, et al., 2008). One of the benefits of the within-person approach to work-engagement research is to uncover the appropriate environment to increase employees' engagement by analyzing their experiences when employees are faced with challenging job requirements and demands (Sonnentag et al., 2010). For example, Sonnentag (2003) found that daily recovery experience predicts work engagement. According to the study, starting the day as “recovered” gives employees more work engagement throughout the day.

Studies showed that an increase in employees daily work engagement was related to an increase in their positive affect (Schaufeli & Bakker, 2004). However, there are limited number of studies on mediating mechanism through with work engagement impact positive affect. Given the importance of basic need satisfaction in well-being (Baard et al., 2004; Mayer et al., 2008; Ryan, 1995; Ryan & Deci, 2006), basic need satisfaction might have a mediating role in that relationship.

## 1.5 Basic Psychological Need Satisfaction

Humans have an innate tendency to grow, develop, and integrate internally (Ryan, 1995; Ryan & Deci, 2000b). Babies do not come into the world as "tabula rasa"; instead, they tend to actively and willingly communicate with their environment to form their selves. Even in infants, human "innate" desire for growth and integration can be observed (Ryan & Deci, 2017). However, people need supportive contexts for their internal transformation towards integration (Ryan & Deci, 2017; Vansteenkiste et al., 2010). SDT investigates the fundamental motivations required for human development/growth and the social conditions that hinder this development/growth (Ryan & Deci, 2017). Edward Deci and Richard Ryan spent nearly 50 years developing SDT, a thorough theory of human motivation that aims to understand and explain human behavior (Ryan & Deci, 2000c; Vansteenkiste et al., 2010).

Self-determination theory emphasizes three basic needs for psychological well-being and growth. Basic psychological needs are; autonomy, competence, and relatedness (Ryan 1995; Ryan et al., 1996). These basic psychological needs are innate, necessary, and universal (Ryan & Deci, 2000b). Basic psychological needs may differ from one's conscious needs. For example, in individualistic cultures, the need for "relatedness" may often be denied, but not meeting a need undermines psychological well-being in all cultures (Ryan, 1995; Ryan et al., 1996). In a cross-cultural study, Deci et al. (2001) supported the universality of basic psychological needs; found that need satisfaction predicts psychological well-being.

Three basic psychological needs must be satisfied for human functionality, vitality, and well-being (Ryan & Deci, 2006). Intrinsic motivation and internalized extrinsic motivation and their maintenance only occur in social contexts where basic psychological needs are met (Deci & Ryan, 2008; Gagne & Deci, 2005; Vansteenkiste & Ryan, 2013). Healthy self-development plays a critical role both in the individual's relationship with oneself and in communication with the world and occurs only when autonomy, competence, and relatedness needs (basic psychological needs) are met (Ryan & Deci, 2017). The concept of need here is not superficial but refers to the essential nutrients and conditions necessary for the growth and integrity of being. For example, as much as sun and water are important for the development and integrity of a plant, the needs of autonomy, competence, and relatedness are also important for the psychological health and well-being of human beings, who are biological beings (Ryan, 1995).

The psychological need for autonomy includes people's will over their experiences and actions and being responsible for them (Deci et al., 1991). Autonomy is the need for self-regulation of one's behavior (Ryan, 1993; Ryan & Deci, 2017). Competence, which is the second of the basic psychological needs, refers to knowing and understanding the ways to reach the goal. It includes mastery, curiosity, and the experience of competition (Ryan & Deci, 2002). Lastly, relatedness explains the need for feeling socially connected and supportive and satisfying relationships (Deci & Ryan, 2017; Ryan & Deci, 2000a). People feel connected when they are cared for by others and when they feel valued among peers, they feel a sense of belonging (Deci & Ryan, 2017).

Individuals who cannot meet their psychological needs tend to be more defensive, unmotivated, unhappy, aggressive, and display more antisocial behaviors, so failure to meet these three needs leads to exhaustion and fragmentation of self-integrity. (Ryan & Deci, 2017). Psychological well-being and performance increase in environments where need satisfaction is supported, and positive motivation develops (Ryan & Deci, 2000c). Understanding the context and conditions in which autonomy, competence, and relatedness needs are met is important to ensure need satisfaction (Chiniara & Bentein, 2015).

The effect of satisfaction and frustration of basic psychological needs on psychological well-being has been supported by both between person and within person studies. Sheldon et al. (1996) investigated the effect of daily fluctuations in meeting basic needs for autonomy and competence on psychological well-being with hierarchical linear modeling. According to within-person analyses, individuals experience greater psychological well-being on days when their need for autonomy and competence is met. In a daily study, Reis et al. (2000) found that basic psychological need satisfaction independently increased emotional well-being.

Supporting basic psychological needs plays a crucial role in employee motivation and productivity (Olafsen et al., 2018). Contexts that support needs help the internalization of motivation; this knowledge can be helpful for internally motivating group members in tasks that require commitment, performance, and effort (Ryan & Deci, 2000c). The basic psychological need satisfaction is related with psychological well-being, job commitment, and job satisfaction (Mayer et al., 2008). Baard et al. (2004) found that psychological need satisfaction at work is associated with psychological well-being and increased performance. Leaders who focus on followers' growth and development positively affect their

performance by promoting employees' basic psychological needs satisfaction (Chiniara & Bentein, 2015). Contexts that support the fulfillment of basic psychological needs not only improve emotional well-being, but also promote the robust development of creativity, productivity, compassion, and curiosity (Ryan & Deci, 2017). According to the findings, the work environment supportive of autonomy-competence brought the psychological need satisfaction (Coxen et al., 2022).

### **1.5.1 Basic Psychological Need Satisfaction in Remote Work**

In remote work, superiors may have a desire to control and supervise subordinates, but this harms employees' engagement and reduces their productivity (Lodovici, 2021). According to Orsini and Rodrigues (2020), working from home differs from traditional office work as it requires employees to be self-organized due to its structure.

In a meta-analysis on teleworkers, an increase in perceived autonomy was related to a decrease in work-family conflict (Gajendran & Harrison, 2007). However, in a study conducted during the Covid-19 pandemic, job autonomy did not reduce work-family conflict; when employees cannot maintain work-home boundaries, work-family conflict occurs even though they have job autonomy (Wang et al., 2020). Remote workers rely more on their abilities and self-efficacy, as they receive less direction and supervision, and have more job autonomy than those working under supervision (Staples et al., 1999). However, studies conducted during the Covid-19 period revealed that job autonomy in remote working is difficult to achieve (Akbaş-Tuna & Türkmendağ, 2020; Kılıç, 2020; Rigotti et al., 2020; Wang et al. 2020). In Kılıç's (2020) study, almost all participants stated that they had problems with their managers while working from home. One of those participants expressed that due to "flexible working" the employer makes video calls even outside working hours.

The ability to operate autonomously is one of the essential skills necessary in remote workers (Flores, 2019). Wang et al. (2020) stated that job autonomy and social support are virtual work characteristics that boost remote employees' productivity and well-being. They found that job autonomy does not alleviate work-family conflicts, but job autonomy helps cope with loneliness, and social support positively affects well-being and productivity by dealing with all of the identified remote working challenges. Employees can adopt proactive behaviors while performing their profession as job autonomy promotes intrinsic motivation and self-confidence through control (Parker et al., 2010). Job autonomy helps with feelings of loneliness by leading to proactive actions. This is because social interaction while working

remotely is only possible when employees start online communication on their own; social interaction reduces feelings of loneliness (Wang et al., 2020).

Work engagement is positively associated with “job resources” that can inspire personal growth, learning, and development. Those resources are beneficial in achieving business goals and help to reduce job demands (Schaufeli et al., 2002). For example, job resources such as social support from colleagues or supportive feedback from superiors that encourage learning, task diversity, growth, and learning opportunities are positively associated with work engagement (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004). Job resources encourage employees to meet their autonomy, competence, and relatedness needs by motivating them internally with the development opportunities and support structure they offer (Bakker & Leiter, 2008). Employees can deal with high job demands in organizations with easily accessible job resources (Bakker & Albrecht, 2018). Ouweneel et al. (2012) stated that positive emotions predict work engagement only through personal resources (e.g. self-efficacy, optimism, self-esteem). They also found that work engagement predicts personal resources, but it is insufficient to predict job resources (supportive work context). Mayer et al. (2008) reported that work environments that support the basic psychological needs of autonomy and competence increase work engagement. Van den Broeck et al. (2008) concluded that basic psychological need satisfaction fully explains the relationship between job resources and burnout (opposite of work engagement) and that need satisfaction plays a mediating role in the relationship between these two variables. Employees with high autonomy and emotional stability have effectively satisfied their needs for autonomy, relatedness, and competence; moreover, they experience less tension and strain even working remotely (Perry et al., 2018). McDonough and Crocker (2007) reported that the mediating effects of self-determined motivation predicted positive affectivity. Hence, the following hypothesis was proposed:

*Hypothesis 1: Psychological needs satisfaction mediates the relationship between daily work engagement and end-of-day positive affect.*

## **1.6 Work Recovery**

Recovery is a widely researched topic focusing on the necessity of work-life balance, with implications for psychological well-being (Zijlstra & Sonnentag, 2006). Since working people spend the most of their time at work, replenishing their depleted resources during non-working hour is critical for their well-being (Trougakos et al., 2014). Recovery

is the process of replenishing spent resources, reaching balance, and returning to the pre-stress level (Rook & Zijlstra, 2006; Sonnentag & Natter, 2004). The way for recovering depleted resources is to not be no longer exposed to job demands and take a break from work-related activities (Demerouti et al., 2012). The need for recovery felt after work may be a sign of occupational fatigue and must be met until the next work cycle (Sluiter et al., 1999). Occupational fatigue is important because it is associated with negative outcomes such as work absenteeism; however, occupational fatigue will not be a problem as long as “recovery” is experienced after working hours (Sluiter et al., 2001). Employees might be ready for new demands (new workday) by “charging their batteries” during the recovery process (Zijlstra & Sonnentag, 2006). Weekends and holidays are good opportunities to replenish resources (Sonnentag et al., 2012), but resources also should be replenished daily (Feuerhahn et al., 2014). Fritz and Sonnentag (2006) found that individuals put aside their work demands, replenish their resources, and significantly diminish their health-related complaints and fatigue during vacation. Maintaining a healthy life requires work-life balance and recovery after a stressful and tough day (Zijlstra & Sonnentag, 2006).

Recovery experience is essential to maintain long-term psychological well-being, performance, and to live healthy (Fritz & Sonnentag, 2006; Kinnunen et al., 2011). Insufficient recovery and constant work demands can lead to deterioration of the individual's health and various diseases (Kinnunen et al., 2011). Individuals who do not feel adequately recovered and cannot rest have more complaints of illness and a feeling of burnout (Sluiter et al., 1999). When recovery is obtained after an exhausting workday, the person no longer feels nervous, achieves well-being, and starts the next day by replenishing their resources so that they can perform well the next day (Sonnentag & Natter, 2004). Fritz and Sonnentag (2006) found that employees made less effort to do their daily work after vacation and performed better at their jobs. Similarly, Westman and Eden (1997) found that employees' burnout levels decreased after a two-week vacation. Because of all these, short vacations and breaks where employees can regain their resources are very important (Fritz & Sonnentag, 2006; Sonnentag, 2001). However, it may not always be possible to take a break and rest in human life, people have responsibilities to do after work. In such cases, performing activities that use different resources (such as replacing mental power with muscle power) often have a resting effect (Zijlstra & Sonnentag, 2006). In a day-level study, it was found that although exercise is an energy-requiring activity, it positively affects the recovery process by renewing stress sources (Feuerhahn et al., 2014).

Recovery occurs not only with low-activation activities but also with activities that require high physical energy, as exercise strengthens the recovery experience by renewing stress sources (Rook & Zijlstra, 2006; Sonnentag, 2001; Sonnentag & Natter, 2004; Sonnentag & Zijlstra, 2006). According to Feuerhahn et al. (2014), exercising after working hours provides psychological detachment from work because it is not possible to do work-related activities and exercise simultaneously, and also brings the focus of the person to their body rather than the work-related activities. They also stated that exercise has a positive effect on satisfying the psychological needs of competence.

An interesting study on recovery and flow experience found that flow experience at work increases energy by enjoying work, feeds resources, and thus helps the recovery process at the end of the day (Demerouti et al., 2012). The sense of pleasure often has been positively associated with the recovery process. Enjoying work is a sign of intrinsic motivation and the sense of pleasure has been positively associated with the recovery process (Ryan & Deci, 2000b). Actions performed with internal motivation increase energy and vitality (van Hooff & Geurts, 2014). Enjoying work is a protective factor against insufficient recovery by investing in energy resources, yet the vital point here is that the pleasure of work can protect energy resources for a limited time. For this reason, it is valuable and important to focus all on work while at work and to detach from work psychologically during non-working hours, to replenish energy resources, and be "recovered" for the next working day (Demerouti et al., 2012; Sonnentag, Mojza et al., 2008). To keep the flow going, take breaks outside work and devote attention entirely to the job while working. There is no need to recover during working hours (Zijlstra & Sonnentag, 2006).

Day-level studies found a relationship between experiencing a good recovery after work hours and having a flow experience at work the next day. According to the findings, when individuals experience better recovery after work than their average, they feel more physically and mentally energized and refreshed the next day. That enabled well-recovered individuals to perform above their average, concentrate better on challenging tasks, and have a "flow" experience at work (Debus et al., 2014). Similarly, in a day-level study, employees who recovered well in the resting cycle had higher levels of engagement to work the next day; however, high energy on days with insufficient job demand did not result in work engagement (Sonnentag et al., 2012). Because high job demands prevent distraction by irrelevant issues, it helps the person to immerse himself in their work (Sonnentag et al., 2010). According to Bakker and van Emmerik et al. (2008), high job demands should not be

continuous, as they lead to increased effort and, as a result, the "burn" of all resources. The same researcher also highlighted that high job demands cause deterioration of employee well-being and depletion of energy resources.

### **1.6.1 Dimensions of Recovery Experiences**

Sonnentag and Fritz (2007) identified four recovery experiences: psychological detachment (mental and physical withdrawal from work), relaxation (free time and low activation), mastery (favorable challenging experiences and learning), and control (control time outside of work).

#### ***1.6.1.1 Psychological Detachment***

Sonnentag and Fritz (2007) defined psychological detachment from work as a state of not thinking about any work-related situation, not being interested in work, and mental distancing from work as well as physical distancing. Psychological detachment from work is important for recovery, helps to recover from work-related tension, and replenishes resources (Kinnunen et al., 2011). The absence of successful psychological detachment during non-work time indicates that the person's mind is full of work-related demands and stressful experiences; in this case, the person cannot recover, and fatigue and tension are expected to increase (Sonnentag, Binnewies et al., 2008). Day-level studies have found that employees, who experience psychological detachment from work, experience less fatigue, fewer sleep disturbances, and less negative mood (Sonnentag, Binnewies et al., 2008; Demerouti et al., 2012). Rook and Zijlstra (2006) studied the recovery experiences on weekends. According to the findings, "subjective fatigue" was significantly reduced on weekends, but the quality of sleep was experienced the poorest on Sunday nights throughout the week. The study's authors reported that, on Sunday night, employees start to think about work and feel pressure and anxiety about work, so the positive effects of recovery during the weekend disappear since psychological detachment from work is not achieved.

#### ***1.6.1.2 Relaxation***

According to Sonnentag and Fritz (2007), relaxation is a psychophysiological state that occurs after low activation and increases the positive effect. The same researcher stated that low activation activities are important because high and long-term activation is needed to meet work demands and working in this way negatively affects employees. After-work rest and leisure activities accompany the relaxation process. However, these activities should not require new demands for resource replenishment, low-effort activities performed during off-work

hours reduce the stress caused by work demands and encourage the negative effect to turn into a positive one (Fritz & Sonnentag, 2006). The relaxation experience is invaluable for recovery because the resources used while working are no longer demanded (Sonnentag & Fritz, 2007). Both the relaxation experience and mastery are characterized by positive affect and serenity (Sonnentag, Binnewies, et al., 2008).

#### ***1.6.1.3 Mastery***

Mastery experience includes activities that include difficulty and progression components and creates opportunities for success in non-work activities (Taylor, 2015). Activities such as learning a new language, going to a dance course, which can renew one's resources, gain new skills and competencies, and increase self-efficacy promote the mastery experience (Fritz & Sonnentag, 2006; Sonnentag & Fritz, 2007). Unlike the other three dimensions, the mastery experience requires self-regulation and different demands because learning a new language is a process that requires self-discipline, similar to job demands that require high activation (Sonnentag & Fritz, 2007). However, nourishing and renewing one's internal resources helps recovery and contributes to a positive mood. While contributing to the mastery experience after work affects the person positively the next morning (Kinnunen et al., 2011; Sonnentag & Fritz, 2007), people who experienced mastery during vacation times did not feel exhausted after vacation (Sonnentag & Fritz, 2007). Moreover, those people who had mastery experiences outside of work were found to have higher life satisfaction (Sonnentag, Binnewies, et al., 2008).

#### ***1.6.1.4 Control***

“Control can be described as a person's ability to choose an action from two or more options” (Siltaloppi et al., 2009). People desire to have control over their lives (Kelley, 1971 as cited in Sonnentag & Fritz, 2007). Psychological well-being increases when people have control over important life areas (Bandura, 1997 as cited in Siltaloppi et al., 2009). Related to recovery experience, control refers to the person's free decision on how to manage his/her non-work time (Sonnentag & Fritz, 2007). The perception of control plays an active role in the build of new resources (Rook & Zijlstra, 2006). Control experience increases the competence and self-efficacy of individuals (Siltaloppi et al., 2009) and is positively associated with psychological well-being and happiness (Bandura, 1997, as cited in Sonnentag & Fritz, 2007). A weak sense of control is related to negative self-evaluation, low

self-esteem, and ultimately depression and anxiety (Rosenfield 1989; Sonnentag & Fritz, 2007).

### **1.6.2 Recovery and Basic Psychological Needs Satisfaction**

Employees get tired physically, emotionally, and psychologically in the workplace and need recovery after this fatigue (Sonnentag, Kuttler et al., 2010). There are many demands, requirements brought by the job, and employees spend the physical or mental energy to meet these demands. Replenishing depleted energy resources is necessary for the next day (Zijlstra & Sonnentag, 2006). Renewing the energy resources that are depleted during the day will benefit the post-work recovery process (van Hooff & Geurts, 2015). It has been determined that meeting basic psychological needs is positively related to vitality and negatively relationship to exhaustion (Van den Broeck et al., 2010)

Autonomy, competence, and relatedness needs independently predict life satisfaction and vitality (Martela et al., 2016). Basic psychological need satisfaction during the day facilitates the recovery experience as it renews energy resources (van Hooff & Geurts, 2015). van Hooff et al. (2018) found that need satisfaction on non-workdays was positively associated with the “recovery” experience. And this positive association was found to be stronger when more fatigue was reported (less recovery) the day before the non-workday. In other words, participants who needed more recovery benefited more when they reached need satisfaction than less tired participants. The results show the same effects in within-person analyses. Namely, the participants benefited more from the need satisfaction when they needed more recovery.

All recovery-themed actions include the satisfaction of basic psychological needs defined within the scope of Self-determination theory (Mancini, 2008). The main feature of self-determination is the desire for autonomy and perception of control (Gagne & Deci, 2005), and control is one of the elements that contribute to the recovery experience (Sonnentag & Fritz, 2007). The control component is rooted in the desire for self-determination (Kelley, 1971 as cited in Sonnentag & Geurts, 2009). Control experience is positively associated with psychological well-being and happiness (Bandura, 1997, as cited in Sonnentag & Fritz, 2007). The dimension of autonomy and relatedness play a critical role in “recovery” practices. Meeting basic psychological needs benefits the "recovery" experience at the end of the day (van Hooff & Geurts, 2015). In addition, day-level studies

showed that daily fluctuations in need satisfaction was related to psychological well-being (Sheldon et al., 1996; Reis et al., 2000).

### **1.6.3 Recovery as Mediating Mechanism**

According to Sonnentag and Kühnel (2016), psychological detachment from work is an experience that promotes work engagement. In addition, work engagement during the day helps the recovery process at the end of the working day (Sonnentag et al., 2012). Employees with a work engagement also enjoy their hobbies and activities outside of work, and they are energetic and enthusiastic in other areas (Bakker & Demerouti, 2008).

The level of recovery after work also affects the opportunities to meet their basic psychological needs during free evening hours. Employees who reported lower levels of "recovery" at the end of the shift experienced less psychological needs satisfaction in the following hours (van Hooff & Geurts, 2014). Ryan et al. (2010) found that weekend and non-work activities support the psychological well-being of individuals, especially by meeting their autonomy and relatedness needs.

Van Hooff and Geurts (2015) stated that basic psychological needs satisfaction at work would support the post-work recovery process but need satisfaction at work does not directly predict recovery experience, the relationship between the two is mediated by "intrinsic motivation". However, van Hooff and Geurts (2014) showed that a high level of need satisfaction in the evening positively related to recovery and vitality before going to bed. Hence, the following hypothesis was proposed:

*Hypothesis 2: Day-level recovery (psychological detachment and relaxation) mediates the relationship between day-level psychological need satisfaction and day-level positive affect.*

### **1.6.4 General Work Engagement: As Boundary Construct**

Engagement research has yielded useful insights into the association between work engagement and non-work processes. Sonnentag, Mojza et al. (2008) found that the general level of work engagement moderated the relationship between psychological detachment from work and positive affect. Specifically, they showed that psychological detachment from work is more critical for highly engaged employees. Being engaged at work is not easy; highly engaged employees need psychological detachment more after work.

