T.C.

BAHCESEHIR UNIVERSITY

GRADUATE SCHOOL

PSYCHOLOGICAL COUNSELING AND GUIDANCE HEAD OF THE DEPARTMENT

LIFE SATISFACTION IN INDIVIDUAL AGED 65 AND OVER: MEANING IN LIFE, RESILIENCE AND LONELINESS

MASTER'S THESIS

CESI SADUK

ISTANBUL 2024

T.C.

BAHCESEHIR UNIVERSITY

GRADUATE SCHOOL

PSYCHOLOGICAL COUNSELING AND GUIDANCE HEAD OF THE DEPARTMENT

LIFE SATISFACTION IN INDIVIDUAL AGED 65 AND OVER: MEANING IN LIFE, RESILIENCE AND LONELINESS

MASTER'S THESIS

CESI SADUK

THESIS ADVISOR

Prof. Dr. BERNA GÜLOĞLU

ISTANBUL 2024

T.C.

BAHCESEHIR UNIVERSITY

GRADUATE SCHOOL

MASTER THESIS APPROVAL FORM

Program Name:	PSYCHOLOGICAL COUNSELING AND GUIDANCE (EN)
Student's Name and Surname:	CESI SADUK
Name Of The Thesis:	LIFE SATISFACTION IN INDIVIDUAL AGED 65 AND OVER: MEANING IN LIFE, RESILIENCE AND LONELINESS
Thesis Defense Date:	20.08.2024

This thesis has been approved by the Graduate School which has fulfilled the necessary conditions as Master thesis.

.....

Institute Director

This thesis was read by us, quality and content as a Master's thesis has been seen and accepted as sufficient.

	Title/Name	**Institution**	**Signature**
Thesis Advisor's	Prof. Dr. Berna Güloğlu	BAU	
Member's	Dr. Tuğba KIRAL ÖZKAN	BAU	
Member's	Doç. Dr. Ezgi ÖZEKE KOCABAŞ	Mimar Sinan Güzel Sanatlar Üniversitesi	

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.

Name, Last Name: Cesi Saduk

Signature:

ABSTRACT

LIFE SATISFACTION IN INDIVIDUAL AGED 65 AND OVER: MEANING IN LIFE, RESILIENCE AND LONELINESS

Cesi Saduk
Master's Program in Psychological Counseling and Guidance
Supervisor: Prof. Dr. Berna Güloğlu

August 2024, 64 pages

The aim of the current study was to investigate the predictive role of socio-demographic variables (age, gender, marital status, social life), meaning in life, resilience and loneliness on life satisfaction over 65 years old. The sample involved 355 participants (177 females and 178 males) with the mean age of 72.44 (SD= 5.02). Demographic Information Form, Satisfaction with Life Scale (SWLS), Meaning in Life Questionnaire (MLQ), Brief Resilience Scale (BRS), and UCLA Loneliness Scale Version III were used as data collection tools in the research. The data were tested by using Spearman Rank Correlation Coefficient analysis, and Hierarchical Regression Analysis. The findings of the study revealed that there was a significant relationship between life satisfaction and all variables, except gender. Moreover, the results indicated that presence of meaning, resilience and loneliness significantly predicted life satisfaction. All these variables explained 34.3% of the variance. On the other hand, there were no predictive roles of age, gender, marital status, social life, and searching of meaning.

Key Words: Life Satisfaction, Meaning in Life, Resilience, Loneliness, Elderly

ÖZ

65 YAŞ ÜSTÜ BİREYLERİN YAŞAM DOYUMLARININ İNCELENMESI: YAŞAMDA ANLAM, PSİKOLOJİK SAĞLAMLIK, YALNIZLIK

Cesi, Saduk
Psikolojik Danışmanlık ve Rehberlik Yüksek Lisans Programı
Tez Danışmanı: Berna Güloğlu

Ağustos 2024, 64 sayfa

Bu araştırmanın amacı, 65 yaş üstü bireylerin yaşam doyumunda sosyo-demografik değişkenler (yaş, cinsiyet, medeni hal, sosyalleşme sıklığı), yaşamda anlam, psikolojik sağlamlık ve yalnızlığın yordayıcı rolünü incelemektir. Çalışmaya 65 yaş üstü 355 birey (177 kadın, 178 erkek) katılmış olup, katılımcıların yaş ortalaması 72.44'dır (SD= 5.02). Verilerin toplanmasında, Demografik Bilgi Formu, Yaşam Doyumu Ölçeği, Yaşamda Anlam Ölçeği, Kısa Psikolojik Sağlamlık Ölçeği ve UCLA Yalnızlık Ölçeği kullanılmıştır. Veriler Spearman Korelasyon analizi ve hiyerarşik regresyon analizi yöntemleriyle test edilmiştir. Bulgular, cinsiyet dışında yaşam doyumu ile diğer değişkenler arasında anlamlı ilişki olduğunu göstermektedir. Ayrıca, yaşamda anlamın varlığı, psikolojik sağlamlık, ve yalnızlık yaşam doyumunu yordamaktadır. Tüm bu değişkenler varyansın %34.3'ünü açıklamaktadır. Öte yandan, yaş, cinsiyet, medeni durum, sosyalleşme sıklığı ve yaşamda anlam arayışı 65 yaş üstü bireylerin yaşam doyumunu yordamamaktadır.

Anahtar Kelimeler: Yaşam Doyumu, Yaşamda Anlam, Psikolojik Sağlamlık, Yalnızlık, Yaşlılık

To My Family

ACKNOWLEDGEMENTS

First, I want to thank to my supervisor Prof. Dr. Berna GÜLOĞLU for her guidance, contributions, criticism, patience, and insight throughout the research.

I want to show my appreciation to Assoc. Prof. Dr. Ezgi ÖZEKE KOCABAŞ and Assist Prof. Dr. Tuğba KIRAL ÖZKAN for taking their time and accepting to be my jury members.

I would also like to share my special thanks to my family and fiancé, for their support and faith. They always encourage me to pursue my dreams and be next to my side no matter what.

Lastly, data collection process was one of the most difficult parts of this study. I would like to thank my beloved relatives and friends who helped me to spread my research.

TABLE OF CONTENTS

LIST OF TABLES

TABLES

LIST OF ABBREVIATIONS

5-HTTLPR	Serotonin-Transporter-Linked Promoter Region
APA	American Psychological Association
BRS	Brief Resilience Scale
CD-RISC	Connor-Davidson Resilience Scale
MiL	Meaning in Life
MLQ	Meaning in Life Questionnaire
SWLS	Satisfaction with Life Scale
TSI	Turkish Statistical Institute
WHO	World Health Organization

Chapter 1

Introduction

1.1 Statement of the Problem

Aging is a natural and inescapable process that involves a variety of gains and losses for individuals and societies. It refers to a process of biological, psychological, and social changes that have profound effects on the well-being of an individual. From a biological standpoint, aging is characterized by various physiological changes and processes that have an impact on health and well-being (Baltes & Smith, 2003). The statistics of the United Nations (2017) anticipated that the number of aged people will reach 2.1 billion in the year 2050. Today, the elderly population in Türkiye continues growing. The value increased from 8% in 2018 to 10.2% in 2023 (Turkish Statistical Institute [TSI], 2023).

Life satisfaction is a complex construct that depicts the overall subjective evaluation of a person's quality of life and level of satisfaction with life (Pavot & Diener, 2008). Diener, Emmons, Larsen and Griffin (1985) argued that life satisfaction depends on one's perception, past experiences, future expectations, and the culture or society in which one finds himself/herself. In the elderly, life satisfaction is important because it shows that they are successful in aging and can cope with life changes (Steptoe et al., 2015). Some of the factors affecting life satisfaction among the elderly are health, social roles and networks, economic security, and housing (Bowling, 2008). Gender has also an impact on life satisfaction of elderly because women are likely to experience events such as widowhood and therefore social isolation more often than men (Pinquart & Sorensen, 2001; Arber & Ginn, 1991). Hence, while women may have post-retirement concerns regarding their health and body image, men may grapple with issues of identity and worth (Wang, 2007). Cognitive skills are another significant factor as cognitive impairment can hinder and impact day-to-day functioning and quality of life (Enkvist, Ekström, & Elmståhl, 2013). Rowe and Kahn (1997) noted that high cognitive and physical health are effective ways of increasing life satisfaction. Besides, life transition events that are associated with role loss or a

change in roles, for example, retirement, or becoming a grandparent, affect life satisfaction (Beehr & Bennett, 2007).

Meaning in life (MiL) is a major construct that can be used to explain the life satisfaction of the elderly. According to logotherapy by Viktor Frankl (1963), people need to find meaning in their lives to be psychologically healthy and to be able to cope with adversities. Steger (2009) stated that MiL is the perceived sense of meaning, order, and purpose in life. It is more cultural and contextual as it focuses on the perceptions of people; it is therefore more subjective and complex (Schnell, 2009). In the case of older adults, MiL includes factors such as generativity, legacy, and contributions to the younger generations (Tornstam, 2005). A study indicated that a healthy and strong MiL can protect a person from loneliness and improve life satisfaction (Pinquart, 2002). Nonetheless, as Krause (2007) pointed out, the level of experience of MiL can be quite different from one person to another depending on their health status, social support, and coping mechanisms.