On the other hand, employees experience positive emotions about their jobs and are more engaged to work when they replenish their resources (Salanova et al., 2010). There are findings from day-to-day studies in the literature that demonstrate that while psychological detachment from work promotes work engagement, work engagement also encourages recovery (Sonnentag & Kühnel, 2016). Logically, general work engagement might strengthen the relationship between psychological detachment and positive affect. Therefore, it is beneficial to examine the effects of non-work processes on work engagement and psychological well-being. For instance, Rivkin et al. (2015) found that self-control demands and emotional exhaustion are moderated by psychological detachment. In other words, psychological detachment buffers the negative effects of self-control demands. From this perspective, we propose that psychological detachment from work plays an important role in the relationship between resources and positive/negative affectivity. Psychological detachment is the most studied and supported structure in the recovery literature (i.e. Morganson et al., 2010; Sonnentag, Mojza et al., 2008; Zijlstra & Sonnentag, 2006). In addition, there are studies on the moderating effect of psychological detachment in the literature (i.e., Mantymaki et al., 2022; Rivkin et al., 2015). As a result, detachment, one of the sub-dimensions of recovery, was included in the hypothesis of this study. Hence, the following hypotheses was proposed:

*Hypothesis 3: General work engagement moderates the relationship between the psychological detachment from work after working hours and day-level positive affect. The relation will be stronger when trait work engagement is low than trait work engagement is high.*

*Hypothesis 4: Daily recovery (psychological detachment) moderates the relationship between daily work engagement in the morning of the workday and positive affect at the end of the workday. The relation will be stronger when psychological detachment is low than psychological detachment is high.*

## **1.7 Self-Compassion**

Self-compassion is related to the broader concept of “compassion” (Neff, 2003b). Compassion is a human quality defined by the desire to understand the negative emotions like sadness, grief, fears and anger of others and to relieve their suffering (Neff, 2009). Self-compassion involves touching own pain, not running away from it, and not being detached

from it, but the willingness to alleviate and heal the pain (Neff, 2003b). Neff (2003a) suggests that there are three dynamics of self-compassion: 1) Self-kindness versus Self-judgment 2) Common Humanity versus Isolation 3) Conscious Awareness versus Over-identification. These components, which form the basic structure of self-compassion, interact with each other (Neff, 2009). Self-compassion involves being kind, sensitive, and understanding rather than being cruel and critical in the face of failures and inadequacies (Neff, 2003a, b; Neff, 2009). The shared sense of humanity embodied in self-compassion encompasses that all people can make mistakes and engage in unhealthy behaviors, all humans are flawed, and likewise, all humans are worthy of compassion (Neff, 2003b). A shared sense of humanity softens the distinction between "me" and "other" (Neff, 2009). The third component of self-compassion, awareness, involves being openly aware of own flaws rather than running away from self-painful thoughts and negative experiences. Self-compassion encourages actions to improve negative behavior patterns by being aware of unhealthy and harmful actions (Neff, 2003a, b). Self-compassion is one of the powerful human traits linked to well-being and feelings of serenity and helps people find hope and meaning in their lives (Neff et al., 2007). When people overthink painful experiences, it occupies the mental space necessary for self-compassion. Conscious awareness does not allow for over-identification by preventing falling into suffering (Neff, 2003b). This aspect of mindfulness prohibits the person from being self-judgmental by overly identifying with negative experiences (Neff, 2003a). Self-compassion prevents one from judging oneself badly after "failure" (Shepherd & Cardon, 2009).

Research supported that self-compassion and psychological well-being are strongly related (Neff, 2009). Self-compassionate people worry less about negative situations and protect their psychological well-being (Neff, 2004). Neff (2003b) suggested that self-compassion is related to Self-Determination Theory (SDT). Autonomous behavior occurs because individuals with a high level of self-compassion perform their actions with intrinsic motivation (through a sense of self-worth). So, self-compassion contributes to the experience of autonomous behavior and a sense of self-determination by contributing to intrinsic motivation. As a result, self-compassionate individuals build more "self-determination" in their lives with internal motivation (Neff, 2003a). Self-compassion acts as a resource generator for the self (Maslach et al., 2001) and can decrease the effects of the burnout symptoms of exhaustion, cynicism, and inefficiency (Schabram & Heng, 2021). Individuals with high self-compassion have more motivation to try again after failures (Shepherd &

Cardon, 2009). Since self-compassion requires the individual to want the well-being of oneself, it allows the individual to complete their deficiencies without judging their failures badly (Neff, 2003a). According to Shepherd and Cardon (2009), failure at work negatively affects the basic psychological need satisfaction. The same research paper states fewer negative emotions and higher psychological well-being in employees with higher self-compassion. In other words, self-compassion has been associated with the courage to try again after negative experiences and learn from failures.

Self-compassion provides an emotionally based resource against pressure in coping with difficulties and performance-based tasks (Mosewich et al., 2011). Self-compassion neutralizes negative emotional patterns and supports psychological health and well-being (Neff et al., 2005). According to Woo Kyung (2013), the relationship between burnout and emotional well-being is moderated by self-compassion, and this finding indicates that high levels of self-compassion attenuate the relationship between burnout and psychological well-being. According to Nicklin et al. (2019), self-compassion has a significant role in preserving and maintaining work-life balance, reducing burnout and increasing life satisfaction by supporting individuals to take on multiple roles in work-life balance. At the time of Covid 19, especially for people with low self-compassion, daily need satisfaction would be more likely to be linked to daily positive affect.

*Hypothesis 5: Self-compassion moderates the relationship between day-level basic psychological needs satisfaction and day-level positive affect. The link between psychological needs satisfaction and positive affect is stronger for employees low on self-compassion than employees high on self-compassion.*

## **1.8 Working Patterns As Moderator**

The current study investigates the possible moderator effects of different working patterns, namely remote, onsite, and hybrid work. One of influential factors affecting employees' post-work recovery experiences is their working pattern (Zijlstra & Sonnentag, 2006). Thanks to information and communication technologies and online chances, people can work whenever and wherever they desire (Dambrin, 2004; Eurofound & ILO, 2017). However, boundaries between home and work have an important function; while working from home, work and home boundaries may become transparent (especially on days working late at home) and harm the after-work recovery experience (Zijlstra & Sonnentag, 2006).

When the distinction between work and home becomes blurred, people are exposed to more work stress (Richter & Hall, 1988) and as a result, successful psychological detachment and thus "recovery" is not possible (Morganson et al., 2010; Zijlstra & Sonnentag, 2006).

Self-Determination Theory is expected to help in the planning and development of remote work programs (Orsini & Rodrigues, 2020; Perry et al., 2018). Employees have a greater sense of responsibility for their job when they are trusted and given more autonomy to handle challenges (Dambrin, 2004). It is recommended that managers avoid establishing a controlled motivation atmosphere and place greater trust in their employees to improve performance (Ryan & Deci, 2017). Autonomy is important for subordinates in teleworking, more successful results are expected when managers control their subordinates less, give them more autonomy, and when superiors take on coaching rather than managerial roles (Dambrin, 2004). Remote workers cannot get enough feedback and encouragement from others and seniors and cannot compare their abilities with others (Perry et al., 2018; Sewell & Taskin, 2015). Therefore, psychological need satisfaction at work is essential for remote workers to feel effective, and supervisors should encourage remote workers' skills (Orsini & Rodrigues, 2020). The biggest challenges of remote working are social isolation and loneliness (Toscano and Zappala, 2020). In one study investigating the psychological effects of working from home during the Covid-19 period, approximately 60 percent of participants reported feeling isolated from other people and colleagues (Marimuthu & Vasudevan, 2020). Due to feelings of exclusion, physical isolation, and a lack of nonverbal support, the need for "relatedness" is the most difficult basic psychological need to satisfy while working remotely (Orsini & Rodrigues, 2020). Moreover, Mann and Holdsworth (2003) reported that teleworkers experience more negative emotions such as anger, loneliness, and anxiety than office workers. The same study stated that this negative effect of teleworking is thought to be due to a lack of bonds with colleagues and social isolation. Based on the studies in the literature, it is thought that psychological need satisfaction and post-work recovery experiences are more critical for remote workers. Remote workers are expected to have stronger positive-affect responses to need satisfaction and recovery experiences.

In this regard, the present study attempts to investigate the impact of flexible working patterns on employee recovery experiences, basic psychological need satisfaction and wellbeing in the Turkish sample.

*Hypothesis 6 : Working pattern moderates the relationship between day-level recovery experience (psychological detachment) and day-level positive affect.*

*Hypothesis 7 : Working pattern moderates the relationship between day-level psychological need satisfaction (autonomy, relatedness, competence) and day-level positive affect*

## **1.9 The Present Study**

The main purpose of this study is to examine the psychological factors that affect the psychological well-being of employees in unexpected crisis situations. The Covid-19 pandemic has affected working and living conditions. The psychological state of the employees has also been affected by the changing circumstances in the new normal. More specifically, in the current study, flexible working arrangements and their effects on the psychological well-being of employees were investigated. In this study, specific psychological factors (i.e., basic psychological need satisfaction, work engagement, recovery, self-compassion) and the relationships between them, which are hypothesized to affect the psychological well-being of employees, were examined. The current study's hypotheses and model are listed below.

### **1.9.1 Hypotheses and Research Model**

*Hypothesis 1: Psychological needs satisfaction mediates the relationship between daily work engagement and end-of-day positive affect.*

*Hypothesis 2: Day-level recovery (psychological detachment and relaxation) mediates the relationship between day-level psychological need satisfaction and day-level positive affect.*

*Hypothesis 3: General work engagement moderates the relationship between the psychological detachment from work after working hours and day-level positive affect. The relation will be stronger when trait work engagement is low than trait work engagement is high.*

*Hypothesis 4: Daily recovery (psychological detachment) moderates the relationship between daily work engagement in the morning of the workday and positive affect at the end of the workday. The relation will be stronger when psychological detachment is low than psychological detachment is high.*

*Hypothesis 5: Self-compassion moderates the relationship between daily basic psychological needs satisfaction and day-level positive affect. The relationship between basic psychological needs satisfaction and positive affect is stronger for employees low on self-compassion than employees high on self-compassion.*

*Hypothesis 6 : Working pattern moderates the relationship between daily recovery experience (psychological detachment) and day-level positive affect.*

*Hypothesis 7 : Working pattern moderates the relationship between daily psychological need satisfaction and day-level positive affect.*

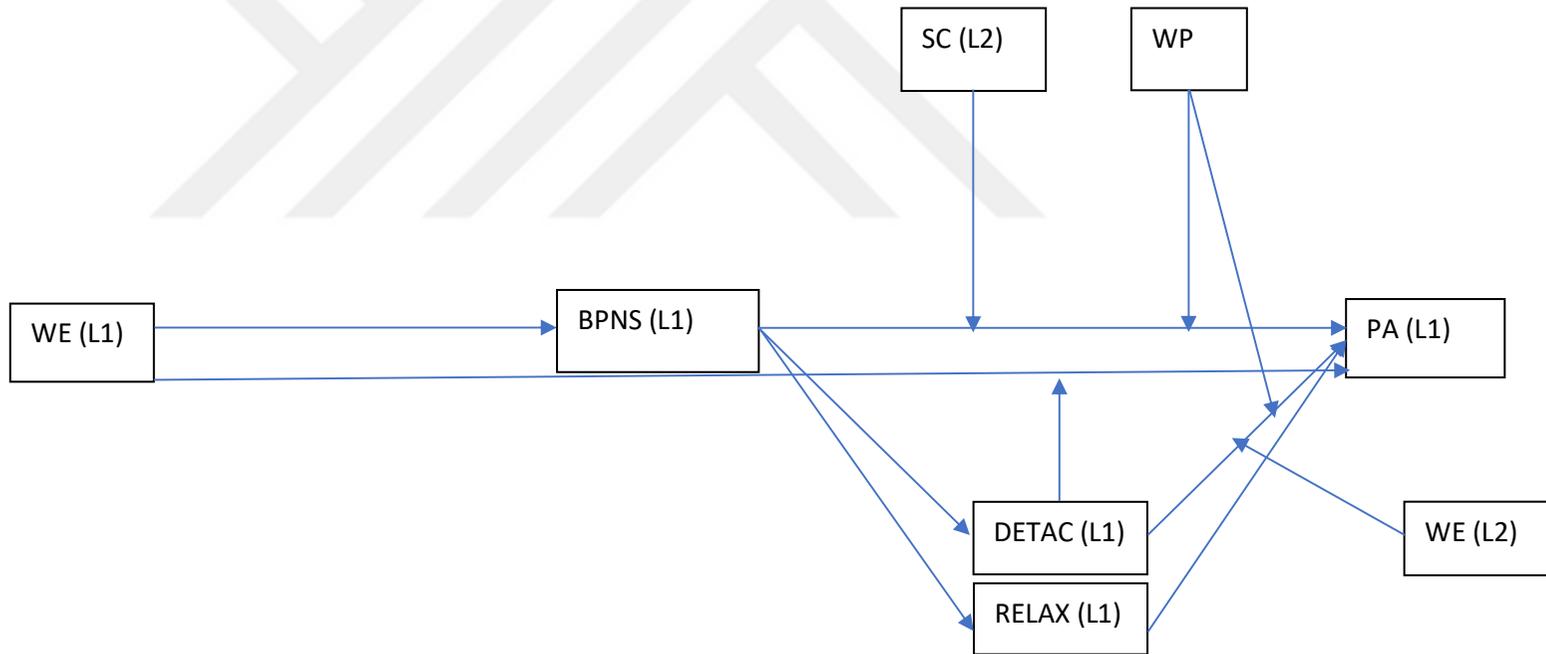


Figure 1: Note. WE=Work engagement, BPNS=Basic psychological need satisfaction, SC=Self-Compassion, WP=Working Pattern, DETAC=Detachment, RELAX=Relaxation, PA= Positive affect.

Note. The current research model is a conceptual model. Each part of the model will be tested separately. Research hypotheses will not be tested by structural equation modeling.

## CHAPTER 2

### METHOD

#### 2.1 Participants

A total of 262 working people participated to the baseline phase of the current study. Among these people, currently unemployed people and those who did not approve were left out of the study. The final sample consisted of 247 working people from different sectors for the baseline phase. The gender distribution of the sample consisted of 72.5% ( $N = 179$ ) women and 27.5% ( $N = 68$ ) men. The ages of the participants ranged from 21 to 58 ( $M = 32.69$ ). With respect to education, 4.9% of the participants had PhD, 27.1% master's, 61.5% undergraduate, 5.3% high school, 0.8% secondary school and 0.4% primary school degree. Regarding positions, 23.5% ( $N = 58$ ) of the research sample is in the employer/manager position and, 76.5% ( $N = 189$ ) is in the employee/worker position. In terms of working pattern, 49% ( $N = 121$ ) of the sample work from the workplace, 27.9% ( $N = 69$ ) hybrid, and 23.1% ( $N = 57$ ) work remotely/from home. In addition, 88.7% of the sample has a superior/manager, while 11.3% do not have a superior/manager. Of the participants, white-collar employees were accounting for almost 93 percent of the total.

As a second phase of the current study, daily surveys (through five days) were sent to the participants who completed the baseline survey. A total of 112 working people participated in the second stage of the study. Participants who did not regularly answer (those who answered less than 60% of the surveys) daily surveys, people who worked shifts, and participants who did not answer the surveys during the specified hours, were excluded from the data set. Final sample were 87 people in the second phase. Participants were 74.7% ( $N = 65$ ) women and 25.3% ( $N = 22$ ) men. The participants' ages ranged from 23 to 58 ( $M = 32.48$ ). Regarding education, 6.9 % of the participants were PhD, 31 % master's, 55.2 % undergraduate, 5.7 % high school, 1.1 % secondary school graduates. 20.7 % ( $N = 18$ ) of the research sample is in the manager/manager position and, 79.3 % ( $N = 69$ ) is in the employee/worker position. In terms of working pattern, 42.5% ( $N = 37$ ) of the sample work

from the workplace, 37.9% ( $N = 33$ ) hybrid and 19.5% ( $N = 17$ ) work remotely/from home. In addition, 93.1 % of the sample had a superior/manager, while 6.9 % did not have a superior/manager. White-collar employees account for about 94 percent of the total.

## **2.2 Measures**

### **2.2.1 Basic Psychological Need Satisfaction & Frustration Scale**

This scale, developed by Chen et al. (2015), was presented to the participants to understand under which social conditions and to what extent three basic psychological needs (autonomy, competence, relatedness) required for psychological health and well-being are met or not. The original form of the scale consists of 24 items, and each need is measured with eight items. Sample items of the scale are "I feel my choices express my true self" (autonomy), "I feel I can successfully complete difficult tasks" (competence) "I feel close and connected with other people who are important to me" (relatedness) (Chen et al., 2015). Each item is rated on a scale ranging from 1 (*definitely false*) to 7 (*definitely true*). In this study the participants are expected to answer the same questions multiple times over several days. Hence, a short version (12 items) of the scale (van der Kaap-Deeder et al., 2017) is used to prevent participant fatigue (Fisher & To, 2012). The short form, which was developed for daily study, was modified according to the purpose of the study with different instructions (instructions investigating the need satisfaction of general life and instructions investigating the need satisfaction of that working day) and time markers and then used for both baseline and daily measurements. Each need satisfaction was measured with four items. Kantaş (2018) translated the original scale to Turkish. Respective items of the short version were taken from the translation study. The internal consistency of the scale was found .76, .79 respectively for need satisfaction and need frustration (Kantaş, 2018). The Cronbach's alpha coefficient of the current study was for need satisfaction, .78 for need frustration, .77. And the reliability of autonomy satisfaction was .72, competence satisfaction was .62 and relatedness satisfaction was .64.

### **2.2.2 Well-Being Measures**

Psychological well-being is the outcome variable of the current research. In the current study, well-being scores were measured with positive affectivity (PA) and satisfaction with life scale (SWLS). However, only the positive affectivity scale was used as

the level-1 outcome variable because the satisfaction with life scale was not included in the day-level study. "Outcome variable is always a level-1 variable" (Woltman et al., 2012).

### **2.2.2.1 The PANAS Scales**

Watson et al. (1988) developed Positive and Negative affect scales. The scale has 10 positive (PA) and 10 negative (NA) emotional expression items. Each of these items is rated on a scale ranging from 1 (*Very rarely or never*) to 5 (*Very frequently*). Sample items are "attentive, interested, alert" for the PA scale and "irritable, ashamed, nervous" for the NA scale (Watson et al., 1988). The internal consistency coefficient of the original scale for positive and negative affect was found as .88 and .85 respectively. The Turkish version of the scale translated by Gençöz (2000) was used. The internal consistency of the Turkish version of the scale was .83 and .86 for positive affect and negative affect, respectively. PANAS was used in the baseline measurement, while only the positive emotion dimension (PA) was used to evaluate the positive mental state in the daily study. For the current study, Cronbach's alpha internal consistency value for PA was .78 and for NA was .85.

### **2.2.2.2 Satisfaction with Life Scale**

The life satisfaction scale was developed by Diener et al. (1985) to evaluate the extent to which individuals are satisfied with life and their judgments about their overall quality of life. The life satisfaction scale consists of 5 items, and high scores indicate higher life satisfaction. Items were scored on a scale ranging from (1 = *Strongly Disagree*; 5 = *Totally Agree*). The Cronbach alpha coefficient of the scale was reported as .87. A Sample item of the scale is "I am satisfied with my life" (Diener et al., 1985). Dağlı and Baysal (2016) translated the life satisfaction scale into Turkish. English and Turkish versions of the scale showed a high level of a positive and significant relationship; this scale's internal consistency coefficient was found as .88 (Dağlı & Baysal, 2016). For the current study, the reliability of the scale was 85.

### **2.2.3 Recovery Experience Questionnaire**

The scale, developed by Sonnentag and Fritz (2007), measures psychological detachment (mentally and physically away from work), relaxation (sparing time for oneself and low activation), mastery (positive challenging experiences and learning), and control (control of outside time) sub-dimensions. Each item was rated on a scale ranging from 1 (*Strongly disagree*) to 5 (*Totally Agree*). Sample items of the scale were "I forget about

work" for psychological detachment, "I do relaxing things" for relaxation, "I seek out intellectual challenges" for mastery and "I decide my own schedule" for control. The Cronbach's alpha values were found to be .84, .85, .79, and .85 for each sub-dimension, respectively (Sonnentag & Fritz, 2007). Regarding this study, Cronbach alpha scores were found as .79 for detachment, .88 for mastery and .91 for control. The original form of the scale consists of 16 items, and each sub-dimension is measured with 4 items. The Turkish version of the scale was translated into Turkish by supervisors of this thesis for the current study, and conceptual equivalence of the translations with original items were checked one researcher with PHD degree in psychology. For the baseline measurement, the original version of the scale was used. The recovery experience questionnaire has been modified to be appropriate for their daily surveys. Of 16 items, 12 items were adapted to the daily survey.

#### **2.2.4 The Utrecht Work Engagement Scale (UWES)**

As a self-report scale, UWES was developed by Schaufeli et al. (2002) and include items measuring three dimensions of work engagement (vigor, dedication, and absorption) (Schaufeli & Bakker, 2004). The original form of the scale consists of 17 items rated on 6-likert type scale ranging from (1) "Never" to (6) "Always". For the employee sample, the internal consistency coefficient of vigor dimension of the scale (6 items) was found  $\alpha = .79$ , of work dedication (5 items)  $\alpha = .89$ , and of absorption (6 items)  $\alpha = .72$  (Schaufeli et al., 2002). Eryılmaz and Doğan (2012) adapted the scale into Turkish. The reliability coefficients of the UWES-TR were reported as .87, .87, and .84 for vigor, dedication, and absorption, respectively. In the current study the reliability coefficients were .81 for vigor, .73 for dedication and .80 for absorption. Higher scores from the scale indicate higher work engagement. Specific items were selected from Eryılmaz and Doğan's (2012) study. Selected items from each dimension for UWES-3 are listed below. "At my work, I feel bursting with energy" (vigor), "I am enthusiastic about my job" (dedication), "I am immersed in my work" (absorption) (Schaufeli et al., 2017). Inspired by previous studies measuring daily engagement (Petrou et al., 2012; Sonnentag, 2003; Xanthopoulou et al., 2009), the short version of the work engagement scale, UWES-3, was adapted to a day-level study by the researchers. Participants were asked to rate how much work engagement they felt at the time of starting work.