Resilience refers to one's ability to cope and bounce back after experiencing stress or, in the case of elderly, one's psychological ability to cope with life stressors (Werner & Smith, 1982). It is considered both an attribute and a developmental phenomenon, which is endowed with cultural and contextual sensitivity (Masten, 2001; Ungar, 2013). It is also important to point out that the concept of resilience has a biological basis, which includes genetic and neurobiological factors (Feder et al., 2009; Stein et al., 2009). Non-resilient individuals experience homeostatic failure which causes overstimulation or under stimulation in limbic system (Delli Pizzi et al., 2016). While overstimulation causes anxiety, panic attack, anger; under stimulation leads to depression, hopelessness. Erickson (1982) highlighted that, if elderly people have a negative evaluation about their life, they may fail to achieve meaning in life which may result in difficulties in coping with aging and low level of resilience. Thus, people who have higher resilience more likely to turn stressful situations into opportunities (Connor & Davidson, 2003; Orang et al., 2018).

Humans are social beings and as Maslow (1943) mentioned it, feeling socially connected is a basic need which should be fulfilled. People's search for an emotional connection starts when they are born and continues throughout their life. When they can't connect to significant others, they experience loneliness. Maslow (1943) added that having social connections is associated with better physical health meanwhile

isolation has negative consequences on general well-being (cited in Hopper, 2024). It is both social and emotional, emphasizing the significance of positive social connectedness (Perlman & Peplau, 1998). While emotional loneliness is the lack of close relationships, social loneliness stems from the lack of connections in the community (Perlman & Peplau, 1998). During aging, elders experience loneliness in various ways. Social isolation, or the self-perceived lack of companionship, is a common and influential factor that influences the psychological well-being of elderly people (Donovan & Blazer, 2020). Some of the major causes of loneliness are; marital status, retirement, social transition factors, which include family migration and cultural attitudes towards aging (Dykstra, 2009; Singh & Misra, 2009). Widowhood increases loneliness because the woman loses her partner with whom she may have spent a significant portion of her life (Adams, Sanders, & Auth, 2004). A spouse or partner in marriage offers emotional needs and helps in reducing loneliness (Hawkley & Cacioppo, 2010). These changes also affect the social relations of the person and result in loneliness during retirement (Wang, 2007).

Studies have demonstrated that high levels of life satisfaction are linked to high levels of MiL and resilience (Steger, et al., 2009; Yüksel et al., 2016; Gerino et al. 2017), whereas loneliness reduces both life satisfaction and well-being (Yüksel et al., 2016; Szcześniak et al. 2020). Likewise, cultivating the feeling of MiL can help to reduce the impact of loneliness on life satisfaction and have positive effects (Frankl, 1963). It is therefore important to understand the relationship between these concepts to come up with proper interventions that would improve the quality of life of the elderly.

1.3 Purpose of the Study

The purpose of the present study was to investigate the predictive role of socio-demographic variables (age, gender, marital status, social life), meaning in life (search for meaning and presence of meaning), resilience, and loneliness on life satisfaction over 65 years old individuals.

1.4 Research Questions

The research questions guiding this study are designed to explore the relationships between key psychological constructs and sociodemographic factors among the elderly.

1. Is there a relationship between life satisfaction, socio-demographic variables (age, gender, marital status, social life), meaning in life, resilience, and loneliness among individuals aged 65 and over?

2. Do socio-demographic variables (age, gender, marital status, social life), meaning in life (search for meaning and presence of meaning), resilience, loneliness predict life satisfaction over 65 years old individual?

1.5 Significance of the Study

Given that the proportion of elderly people in Türkiye is projected to increase significantly by 2050, it is essential to analyze factors that impact their life satisfaction. Nonetheless, little research has been done specifically regarding how meaning in life affects life satisfaction in the elderly population. Frankl (1963) introduced the concept of logotherapy which underscores the necessity for people to look for meaning in their lives as a primary need that is critical to human beings' psychological well-being. Considering this, the current study seeks to establish the relationship between meaning in life and life satisfaction to fill this gap and provide significant information that will help in designing interventions to increase life satisfaction through increasing meaning. Another key aspect of the health of older people is the concept of resilience, which is the ability to cope and bounce back after being subjected to stressors. Werner and Smith (1982) earlier defined resilience as a process of overcoming adversity, while Masten (2001) defined it as 'ordinary protective factors,' or the average individual strength to bounce back from adversity. However, there is limited research regarding the relationship between resilience and other psychological factors such as life satisfaction and loneliness in elderly. This research aims at attempting to fill this gap by exploring how resilience relates to these constructs in determining life satisfaction.

Loneliness, defined as a lack or absence of close relationships, has far-reaching consequences for psychological well-being. Similarly, Donovan and Blazer (2020) stressed the impact of loneliness on the overall quality of life of elderly individuals. There is a paucity of literature concerning the life satisfaction and loneliness experienced by the elderly.

To conclude, the present work has valuable implications for the fields of gerontological psychology and the study of aging as it explores the intricate relationships between life satisfaction, meaning in life, resilience, and loneliness in the elderly population. While the concept of life satisfaction has been studied in the literature (Veenhoven, 1996), the relationships between life satisfaction and other constructs including meaning in life, resilience, and loneliness have not been well explored. In previous studies, the above-stated constructs have been studied individually with less regard to their interactional nature. This research seeks to fill this gap by adopting an integrated approach that explores these constructs concurrently and, in more detail, to establish the extent to which they affect the life satisfaction of elderly.

1.6 Definitions

Elderly: Typically beginning at age 60 and is characterized by the accumulation of various types of molecular and cellular damage (World Health Organization [WHO], 2024).

Life Satisfaction: An individual's overall assessment of their well-being and contentment with life (Pavot & Diener, 2008).

Meaning in Life: The sense of purpose and significance that individuals derive from their existence (Frankl, 1963).

Resilience: The capacity of individuals to effectively cope with, adapt to, and recover from adversity, stress, and challenging life events (Werner & Smith, 1982).

Loneliness: The subjective feeling of being socially isolated or lacking meaningful connections with others (Hawkley & Cacioppo, 2010)

Chapter 2

Literature Review

This chapter overviews the theoretical background of life satisfaction, meaning in life, resilience, and loneliness and previous studies conducted on these contructs.

2.1 Old Age

Developments in medical science and the pharmaceutical industry have led to an increase in the elderly population by improving the living conditions of individuals and reducing death rates. It is estimated that in 2050, approximately 2.1 billion of the world's population will consist of elderly (United Nations, 2017). According to the reports of TSI (2023), while the ratio of the elderly population in the general population in Türkiye was 8.8% in 2018, it increased to 10.2% in 2023. It was also reported that 64.0% were in the 65-74 age group, 28.1% were in the 75-84 age group and 7.9% were in the 85 and over age group.

From a biological perspective, old age is predominantly delineated by the physical transformations and the unfolding patterns of senescence that mark the human body. These biological shifts are not merely superficial markers, but rather, they intertwine with individuals' experiences, influencing their health trajectories, functional capacities, and, ultimately, their quality of life (Baltes & Smith, 2003). However, it is imperative to traverse beyond the biological realms, embracing a more holistic perspective that acknowledges the multiplicity of influences that sculpt the architecture of old age (Baltes & Smith, 2003).

Furthermore, sociological perspectives, such as role theory by Biddle (1986) and activity theory by Havinhurst (1961) delve into the societal dimensions that interplay with the individual experiences of being old. Role theory articulates the shifts in societal roles and expectations that accompany ageing, exploring the impacts of role transitions, losses, and adaptations on individuals' identities and social interactions (Biddle, 1986). Accordingly, it explores how aging leads to transitions in roles such as retirement from the workforce, becoming a grandparent, or experiencing widowhood. These role transitions impact individuals' identities and social

interactions, as roles significantly shape self-concept and social status (Biddle, 1986). In other words, Biddle (1986) underlined that the loss or change of roles can lead to a re-evaluation of self-worth and purpose, influencing psychological well-being. For instance, retirement might bring about a loss of professional identity, necessitating adjustments to new social roles and activities that maintain a sense of purpose and belonging.

Activity theory, conversely, emphasizes the significance of continued engagement, social participation, and activity in fostering a sense of purpose and vitality in old age (Havighurst, 1961). According to this theory, maintaining an active lifestyle and participating in social, physical, and productive activities are crucial for sustaining life satisfaction and mental health (Havighurst, 1961). The theory posits that staying active helps older adults counteract the potential negative effects of aging, such as isolation and depression, by keeping them connected to their communities and providing ongoing opportunities for personal fulfilment. Engagement in activities aligns with societal norms and expectations, reinforcing a positive self-image and enhancing overall well-being (Havighurst, 1961).

Additionally, the person-environment perspective accentuates the interconnectedness between older individuals and their environmental contexts, underscoring the role of environmental congruence in enhancing or impeding individuals' adaptive capacities and well-being (Lawton & Nahemow, 1973). This perspective highlights the dynamic interplay between individual competencies and environmental demands, elucidating how supportive environments can nurture autonomy, competence, and relatedness (Lawton & Nahemow, 1973). For older adults, this theory is particularly relevant as it addresses how changes in physical, social, and psychological environments can significantly impact their quality of life. As individuals age, their physical and cognitive abilities may decline, making them more sensitive to the demands of their environment (Lawton & Nahemow, 1973). When there is a good fit between an individual's abilities and the demands of their environment, older adults can maintain higher levels of functioning and well-being. Conversely, a poor fit can lead to increased stress, decreased autonomy, and diminished life satisfaction (Lawton & Nahemow, 1973).