### **2.2.5 Self-Compassion Scale (SCS)**

The Self-Compassion scale, developed by Neff (2003a), included 26 items and of 3 dimensions (self-kindness, common humanity, conscious awareness; Neff, 2003a, b). Each item was rated on a 5-point Likert scale ranging from 1 (*Almost never*) to 5 (*Almost always*). A sample item of the scale is "I'm kind to myself when I'm experiencing suffering" (Neff, 2003a). Kantaş (2013) translated the scale to Turkish. The Cronbach's alpha value of the self-compassion scale was .94 and for each sub-dimension (self-kindness, shared humanity, awareness) as .85, .82, and .77, respectively (Kantaş, 2013). The Cronbach alpha internal consistency coefficient of the scale was calculated as .94 for the current study and for each sub-dimension (self-kindness, shared humanity, awareness) as .84, .75, .73 respectively.

### **2.2.6 Baseline Demographic Information Form**

This form includes questions regarding gender, year of birth, education level, occupation, monthly income, workplace position, marital status, and number of children, working pattern (hybrid, workplace, remote), and post-pandemic working pattern preference.

### **2.2.7 Daily Demographic Information Form**

In this form, participants were asked for to report the start time of the work-day, the end time of work, and where the work was done on that day (home or workplace).

## **2.3 Procedure**

Participation in this research is on a voluntary basis, and the participants were informed about the confidentiality, nature, and requirements of the research in the informed consent form. Participants were invited to the study through social media. The surveys were created through the Qualtrics Survey online survey program. In baseline survey, participants filled out a survey package, including Basic Psychological Need Satisfaction & Frustration Scale (BPNSF), Well-Being Measures (The PANAS Scales, Satisfaction with Life Scale), Recovery Experience Questionnaire, The Utrecht Work Engagement Scale (UWES), Self-Compassion Scale (SCS), and Demographic Information Form. The baseline survey took an average of 10-15 minutes to complete, and individuals filled out the survey above (baseline measurement) once. Daily survey links were sent to the e-mail addresses of the volunteers who participated in the first phase of the study for five days. Participants were expected to

answer the daily questionnaires at the specified times. Participation in the second stage of the research took an average of 5 minutes. Research questionnaires were sent to the participants for their evaluation twice a day (two different surveys on the same day) for five working days, from Monday to Friday. In other words, participants were expected to answer the questionnaires a total of 10 times over five days. To measure work engagement in the morning, the short form of the work engagement scale was sent in the afternoons (15.00-18.00). The basic psychological needs scale, the recovery experience questionnaire short version, and the positive affectivity subscale form (panas+) were sent end of the work-day (21.00-00.00).

## **2.4 Statistical Analysis**

Statistical Package for the Social Sciences (IBM SPSS 22) was used to estimate descriptive statistics for the measured variables. HLM 8 software, which allows for multilevel analysis, was used to test the associations between the variables. The restricted maximum likelihood estimation method (REML) was used to analyze diary study data. REML is the most widely used estimator method recommended because it is the only estimate that assumes normality of effect sizes and is also an effective method for dealing with high correlations (Langan et al., 2019).

The current study has a multilevel data as days are nested within persons in the current multilevel data. The participant's data was taken multiple times during the diary study. Data variance could be distributed not just between persons but also within persons. Academic studies show that intra-individual variations are not random and can be explained by specific predictors of intra-individual variations (Sonnetag et al., 2010). HLM allows for estimating day-level and person-level effects simultaneously; in this way, person-level impacts can be measured independently of day-level effects (Bryk & Raudenbush, 1992).

Hierarchical linear modelling considers each person as a random rather than a fixed effect, letting findings be generalized to the entire population (Reis et al., 2000). Hierarchical linear modelling is suitable for our multilevel data because it allows us to see the effect of day-level data dependency on the within-person (Snijders & Bosker, 1999). We analyzed the data using hierarchical linear modelling. Monte Carlo method was used to test the statistical significance of indirect effects (Selig & Preacher, 2008). Precher et al. (2006) method was used to graph the interaction effects.

Day-level data were centered around the respective person mean (group mean) to remove between-person variance based on methodological suggestions in diary studies (Ohly et al., 2010; Petrou et al., 2012). Person level data and person-level control variables were centered around the grand mean. Also, in cross-level interactions, centering was made to the group mean. Thus, variance in the estimating variables was reduced, and the variance obtained totally reflects the intrapersonal process (Ilies et al., 2007). Enders and Tofighi (2007) made some recommendations to researchers and methodologists for the centering decision. These are: (1) person-mean centering is appropriate if the level-1 relationship between X and Y variables is desired, and (2) both grand-mean and person-mean are used to examine the different effects of level-1 and level-2 variables.



## **CHAPTER III**

### **RESULTS**

#### **3.1 Overview**

Results are presented in four parts: (1) data screening; (2) correlations between the study variables and descriptive statistics; (3) hypotheses tested with hierarchical linear modelling. At first, data were analyzed for outliers and normality assumptions. Secondly, the descriptive statistic and correlational analysis results were conducted with Statistical Package for the Social Sciences (SPSS). Finally, multilevel analyses were carried out with Hierarchical Linear Modelling (HLM).

#### **3.2 Data Screening**

Outlier analysis was performed before the hypothesis testing, and the data of 15 participants were removed from the data set, finally, 247 people participated in the first phase of the research. Multilevel analysis was performed with 87 working people for level-2 and 349 for level-1. Skewness and kurtosis values were determined to understand whether the normality assumption was met. The skewness values for level-2 variables ranged between -.54 and .48, while the kurtosis coefficients were between -.56 and .06, for level-1 variables, skewness values -.69 and .41 and kurtosis values were between -1.49 and -.92. According to Tabachnick and Fidell (2007), skewness and kurtosis values are between +1.96 and -1.96, indicating that the data set has a normal distribution.

Table 1 shows the results obtained from the preliminary analysis of the study variables.

**Table 1**

*Means, Standard Deviations, Ranges, Skewness and Kurtosis Values of The Variables for The Level 1 And Level 2 Variables*

Variables	<i>M</i>	<i>SD</i>	Range	Skewness	Kurtosis
Level 2					
SC	3.34	.71	3.62	-.19	-.38
BPNS	5.38	.99	4.67	-.54	-.05
Recovery	3.37	.69	3.75	-.43	.38
Wellbeing	3.08	.82	3.80	-.19	-.56
WE	4.28	.99	4.41	-.48	-.29
PA	3.52	.57	2.90	-.40	.06
NA	2.23	.70	3.50	.48	-.21
Level 1					
BPNS	5.03	.13	.35	.06	-1.49
Recovery	3.80	.22	.64	.41	-.98
WE	3.88	.13	.38	-.55	-.92
PA	3.10	.12	.33	-.69	-1.00

Note. *N* = 87 persons; *N* = 349 diary entries; Day-level measures are aggregated to the person level. SC=Self compassion, BPNS=Basic psychological need satisfaction, WE=Work engagement, PA=Positive affect, NA= Negative affect.

### **3.3 Correlations Between the Study Variables and Descriptive Statistics**

Descriptive statistics and intercorrelation of study variables for level-2 was displayed in Table 2 and for level-1 in Table 3. In addition, all ICCs (to determine the distribution of variance) were between 0.28 and 0.68, indicating that these variables have a significant within-person variability (between 32 and 72 per cent of total variation) (Marcoulides & Schumacker, 2009 as cited in De Gieter, & Hoffman, 2017).

**Table 2***Descriptive Statistics and Correlations Between the Study Variables for Level 2*

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Wellbeing	3.08	.82	-													
2 WE	4.28	.99	.40**	-												
3 Recovery	3.37	.69	.32**	.20**	-											
4 BPNS	5.24	.94	.54**	.51**	.39**	-										
5 SC	3.34	.71	.46**	.29**	.37**	.64**	-									
6 Detachment	2.64	1.02	.13*	-.11	.68**	.08	.21**	-								
7 Relaxation	3.60	.98	.21**	.12*	.80**	.23**	.20**	.52**	-							
8 Mastery	3.38	.87	.25**	.31**	.61**	.31**	.32**	.12	.23**	-						
9 Control	3.87	.95	.32**	.30**	.78**	.53**	.35**	.26**	.51**	.49**	-					
10 PA	3.52	.57	.35**	.41**	.43**	.50**	.37**	.09	.23**	.48**	.46**	-				
11 NA	2.23	.70	-.41**	-.29**	-.28**	-.62**	-.62**	-.13*	-.14*	-.22**	-.32**	-.20**	-			
12 Relatedness	5.70	1.05	.31**	.37**	.19**	.76**	.43**	.02	.14*	.12	.27**	.24**	-.48**	-		
13 Competence	5.41	1.20	.44**	.43**	.32**	.85**	.62**	.03	.15*	.35**	.43**	.51**	-.55**	.47**	-	
14 Autonomy	4.60	1.18	.58**	.47**	.44**	.85**	.53**	.14*	.27**	.29**	.59**	.47**	-.50**	.46**	.62**	-

Note. \*  $p < .05$  \*\*  $p < .01$ , WE=Work engagement, BPNSF=Basic psychological need satisfaction, SC=Self compassion, PA= Positive affect, NA= Negative affect.

**Table 3***Descriptive Statistics, Intraclass Coefficients, and Correlations Between the Study Variables for Level 1*

	Variables	Mean	SD	ICC	1	2	3	4	5	6	7	8	9	10	11
1	WE	4.09	.13	.48	-										
2	BPNS	5.31	.10	.70	.98**	-									
3	Recovery	4.08	.22	.48	.64**	.68**	-								
4	PA	3.30	.12	.61	.16**	.32**	.56**	-							
5	Detachment	4.14	.25	.51	.72**	.74**	.93**	.35**	-						
6	Relaxation	4.34	.20	.39	.40**	.44**	.91**	.69**	.68**	-					
7	Mastery	3.17	.23	.44	.61**	.67**	.99**	.06**	.95**	.86**	-				
8	Control	4.67	.24	.28	.66**	.68**	.98**	.53**	.85**	.94**	.93**	-			
9	Autonomy	4.72	.13	.62	.90**	.81**	.60**	-.08	.62**	.44**	.51**	.68**	-		
10	Competence	5.61	.07	.62	.92**	.96**	.51**	.39**	.56**	.32**	.52**	.52**	.67**	-	
11	Relatedness	5.63	.15	.64	.82**	.90**	.63**	.54**	.72**	.39**	.69**	.56**	.49**	.92**	-

Note.  $N = 87$  persons;  $N = 349$  diary entries; \*  $p < .05$  \*\*  $p < .01$ , Day-level measures are aggregated to the person level. WE=Work engagement, BPNS=Basic Psychological Need Satisfaction, PA= Positive affect, ICC=intraclass correlation coefficients.

### 3.4 Hierarchical Linear Modelling:

It is recommended to run a null model, also called unconditional, before running other conditional models (Nezlek, 2001). The null model does not test any hypothesis, but it specifies how much the total variance there is in the dependent variable for each level (Nezlek, 2001). Therefore, to determine the percentage of variance attributable to interpersonal and intrapersonal fluctuations, ICC (Intraclass correlations) can be calculated (Woltman et al., 2012). There is no predictor variable in our null model. The null model equation is shown below:

#### NULL MODEL

##### *Level-1 Model*

$$Y_{ij} = \beta_{0j} + r_{ij}$$

##### *Level-2 Model*

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

At level 1,  $\beta_{0j}$  is the intercept term,  $r_{ij}$  is the residual error term,  $Y_{ij}$  is the outcome variable predicted by an intercept and a random error term (Garson, 2013). At the level-2 equation,  $\gamma_{00}$ , represents the between-person intercept term and  $u_{0j}$  is the random error term for level-2 (Woltman et al., 2012). In our diary study, daily measured positive affect is the outcome variable.  $Y_{ij}$  refers to the day-level measure of Positive affect ( $PA_{ij} = \beta_{0j} + r_{ij}$ ).  $\beta_{0j}$  refers to the within-person intercept term for the person  $i$  ( $i = 1, \dots, 87$ ) and  $r_{ij}$  the residual of person  $i$ 's positive affect score.

The following formula is used to determine the distribution of variance (Woltman et al., 2012):

$$ICC = \frac{\tau_{00}}{\tau_{00} + \sigma^2}$$

The ICC(PA) was computed as .61 ( $0.46633 / [0.46633 + 0.29251]$ ), suggests that 61% of the variance in Positive Affect is at level-2 (between-person) and 39% is at level-1 (within-person). The reliability estimate for the null model was .86. The results for the null model indicate that  $\chi^2(86) = 619.56872$ ,  $p < .001$ ; which supports the use of HLM (Woltman

et al., 2012). PA fluctuates within persons, and it necessitates examining the predictor variables both at the day and person levels. Table 4 displays the results obtained from the null model.

**Table 4**

*Parameter Estimates of The Null Model*

Null model					
Fixed effects	B	SE	Df	t	p
Intercept ( $\beta_0$ )	3.30**	.08	86	42.12	<.001
Random effects	Variance	SD	Df	$\chi^2$	p
Within-person	0.29	0.54			
Between-person	0.46**	0.68	86	619.56	<.001
Deviance	736.361860				
Parameters	2				

Note. \*\* $p < .001$ , SE= Standard error.

### 3.4.1 Hypotheses Testing

The next section of the analysis examined the conditional models. In conditional models, the outcome variable is explained as a function of another variable (Nezlek, 2001). Our daily study was analyzed in a two-level model; days were nested within persons. The terms were added to the equations at different levels. The equation as follows shows the summary of the estimate path b regarding Hypothesis 1:

#### *Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(WE_{ij}) + \beta_{2j}*(BPNS_{ij}) + r_{ij}$$

#### *Level-2 Model*

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(BPNS_j) + \gamma_{02}*(WE_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10}$$

$$\beta_{2j} = \gamma_{20}$$

#### *Mixed Model*

$$PA_{ij} = \gamma_{00} + \gamma_{01}*BPNS_j + \gamma_{02}*WE_j + \gamma_{10}*WE_{ij} + \gamma_{20}*BPNS_{ij} + u_{0j} + r_{ij}$$

Hypothesis 1 proposed that daily need satisfaction mediates the link between daily work engagement and daily positive affect. It was found that daily work engagement positively related to daily positive affect ( $\gamma = .13, SE = 0.05, t = 2.65, p < .05$ ) and daily psychological need satisfaction ( $\gamma = .24, SE = 0.05, t = 5.05, p < .001$ ).

Before testing Hypothesis 1, we entered trait work engagement and psychological need satisfaction (level-2 predictors) as control variables. The mediation effects and their associated 95% confidence intervals are provided in Table 5. In line with Hypothesis 1, basic psychological needs satisfaction ( $\gamma = .08, 95\% \text{ CI} = [.05, .13]$ ), autonomy satisfaction ( $\gamma = .03, 95\% \text{ CI} = [.00, .07]$ ), competence satisfaction ( $\gamma = .08, 95\% \text{ CI} = [.04, .13]$ ), relatedness satisfaction ( $\gamma = .04, 95\% \text{ CI} = [.01, .07]$ ) mediated the relationship between work engagement and positive affect. (see table 5). After entering the mediator (basic psychological needs satisfaction) into the model, the work engagement estimate dropped and was no longer significant ( $\gamma = .04, p = .39$ ). Thus, Hypothesis 1 was supported.

In addition, to calculate an estimate of the effect size, the Pseudo  $R^2$  statistic was used (Raudenbush & Bryk, 2002).

$$r^2 = \frac{(\sigma^2_{null} - \sigma^2_{random})}{\sigma^2_{null}}$$

$$=(0.46633 - 0.39123)/0.46633$$

$$=.24$$

In other words, basic need satisfaction accounts for 9.36 % of the total within-person variance in positive affect, which was 39%. Hence, the within-person variance in positive affect that remains after the satisfaction of needs is accounted for is 29.64%.

**TABLE 5***Regression Table for the Mediation Analysis*

Outcome Variable						
Positive affect						
		95% CI				
Predictor Variable(L1)	Mediator(L1)	Effect of predictor on mediator (a)	Unique effect of mediator (b)	Indirect effect (ab)	Lower	Upper
Work engagement	BPNS	.24**	.37**	.09	.05	.13
	Autonomy	.18*	.17**	.03	.00	.07
	Competence	.34**	.24**	.08	.04	.13
	Relatedness	.20**	.19**	.04	.01	.07

Note. CI = Confidence intervals,  $df = 260$

Hypothesis 2 proposed that the recovery (psychological detachment and relaxation) mediates the relationship between psychological need satisfaction and positive affect. The equations below show the summary of the estimate path b regarding Hypothesis 2:

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(BPNS_{ij}) + \beta_{2j}*(DETAC_{ij}) + r_{ij}$$

*Level-2 Model*

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(BPNS_j) + \gamma_{02}*(DETAC_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10}$$

$$\beta_{2j} = \gamma_{20}$$

*Mixed Model*

$$PA_{ij} = \gamma_{00} + \gamma_{01}*BPNS_j + \gamma_{02}*DETAC_j$$

$$+ \gamma_{10}*BPNS_{ij}$$

$$+ \gamma_{20}*DETAC_{ij}$$

$$+ u_{0j} + r_{ij}$$

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(BPNS_{ij}) + \beta_{2j}*(RELAX_{ij}) + r_{ij}$$

### *Level-2 Model*

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(BPNS_j) + \gamma_{02}*(RELAX_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10}$$

$$\beta_{2j} = \gamma_{20}$$

### *Mixed Model*

$$PA_{ij} = \gamma_{00} + \gamma_{01}*BPNS_j + \gamma_{02}*RELAX_j$$

$$+ \gamma_{10}*BPNS_{ij}$$

$$+ \gamma_{20}*RELAX_{ij}$$

$$+ u_{0j} + r_{ij}$$

Daily psychological need satisfaction positively related to daily psychological detachment ( $\gamma = .20$ ,  $SE = 0.10$ ,  $t = 1.92$ ,  $p = .06$ ), daily relaxation ( $\gamma = .41$ ,  $SE = 0.13$ ,  $t = 3.06$ ,  $p < .05$ ) and daily positive affect ( $\gamma = .40$ ,  $SE = 0.05$ ,  $t = 7.23$ ,  $p < .001$ ). Before testing Hypothesis 2, we entered psychological detachment, relaxation and psychological need satisfaction (level-2 predictors) as control variables. In line with Hypothesis 2, we examined whether psychological detachment and relaxation mediates the relation between psychological need satisfaction and positive affect at end of the workday. Daily psychological detachment ( $\gamma = .08$ , 95 % CI = [ . -00, .15]) was not mediated the relationship between daily psychological need satisfaction and daily positive affect (see table 6). However daily relaxation ( $\gamma = .12$ , 95 % CI = [.03, .20]) mediated the relationship between daily psychological need satisfaction and daily positive affect (see table 6). After entering the mediator (relaxation) into the model, the need satisfaction estimate dropped but still was significant ( $\gamma = .37$ ,  $p < .001$ ). Hypothesis 2 was supported just for mediating effect of relaxation.

The Pseudo statistic was computed ( $R^2 = .16$ ) for relaxation in line with Hypothesis 2. The relaxation subdimension accounts for 6.24 % of the total within-person variance in positive affect, which was 39%.

**TABLE 6***Regression Table for the Mediation Analysis*

Outcome Variable						
Positive affect						
Predictor Variable(L1)	Mediator(L1)	Effect of predictor on mediator (a)	Unique effect of mediator (b)	Indirect effect (ab)	95% CI	
					Lower	Upper
BPNSF	Relaxation	.32*	.36**	.12	.03	.20
	Detachment	.20	.38*	.08	<b>-.00</b>	<b>.15</b>
	Control	.21	.48	.10	<b>-.04</b>	<b>.34</b>
	Mastery	.17	.56**	.10	<b>-.05</b>	<b>.29</b>

Note. CI = Confidence intervals,  $df = 260$ , Confidence intervals that contain 0 are in bold.

### 3.4.1.1 Test of moderation hypotheses

Hypothesis 3 proposed that general work engagement moderates the relationship between daily psychological detachment and daily positive affect. We tested person-level work engagement as a moderator variable. Results (see Table 7) revealed that the moderation effect was not significant ( $\gamma = -.04$ ,  $p = .26$ ). The effect of psychological detachment from work on positive affect is not affected by general work engagement. Hypothesis 3 was not supported. The equation for the Hypothesis 3 as follows:

#### Level-1 Model

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(DETAC_{ij}) + r_{ij}$$

#### Level-2 Model

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(WE_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}*(WE_j)$$

#### Mixed Model

$$PA_{ij} = \gamma_{00} + \gamma_{01}*WE_j + \gamma_{10}*DETAC_{ij} + \gamma_{11}*WE_j*DETAC_{ij} + u_{0j} + r_{ij}$$

**TABLE 7***HLM Results for testing Work Engagement (L2) Moderating Effects on Daily Positive Affect*

Predictor Variable (PV): Detachment			
Variables	<i>Est</i>	<i>SE</i>	<i>t</i>
Intercept ( $\gamma_{00}$ )	3.30	.07	46.03**
PV ( $\gamma_{10}$ )	.08	.03	2.48*
Work engagement ( $\gamma_{01}$ )	.31	.07	4.35**
Work engagement ( $\gamma_{11}$ )	-.04	.03	-1.12

Note  $df = 259$ , Est = Standardized coefficient, SE = standard error. \* $p < .05$ , \*\* $p < .001$

Hypothesis 4 proposed that psychological detachment moderates the relation between work engagement and positive affect, and the relationship would be stronger on days with a lower level of psychological detachment. We constructed the following HLM equation to address the Hypothesis 4:

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(WE_{ij}) + \beta_{2j}*(DETAC_{ij}) + \beta_{3j}*(WE*DETAC_{ij}) + r_{ij}$$

*Level-2 Model*

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

$$\beta_{1j} = \gamma_{10}$$

$$\beta_{2j} = \gamma_{20}$$

$$\beta_{3j} = \gamma_{30}$$

*Mixed Model*

$$PA_{ij} = \gamma_{00}$$

$$+ \gamma_{10}*WE_{ij}$$

$$+ \gamma_{20}*DETAC_{ij}$$

$$+ \gamma_{30}*WE*DETAC_{ij}$$

$$+ u_{0j} + r_{ij}$$

Psychological detachment interacted with work engagement in predicting the positive affect. Results (see table 8) show that the moderation effect was significant and negative ( $\gamma = -.04$ ,  $p < .05$ ), showing the effect of work engagement on positive effect is affected by psychological detachment. In all psychological detachment measurements, these

slopes (see Figure 2) show significant relationships between work engagement and positive affect. Positive affect demonstrated the most remarkable rate of changes as a function of daily work engagement with low levels of psychological detachment (see Figure 2). When the days are on the lower level of work engagement, experiencing psychological detachment after working hours matters in predicting positive affect. Thus, Hypothesis 4 was supported.