Psychological theories offer profound insights into the old age tapestry, illuminating the mental and emotional terrains that individuals navigate during this life

phase (Erikson, 1982). Erik Erikson's (1982) psychosocial theory provides essential insights into the psychological landscape of old age, focusing on the crisis of 'Ego Integrity versus Despair.' Typically occurring after age 65, this stage involves a profound reflection on one's life. Individuals assess their experiences and choices, which is not a passive review but an active and dynamic reassessment (Erikson, 1982). Successfully navigating this stage results in ego integrity, characterized by a sense of fulfilment and coherence in life's achievements and experiences. Those with ego integrity feel content and accept both successes and failures, which enhances their psychological well-being, life satisfaction, and resilience. They derive a sense of meaning and wholeness from their life narrative (Erikson, 1982). In contrast, failure to achieve ego integrity leads to despair, marked by regret and dissatisfaction with past choices and an overwhelming fear of death. This despair negatively impacts psychological health, increasing feelings of meaninglessness and loneliness. Erikson's (1982) theory underscores that the quality of this reflective process significantly influences psychological outcomes in elderly. The ability to integrate life experiences into a coherent narrative plays a crucial role in determining levels of life satisfaction, resilience, and overall psychological well-being (Erikson, 1982).

Theorizations of old age have also been enriched by contemporary discourses that echo themes of diversity, individuality, and the subjective nuances of the ageing experience. Concepts such as 'successful aging' and 'productive aging' have entered scholarly dialogues, opening arenas of debate and reflection around the ideals, aspirations, and varied pathways that can characterize the aging journey (Rowe & Kahn, 1997). "Successful aging" as proposed by Rowe and Kahn (1997), encompasses three key components: low probability of disease and disability, high cognitive and physical functional capacity, and active engagement with life. This concept suggests that aging can be a positive experience if individuals maintain physical health, mental sharpness, and social involvement. "Productive aging", on the other hand, focuses on the continued contributions of older adults to society, through both paid and unpaid roles, emphasizing the value of their experience and knowledge (Butler & Gleason, 1985). These notions invite contemplation on the multifactorial influences and choices that shape the ageing process. They challenge the traditional view of aging as a period of inevitable decline, highlighting instead the potential for growth, achievement, and fulfilment in later life (Butler & Gleason, 1985; Rowe & Kahn, 1997).

In understanding the characteristics of old age, it is essential to consider the physical, cognitive, and emotional changes that typically occur. Physically, aging is often accompanied by a decline in strength, mobility, and sensory acuity, which can affect an individual's ability to perform daily activities. Cognitively, there may be changes in memory, processing speed, and problem-solving abilities, although these changes vary widely among individuals whereas emotionally, older adults may experience shifts in their social roles and relationships, leading to challenges such as loneliness and isolation (Butler and Gleason, 1985; Rowe and Kahn, 1997).

2.2 Life Satisfaction

2.2.1 Definition of Life Satisfaction. Life satisfaction is a pivotal concept within the realm of subjective well-being and successful aging, essential for comprehending the well-being of the elderly population. Defined as a cognitive, judgmental process, life satisfaction encompasses an individual's evaluative assessment of their life as a whole, considering various life domains such as health, relationships, and economic status (Diener, 1984). Diener (1984), a seminal figure in the study of life satisfaction, posits that it is not merely an ephemeral emotion but a stable, comprehensive evaluation grounded in personal values, past experiences, and future aspirations. In other words, this evaluation is not just a fleeting feeling but rather a stable cognitive judgment process, deeply influenced by personal values, past experiences, future expectations, and the cultural or societal contexts in which one lives (Diener et al., 1985; Pavot & Diener, 2008). Life satisfaction is a complex, multifaceted construct that reflects an individual’s holistic and subjective evaluation of their life as a whole, or specific aspects thereof (Kalınkara, 2023). This theoretical framework underscores the multidimensional nature of life satisfaction, integrating subjective well-being with broader psychological and sociocultural factors (Pavot & Diener, 2008).

The assessment of life satisfaction involves a deliberate appraisal of various life domains such as personal health, social relationships, financial security, and emotional well-being (Bowling, 2008). Individuals weigh their actual life circumstances against their personal aspirations and societal standards to determine their level of satisfaction.

This process is significantly shaped by one's ability to adapt to life changes and challenges, making it particularly relevant for older adults who often face transitions like retirement, health deterioration, and changes in social roles (Bowling, 2008).

Dolan, Peasgood, and White (2008) highlighted that life satisfaction transcends mere emotional states or temporary happiness, embodying a more enduring, global assessment of one's life quality. It reflects how effectively individuals integrate their life experiences, including achievements and setbacks, into their personal narrative. For the elderly, maintaining or achieving high levels of life satisfaction is often indicative of successful adaptation to ageing, demonstrating resilience and the presence of rich social and personal support systems (Steptoe, Deaton, & Stone, 2015). Moreover, the determinants of life satisfaction in older adults are diverse, encompassing health status, quality of social relationships, economic stability, and suitability of living environments. These factors interplay dynamically, influencing the fluidity of life satisfaction which evolves in response to changing life circumstances and transitions, underscoring its non-static nature (Papi & Cheraghi, 2021; Pavot & Diener, 2008).

In summary, understanding life satisfaction involves acknowledging its inherent subjectivity and the critical role of individual agency in evaluating life quality. It is essential to recognize the criteria individuals use to measure their satisfaction, which could include a variety of life domains from personal achievements to overall well-being. A comprehensive grasp of life satisfaction, particularly in the study of ageing and subjective well-being of older adults, necessitates a nuanced, individualized, and contextually rich perspective that should leave readers well-informed without the need to consult additional sources.

2.2.2 Factors Affecting Life Satisfaction

***2.2.2.1 Gender and Life Satisfaction*.** Gender holds a pivotal role in influencing life satisfaction among the elderly, weaving a complex interplay of societal norms, biological factors, and individual life experiences. For instance, a seminal study by Pinquart and Sorensen (2001) has unearthed significant gender disparities in the subjective well-being of older adults, attributed to a multitude of intertwined factors such as economic stability, physical health, and social support networks. Moreover,

according to Arber and Ginn (1991), women, despite their longevity, often encounter unique challenges such as widowhood, social isolation, and economic hardships in their later years, which potentially overshadow their life satisfaction. Furthermore, Hank and Jürges (2007) contend that the societal roles and expectations levied upon women, such as caregiving, can further impact their well-being, highlighting the gendered nuances of ageing and life satisfaction.

On the other hand, men typically benefit from lifelong occupational engagements and economic privileges, conferring them with enhanced financial stability in their twilight years (Choi, Jeon, & Jang, 2020). Such economic advantages can bolster life satisfaction. However, post-retirement, men might grapple with issues related to identity and self-worth, which could mitigate levels of life satisfaction (Wang, 2007).

Conclusively, gender emerges as a profound determinant of life satisfaction in older adults, necessitating nuanced explorations that consider the multifactorial influences and gender-specific challenges faced during aging.

2.2.2.2 Cognitive Abilities and Life Satisfaction. Cognitive abilities, including memory, attention, and problem-solving, invariably influence life satisfaction among elderly (Enkvist, Ekström, & Elmståhl, 2013). Diminishing cognitive functions can impede daily living activities, engendering a sense of dependency and erosion of autonomy in elderly individuals, thereby impacting their overall well-being (Belsiyal et al., 2022).

Further, cognitive decline has been linked to a reduced ability to adapt to life changes and setbacks, which are frequent in later life, such as the loss of loved ones or health-related issues (St. John & Montgomery, 2010). As adaptability is key to maintaining life satisfaction, the deterioration of cognitive abilities can exacerbate feelings of discontent and despair.

2.2.2.3 Change in Social Roles and Life Satisfaction. Alterations in social roles constitute a significant determinant in the trajectory of life satisfaction among the elderly. These transformations, often heralded by retirement, bereavement, or grandparenthood, can precipitate profound reassessments of identity and purpose (Beehr & Bennett, 2007). For instance, the cessation of professional roles post-

retirement can engender feelings of loss and redundancy, attenuating life satisfaction (Wang, 2007). Conversely, it may also usher in opportunities for personal growth and the exploration of latent interests and hobbies, thereby enhancing subjective well-being (Gil-Lacruz, Saz-Gil & Gil-Lacruz, 2019).

Moreover, the onset of caregiving responsibilities, whether for a spouse or grandchildren, can introduce additional layers of complexity. Such roles, while potentially enriching, can also be fraught with stressors and demands that impact overall well-being (Arber & Timonen, 2012). Thus, it would be prudent to state that the nuanced interplay of these evolving social roles with individual adaptability and resilience shapes the contours of life satisfaction in older individuals.

2.2.2.4 Marital Status and Life Satisfaction. Marital status is a pivotal factor that profoundly influences the life satisfaction of older adults, mediating their experiences of companionship, support, and societal participation (Fengler, Danigelis & Grams, 1982). Being in a marriage or a committed relationship often enhances life satisfaction, providing individuals with emotional sustenance, social interaction, and a shared purpose, crucial aspects that augment the quality of life in older age (Carr & Springer, 2010; Fengler, Danigelis & Grams, 1982). Such partnerships offer a buffer against the adversities and vulnerabilities that frequently accompany ageing, such as health challenges and social isolation (Uchino & Rook, 2020).