**TABLE 8**

*HLM Results for testing Day-Level Moderating Effects on Daily Positive Affect*

Predictor Variable (PV)				
Work Engagement				
Variables	<i>Est</i>	<i>SE</i>	<i>df</i>	<i>t</i>
Level 1				
Intercept ( $\gamma_{00}$ )	3.30	.07	86	42.10**
WE ( $\gamma_{10}$ )	.33	.08	259	3.83**
Detachment ( $\gamma_{20}$ )	.26	.08	259	3.17*
WE*DETAC ( $\gamma_{30}$ )	-.04	.01	259	-2.84*

Note. *df* = 259, *Est* = Standardized coefficient, *SE* = standard error. \**p* < .05, \*\**p* < .001

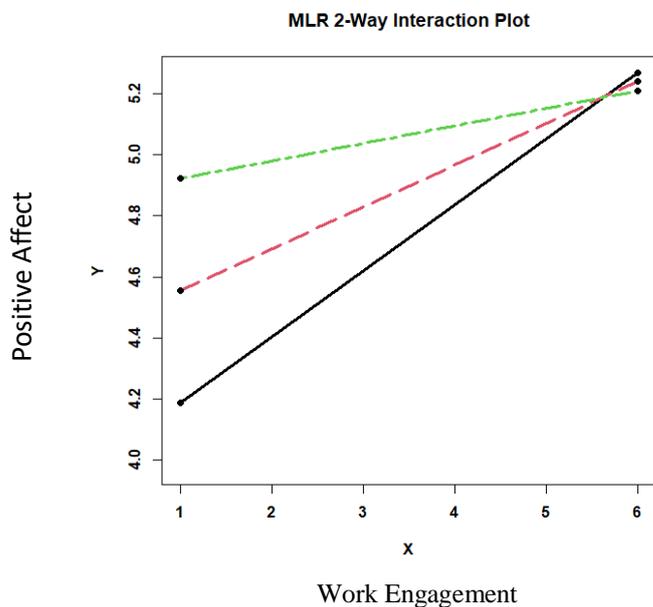


Figure 2: Moderating Effect of Day Level Psychological Detachment on the Relation Between Daily Work Engagement and Daily Positive Affect. Note. ---High, ---Medium, ---Low

Hypothesis 5 proposed that self-compassion (level 2) moderates the relationship between daily psychological need satisfaction and daily positive affect. We constructed the following HLM equation to address the Hypothesis 5:

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(BPNS_{ij}) + r_{ij}$$

*Level-2 Model*

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(SC_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}*(SC_j)$$

*Mixed Model*

$$PA_{ij} = \gamma_{00} + \gamma_{01}*SC_j + \gamma_{10}*BPNS_{ij} + \gamma_{11}*SC_j*BPNS_{ij} + u_{0j} + r_{ij}$$

In predicting Positive affect, we did not find any significant interaction effect between psychological need satisfaction and self-compassion ( $\gamma = .06, p = .35$ ) (see table 9). Thus, Hypothesis 5 was not supported.

**TABLE 9**

*HLM Results for testing Self-Compassion(L2) Moderating Effects on Daily Positive Affect*

Predictor Variable (PV): BPNS			
Variables	<i>Est</i>	<i>SE</i>	<i>t</i>
Intercept ( $\gamma_{00}$ )	3.30	.08	45.51**
PV ( $\gamma_{10}$ )	.39	.05	7.63**
Self-compassion ( $\gamma_{01}$ )	.17	.13	1.26
Self-compassion ( $\gamma_{11}$ )	.06	.06	.93

*Note*  $df = 259$ , *Est* = Standardized coefficient, *SE* = standard error. \* $p < .05$ , \*\* $p < .001$

Hypotheses 6 and 7 involved the moderating role of working patterns on the within-person relations between recovery experience (psychological detachment), basic psychological need satisfaction and positive affect. Hypothesis 6 proposed that working pattern moderates the relationship between daily recovery experience (psychological detachment) and daily positive affect. The working pattern (L2) variable was dummy coded and added to the equation to see how working patterns have a moderating effect on positive affect. The following HLM equations was constructed to address Hypothesis 6 (level 2 moderator):

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(DETAC_{ij}) + r_{ij}$$

*Level-2 Model*

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(REMOTE_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}*(REMOTE_j)$$

*Mixed Model*

$$PA_{ij} = \gamma_{00} + \gamma_{01}*REMOTE_j \\ + \gamma_{10}*DETAC_{ij} + \gamma_{11}*REMOTE_j*DETAC_{ij} \\ + u_{0j} + r_{ij}$$

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(DETAC_{ij}) + r_{ij}$$

*Level-2 Model*

$$\beta_{0j} = \gamma_{00} + \gamma_{01}*(ONSITE_j) + u_{0j}$$

$$\beta_{1j} = \gamma_{10} + \gamma_{11}*(ONSITE_j)$$

*Mixed Model*

$$PA_{ij} = \gamma_{00} + \gamma_{01}*ONSITE_j \\ + \gamma_{10}*DETAC_{ij} + \gamma_{11}*ONSITE_j*DETAC_{ij} \\ + u_{0j} + r_{ij}$$

In predicting positive affect, we found significant main effects for psychological detachment ( $\gamma = .07$ ,  $SE = .03$ ,  $t = 2.43$ ,  $p < .05$ ). As shown in figure 3, the interaction between psychological detachment and working remote was significant ( $\gamma = .13$ ,  $p < .05$ ) but the interaction between psychological detachment and working onsite was not significant ( $\gamma = -.06$ ,  $p = .40$ ) (see table 10).

**TABLE 10**

*HLM Results for testing Moderating Effects on Positive Affect*

Predictor Variable (PV): Detachment									
Level 1	<i>Est</i>	<i>SE</i>	<i>df</i>	<i>t</i>	Level 1	<i>Est</i>	<i>SE</i>	<i>df</i>	<i>t</i>
Intercept ( $\gamma_{00}$ )	3.23	.08	85	36.66**	Intercept ( $\gamma_{00}$ )	3.36	.09	85	36.80**
Detachment ( $\gamma_{10}$ )	.05	.04	260	1.43	Detachment ( $\gamma_{10}$ )	.10	.03	260	3.34**
Level 2					Level 2				
Remote ( $\gamma_{01}$ )	.39	.17	85	2.26*	Onsite ( $\gamma_{01}$ )	-.13	.16	85	-0.78
Remote ( $\gamma_{11}$ )	.13	.06	260	2.32*	Onsite ( $\gamma_{11}$ )	-.06	.07	260	-0.83

Note. Est = Standardized coefficient, SE = standard error. \*p < .05, \*\*p < .001

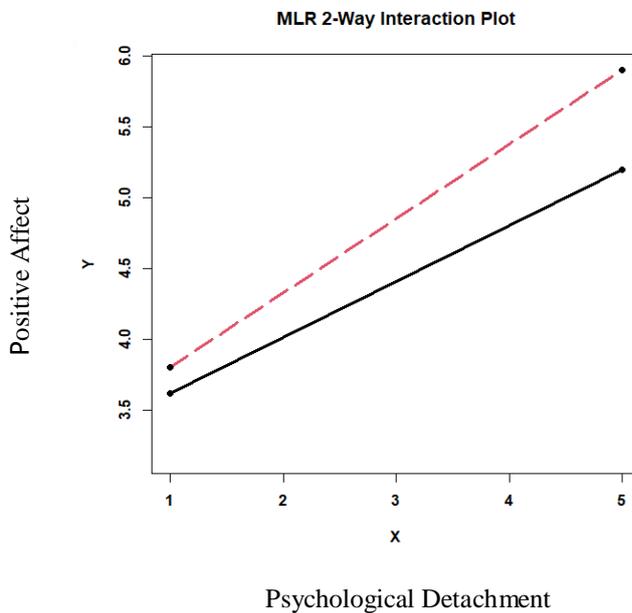


Figure 3: Moderating Effect of Remote Working on the Relation Between Psychological Detachment and Positive Affect. Note. ----- Remote, - - - - - Onsite+ hybrid

After that we entered the working place variable as a Level 1 predictor of these within-person relations in the model. As shown in Table 11, parallelly to expectations, working remote interacted with psychological detachment ( $\gamma = .13, p < .05$ ) in predicting day-level positive affect. As shown in Figure 4, there was a stronger positive relationship between detachment and positive affect for the days working from home ( $p < .05$ ). The equation for the Hypothesis 6 (level 1 moderator) as follows:

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(REMOTE_{ij}) + \beta_{2j}*(DETAC_{ij}) + \beta_{3j}*(REMOTE*DETAC_{ij}) + r_{ij}$$

*Level-2 Model*

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + u_{0j} \\ \beta_{1j} &= \gamma_{10} \\ \beta_{2j} &= \gamma_{20} \\ \beta_{3j} &= \gamma_{30} \end{aligned}$$

*Mixed Model*

$$\begin{aligned} PA_{ij} &= \gamma_{00} \\ &+ \gamma_{10} * REMOTE_{ij} \\ &+ \gamma_{20} * DETAC_{ij} \\ &+ \gamma_{30} * REMOTE * DETAC_{ij} \\ &+ u_{0j} + r_{ij} \end{aligned}$$

**TABLE 11**

*HLM Results for testing Moderating Effects on Positive Affect*

Variables	Est	SE	df	t
Level 1				
Intercept ( $\gamma_{00}$ )	3.31	.09	86	38.30**
Detachment ( $\gamma_{10}$ )	.02	.04	259	.54
Remote ( $\gamma_{20}$ )	-.49	.23	259	-2.20*
Remote*Detac ( $\gamma_{30}$ )	.13	.04	259	2.87*

Note. Est = Standardized coefficient, SE = standard error. \*p < .05, \*\*p < .001

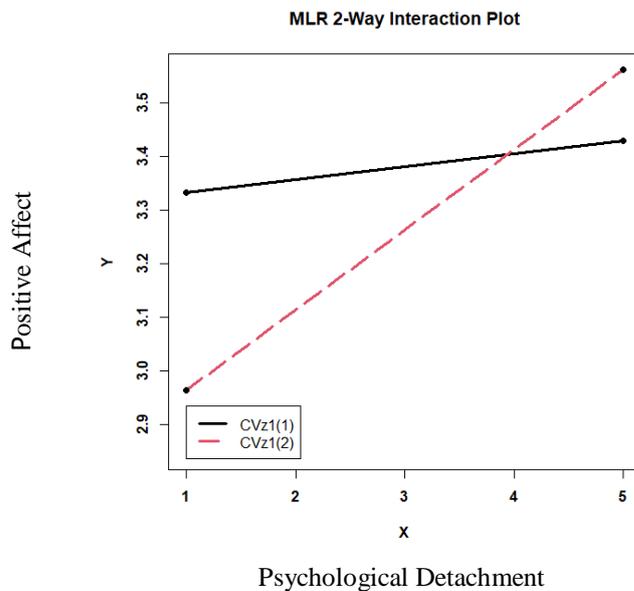


Figure 4: Moderating Effect of Working Place on the Relation Between Detachment and Positive Affect. Note. ----- Remote, ----- Onsite

According to Hypothesis 7, working patterns moderates the relationship between daily basic psychological need satisfaction and daily positive affect. The equations for the Hypothesis 7 as follow:

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(BPNS_{ij}) + r_{ij}$$

*Level-2 Model*

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + \gamma_{01}*(ONSITE_j) + u_{0j} \\ \beta_{1j} &= \gamma_{10} + \gamma_{11}*(ONSITE_j) \end{aligned}$$

*Mixed Model*

$$\begin{aligned} PA_{ij} &= \gamma_{00} + \gamma_{01}*ONSITE_j \\ &+ \gamma_{10}*BPNS_{ij} + \gamma_{11}*ONSITE_j*BPNS_{ij} \\ &+ u_{0j} + r_{ij} \end{aligned}$$

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(BPNS_{ij}) + r_{ij}$$

*Level-2 Model*

$$\begin{aligned} \beta_{0j} &= \gamma_{00} + \gamma_{01}*(REMOTE_j) + u_{0j} \\ \beta_{1j} &= \gamma_{10} + \gamma_{11}*(REMOTE_j) \end{aligned}$$

*Mixed Model*

$$\begin{aligned} PA_{ij} &= \gamma_{00} + \gamma_{01}*REMOTE_j \\ &+ \gamma_{10}*BPNS_{ij} + \gamma_{11}*REMOTE_j*BPNS_{ij} \\ &+ u_{0j} + r_{ij} \end{aligned}$$

A series of hierarchical regression analyses were performed to determine the moderating effect of working pattern on the relationship between basic psychological needs

and positive affect. The working pattern (L2) variable was dummy coded and added to the equation to see how working patterns have a moderating effect on positive affect. Firstly, we examined whether working onsite moderates the relationship between need satisfaction and positive affect. As shown in Table 12, working onsite was not moderated the effects of basic psychological need satisfaction on Positive affect ( $\gamma = .09, p = .42$ ).

**TABLE 12**

*HLM Results for testing Moderating Effects on Positive Affect*

Level 1	Est	SE	df	t	Level 1	Est	SE	df	t
Intercept ( $\gamma_{00}$ )	3.35	.09	85	36.75**	Intercept ( $\gamma_{00}$ )	3.22	.09	85	42.44**
BPNS ( $\gamma_{10}$ )	.35	.05	260	6.63**	BPNS ( $\gamma_{10}$ )	.42	.06	260	7.08**
Level 2					Level 2				
Onsite ( $\gamma_{01}$ )	-.13	.16	85	-.78	Remote ( $\gamma_{01}$ )	.39	.17	85	2.26*
Onsite ( $\gamma_{11}$ )	.09	.12	260	.81	Remote ( $\gamma_{11}$ )	-.18	.11	260	-1.60

Note. Est = Standardized coefficient, SE = standard error. \*p < .05, \*\*p < .001

We also investigated the day-specific moderation effect of working patterns, i.e., whether the daily working pattern moderated basic psychological needs responses to positive affect. Then we entered the working pattern variable as a Level 1 predictor (working place) of these within-person relations in the model. The equations for the working place (onsite) as follows:

*Level-1 Model*

$$PA_{ij} = \beta_{0j} + \beta_{1j}*(ONSITE_{ij}) + \beta_{2j}*(BPNS_{ij}) + \beta_{3j}*(ONSITE*BPNS_{ij}) + r_{ij}$$

*Level-2 Model*

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

$$\beta_{1j} = \gamma_{10}$$

$$\beta_{2j} = \gamma_{20}$$

$$\beta_{3j} = \gamma_{30}$$

*Mixed Model*

$$PA_{ij} = \gamma_{00}$$

$$+ \gamma_{10}*ONSITE_{ij}$$

$$+ \gamma_{20}*BPNS_{ij}$$

$$+ \gamma_{30} * ONSITE * BPNS_{ij}$$

$$+ u_{0j} + r_{ij}$$

Results (see Table 13) revealed that the moderation effect of working onsite was significant in predicting daily positive affect ( $\gamma = .29, p < .001$ ). As shown in Fig. 5, there was a stronger relationship between need satisfaction and positive affect for the days working onsite ( $p < .05$ ).

**TABLE 13**

*HLM Results for testing Moderating Effects on Positive Affect*

Predictor Variable (PV): BPNS				
Variables	Est	SE	df	t
Level 1				
Intercept ( $\gamma_{00}$ )	3.35	.11	86	30.52**
BPNS ( $\gamma_{10}$ )	.23	.06	259	3.82**
OBSITE ( $\gamma_{20}$ )	-1.51	.26	259	-4.17**
ONSITE*BPNS ( $\gamma_{30}$ )	.29	.07	259	4.51**

Note. Est = Standardized coefficient, SE = standard error. \*p < .05, \*\*p < .001

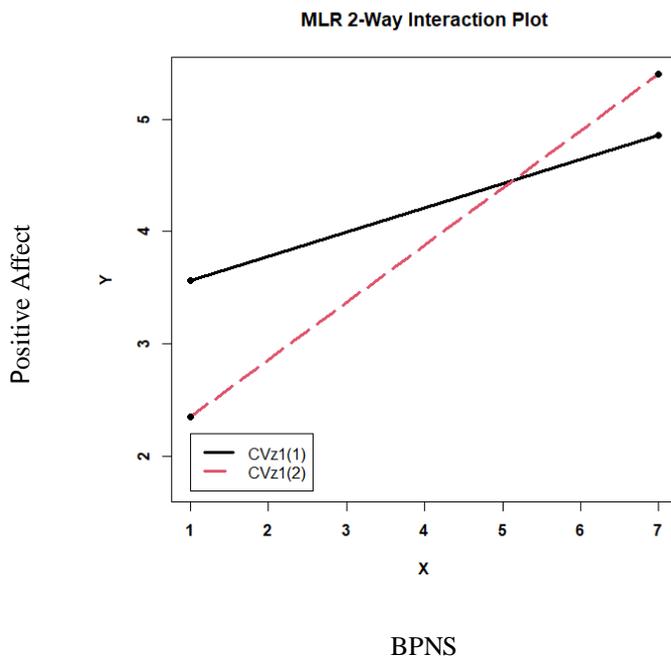


Figure 5: Moderating Effect of Working Place on the Relation Between Basic Psychological Needs and Positive Affect. Note. ----- Onsite, - - - - - Remote

## **CHAPTER IV**

### **DISCUSSION**

#### **4.1 Overview**

The current research investigated how new working patterns (remote, hybrid) affect employees' well-being and which factors play an important role in this relation by using daily diary methodology. Recent studies on employee well-being had shown that engagement at work, psychological need satisfaction, and experiencing recovery during free evening hours would affect subjective well-being and work-related outcomes (Baard et al., 2004; Bakker & Demerouti, 2008; Fritz & Sonnentag, 2006; Kinnunen et al., 2011; Mayer et al, 2018). However, there is no research about the boundary conditions in the relationships between recovery, need satisfaction, and positive affect. Therefore, we conducted further analysis to reveal the role of the work engagement, basic psychological need satisfaction and recovery (psychological detachment, relaxation) in the well-being measures in different working styles. Psychological need satisfaction and recovery dimensions examined as mediators. Also, the potential moderating effects of work engagement, psychological detachment, self-compassion, and working patterns were investigated.

This chapter consists of three sections. The first part discusses the results of hypothesis testing and the variables that best predict employees' psychological well-being. The next part focuses on the contribution of the current study. The last part provides the current study's limitations and suggestions for future studies.

#### **4.2. Findings of the Research**

##### **4.2.1 Discussion of the Results Concerning the Mediating Effect of Psychological Need Satisfaction**

In the current study, daily basic psychological need satisfaction mediated the relationship between daily work engagement and daily positive affect. In other words, in days individuals reported higher work engagement, their basic psychological needs were more satisfied, which increased their end of the day positive-affect scores. Van den Broeck et al. (2008) stated that psychological need satisfaction helps people increase their well-

being. Bakker and Demerouti (2008) indicated that employees who are highly engaged at work have positive emotions about their jobs. Deci et al. (2001) showed that need satisfaction is negatively associated with burnout which is the opposite of work engagement (Bakker et al., 2008). Prior studies have shown the importance of need satisfaction at work. For instance, need satisfaction mediated the relationship between job characteristics and positive work motivation (Liu et al., 2021). The current study showed that employees that are more engaged in their jobs are more satisfied with their psychological needs. The current findings are consistent with earlier studies showing basic need satisfaction as a mediator. For instance, Aldrup et al. (2017) showed that BPNS has a mediating role between stress exposure and well-being. According to Feng and Zhang (2021), psychological need satisfaction has a mediating role between prosocial tendencies and psychological well-being.

#### **4.2.2 Discussion of the Results Concerning the Mediating Effects of Recovery Dimensions**

Daily psychological detachment did not mediate the link between daily need satisfaction and daily positive affect. This result coincides with Safstrom and Hartig's (2013) research, which found that psychological detachment did not buffer the links between work pressures and cognitive failures. In addition, a study conducted during the COVID-19 pandemic reported that psychological detachment by using social network sites did not buffer the COVID-19 stressors such as isolation and work-family conflict on psychological well-being (Mantymaki et al., 2022). Similar to this study, our research corroborated the same findings.

Psychological detachment might not be necessary when thinking the job is positive and fulfilling. Employees may ruminate over positive work events at the end of the workday (Fritz & Sonnentag, 2005). This finding is consistent with the work of van Hooff and Geurts (2015) in which there was no direct relationship between need satisfaction and recovery. They stated that the relationship between psychological need satisfaction and recovery could be mediated by internal motivation.

The current study supported the mediating effect of daily relaxation in the daily basic psychological need satisfaction and daily positive-affect link. That is to say, when employees' satisfaction with psychological needs increases, so does their chance of getting recovered (relaxation) after work, which in turn, at the end of the day, increases the positive-affect levels of those employees. According to Hur et al. (2020), evening relaxation mediated

the relationship between job performance and the next-day positive affect. The relationship between recovery experience after work and well-being is consistent with the recent studies. For instance, Trougakos et al. (2014) indicated that recovery after work help individuals replenish their resources. According to Reis et al. (2000), need satisfaction is negatively associated with exhaustion. Ryan and Deci (2008) suggested that need satisfaction facilitates maintaining and enhancing energy. Positive association between need satisfaction and recovery is compatible with the work of Gagné (2003), in which female gymnasts reported more energy on days with higher psychological need satisfaction although they engage in physically demanding activities. As was expected, the current study shows that compatible with Gagné's (2003) findings, psychological needs satisfaction at work was positively associated with recovery after work.