On the contrary, transitions such as widowhood or divorce tend to be correlated with a decrement in life satisfaction, particularly among the elderly (Lucas, 2005). These transitions often introduce significant disruptions, triggering feelings of loss, loneliness, and alterations in social identity and networks (Lucas, 2005). In older adults, widowhood becomes more prevalent due to the natural progression of life, resulting in a higher likelihood of experiencing the loss of a spouse as one ages. This can lead to a significant reduction in social interactions and support, exacerbating feelings of isolation and desolation, critically impinging on their overall sense of well-being (Ben-Zur, 2012). Similarly, divorce in later life, although less common than in younger age groups, presents unique challenges. Older adults who experience divorce may face the loss of long-established social roles and networks, leading to a diminished sense of stability and security. The psychological impact of these life transitions in the elderly is profound, often resulting in decreased life satisfaction due to the

compounded effects of reduced social engagement, emotional support, and the challenge of re-establishing their identity and social connections in later life (Ben-Zur, 2012).

However, it must be noted that the interrelationship between marital status and life satisfaction is not linear or universally applicable. Individual trajectories are considerably nuanced, influenced by personal resilience, the availability of alternative social networks, and the quality of the marital relationship prior to loss or separation. For some elderly individuals, the absence of a marital partner, particularly in cases where the relationship might have been contentious or unsupportive, may not necessarily precipitate reduced life satisfaction and could occasionally herald improved well-being and autonomy (Williams & Umberson, 2004).

In conclusion, marital status interacts with various facets of life to influence the satisfaction levels of older adults, underpinned by a complexity that necessitates a multifaceted understanding beyond mere marital status categorizations.

***2.2.2.5 Income and Life Satisfaction*.** Income substantially influences life satisfaction among elderly, playing a multifaceted role in shaping the quality of life and well-being during the aging process (Mandi & Bansod, 2023; Papi, 2021). It acts as a conduit facilitating access to essential resources such as quality healthcare, nutrition, and secure housing, which are fundamental pillars supporting life satisfaction in later years (Mandi & Bansod, 2023; Papi, 2021). A higher income also furnishes individuals with the opportunity to engage in recreational activities and hobbies, fostering social connections and promoting mental health (Papi, 2021).

Moreover, income affects life satisfaction by engendering a sense of financial security and autonomy. In the face of declining health or unexpected adversities, a robust financial footing provides a buffer, alleviating stress and anxiety associated with economic uncertainties (Hsieh, 2004; Kim et al., 2021). However, it is of utmost importance to consider the diminishing marginal utility of income in enhancing life satisfaction. While a basic level of income is undoubtedly crucial for fulfilling fundamental needs, beyond a certain threshold, the impact of additional income on life satisfaction tends to be less pronounced (Easterlin, 2001). In conclusion, while income holds significant sway in affecting life satisfaction among older adults, its influence is nuanced by a multitude of factors, underscoring the complexity of this relationship.

2.3 Meaning in Life

2.3.1 Definition of Meaning in Life. The concept of "Meaning in Life" (MiL) has been meticulously explored within psychological literature, carving a nuanced understanding that transcends simplistic definitions. Frankl (1963), a pioneering figure in existential psychology, posited that the pursuit of meaning is a fundamental human drive, essential for psychological health and well-being. He argued that even amidst suffering, individuals strive to find purpose and significance, which fosters resilience and a sense of fulfilment. This foundational perspective laid the groundwork for subsequent explorations into MiL.

At its core, MiL is conceptualized as a subjective realization and comprehension of purpose, coherence, and significance in one's existence (Steger, 2009). Baumeister (1991) expanded on Frankl's study, suggesting that MiL is derived from four primary needs: purpose, values, efficacy, and self-worth. According to him, these needs provide a framework through which individuals interpret their lives and experiences, thus shaping their overall sense of meaning. Purpose provides direction and motivation; values offer a guiding ethical framework; efficacy builds confidence and a sense of achievement, and self-worth fosters self-respect and appreciation. Together, these elements generate a comprehensive foundation for a meaningful and fulfilling life. Steger et al. (2006) further refined this understanding, defining MiL as the extent to which individuals comprehend and see significance in their lives, alongside a sense of purpose and coherence.

Within contemporary discourse, Heintzelman and King (2014) conceptualize MiL as an intrinsic guide that harmonizes individuals' behaviours, goals, and aspirations with a synthesized sense of order and value. This alignment fosters psychological well-being and resilience, as individuals who perceive their lives as meaningful are better equipped to navigate life's challenges.

Diverse theoretical frameworks contribute to sculpting the definition of MiL, imbibing it with multifaceted dimensions that echo the complexities of human existence. Predominantly, MiL is construed through the lens of existential psychology, signifying an anchor that mitigates the tumultuous tides of life's uncertainties and adversities (Hupkens et al., 2016). Here, MiL is not merely an abstract philosophical

conjecture but embodies a concrete psychological asset, instrumental in nurturing individuals' well-being and psychological resilience (Hupkens et al., 2016).