#### **4.2.3 Discussion of the Results Concerning the Moderating Effect of General Work Engagement**

One of the aims of this study was to reveal the potential moderating effects of work engagement on the relationship between recovery processes and positive affect. As mentioned in the literature review, psychological detachment has an important function in coping with work-related stress and exhaustion (Sonnentag & Fritz, 2007). Moreover, it has been shown that trait work engagement moderated the relationship between daily psychological detachment and daily positive affect (Sonnentag, Mojza et al., 2008). The current study did not support the moderation effect. This result may be somewhat exciting because findings can be discussed in two ways. Previous studies have suggested that work engagement had a moderation effect (Boonsiritomachai & Sud-On, 2022; Sonnentag, Mojza et al., 2008). However, there are findings in the literature that this moderation effect both strengthens and weakens the independent variable's impact. According to Bakker and Leiter's (2010) study, engaged employees experience more flow in work and are more effective at job-related activities. Employees who are engaged to work do not need the after-work recovery as much as those who are not. The Conservation Theory of Resources assumes that we strive to acquire new resources, increase resources, and protect existing resources (Hobfoll, 1998). COR theory emphasizes that the experience of “recovery” significantly impacts health and well-being. Avoiding job demands and regaining depleted resources serve the recovery processes (Sonnentag, 2001).

In line with the COR theory, engaged individuals protect their resources, therefore, engaged employees might not need post-work recovery. In contrast, Sonnentag, Mojza et al. (2008) revealed that psychological detachment is more critical for highly engaged employees. Work engagement is not effortless, even though it is a positive experience (Macey & Schneider, 2008). Work engagement may deplete the employees' resources. Perhaps, because engaged employees attach more meaning to work, they are also more affected by stressful situations at work (Sonnentag, Mojza et al., 2008). Highly engaged people may need more recovery after working hours.

A possible explanation in the current study might be that the two opposite poles of work engagement, which are consume resources and feed resources, probably neutralize each other. Another possible explanation for this result might be that between-person design is not suitable for work engagement studies. Employees do not show equal work engagement to their work every day (Sonnentag et al., 2010). In the present study, work engagement measured both between-person and within-person fluctuations. The relation between work engagement and psychological detachment is discussed below (the following hypothesis) with a within-person approach. However, further research is required to confirm and validate these findings.

#### **4.2.4 Discussion of the Results Concerning the Moderating Effect of Daily Psychological Detachment**

With respect to the fourth research hypothesis, it was found that the effect of work engagement on positive affect is moderated by psychological detachment. According to the present study findings, work engagement was positively linked to positive affect at the end of the workday. Also, psychological detachment during the non-work time has an important role in this relation. More importantly, psychological detachment is critical on days with low work engagement. On days with low work engagement and low psychological detachment, employees cannot reach positive affect at the end of the workday. On the other hand, our findings also indicate that psychological detachment does not matter for highly engaged employees. This finding is consistent with the work of Gaudiino and Stefano (2021), in which work engagement and psychological well-being play a protective role for employees who cannot detach from work. Work is a positive experience for highly engaged employees. This study offers an inspiring aspect of work engagement based on the findings. Previous studies have demonstrated that being engaged at work boosts energy by allowing employees

to enjoy work, feeds resources, and supports the recovery process at the end of the day (Demerouti et al., 2012). In accordance with the present results, work engagement may help protect existing resources. Additional evidence is also needed to support this result.

#### **4.2.5 Discussion of the Results Concerning the Moderating Effect of Self-Compassion**

In the current study, self-compassion was thought of as a moderator variable in the model relationship between need satisfaction and positive affect. Hypothesis 5 was based on the study question, "How does the relationship between basic psychological need satisfaction and positive affect change when employees are self-compassionate or not?" According to the study results, no significant moderating effect has impacted the relationship between need satisfaction and positive affect. Woo Kyung (2013) found that self-compassion is a moderator variable between burnout and emotional well-being. In contrast, there is scientific evidence that not everyone benefits equally from being self-compassionate. For example, although self-compassion was moderated by conscientiousness in males, this was not the case in women. Men with low levels of conscientiousness did not benefit from self-compassion. On the other hand, self-compassion was linked to women's motivation to fix their mistakes with other people, regardless of conscientiousness (Baker & McNulty, 2011). According to the literature, self-compassion protects against stress, failures, depression, and minor setbacks (Germer et al., 2013; Sirois et al., 2015). But in the current study, negative affect was not tested. Perhaps the moderator effect of self-compassion works better with negative emotions. For example, self-compassion has a protective role against neurotic perfectionism, but being self-compassionate is not related to performance (Neff, 2003a). In addition, need satisfaction is our predictor variable, but we also have employees' frustration scores. Maybe we could find a significant relationship if we tested need frustration instead need satisfaction.

#### **4.2.6 Discussion of the Results Concerning the Moderating Effect of Working Pattern on The Relationship Between Recovery Experience (Psychological Detachment) and Positive Affect**

The results of the present study revealed that the participants' day-specific working practices (remotely or onsite) moderated the link between psychological detachment from work and positive affect. Namely, the relationship between psychological detachment and well-being is stronger on remote working days than office days. Therefore, psychological

detachment is critical, particularly on days working remotely. These results remind Hall and Ritzer (1988), who defined the "daily transition" concept. Boundaries between work and home are important. When working from the office, even if psychological detachment from work is difficult to achieve, positive emotions can still be experienced at the end of the day. According to Mantymaki et al. (2022), in the COVID-19 pandemic, increasing remote work can cause work-family conflict by blurring the borders between family and work. All in all, we hypothesized that the boundaries become more transparent when working remotely and psychological detachment from work becomes more challenging, and, as a result, the positive affect would be weakened. This thought is partially supported by results demonstrating that low boundary control was related to the lack of psychological detachment, moreover, the link between using a smartphone at work and psychological detachment was moderated by boundary control (Mellner, 2016). These findings are also consistent with Verma and Uy's (2021) study, psychological detachment from work is an effective and important component in remote working arrangements.

#### **4.2.7 Discussion of the Results Concerning the Moderating Effect of Working Pattern on The Relationship Between Psychological Need Satisfaction and Positive Affect**

Results showed that working patterns (remote-hybrid-onsite) did not moderate the link between basic psychological needs at work and end of the day positive affect. The effect of psychological need satisfaction on positive affect did not differ across employees with different work patterns (remote-hybrid-onsite). The responses of hybrid workers to the questionnaire may have shown the relationship insignificant because the day-specific working place moderated the relationship between psychological need satisfaction and positive affect.

In contrast with the person-level model, our day-level research reveals the moderating effect of working place on the relationship between need satisfaction and positive affect. The effect of basic psychological needs on positive affect is stronger for onsite workers than remote workers. On days with low need satisfaction, the working place matters. It is possible that these results might have been affected by the non-work-related factors. Employees might have met psychological needs with life rather than work. While need satisfaction at work brings a positive affect at the end of the workday for onsite workers, need satisfaction at work might not be necessary for remote workers. According to Biron et al. (2022), teleworkers might engage their psychological needs by creating an "ideal identity"

such as ideal workers or ideal parents. Employees meet their psychological needs at home as well. However, in the current study, it was questioned whether the psychological needs of individuals are met only at work. Family members and household chores might help engage the psychological needs (Biron et al., 2022). Psychological need satisfaction by non-work-related factors may result in an increased positive affect at the end of the day, which can be examined in future studies.

### **4.3 Contributions of the Current Study**

The current study provided theoretical and practical insights into work engagement, psychological need satisfaction, and the recovery cycle at work. The findings from the present study make several contributions to the literature. First, the current study contributed to the literature by using multilevel methods and within-person design which decreases participants' dependence on memory and reduce recall bias.

Second, the present study supported that the need satisfaction at work contributes to employee recovery and, as a result, boosts positive affect at the end of the workday. Also, to the best of our knowledge, the present research is the first comprehensive investigation of the role of working patterns on psychological need satisfaction. In addition to the above contributions, the current study was the first to investigate the potential moderator effects of working patterns on these relationships.

Third, regarding strengths, this study's findings revealed that the need satisfaction at work mediated the relation between morning work engagement and the positive affect at the end of the day. Our findings contribute to a better understanding of the underlying mechanisms related to work engagement and well-being, which are mediated by basic psychological needs satisfaction.

Fourth, with respect to practical implications, our study revealed that employees' well-being benefits from both work engagement and need satisfaction at work. Accordingly, managers could support their employee's need satisfaction by building an autonomy-supportive work environment (Kaabomeir et al., 2022).

Lastly, an important implication of this study is that it was conducted in a period of transition to the "new normal" lifestyles in many sectors. In other words, the world has never had a crisis like this, and it has never altered as much as it did during the coronavirus period. Therefore, the present study's findings provide implications for crisis situations.

#### **4.4 Limitations and Suggestions for Future Studies**

Finally, the limitations of the current study are discussed respectively. First, this study's measures were self-reported. The current study design relies on self-reports overestimating the relationships between variables attributable to common method variance. It would be reasonable if future research included other report alternatives (i.e., supervisor report).

Second, this study focused on the moderator effects of work engagement on recovery and positive affect. In a future study, exploring other mechanisms that moderate the relationship between recovery and positive affect would be interesting. For instance, the flow state at work could be one factor that weaken recovery's effect on well-being. As mentioned in Bakker and Leiter's (2010) study, engaged employees experience more flow in work and are more effective at job-related activities. Logically, considering COR theory, employees who experience a high degree of flow state at work do not need to recover much after work. But this opinion needs evidence. Therefore, future research should consider the measures of flow state at work.

Third, the current study only examined need satisfaction at work. To get a full picture of the function of need satisfaction in the daily effort–recovery process, it is also important to look at employees' need satisfaction during free evening hours. Previous research indicates that the employees with lower recovery during free evening hours reported less satisfaction with needs (Van Hoof, 2014). As a result, future research might examine to focus on employees' daily needs satisfaction after work during free hours.

Fourth, the current study is limited by the possible unknown psychological effects of the COVID-19 pandemic on participants. We ignored the psychological effects of COVID-19 that may affect relations between the variables of interest in our study. Because coronavirus is contagious and deadly, COVID-19-related stressors might lead to anxiety about one's life (Fu et al., 2021). It can be imagined that employees who are stressed, depressed, or anxious are less likely to satisfy their needs because their anxieties keep them from engaging in activities that contribute to psychological need satisfaction (Geurts, 2014). Employees worried about their lives may be more willing to work from home, where the risk of contamination is much less (Shao et al., 2021).

Fifth, we did not identify participants already remotely or hybrid working before the COVID-19 pandemic. It was important to consider this because; remote and hybrid workers'

may be different from on-site workers with being organized, motivated, and responsible personality traits. Moreover, we did not investigate the critical factors such as work-family conflict and work-home boundaries. For instance, Shao et al. (2021) reported that employees exposed to work-family boundary stressors are more likely to want to work onsite the next day, while those exposed to high work-related stressors are likelier to want to work remote. All in all, need satisfaction, recovery experience and engagement at work might differ in these participants. Additionally, in the present study, gender differences were not tested. For instance, Lundberg and Lindfors (2002) found that the increase in arousal and epinephrine levels was explained by males continuing to work after working hours when teleworking. However, women do not experience post-telework stress because they are more concerned with domestic demands after work. In future studies, gender differences should be considered in changing working conditions.

Lastly, another possible area of future research would be to investigate the potential consequences (loneliness, technostress, work-life balance) of flexible working arrangements (Taser et al., 2022) in the next normal.

## REFERENCES

- Abilash, K. M., & Siju, N. M. (2021). Telecommuting: An empirical study on job performance, job satisfaction and employees commitment during pandemic circumstances. *Management*, 8, 3547. <https://doi.org/10.34293/management.v8i3.3547>
- Aldrup, K., Klusmann, U., & Lüdtke, O. (2017). Does basic need satisfaction mediate the link between stress exposure and well-being? A diary study among beginning teachers. *Learning and Instruction*, 50, 21–30. <https://doi.org/10.1016/j.learninstruc.2016.11.005>
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings. *Journal of Applied Social Psychology*, 34(10), 2045–2068. <https://doi.org/10.1111/j.1559-1816.2004.tb02690.x>
- Babenko, O., Mosewich, A. D., Lee, A., & Koppula, S. (2019). Association of physicians' self-compassion with work engagement, exhaustion, and professional life satisfaction. *Medical Sciences*, 7(2), 29. <https://doi.org/10.3390/medsci7020029>
- Baker, L. R., & McNulty, J. K. (2011). Self-compassion and relationship maintenance: the moderating roles of conscientiousness and gender. *Journal of Personality and Social Psychology*, 100(5), 853. <https://doi.org/10.1037/a0021884>
- Bakker, A. B. (2014). Daily fluctuations in work engagement: An overview and current directions. *European Psychologist*, 19(4), 227–236. <https://doi.org/10.1027/1016-9040/a000160>
- Bakker, A. B., & Albrecht, S. (2018). Work engagement: current trends. *Career Development International*, 23(1), 4-11. <https://doi.org/10.1108/CDI-11-2017-0207>
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *The Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>

- Bakker, A. B., & Leiter, M. P. (2010). *Work engagement: A handbook of essential theory and research*. Psychology Press. <https://doi.org/10.1111/j.1744-6570.2011.01242.2.x>
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29(2), 147-154. <https://doi.org/10.1002/job.515>
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187–200. <https://doi.org/10.1080/02678370802393649>
- Bakker, A. B., Van Emmerik, I. H., Geurts, S. A., & Demerouti, E. (2008). Recovery turns job demands into challenges: A diary study on work engagement and performance. Unpublished Working paper. Erasmus University.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman/Times Books/ Henry Holt & Co.
- Baruch, Y., & Nicholson, N. (1997). Home, sweet work: Requirements for effective home working. *Journal of General Management*, 23(2), 15-30. <https://doi.org/10.1177/030630709702300202>
- Belzunegui-Eraso, A., & Erro-Garcés, A. (2020). Teleworking in the context of the covid-19 crisis. *Sustainability*, 12(9), 3662. <https://doi.org/10.3390/su12093662>
- Biron, M., Casper, W. J., & Raghuram, S. (2022). Crafting telework: a process model of need satisfaction to foster telework outcomes. *Personnel Review*. <http://dx.doi.org/10.1108/PR-04-2021-0259>
- Boonsiritomachai, W. and Sud-On, P. (2022), "The moderation effect of work engagement on entrepreneurial attitude and organizational commitment: evidence from Thailand's entry-level employees during the COVID-19 pandemic", *Asia-Pacific Journal of Business Administration*, 14 (1), 50-71. <https://doi.org/10.1108/APJBA-03-2021-0101>

- Bryk, A., & Raudenbush, S. (1992). Hierarchical linear models: Applications and data analysis methods. SAGE.
- Byrne, Z. S., Peters, J. M., & Weston, J. W. (2016). The struggle with employee engagement: Measures and construct clarification using five samples. *Journal of Applied Psychology, 101*(9), 1201. <http://dx.doi.org/10.1037/apl0000124>
- Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research, 116*, 183–187. <https://doi.org/10.1016/j.jbusres.2020.05.037>
- Charalampous, M., Grant, C. A., Tramontano, C., & Michailidis, E. (2019). Systematically reviewing remote e-workers' well-being at work: A multidimensional approach. *European Journal of Work and Organizational Psychology, 28*(1), 51-73. <https://doi.org/10.1080/1359432X.2018.1541886>
- Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M., Sheldon, K. M., Soenens, B., Van Petegem, S., & Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion, 39*(2), 216–236. <https://doi.org/10.1007/s11031-014-9450-1>
- Chiniara, M., & Bentein, K. (2015). Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction. *The Leadership Quarterly, 27*(1), 124–141. <https://doi.org/10.1016/j.leaqua.2015.08.004>
- Coxen, L., Van Der Vaart, L., Van den Broeck, A., & Rothmann, S. (2021). Basic psychological needs in the work context: A systematic literature review of diary studies. *Frontiers in Psychology, 12*, 1-18. <https://doi.org/10.3389/fpsyg.2021.698526>
- Dağlı, A., & Baysal, N. (2016). Yaşam doyumu ölçeğinin Türkçe'ye uyarlanması: geçerlik ve güvenilirlik çalışması [Adaptation of The Satisfaction with Life Scale into Turkish: The study of validity and reliability]. *Electronic Journal of Social Sciences, 15*(59) 1250-1262. <https://doi.org/%2010.17755/esosder.263229>

- Dambrin, C. (2004). How does telework influence the manager-employee relationship? *International Journal of Human Resources Development and Management*, 4(4), 358-374. <https://doi.org/10.1504/IJHRDM.2004.005044>
- De Gieter, S., Hofmans, J., & Bakker, A. B. (2018). Need satisfaction at work, job strain, and performance: A diary study. *Journal of Occupational Health Psychology*, 23(3), 361–372. <https://doi.org/10.1037/ocp0000098>
- Debus, M. E., Sonnentag, S., Deutsch, W., & Nussbeck, F. W. (2014). Making flow happen: The effects of being recovered on work-related flow between and within days. *Journal of Applied Psychology*, 99(4), 713–722. <https://doi.org/10.1037/a0035881>
- Deci, E. L., & Moller, A. C. (2005). The concept of competence: A starting place for understanding intrinsic motivation and self-determined extrinsic motivation. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 579–597). Guilford Publications.
- Deci, E. L., & Ryan, R. M. (2008). Facilitating optimal motivation and psychological well-being across life's domains. *Canadian Psychology/Psychologie canadienne*, 49(1), 14–23. <https://doi.org/10.1037/0708-5591.49.1.14>
- Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, 27(8), 930–942. <https://doi.org/10.1177/0146167201278002>
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26(3-4), 325–346. [https://doi.org/10.1207/s15326985ep2603&4\\_6](https://doi.org/10.1207/s15326985ep2603&4_6)
- Demerouti, E., Bakker, A. B., Sonnentag, S., & Fullagar, C. (2012). Work-related flow and energy at work and at home: A study on the role of daily recovery. *Journal of Organizational Behavior*, 33, 276–295. <https://doi.org/10.1002/job.760>

- Dettmers, J., Vahle-Hinz, T., Bamberg, E., Friedrich, N., & Keller, M. (2016). Extended work availability and its relation with start-of-day mood and cortisol. *Journal of occupational health psychology, 21*(1), <https://doi.org/10.1037/a0039602>
- Dev, V., Fernando, A. T., & Consedine, N. S. (2020). Self-compassion as a stress moderator: a cross-sectional study of 1700 doctors, nurses, and medical students. *Mindfulness, 11*(5), 1170-1181. <https://doi.org/10.1007/s12671-020-01325-6>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*(1), 71–75. [https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13)
- Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel models: A new look at an old issue. *Psychological Methods, 12*(2), 121–138. <https://doi.org/10.1037/1082-989X.12.2.121>
- Ens, N., Stein, M. K., & Blegind Jensen, T. (2018). Decent digital work: Technology affordances and constraints. Thirty ninth International Conference on Information Systems, San Francisco. <https://aisel.aisnet.org/icis2018/impact/Presentations/4/>
- Eryılmaz, A., & Doğa, T. (2012). İş yaşamında öznel iyi oluş: Utrecht İşe Bağlılık Ölçeği'nin psikometrik niteliklerinin incelenmesi. *Klinik Psikiyatri Dergisi, 15*(1), 49-55.
- Etzion, D., Eden, D., & Lapidot, Y. (1998). Relief from job stressors and burnout: Reserve service as a respite. *Journal of Applied Psychology, 83*(4), 577-585. <https://doi.org/10.1037/0021-9010.83.4.577>
- Eurofound and the International Labour Office. (2017). Working anytime, anywhere: The effects on the world of work. *Publications Office of the European Union, Luxembourg, and the International Labour Office, Geneva.*
- Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technology, Work and Employment, 32*(3), 195-212. <https://doi.org/10.1016/j.jbusres.2020.05.037>

- Feng, L., & Zhang, L. (2021). Prosocial tendencies and subjective well-being: The mediating role of basic psychological needs satisfaction. *Social Behavior and Personality: An International Journal*, 49(5), 1–10. <https://doi.org/10.2224/sbp.9986>
- Feuerhahn, N., Sonnentag, S., & Woll, A. (2014). Exercise after work, psychological mediators, and affect: A day-level study. *European Journal of Work and Organizational Psychology*, 23(1), 62–79. <https://doi.org/10.1080/1359432X.2012.709965>
- Fisher, C. D., & To, M. L. (2012). Using experience sampling methodology in organizational behavior. *Journal of Organizational Behavior*, 33(7), 865–877. <http://dx.doi.org/10.1002/job.1803>
- Flores, M. F. (2019). Understanding the challenges of remote working and its impact to workers. *International Journal of Business Marketing and Management (IJBMM)*, 4(11), 40-44. <https://www.scirp.org/>
- Fritz, C., & Sonnentag, S. (2005). Recovery, health, and job performance: Effects of weekend experiences. *Journal of Occupational Health Psychology*, 10, 187-199. <https://doi.org/10.1037/1076-8998.10.3.187>
- Fritz, C., & Sonnentag, S. (2006). Recovery, well-being, and performance-related outcomes: The role of workload and vacation experiences. *Journal of Applied Psychology*, 91(4), 936–945. <https://doi.org/10.1037/0021-9010.91.4.936>
- Fu, S. Q., Greco, L. M., Lennard, A. C., & Dimotakis, N. (2021). Anxiety responses to the unfolding COVID-19 crisis: Patterns of change in the experience of prolonged exposure to stressors. *Journal of Applied Psychology*, 106(1), 48–61. <https://doi.org/10.1037/apl0000855>
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362. <https://doi.org/10.1002/job.322>
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual

- consequences. *Journal of Applied Psychology*, 92(6), 1524-1541. <https://doi.org/10.1037/0021-9010.92.6.1524>
- Garson, G. D. (2013). Introductory guide to HLM with HLM 7 software. Hierarchical linear modeling: Guide and applications, 55-96.
- Gençöz, T. (2000). Pozitif ve negatif duygu ölçeği: Geçerlik ve güvenilirlik çalışması [The positive and negative affect scale: Validity and reliability study]. *Türk Psikoloji Dergisi* [Turkish Journal of Psychology], 15(46), 19-26.
- Gerber, Z., & Anaki, D. (2021). The role of self-compassion, concern for others, and basic psychological needs in the reduction of caregiving burnout. *Mindfulness*, 12(3), 741-750. <https://doi.org/10.1007/s12671-020-01540-1>
- Gigauri, I. (2020). Remote working concerns during the covid-19 pandemic. *International Journal of Social Science and Economic Research*, 05(10), 2803-2818. <https://doi.org/10.46609/IJSSER.2020.v05i10.005>
- Görmüş, A. (2020). Kovid-19 pandemisi döneminde sosyal mesafeli çalışma biçimi: Tele-çalışma. *Electronic Turkish Studies*, 15(4). <http://dx.doi.org/10.7827/TurkishStudies.44261>
- Grant, C. A., Wallace, L. M., & Spurgeon, P. C. (2013). An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being, and work-life balance. *Employee Relations*, 35(5), 527–546. <https://doi.org/10.1108/er-08-2012-0059>
- Hall, D. T., & Richter, J. (1988). Balancing work life and home life: What can organizations do to help?. *Academy of Management Perspectives*, 2(3), 213-223.
- Hartig, T., Kylin, C., & Johansson, G. (2007). The telework tradeoff: Stress mitigation vs. constrained restoration. *Applied Psychology: An International Review*, 56(2), 231–253. <https://doi.org/10.1111/j.1464-0597.2006.00252.x>
- Hobfoll, S. E. (1998). *Stress, culture, and community: The psychology and physiology of stress*. New York: Plenum. <http://dx.doi.org/10.1007/978-1-4899-0115-6>

- Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., ... & Bullmore, E. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. *The Lancet Psychiatry*, 7(6), 547-560. [https://doi.org/10.1016/S2215-0366\(20\)30168-1](https://doi.org/10.1016/S2215-0366(20)30168-1)
- Hur, W.-M., Shin, Y., & Moon, T. W. (2020). How does daily performance affect next-day emotional labor? The mediating roles of evening relaxation and next-morning positive affect. *Journal of Occupational Health Psychology*, 25(6), 410-425. <https://doi.org/10.1037/ocp0000260>
- Ilies, R., Schwind, K. M., & Heller, D. (2007). Employee well-being: A multilevel model linking work and nonwork domains. *European Journal of Work and Organizational Psychology*, 16(3), 326-341. <https://doi.org/10.1080/13594320701363712>
- International Labour Organization. (2020). Teleworking during the covid-19 pandemic and beyond a practical guide. International Labour Office, Geneva.
- In E. R. Hirt, J. J. Clarkson, & L. Jia (Eds.), *Self-regulation and ego control* (pp. 67-85). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-801850-7.00004-4>
- İş Kanunu [Labour Law Legislation]. (2003). Resmi Gazete 25134 (10/6/2003) Erişim 19.08.2021 <https://www.mevzuat.gov.tr/mevzuatmetin/1.5.4857.pdf>
- Kaabomeir, N., Mazhari, K., Arshadi, N., & Karami, M. (2022). How supervisors can support employees' needs and motivation? an experimental study based on SDT. *Current Psychology*, 1-13. <https://doi.org/10.1007/s12144-022-02922-5>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724. <https://doi.org/10.2307/256287>
- Kantaş, Ö. (2013). *Impact of relational and individuational self-orientations on the well-being of academicians: The roles of ego-or eco-system motivations, self-transcendence, self-compassion and burnout* [Unpublished master's thesis]. Middle East Technical University, Ankara.

- Kantaş, Ö. (2018). “*What I need is more than a job*”: A self-determination theory-based profile of disconnected and working youth in Turkey [Unpublished Ph.D. dissertation]. Middle East Technical University, Ankara.
- Kataria, A., Garg, P. and Rastogi, R. (2019). Do high-performance HR practices augment OCBs? The role of psychological climate and work engagement. *International Journal of Productivity and Performance Management*, 68(6), 1057-1077. <https://doi.org/10.1108/IJPPM-02-2018-0057>
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22(3), 280–287. <https://doi.org/10.1177/0146167296223006>
- Kavi, E., & Koçak, O. (2010). Bilgi toplumunda evden çalışmanın etik boyutu [Ethical aspect of telecommuting in the information society] *Journal of Social Policy Conferences*, 0(59), 69-88.
- Kelley, H. H. (1971). *Attribution in social interaction*. General Learning Press.
- Kılıç, B. (2020). İzolasyon sürecinin çalışma ve iletişim biçimlerinde meydana getirdiği değişimin iletişim fakültelerinde çalışan araştırma görevlileri ekseninde incelenmesi [Analysis of the change caused by the isolation process in work and communication forms based on research assistants working at the faculties of communication]. *Egemia Ege Üniversitesi İletişim Fakültesi Medya ve İletişim Araştırmaları Hakemli E-Dergisi*, 7(7),87-106. <https://dergipark.org.tr/en/pub/egemiadergisi/issue/57586/765252>
- Kinnunen, U., Feldt, T., Siltaloppi, M., & Sonnentag, S. (2011). Job demands–resources model in the context of recovery: Testing recovery experiences as mediators. *European Journal of Work and Organizational Psychology*, 20(6), 805–832. <https://doi.org/10.1080/1359432X.2010.524411>
- Koronavirüs ile mücadele kapsamında- Yeni kısıtlama ve tedbirler genelgeleri [Within the scope of combating coronavirus-New restrictions and measures circulars]. (2020). T.C. İçişleri Bakanlığı [T.R. Ministry of the Interior]. <https://www.icisleri.gov.tr/koronavirus-ile-mucadele-kapsaminda-sokaga-cikma-kisitlamalari---yeni-kisitlama-ve-tedbirler-genelgeleri>

- Kundi, Y. M., Aboramadan, M., Elhamalawi, E. M., & Shahid, S. (2020). Employee psychological well-being and job performance: Exploring mediating and moderating mechanisms. *International Journal of Organizational Analysis*, 29(3), 736-754. <https://doi.org/10.1108/IJOA-05-2020-2204>
- Kwok, O. M., Underhill, A. T., Berry, J. W., Luo, W., Elliott, T. R., & Yoon, M. (2008). Analyzing longitudinal data with multilevel models: An example with individuals living with lower extremity intra-articular fractures. *Rehabilitation Psychology*, 53(3), 370-386. <https://doi.org/10.1037/a0012765>
- Kyeong, L. W. (2013). Self-compassion as a moderator of the relationship between academic burn-out and psychological health in Korean cyber university students. *Personality and Individual Differences*, 54(8), 899–902. <https://doi.org/10.1016/j.paid.2013.01.001>
- Langan, D., Higgins, J. P., Jackson, D., Bowden, J., Veroniki, A. A., Kontopantelis, E., ... & Simmonds, M. (2019). A comparison of heterogeneity variance estimators in simulated random-effects meta-analyses. *Research synthesis methods*, 10(1), 83-98. <https://doi.org/10.1002/jrsm.1316>
- Liu, Y., Wang, S., Zhang, J., & Li, S. (2022). When and How Job Design Influences Work Motivation: A Self-Determination Theory Approach. *Psychological Reports*, 125(3), 1573-1600.
- Lodovici, M. S. (2021). The impact of teleworking and digital work on workers and society. Study Requested by the EMPL Committee. European Parliament. [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662904/IPOL\\_STU\(2021\)662904\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662904/IPOL_STU(2021)662904_EN.pdf)
- Lundberg, U., & Lindfors, P. (2002). Psychophysiological reactions to telework in female and male white-collar workers. *Journal of Occupational Health Psychology*, 7(4), 354–364. <https://doi.org/10.1037/1076-8998.7.4.354>
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 1(1), 3–30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>

- Mancini, A. D. (2008). Self-determination theory: A framework for the recovery paradigm. *Advances in Psychiatric Treatment*, 14(5), 358-365. <https://doi.org/10.1192/apt.bp.107.004036>
- Mann, S., & Holdsworth, L. (2003). The psychological impact of teleworking: Stress, emotions, and health. *New Technology, Work and Employment*, 18(3), 196-211. <https://doi.org/10.1111/1468-005X.00121>
- Mäntymäki, M., Islam, A. N., Turel, O., & Dhir, A. (2022). Coping with pandemics using social network sites: A psychological detachment perspective to COVID-19 stressors. *Technological Forecasting and Social Change*, 179, 121660. <https://doi.org/10.1016/j.techfore.2022.121660>
- Marcoulides, G. A., & Schumacker, R. E. (2009). New developments and techniques in structural equation modeling. Mahwah, NJ: Lawrence Erlbaum Associates.
- Marimuthu, P., & Vasudevan, H. (2020). The psychological impact of working from home during coronavirus (COVID 19) pandemic: A case study. *CnR's International Journal of Social & Scientific Research*, 06(1), pp. 18–29. <https://www.researchgate.net/publication/343101009>
- Martela, F., Dehaan, C. R., & Ryan, R. M. (2016). On enhancing and diminishing energy through psychological means: Research on vitality and depletion from self-determination theory. In E. R. Hirt, J. J. Clarkson, & L. Jia (Eds.), *Self-regulation and ego control* (pp. 67–85). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-801850-7.00004-4>
- Maslach, C. (2017). Finding solutions to the problem of burnout. *Consulting Psychology Journal: Practice and Research*, 69(2), 143-152. [10.1037/cpb0000090](https://doi.org/10.1037/cpb0000090)
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. <https://doi.org/10.1146/annurev.psych.52.1.397>
- Mayer, D. M., Bardes, M., & Piccolo, R. F. (2008). Do servant-leaders help satisfy follower needs? An organizational justice perspective. *European Journal of Work and*

- McDonough, M. H., & Crocker, P. R. (2007). Testing self-determined motivation as a mediator of the relationship between psychological needs and affective and behavioral outcomes. *Journal of Sport and exercise Psychology*, 29(5), 645–663. <https://doi.org/10.1123/jsep.29.5.645>
- Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth, H. Thierry, & C. J. de Wolff (Eds.), *Handbook of work and organizational: Work psychology* (pp. 5–33). Psychology Press/Erlbaum (UK) Taylor & Francis.
- Mellner, C. (2016). After-hours availability expectations, work-related smartphone use during leisure, and psychological detachment: The moderating role of boundary control. *International Journal of Workplace Health Management*, 9(2), 146–164. <https://doi.org/10.1108/IJWHM-07-2015-0050>
- Mojza, E. J., Sonnentag, S., & Bornemann, C. (2011). Volunteer work as a valuable leisure-time activity: A day-level study on volunteer work, non-work experiences, and well-being at work. *Journal of Occupational and Organizational Psychology*, 84(1), 123–152. <https://doi.org/10.1348/096317910X485737>
- Morganson, V. J., Major, D. A., Oborn, K. L., Verive, J. M., & Heelan, M. P. (2010). Comparing telework locations and traditional work arrangements. *Journal of Managerial Psychology*, 25(6), 578–595. <https://doi.org/10.1108/02683941011056941>
- Mosewich, A. D., Kowalski, K. C., Sabiston, C. M., Sedgwick, W. A., & Tracy, J. L. (2011). Self-compassion: A potential resource for young women athletes. *Journal Of Sport & Exercise Psychology*, 33(1), 103–123. <https://doi.org/10.1123/jsep.33.1.103>
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223–250. <https://doi.org/10.1080/15298860309027>

- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2(2), 85–101. <https://doi.org/10.1080/15298860309032>
- Neff, K. (2004). Self-compassion and psychological well-being. *Constructivism in the Human Sciences*, 9(2), 27–37.
- Neff, K. (2009). Self-compassion. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 561–573). The Guilford Press.
- Neff, K. D., Hsieh, Y.-P., & Dejjitrat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4(3), 263–287. <https://doi.org/10.1080/13576500444000317>
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. L. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, 41(4), 908–916. <https://doi.org/10.1016/j.jrp.2006.08.002>
- Nezlek, J. B. (2001). Multilevel random coefficient analyses of event- and interval-contingent data in social and personality psychology research. *Personality and Social Psychology Bulletin*, 27(7), 771–785. <https://10.1177/0146167201277001>
- Nicklin, J. M., Seguin, K., & Flaherty, S. (2019). Positive work-life outcomes: Exploring self-compassion and balance. *European Journal of Applied Positive Psychology*, 3(6), 1-13. <http://www.nationalwellbeingservice.org/volumes/volume-3-2019/volume-3-article-6/>
- Nilles, J. M. (1975). Telecommunications and organisational decentralization. *Transactions on Communications*, 23(10), 1142–1147.
- Ohly, S., Sonnentag, S., Niessen, C., & Zapf, D. (2010). Diary studies in organizational research: An introduction and some practical recommendations. *Journal of Personnel Psychology*, 9(2), 79–93. <https://doi.org/10.1027/1866-5888/a000009>
- Olafsen, A. H., Deci, E. L., & Halvari, H. (2018). Basic psychological needs and work motivation: A longitudinal test of directionality. *Motivation and Emotion*, 42(2), 178–189. <https://doi.org/10.1007/s11031-017-9646-2>

- Orsini, C., & Rodrigues, V. (2020). Supporting motivation in teams working remotely: The role of basic psychological needs. *Medical Teacher*, 42(7),828-829. <https://doi.org/10.1080/0142159X.2020.1758305>
- Ouweneel, E., Le Blanc, P. M., & Schaufeli, W. B. (2012). Don't leave your heart at home: Gain cycles of positive emotions, resources, and engagement at work. *Career Development International*, 17(6), 537 – 556. <http://dx.doi.org/10.1108/13620431211280123>
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making Things Happen: A Model of Proactive Motivation. *Journal of Management*, 36(4), 827–856. <https://doi.org/10.1177/0149206310363732>
- Perry, S. J., Rubino, C., & Hunter, E. M. (2018). Stress in remote work: Two studies testing the Demand-Control-Person model. *European Journal of Work and Organizational Psychology*, 1–17. <https://doi.org/10.1080/1359432X.2018.1487402>
- Peters, P., Tijdens, K. G., & Wetzels, C. (2004). Employees' opportunities, preferences, and practices in telecommuting adoption. *Information & Management*, 41(4), 469-482. [https://doi.org/10.1016/S0378-7206\(03\)00085-5](https://doi.org/10.1016/S0378-7206(03)00085-5)
- Petrou, P., Demerouti, E., Peeters, M. C., Schaufeli, W. B., & Hetland, J. (2012). Crafting a job on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior*, 33(8), 1120-1141. <https://doi.org/10.1002/JOB.1783>
- Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, 31, 437– 448. <http://dx.doi.org/10.3102/10769986031004437>
- Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin*, 26(4), 419–435. <https://doi.org/10.1177/0146167200266002>
- Richardson, J., & McKenna, S. (2014). Reordering spatial and social relations: A case study of professional and managerial flexworkers. *British Journal of Management*, 25(4), 724–736. <https://doi.org/10.1111/1467-8551.12017>

- Rigotti, T., De Cuyper, N., & Sekiguchi, T. (2020). The Corona crisis: What can we learn from earlier studies in applied psychology? *Applied Psychology: An International Review*, 69(3), 1–6. <https://doi.org/10.1111/apps.12265>
- Rivkin, W., Diestel, S., & Schmidt, K.-H. (2015). Psychological detachment: A moderator in the relationship of self-control demands and job strain. *European Journal of Work and Organizational Psychology*, 24(3), 376–388. <https://doi.org/10.1080/1359432X.2014.924926>
- Rook, J. W., & Zijlstra, F. R. H. (2006). The contribution of various types of activities to recovery. *European Journal of Work and Organizational Psychology*, 15(2), 218–240. <https://doi.org/10.1080/13594320500513962>
- Rosenfield, S. (1989). The effects of women's employment: Personal control and sex differences in mental health. *Journal of Health and Social Behavior*, 30(1), 77–91. <https://doi.org/10.2307/2136914>
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy, and the self in psychological development. In J. E. Jacobs (Ed.), *Nebraska Symposium on Motivation, 1992: Developmental perspectives on motivation* (pp. 1–56). University of Nebraska Press.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63(3), 397–427. <https://doi.org/10.1111/j.1467-6494.1995.tb00501.x>
- Ryan, R. M., & Deci, E. L. (2008). From ego depletion to vitality: Theory and findings concerning the facilitation of energy available to the self. *Social and Personality Psychology Compass*, 2(2), 702–717. <https://doi.org/10.1111/j.1751-9004.2008.00098.x>
- Ryan, R. M., Bernstein, J. H., & Warren Brown, K. (2010). Weekends, work, and well-being: Psychological need satisfactions and day of the week effects on mood, vitality, and physical symptoms. *Journal of Social and Clinical Psychology*, 29(1), 95–122. <https://doi.org/10.1521/jscp.2010.29.1.95>

- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57(5), 749–761. <https://doi.org/10.1037/0022-3514.57.5.749>
- Ryan, R. M., & Deci, E. L. (2000a). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry*, 11(4), 319-338.
- Ryan, R. M., & Deci, E. L. (2000b). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Ryan, R. M., & Deci, E. L. (2000c). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2002). Overview of self-determination theory: An organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2006). Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will?. *Journal of Personality*, 74(6), 1557-1586. <https://doi.org/10.1111/j.1467-6494.2006.00420.x>
- Ryan, R. M., & Deci, E. L. (2017). *Self-Determination Theory*. Guilford Press.
- Ryan, R. M., Deci, E. L., & Grolnick, W. S. (1995). Autonomy, relatedness, and the self: Their relation to development and psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology, Vol. 1. Theory and methods* (pp. 618–655). John Wiley & Sons.
- Ryan, R. M., Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals are not created equal: An organismic perspective on the nature of goals and their regulation. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 7–26). The Guilford Press.

- Safstrom, M., & Hartig, T. (2013). Psychological detachment in the relationship between job stressors and strain. *Behavioral sciences*, 3(3), 418-433. <https://doi.org/10.3390/bs3030418>
- Salanova, M., Schaufeli, W. B., Xanthopoulou, D., & Bakker, A. B. (2010). The gain spiral of resources and work engagement: Sustaining a positive worklife. In A. B. Bakker (Ed.) & M. P. Leiter, *Work engagement: A handbook of essential theory and research* (pp. 118–131). Psychology Press.
- Schabram, K., & Heng, Y. T. (2021). How other-and self-compassion reduce burnout through resource replenishment. *Academy of Management Journal*, (ja). Manuscript 1-56. <https://doi.org/10.5465/amj.2019.0493>
- Shao, Y., Fang, Y., Wang, M., Chang, C.-H. (D.), & Wang, L. (2021). Making daily decisions to work from home or to work in the office: The impacts of daily work- and COVID-related stressors on next-day work location. *Journal of Applied Psychology*, 106(6), 825–838. <https://doi.org/10.1037/apl0000929>
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 25(3), 293-315. <https://doi.org/10.1002/job.248>
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- Schaufeli, W. B., Shimazu, A., Hakanen, J., Salanova, M., & De Witte, H. (2019). An ultra-short measure for work engagement: The UWES-3 validation across five countries. *European Journal of Psychological Assessment*, 35(4), 577–591. <https://doi.org/10.1027/1015-5759/a000430>
- Schaufeli, W., & van Rhenen, W. (2006). Over de rol van positieve en negatieve emoties bij het welbevinden van managers: Een studie met de Job-related Affective Well-being

- Scale (JAWS). *Gedrag & Organisatie*, 19(4).  
<https://doi.org/10.5117/2006.019.004.002>
- Selig, J. P., & Preacher, K. J. (2008, June). Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects [Computer software]. Available from <http://quantpsy.org/>
- Sewell, G., & Taskin, L. (2015). Out of sight, out of mind in a new world of work? Autonomy, control, and spatiotemporal scaling in telework. *Organization Studies*, 36(11), 1507–1529. <https://doi.org/10.1177/0170840615593587>
- Sheldon, K. M., Ryan, R., & Reis, H. T. (1996). What makes for a good day? Competence and autonomy in the day and in the person. *Personality and Social Psychology Bulletin*, 22(12), 1270–1279. <https://doi.org/10.1177/01461672962212007>
- Shepherd, D. A., & Cardon, M. S. (2009). Negative emotional reactions to project failure and the self-compassion to learn from the experience. *Journal of Management Studies*, 46(6), 923–949. <https://doi.org/10.1111/j.1467-6486.2009.00821.x>
- Shimazu, A., Schaufeli, W. B., Miyanaka, D., & Iwata, N. (2010). Why Japanese workers show low work engagement: An Item Response Theory analysis of the Utrecht Work Engagement Scale. *BioPsychoSocial Medicine*, 4(1), 1-6. <https://doi.org/10.1186/1751-0759-4-17>
- Shimazu, A., Matsudaira, K., De Jonge, J., Tosaka, N., Watanabe, K., & Takahashi, M. (2016). Psychological detachment from work during non-work time: Linear or curvilinear relations with mental health and work engagement? *Industrial Health*, 54(3), 282–292. <https://doi.org/10.2486/indhealth.2015-0097>
- Siltaloppi, M., Kinnunen, U., & Feldt, T. (2009). Recovery experiences as moderators between psychosocial work characteristics and occupational well-being. *Work & Stress*, 23(4), 330-348. <https://doi.org/10.1080/02678370903415572>
- Sluiter, J. K., Frings-Dresen, M. H. W., van der Beek, A. J., & Meijman, T. F. (2001). The relation between work-induced neuroendocrine reactivity and recovery, subjective need for recovery, and health status. *Journal of Psychosomatic Research*, 50(1), 29–37. [https://doi.org/10.1016/S0022-3999\(00\)00213-0](https://doi.org/10.1016/S0022-3999(00)00213-0)

- Sluiter, J. K., Van der Beek, A. J., & Frings-Dresen, M. H. W. (1999). The influence of work characteristics on the need for recovery and experienced health: A study on coach drivers. *Ergonomics*, 42(4), 573–583. <https://doi.org/10.1080/001401399185487>
- Snijders, T. A. B., & Bosker, R. J. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London, UK: Sage.
- Sonnentag, S. (2001). Work, recovery activities, and individual well-being: A diary study. *Journal of Occupational Health Psychology*, 6(3), 196–210. <https://doi.org/10.1037/1076-8998.6.3.196>
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88(3), 518–528. <https://doi.org/10.1037/0021-9010.88.3.518>
- Sonnentag, S. (2009). Methodological issues in recovery research. In S. Sonnentag, P. L. Perrewé, & D. C. Ganster (Eds.), *Current perspectives on job-stress recovery* (pp. 1–46). JAI Press/Emerald Group Publishing. [https://doi.org/10.1108/S1479-3555\(2009\)0000007004](https://doi.org/10.1108/S1479-3555(2009)0000007004)
- Sonnentag, S., Binnewies, C., & Mojza, E. J. (2008). "Did you have a nice evening?" A day-level study on recovery experiences, sleep, and affect. *Journal of Applied Psychology*, 93(3), 674–684. <https://doi.org/10.1037/0021-9010.93.3.674>
- Sonnentag, S., Binnewies, C., & Mojza, E. J. (2010). Staying well and engaged when demands are high: The role of psychological detachment. *Journal of Applied Psychology*, 95(5), 965–976. <https://doi.org/10.1037/a0020032>
- Sonnentag, S., Dormann, C., & Demerouti, E. (2010). Not all days are created equal: The concept of state work engagement. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 25–38). Psychology Press.
- Sonnentag, S., Eck, K., Fritz, C., & Kühnel, J. (2020). Morning reattachment to work and work engagement during the day: A look at day-level mediators. *Journal of Management*, 46(8), 1408–1435. <https://doi.org/10.1177/0149206319829823>

- Sonnentag, S., & Fritz, C. (2007). The Recovery Experience Questionnaire: Development and validation of a measure assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology, 12*, 204–221. <https://doi.org/10.1037/1076-8998.12.3.204>
- Sonnentag, S., Kuttler, I., & Fritz, C. (2010). Job stressors, emotional exhaustion, and need for recovery: A multi-source study on the benefits of psychological detachment. *Journal of Vocational Behavior, 76*(3), 355–365. <https://doi.org/10.1016/j.jvb.2009.06.005>
- Sonnentag, S., & Kühnel, J. (2016). Coming back to work in the morning: Psychological detachment and reattachment as predictors of work engagement. *Journal of Occupational Health Psychology, 21*(4), 379–390. <https://doi.org/10.1037/ocp0000020>
- Sonnentag, S., Mojza, E.J., Binnewies, C., & Scholl, A. (2008). Being engaged at work and detached at home: A week-level study on work engagement, psychological detachment, and affect. *Work and Stress, 22*(3), 257–76. <https://doi.org/10.1080/02678370802379440>
- Sonnentag, S., Mojza, E. J., Demerouti, E., & Bakker, A. B. (2012). Reciprocal relations between recovery and work engagement: The moderating role of job stressors. *Journal of Applied Psychology, 97*(4), 842–853. <https://doi.org/10.1037/a0028292>
- Sonnentag, S., & Natter, E. (2004). Flight attendants' daily recovery from work: Is there no place like home?. *International Journal of Stress Management, 11*(4), 366–391. <https://doi.org/10.1037/1072-5245.11.4.366>
- Sonnentag, S., Venz, L., & Casper, A. (2017). Advances in recovery research: What have we learned? What should be done next? *Journal of Occupational Health Psychology, 22*(3), 365–380. <https://doi.org/10.1037/ocp0000079>
- Sonnentag, S., & Zijlstra, F. R. H. (2006). Job characteristics and off-job activities as predictors of need for recovery, well-being, and fatigue. *Journal of Applied Psychology, 91*(2), 330–350. <https://doi.org/10.1037/0021-9010.91.2.330>

- Spurk, D., & Straub, C. (2020). Flexible employment relationships and careers in times of the COVID-19 pandemic. *Journal of Vocational Behavior*, 103435. <https://doi.org/10.1016/j.jvb.2020.103435>
- Standen, P., Daniels, K., & Lamond, D. (1999). The home as a workplace: Work–family interaction and psychological well-being in telework. *Journal of Occupational Health Psychology*, 4(4), 368–381. <https://doi.org/10.1037/1076-8998.4.4.368>
- Staples, D. S., Hulland, J. S., & Higgins, C. A. (1999). A Self-Efficacy Theory explanation for the management of remote workers in virtual organizations. *Organization Science*, 10(6), 758–776. <http://dx.doi.org/10.1287/orsc.10.6.758>
- Stewart, K., & Menon, A. (2020). How to navigate the transition to remote work during the COVID-19 pandemic. In *World Economic Forum*. Retrieved January 9, 2021 <https://www.weforum.org/agenda/2020/03/covid-19-transition-to-remote-work>
- Tabachnick, B., & Fidell, L. (2007). Using multivariate statistics (5th ed.). Allyn & Bacon/Pearson Education.
- Taser, D., Aydin, E., Torgaloz, A. O., & Rofcanin, Y. (2022). An examination of remote e-working and flow experience: The role of technostress and loneliness. *Computers in Human Behavior*, 127, 107020.
- Taylor, B. M. (2015). The integrated dynamics of motivation and performance in the workplace. *Performance Improvement*, 54(5), 28-37. <https://doi.org/10.1002/pfi.21481>
- Trougakos, J. P., Hideg, I., Cheng, B. H., & Beal, D. J. (2014). Lunch breaks unpacked: The role of autonomy as a moderator of recovery during lunch. *Academy of Management Journal*, 57(2), 405–421. <https://doi.org/10.5465/amj.2011.1072>
- Tuna, A. A., & Türkmendağ, Z. (2020). Covid-19 pandemi döneminde uzaktan çalışma uygulamaları ve çalışma motivasyonunu etkileyen faktörler. [Remote Working Practices and the Factors Affecting Work Motivation During the Covid19 Pandemic Period] *Journal of Business Research-Turk*, 12(3), 3246-3260. <https://doi.org/10.20491/isarder.2020.1037>

- Turkish Statistical Institute. (2021). İşgücü İstatistikleri. (Yayın no. 37491). <https://data.tuik.gov.tr/Bulten/Index?p=Labour-Force-Statistics-October-2021-37491>
- Türkiye İşveren Sendikaları Konfederasyonu [Turkish Confederation of Employer Associations] (2009). *4857 Sayılı İş Kanunu ve Gerekçesi* [Labor Law No. 4857 and Its Justification]. Ankara: Matsa Basımevi
- Uzaktan Çalışma Yönetmeliği [Remote Working Legislation]. (2021). *Resmi Gazete* 31419 (10 Mart 2021) Erişim 19.08.2021 <https://www.resmigazete.gov.tr/eskiler/2021/03/20210310-2.htm>
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress*, 22(3), 277-294. <http://dx.doi.org/10.1080/02678370802393672>
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-Related Basic Need Satisfaction Scale. *Journal of Occupational and Organizational Psychology*, 83(4), 981–1002. <https://doi.org/10.1348/096317909X481382>
- van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., & Mabbe, E. (2017). Children's daily well-being: The role of mothers', teachers', and siblings' autonomy support and psychological control. *Developmental Psychology*, 53(2), 237-251. <https://doi.org/10.1037/dev0000218>
- van Hooff, M. L. M., Flaxman, P. E., Söderberg, M., Stride, C. B., & Geurts, S. A. E. (2018). Basic psychological need satisfaction, recovery state, and recovery timing. *Human Performance*, 31(2), 125–143. <https://doi.org/10.1080/08959285.2018.1466889>
- van Hooff, M. L., & Geurts, S. A. (2014). Need satisfaction during free evening hours: Examining its role in daily recovery. *Stress and Health*, 30(3), 198-208. <https://doi.org/10.1002/smi.2595>

- van Hooff, M. L. M., & Geurts, S. A. E. (2015). Need satisfaction and employees' recovery state at work: A daily diary study. *Journal of Occupational Health Psychology, 20*(3), 377–387. <https://doi.org/10.1037/a0038761>
- Vansteenkiste, M., Niemiec, C., & Soenens, B. (2010). The development of the five mini-theories of self-determination theory: A historical overview, emerging trends and future directions. *The decade ahead Theoretical Perspectives on Motivation and Achievement, 16*, 105–166. Emerald Publishing [http://dx.doi.org/10.1108/S0749-7423\(2010\)000016A007](http://dx.doi.org/10.1108/S0749-7423(2010)000016A007)
- Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration, 23*(3), 263–280. <https://doi.org/10.1037/a0032359>
- Vartiainen, M. (2021). Telework and remote work. In *Oxford Research Encyclopedia of Psychology*. <https://doi.org/10.1093/acrefore/9780190236557.013.850>
- Verma, K., & Uy, M. A. (2021). Adapting to work-from-home: Examining the benefits and costs of psychological detachment from home. In *Academy of Management Proceedings 2021*(1), p. 14105. Briarcliff Manor, NY 10510: Academy of Management. <https://doi.org/10.5465/AMBPP.2021.14105abstract>
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2020). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology, 70*(1), 16-59. <https://doi.org/10.1111/APPS.12290>
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measure of positive and negative affect: The PANAS Scale, *Journal of Personality and Social Psychology, 54*(6), 1063-1070. <https://doi.org/10.1037//0022-3514.54.6.1063>
- Westman, M., & Eden, D. (1997). Effects of a respite from work on burnout: Vacation relief and fade-out. *Journal of Applied Psychology, 82*(4), 516–527. <https://doi.org/10.1037/0021-9010.82.4.516>
- Williams, A. C., Kaur, H., Mark, G., Thompson, A. L., Iqbal, S. T., & Teevan, J. (2018). Supporting workplace detachment and reattachment with conversational

- intelligence. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1-13. <https://doi.org/10.1145/3173574.3173662>
- Woltman, H., Feldstain, A., MacKay, J. C., & Rocchi, M. (2012). An introduction to hierarchical linear modeling. *Tutorials in quantitative methods for psychology*, 8(1), 52-69. <https://doi.org/10.20982/tqmp.08.1.p052>
- World Health Organizations. (2020). Archived: WHO timeline - COVID-19. 27 April 2020 <https://www.who.int/news/item/27-04-2020-who-timeline---covid-19>
- World Health Organizations. (2021). Coronavirus disease (COVID-19). 13 May 2021 <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19>
- International Labour Organization. (2020). Teleworking during the covid-19 pandemic and beyond a practical guide. International Labour Office, Geneva.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82(1), 183-200. <https://doi.org/10.1348/096317908X285633>
- Xanthopoulou, D., & Bakker, A. B. (2013). State work engagement: The significance of within-person fluctuations. In A. B. Bakker & K. Daniels (Eds.), *A day in the life of a happy worker* (pp. 25–40). Psychology Press.
- Zijlstra, F. R. H., & Sonnentag, S. (2006). After work is done: Psychological perspectives on recovery from work. *European Journal of Work and Organizational Psychology*, 15(2), 129–138. <https://doi.org/10.1080/13594320500513855>
- Zürcher, S. J., Kerksieck, P., Adamus, C., Burr, C. M., Lehmann, A. I., Huber, F. K., & Richter, D. (2020). Prevalence of mental health problems during virus epidemics in the general public, health care workers and survivors: A rapid review of the evidence. *Frontiers in Public Health*, 8, 560389, 1-15. <https://doi.org/10.3389/fpubh.2020.560389>

## APPENDICES

### APPENDIX A

#### INFORMED CONSENT FORM

##### Değerli Katılımcı,

Bu araştırma, Ankara Yıldırım Beyazıt Üniversitesi Psikoloji Bölümü'nden Dr. Öğr. Üyesi Emine İNAN ve Bakırçay Üniversitesi Psikoloji Bölümü'nden Dr. Öğr. Üyesi Derya KARANFİL danışmanlığında, Psikolog Tuğba BECER tarafından yürütülmektedir. Bu yüksek lisans tezi kapsamında, çalışma biçimlerinin (uzaktan, hibrit, ofiste) çalışanların bazı psikolojik süreçlerine etkisi incelenecektir. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

Bu çalışma iki aşamadan oluşmaktadır, ilk kısımda verilen ölçekleri bir defaya mahsus cevaplamanız beklenmektedir. İlk aşamada cevaplamanız gereken sorular ortalama 10 dakika sürecektir. Araştırmanın ikinci aşaması günlük çalışması ile devam edecektir. Bu aşamada sizden beklenen 5 gün boyunca saat 15.00-18.00 ve 21.00-24.00 saatleri arasında size e-postanız aracılığıyla gönderilen soruları yanıtlamanızdır. İkinci aşamada anketlerin normal cevaplanma süresi ortalama 5 dakikadır.

Bu çalışmaya katılmak tamamen **gönüllülük** esasına dayanmaktadır. Çalışmaya **katılmama** veya katıldıktan sonra herhangi bir anda çalışmadan **çıkma** hakkına sahipsiniz. **Çalışmayı yanıtlamanız, araştırmaya katılım için onam verdiğiniz** biçiminde yorumlanacaktır. Size verilen formlardaki soruları yanıtlarken kimsenin baskısı veya telkini altında olmayın. Ankette, sizden kimlik belirleyici bilgiler istenmemektedir, ancak günlük ölçümü yapılacak anketleri yanıtlamanız ve araştırmacıya aktarmanız için mail adresiniz gereklidir. Cevaplarınız gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır.

Çalışma tamamlandığında, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız ve yardımınız için teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Psikoloji Bölümü yüksek lisans öğrencisi Tuğba BECER ile iletişim kurabilirsiniz.

**“Yukarıda yer alan ve araştırmadan önce katılımcıya verilmesi gereken bilgileri okudum ve katılmam istenen çalışmanın kapsamını ve amacını, gönüllü olarak üzerime düşen sorumlulukları tamamen anladım. Bu çalışmayı istediğim zaman ve herhangi bir neden belirtmek zorunda kalmadan bırakabileceğimi ve bıraktığım takdirde herhangi bir olumsuzluk ile karşılaşmayacağımı anladım. Bu koşullarda söz konusu araştırmaya kendi isteğimle, hiçbir baskı ve zorlama olmaksızın katılmayı kabul ediyorum”**

Evet

Hayır

## APPENDIX B

### SELF COMPASSION SCALE

Aşağıdaki cümleler, zor durumlar karşısında kendinize genel olarak nasıl davrandığınızla ilgilidir. Ne sıklıkla aşağıda belirtildiği şekilde davranma eğilimde olduğunuzu işaretleyiniz.

1. Neredeyse hiçbir zaman
2. Nadiren
3. Ara sıra
4. Çoğu zaman
5. Neredeyse her zaman

1. Kişiliğimin beğenmediğim yanlarına karşı anlayışlı ve sabırlı olmaya çalışırım.	1	2	3	4	5
2. Kendimi bir şekilde yetersiz hissettiğimde, çoğu insanın da böylesi yetersizlik duyguları yaşayabileceğini kendime hatırlatmaya çalışırım.	1	2	3	4	5
3. Kendimi üzgün hissettiğimde, yanlış giden her şeyi kafama takma ve kurma eğilimindeyimdir.	1	2	3	4	5
4. Ben zorluklarla mücadele ederken, başka insanların yaşam koşullarının benimkinden daha kolay olduğunu hissetme eğilimi gösteririm.	1	2	3	4	5
5. Acı veren bir şey olduğunda, durumu belirli bir zihinsel mesafeden, dengeli bir bakış açısıyla görmeye çalışırım.	1	2	3	4	5
6. Sıkıntı çektiğim dönemlerimde, kendime karşı biraz katı yürekli olabilirim.	1	2	3	4	5
7. Kendimi üzgün ve her şeyden kopmuş hissettiğimde, dünyada benim gibi hisseden daha pek çok insan olduğunu kendime hatırlatırım.	1	2	3	4	5
8. Duygusal olarak acı çektiğim zamanlarda kendime karşı sevecen olmaya çalışırım.	1	2	3	4	5
9. Yetersizliklerimi düşünmek, kendimi daha yalnız ve dünyadan kopuk gibi hissetmeme neden olur.	1	2	3	4	5
10. Kişiliğimin beğenmediğim yanlarına karşı hoşgörüsüz ve sabırsızımdır.	1	2	3	4	5
11. Benim için önemli olan bir şeyde başarısız olduğumda, yetersizlik hisleriyle kendimi tüketirim.	1	2	3	4	5
12. Kendi hatalarıma ve yetersizliklerime karşı hoşgörülüydümür	1	2	3	4	5
13. Benim için önemli olan bir şeyde başarısız olduğumda, bu konudaki duygularımı bastırmak veya abartmak yerine durumu olduğu gibi açık yüreklilikle anlayıp kabullenmeye çalışırım.	1	2	3	4	5

14. Sıkıntılı dönemlerimde kendime karşı şefkatliyimdir.	1	2	3	4	5
15. Benim için önemli bir şeyde başarısız olduğumda, bu başarısızlığın yalnız benim başıma geldiğini hissetme eğiliminde olurum.	1	2	3	4	5
16. Hatalarıma ve yetersizliklerime karşı kınayıcı ve yargılayıcıyım.	1	2	3	4	5
17. Beğenmediğim yanlarımı gördüğümde kendime yüklenir, moralimi bozarım.	1	2	3	4	5
18. Kendimi üzgün hissettiğimde, duygularımı merakla ve açık yüreklilikle anlamaya çalışırım.	1	2	3	4	5
19. İşler benim için kötü gittiğinde, bu zorlukların, yaşamın bir parçası olarak, herkesin başına gelebileceğini düşünürüm.	1	2	3	4	5
20. Acı veren bir şey olduğunda, olayı gereğinden fazla büyütme eğilimi gösteririm.	1	2	3	4	5
21. Kendimi üzgün hissettiğimde, diğer insanların çoğunun benden daha mutlu olduğunu düşünme eğilimi gösteririm.	1	2	3	4	5
22. Bir şey beni üzdüğünde, kendimi duygularıma kaptırır giderim.	1	2	3	4	5
23. Çok zor bir dönemden geçerken kendime ihtiyacım olan duyarlılık ve sevecenliği gösteririm.	1	2	3	4	5
24. Başarısızlıklarımı insanlık halinin bir parçası olarak görmeye çalışırım	1	2	3	4	5
25. Herhangi bir şey beni üzdüğünde, duygularımı bir denge içerisinde tutmaya çalışırım.	1	2	3	4	5
26. Gerçekten zor zamanlarda, kendime karşı sert ve acımasız olma eğilimindeyim.	1	2	3	4	5

## APPENDIX C

### POSITIVE AND NEGATIVE AFFECT SCHEDULE (PANAS)

Bu ölçek farklı duyguları tanımlayan birtakım sözcükler içermektedir. Genel olarak kendinizi nasıl hissettiğinizi düşünüp her maddeyi okuyun. Uygun cevabı her maddenin yanında ayrılan yere işaretleyin. Cevaplarınızı verirken aşağıdaki puanları kullanın.

	1	2	3	4	5
	Çok az veya hiç	Biraz	Ortalama	Oldukça	Çok fazla
1. İlgili	1	2	3	4	5
2. Sıkıntılı	1	2	3	4	5
3. Heyecanlı	1	2	3	4	5
4. Mutsuz	1	2	3	4	5
5. Güçlü	1	2	3	4	5
6. Suçlu	1	2	3	4	5
7. Ürkmüş	1	2	3	4	5
8. Düşmanca	1	2	3	4	5
9. Hevesli	1	2	3	4	5
10. Gururlu	1	2	3	4	5
11. Asabi	1	2	3	4	5
12. Uyanık	1	2	3	4	5
13. Utanmış	1	2	3	4	5
14. İlhamlı (yaratıcı düşüncelerle dolu)	1	2	3	4	5
15. Sınırlı	1	2	3	4	5
16. Kararlı	1	2	3	4	5
17. Dikkatli	1	2	3	4	5
18. Tedirgin	1	2	3	4	5
19. Aktif	1	2	3	4	5
20. Korkmuş	1	2	3	4	5

## APPENDIX D

### SATISFACTION WITH LIFE SCALE

Lütfen aşağıdaki her bir maddeyi dikkatlice okuyunuz ve size uygun şekilde cevaplayınız.

1. Hiç katılmıyorum
2. Çok az katılıyorum
3. Orta düzeyde katılıyorum
4. Büyük oranda katılıyorum
5. Tamamen katılıyorum

1. İdeallerime uygun bir yaşantım vardır.	1	2	3	4	5
2. Yaşam koşullarım mükemmeldir.	1	2	3	4	5
3. Yaşamımdan memnunum.	1	2	3	4	5
4. Şimdiye kadar yaşamdan istediğim önemli şeylere sahip oldum.	1	2	3	4	5
5. Tekrar dünyaya gelsem hayatımdaki hemen hemen hiçbir şeyi değiştirmezdim.	1	2	3	4	5

## APPENDIX E

### THE UTRECHT WORK ENGAGEMENT SCALE (UWES-17)

Belirtilen ifadeleri hangi sıklıkla yaşadığınızı işaretleyiniz

- 1 Asla/ Yılda birkaç kez ya da daha az,
- 2 Nadiren/ Ayda bir veya daha az,
- 3 Bazen/ Ayda birkaç kez,
- 4 Sıkça/ Haftada bir
- 5 Çok sık / Haftada birkaç kez
- 6 Her zaman/ Her gün

1. İşimde kendimi enerji dolu hissedirim.	1	2	3	4	5	6
2. Yaptığım işi anlamlı ve bir amaca hizmet ediyor buluyorum.	1	2	3	4	5	6
3. Çalışırken zaman su gibi akıp gider.	1	2	3	4	5	6
4. İşimde kendimi güçlü ve dinç hissedirim.	1	2	3	4	5	6
5. İşime karşı istekli ve hevesliyim.	1	2	3	4	5	6
6. Çalışırken etrafımdaki her şeyi unuturum.	1	2	3	4	5	6
7. İşim bana çalışma şevki verir.	1	2	3	4	5	6
8. Sabah kalktığımda işe gitmek için istekliyimdir.	1	2	3	4	5	6
9. Yoğun bir şekilde çalışırken kendimi mutlu hissedirim.	1	2	3	4	5	6
10. Yaptığım işle gurur duyuyorum.	1	2	3	4	5	6
11. Çalışırken tamamen işime konsantre olur, dalar giderim.	1	2	3	4	5	6
12. Ara vermeden uzun süre çalışabilirim.	1	2	3	4	5	6
13. İşimi ilginç ve özel bulurum.	1	2	3	4	5	6
14. Çalışırken kendimi işime kaptırırım.	1	2	3	4	5	6
15. İşimde kendimi zihinsel olarak oldukça dinç hissedirim.	1	2	3	4	5	6
16. Çalışırken bunun hiç bitmemesini isterim.	1	2	3	4	5	6
17. Çalışırken işler yolunda gitmese bile azimle çalışmaya devam ederim.	1	2	3	4	5	6

## APPENDIX F

### RECOVERY EXPERIENCE QUESTIONNAIRE

Bu bölümde iş saatleri sonrası deneyimleriniz ile ilgili 16 ifade yer almaktadır. Sizden istenen, her bir ifadeye ne derecede katıldığınızı beş basamaklı ölçek üzerinde (1 = Hiç Katılmıyorum; 5 = Tamamen Katılıyorum), ilgili rakamı işaretleyerek belirtmenizdir.

1 = Hiç Katılmıyorum

2 = Pek Katılmıyorum

3 = Biraz Katılıyorum

4 = Oldukça Katılıyorum

5= Tamamen Katılıyorum

**İşten sonra;**

1. İşle ilgili hiç düşünmem.	1	2	3	4	5
2. İş i aklımdan çıkarırım.	1	2	3	4	5
3. Kendimi zihinsel olarak işimden uzaklaştırırım.	1	2	3	4	5
4.Yapılacak işlere ara verir, rahatlarım.	1	2	3	4	5
5. Ayaklarımı uzatır ve rahatlarım.	1	2	3	4	5
6. Rahatlatıcı şeyler yaparım.	1	2	3	4	5
7. Zamanımı rahatlamak için kullanırım.	1	2	3	4	5
8. Kendime serbest zaman ayırırım.	1	2	3	4	5
9. Yeni şeyler öğrenirim.	1	2	3	4	5
10. Entelektüel açıdan zorlayıcı şeyler bulmaya çalışırım.	1	2	3	4	5
11. Kendimi zorlayacak bir şeyler ile meşgul olurum.	1	2	3	4	5
12. Ufkumu genişletecek şeyler yaparım.	1	2	3	4	5
13. Ne yapacağıma kendim karar verebilirim gibi hissederim.	1	2	3	4	5
14. Kendi programıma kendim karar veririm.	1	2	3	4	5
15. Vaktimi nasıl geçireceğimi ben belirlerim.	1	2	3	4	5
16. Bir şeyleri olmasını istediğim şekilde hallederim.	1	2	3	4	5

## APPENDIX G

### BASIC PSYCHOLOGICAL NEED SATISFACTION & FRUSTRATION SCALE

Lütfen aşağıdaki her cümleyi dikkatle okuyunuz, sizin hayatınızla ne kadar alakalı olduğunu düşününüz ve sizin için ne kadar doğru olduğunu belirtiniz. Cevaplamak için aşağıdaki derecelendirmeyi kullanınız.

#### 1 Kesinlikle yanlış 4 ne doğru ne yanlış 7 kesinlikle doğru

1.Yaptığım şeylerde tercih hakkım olduğumu ve özgür olduğumu hissediyorum.	1	2	3	4	5	6	7
2. Bir şeyleri iyi yapabileceğim konusunda kendimden emin hissediyorum.	1	2	3	4	5	6	7
3.Benim için önemli olan insanlara kendimi yakın ve bağlı hissediyorum.	1	2	3	4	5	6	7
4. Yaptığım birçok şeyde, "yapmak zorundayım" gibi hissediyorum.	1	2	3	4	5	6	7
5. Ait olmak istediğim gruptan kendimi dışlanmış hissediyorum.	1	2	3	4	5	6	7
6. Yaptığım hatalardan ötürü kendimi tam bir başarısızlık abidesi gibi hissediyorum.	1	2	3	4	5	6	7
7. Kararlarımın, gerçek isteklerimi yansıttığını hissediyorum.							
8. Beraber vakit geçirdiğim insanların benden hoşlanmadığına dair bir izlenimim var.	1	2	3	4	5	6	7
9. Kendimi, amaçlarıma ulaşabilecek kadar yetkin hissediyorum.	1	2	3	4	5	6	7
10. Kendimi birçok şeyi yapmaya zorlanmış hissediyorum.	1	2	3	4	5	6	7
11.Yeteneklerim konusunda kendimi güvensiz hissediyorum.	1	2	3	4	5	6	7
12. Beraber vakit geçirdiğim insanlarla aramda sıcaklık hissediyorum.	1	2	3	4	5	6	7

## APPENDIX H

### DEMOGRAPHIC INFORMATION FORM

1. Cinsiyetiniz: Erkek ( ) Kadın ( )

2. Doğum Yılıınız: .....

3. Eğitim Durumunuz:

İlkokul ( ) Ortaokul ( ) Lise ( ) Üniversite ( ) Yüksek Lisans ( ) Doktora ( )

4. Mesleğiniz: .....

5. Aylık kazancınız ne kadar? 0-2825 TL (asgari ücret) ( ) 2.825-4.000 TL ( )

4.000-6.000 TL ( ) 6.000-8.000 TL ( ) 8.000-10.000 TL ( ) 10.000 TL ve fazlası ( )

6. Hanenizin aylık toplam geliri nedir? .....

7. Mevcut iş yerinizdeki pozisyonunuz: Yönetici/Müdür ( ) Çalışan/İşçi ( )

8. Medeni Haliniz: Bekar / İlişkisi Var ( ) Bekar/ İlişkisi Yok ( ) Evli ( )

9. 18 yaş altı çocuğunuz var mı? Evet ( ) Hayır ( )

*Display This Question:*

*If 18 yaş altı çocuğunuz var mı? = Evet*

10. 18 yaş altı kaç çocuğunuz var? .....

11. En uzun yaşadığınız yerleşim birimi: Köy ( ) Kasaba ( ) İlçe ( ) Şehir ( ) Büyük şehir ( )

12. Şu an nasıl çalışıyorsunuz?

Uzaktan/evden ( ) Hibrit (Yarı işyeri yarı ev) ( ) İşyerinden ( )

13. Pandemi bittiğinde çalışmak istediğiniz çalışma düzeni tercihiniz:

Olabildiğince sık evden çalışmayı tercih ederim ( )

Haftada birkaç gün evden çalışmayı tercih ederim ( )

İş yerinden çalışmaya geri dönmeyi tercih ederim ( )

14. Bir yöneticiniz var mı? Evet ( ) Hayır ( )

*Display This Question:*

*If Bir yöneticiniz var mı? = Evet*

15. Ne kadar süredir şu an ki yöneticinizle birlikte çalışıyorsunuz?

0-1 yıl ( ) 1-5 yıl ( ) 5-10 yıl ( ) 10 yıl+ ( )

16. İşlerinizi yürütürken ne kadar yoğunlukta amirleriniz ve çalışma arkadaşlarınız ile koordineli olarak çalışmanız gerekir?

Neredeyse Hiç 1 2 3 4 5 6 7 8 9 10 Her Zaman

17. Çalışma arkadaşlarınız ve amiriniz ile iletişim kurmak için aşağıda listelenen iletişim araçlarını kullanım yoğunluğunuzu işaretleyiniz.

Whatsapp

Neredeyse hiç 1 2 3 4 5 6 7 8 9 10 Her Zaman

Telefon Görüşmesi

Neredeyse hiç 1 2 3 4 5 6 7 8 9 10 Her Zaman

SMS

Neredeyse hiç 1 2 3 4 5 6 7 8 9 10 Her Zaman

E-Posta

Neredeyse hiç 1 2 3 4 5 6 7 8 9 10 Her Zaman

Diğer

Neredeyse hiç 1 2 3 4 5 6 7 8 9 10 Her Zaman

## APPENDIX I

### DAILY DEMOGRAPHIC INFORMATION FORM (DIARY STUDY)

- 1.Bugün işe başlama saatiniz: ....
- 2.Bugün işinizin tahmini bitiş saati: .....
- 3.Bugün işlerinizi nerede yürüttünüz?



## APPENDIX J

### ULTRA-SHORT VERSION OF THE WORK ENGAGEMENT SCALE (UWES-3) (DIARY STUDY)

Belirtilen ifadeleri bugün işe başlama saatlerinde hangi sıklıkla yaşadığınızı işaretleyiniz.

- 1 Asla/ Yılda birkaç kez ya da daha az,
- 2 Nadiren/ Ayda bir veya daha az,
- 3 Bazen/ Ayda birkaç kez,
- 4 Sıkça/ Haftada bir
- 5 Çok sık / Haftada birkaç kez
- 6 Her zaman/ Her gün

1. Bu sabah işimde kendimi enerji dolu hissettim.	1	2	3	4	5	6
2. Bu sabah işime karşı istekli ve hevesliydim.	1	2	3	4	5	6
3. Bu sabah çalışırken kendimi işime kaptırığımı düşünüyorum.	1	2	3	4	5	6

## APPENDIX K

### BASIC PSYCHOLOGICAL NEED SATISFACTION & FRUSTRATION SCALE

#### (DIARY STUDY)

Lütfen aşağıdaki her cümleyi dikkatle okuyunuz, bugünkü gün boyu iş deneyimlerinizi düşündüğünüzde maddelerin sizin için ne kadar doğru olduğunu belirtiniz.

**1 Kesinlikle yanlış**

**4 Ne doğru ne yanlış**

**7 Kesinlikle doğru**

1.Bugün yaptığım şeylerde tercih hakkım olduğunu ve özgür olduğumu hissettim.	1	2	3	4	5	6	7
2.Bugün bir şeyleri iyi yapabileceğim konusunda kendimden emin hissettim.	1	2	3	4	5	6	7
3.Bugün benim için önemli olan insanlara kendimi yakın ve bağlı hissettim.	1	2	3	4	5	6	7
4.Bugün yaptığım birçok şeyde, "yapmak zorundayım" gibi hissettim.	1	2	3	4	5	6	7
5.Bugün ait olmak istediğim gruptan kendimi dışlanmış hissettim.	1	2	3	4	5	6	7
6.Bugün yaptığım hatalardan ötürü kendimi tam bir başarısızlık abidesi gibi hissettim.	1	2	3	4	5	6	7
7.Bugün kararlarımın gerçek isteklerimi yansıttığını hissettim.	1	2	3	4	5	6	7
8.Bugün beraber vakit geçirdiğim insanların benden hoşlanmadığını düşündüm.	1	2	3	4	5	6	7
9.Bugün kendimi amaçlarıma ulaşabilecek kadar yetkin hissettim.	1	2	3	4	5	6	7
10. Bugün kendimi birçok şeyi yapmaya zorlanmış hissettim.	1	2	3	4	5	6	7
11.Bugün yeteneklerim konusunda kendimi güvensiz hissettim.	1	2	3	4	5	6	7
12. Bugün beraber vakit geçirdiğim insanlarla aramda sıcaklık hissettim.	1	2	3	4	5	6	7

## APPENDIX L

### A SHORT FORM OF THE RECOVERY EXPERIENCE QUESTIONNAIRE (DIARY STUDY)

Soru formunda iş saatleri sonrasındaki deneyimleriniz ile ilgili bazı ifadeler yer almaktadır. Lütfen her bir ifadeyi dikkatlice okuyunuz. Bu ifadelere ne derece katıldığınıza ilişkin görüşünüzü bugüne ilişkin deneyimlerinizi referans alarak belirtiniz. Bu ifadelere ne derece katıldığınıza ilişkin görüşünüzü "1- Kesinlikle katılmıyorum"dan "6 – Tamamen katılıyorum"’a doğru uzanan ölçek üzerinde belirtiniz.

#### İŞ SAATLERİ SONRASINDA;

1. Bu akşam işleri aklımdan çıkarıp atabildim.	1	2	3	4	5	6
2. Bu akşam işle ilgili hiçbir şey düşünmedim.	1	2	3	4	5	6
3. Bu akşam zamanı sakince dinlenip gevşemek için kullandım.	1	2	3	4	5	6
4. Bu akşam beni rahatlatıcı şeylerle meşgul oldum.	1	2	3	4	5	6
5. Bu akşam kendimi geliştirmek için entelektüel konularla ilgilendim.	1	2	3	4	5	6
6. Bu akşam ufkumu açacak şeyler yaptım.	1	2	3	4	5	6
7. Bu akşam kendim için zamanımı nasıl geçireceğimi ben belirledim.	1	2	3	4	5	6
8. Bu akşam kendi programıma (planıma) kendim karar verdim.	1	2	3	4	5	6

## APPENDIX M

### POSITIVE AFFECT SCALE (PANAS+)

#### (DIARY STUDY)

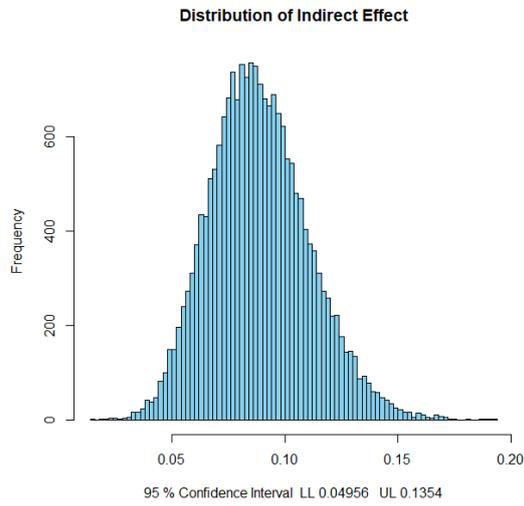
Bu ölçek farklı duyguları tanımlayan birtakım sözcükler içermektedir. Bugün iş sonrası saatlerde nasıl hissettiğinizi düşünüp her maddeyi okuyun. Uygun cevabı her maddenin yanında ayrılan yere işaretleyin. Cevaplarınızı verirken aşağıdaki puanları kullanın.

**1** Çok az veya hiç  
**2** Biraz  
**3** Ortalama  
**4** Oldukça  
**5** Çok fazla

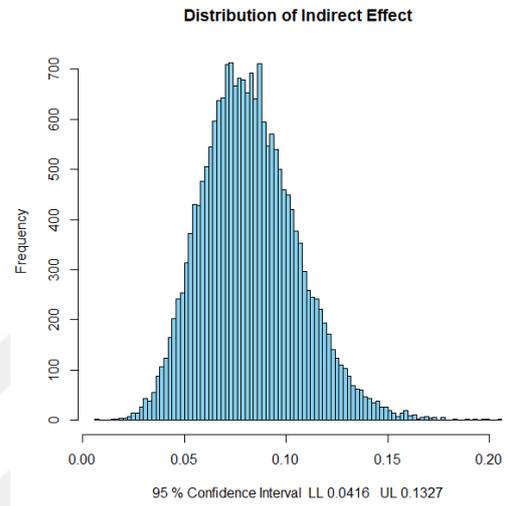
1. İlgili	1	2	3	4	5
2. Heyecanlı	1	2	3	4	5
3. Güçlü	1	2	3	4	5
4. Hevesli	1	2	3	4	5
5. Gururlu	1	2	3	4	5
6. Uyanık	1	2	3	4	5
7. İlhamlı (yaratıcı düşüncelerle dolu)	1	2	3	4	5
8. Kararlı	1	2	3	4	5
9. Dikkatli	1	2	3	4	5
10. Aktif	1	2	3	4	5

# APPENDIX N

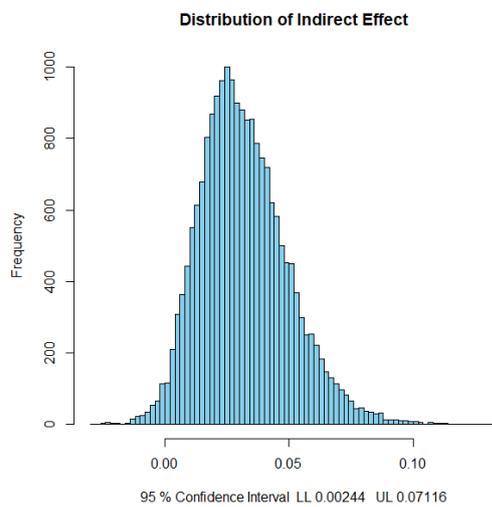
## Mediation Effects of Need Satisfaction on the Relationship Between Work Engagement and Positive Affect



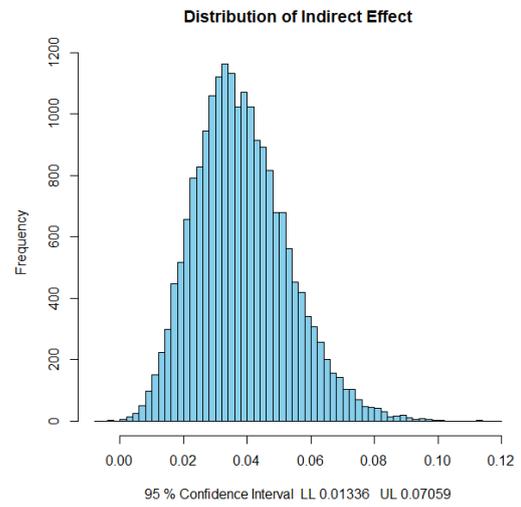
BPNSF



Competence



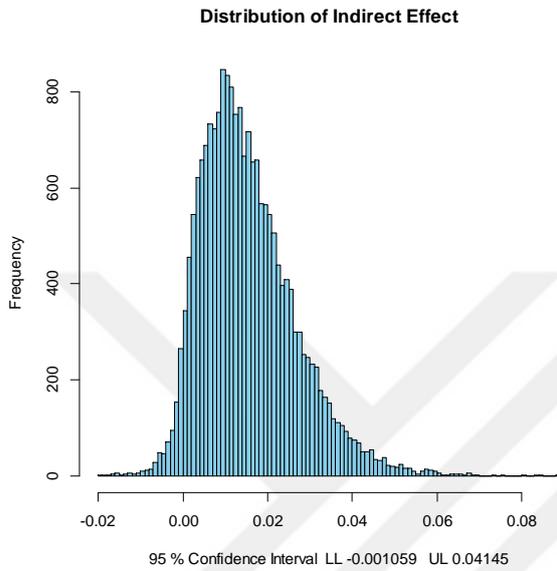
Autonomy



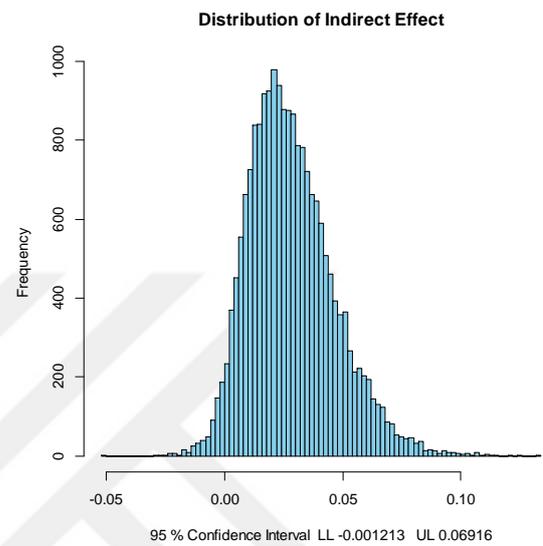
Relatedness

## APPENDIX O

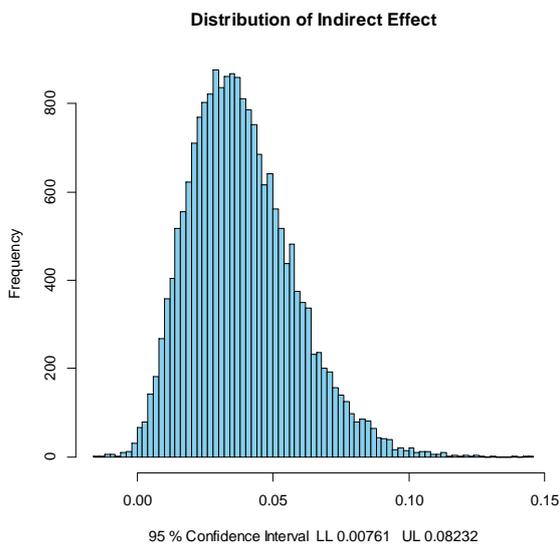
### Mediation Effects of Recovery (Psychological Detachment, Relaxation, Control, Mastery) on the Relationship Between Need Satisfaction and Positive Affect



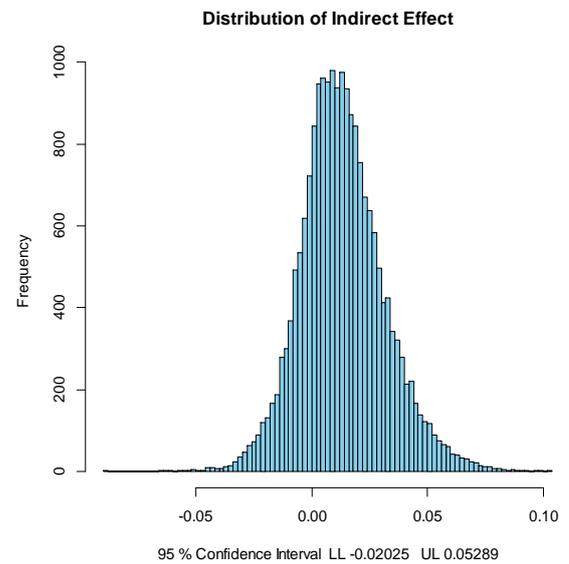
Detachment



Control



Relaxation



Mastery

**APPENDIX P: ETHICAL APPROVAL FORM**