Cultural and contextual factors also play a critical role in shaping MiL. According to Schnell (2009), MiL is deeply embedded within cultural contexts, which influence how individuals perceive and construct meaning. This perspective underscores the variability of MiL across different cultures and life experiences, highlighting its subjective and multifaceted nature. On the other hand, a nuanced understanding appreciates that MiL is not a universal construct, mirrored identically across diverse individual experiences (Hupkens et al., 2016). Rather, it is a personalized construct, delicately woven into the fabric of individual worldviews, life histories, and cultural backdrops (Hupkens et al., 2016). This intrinsic personalization fosters a spectrum of interpretations and lived experiences that revolve around MiL, accentuating its subjective essence and multidimensional portrayal within psychological discourse.

2.3.2 Theories of Meaning in Life. Viktor Frankl's logotherapy is a cornerstone of Meaning in Life (MiL), profoundly influencing contemporary understandings of this construct. Frankl (1963) posited that the primary motivational force in humans is the "will to meaning," which drives individuals to find purpose and significance in their lives. His theory emerged from his own harrowing experiences as a Holocaust survivor, where he observed that those who found meaning in their suffering were more likely to survive and maintain psychological resilience. Frankl's (1963) logotherapy rests on three fundamental tenets: the freedom of will, the will to meaning, and the meaning of life. The freedom of will suggests that humans are being able to make autonomous choices, even in the face of constraints. The will to meaning emphasizes that the search for meaning is a more fundamental drive than the pursuit of pleasure or power. Finally, the meaning of life posits that life has inherent meaning under all circumstances, even the most miserable ones. Central to Frankl's theory is the concept of the "existential vacuum," a state of inner emptiness and lack of purpose that many individuals experience. According to Frankl (1963), this vacuum can lead to feelings of despair, depression, and a sense of meaninglessness. Logotherapy aims to fill this void by helping individuals discover and pursue personally meaningful goals, thereby fostering psychological well-being and resilience. Frankl (1963) also

introduced the idea of "tragic optimism," which refers to the ability to remain optimistic and find meaning despite life's inevitable suffering. This perspective highlights that meaning can be derived not only from positive experiences but also from overcoming adversity and hardship.

Extending the exploration, existential and humanistic psychologists like Yalom (1980) and Rogers (1961) have delved into the intricacies of MiL framing it as central to individuals' psychological well-being and self-actualization. Yalom (1980) emphasized that the awareness of death, isolation, freedom, and responsibility are core existential concerns that compel individuals to seek and construct meaning in their lives. These existential dimensions drive individuals to confront life's inherent uncertainties and, in doing so, create a sense of purpose and coherence.

Rogers (1961), from a humanistic perspective, highlighted the role of self-actualization in MiL. He posited that individuals possess an inherent drive to realize their fullest potential, and this pursuit of self-actualization is deeply intertwined with finding meaning and purpose. Rogers' (1961) emphasis on personal growth, authenticity, and the alignment of one's actions with inner values underscores the dynamic process of meaning-making. Together, these perspectives illustrate that MiL is not a static concept but a continuous, evolving process that integrates core existential challenges and the pursuit of self-actualization, ultimately enhancing psychological well-being and resilience.

Another influential theoretical contribution emerges from the field of positive psychology, where researchers such as Seligman (2002) have expounded on the roles of purpose, engagement, and positive emotions in fostering MiL. This theory emphasizes the alignment of personal strengths and virtues with larger life goals and community engagement as catalysts for cultivating a robust sense of life's meaning and fulfilment (Seligman, 2002). Moreover, contemporary psychological discourses have embraced a more nuanced, culturally sensitive approach, acknowledging the diversity inherent in individuals' meaning-making processes (Wong, 2012). These perspectives underscore the contextual influences, emphasizing the role of cultural, social, and environmental factors in shaping individuals' perceptions and constructions of MiL.

2.3.3 Meaning in Life and Ageing. As individuals traverse the ageing journey, they are often beckoned to grapple with existential queries and confront the

impermanence and finitude of life. In this context, MiL manifests as a critical resource that facilitates older adults' capacity to cultivate a sense of coherence, purpose, and vitality amidst the multifarious challenges that ageing may unveil, such as health adversities and social losses (Krause, 2007).

Furthermore, a study delineated that the richness of lived experiences, wisdom, and accumulated knowledge enables many older adults to harbour a profound sense of MiL, bolstering their resilience and psychological well-being (Tornstam, 2005). MiL in the aging demographic is often intertwined with aspects such as generativity, legacy, and the continuity of life through contributions to subsequent generations, and societal enrichment (Thornstam, 2005). However, the literature also echoes the diversity and heterogeneity in older adults' MiL experiences. While some individuals might blossom in meaning and purpose, others might grapple with a sense of void, loss, and existential despair, oftentimes influenced by factors such as health status, social support, and coping capacities (Pinquart, 2002).

In a nutshell, the exploration of MiL in the context of ageing paints a complex portrait. It elucidates MiL as a dynamic construct, influential in steering the ageing journey towards realms of fulfilment, resilience, and existential gratification, whilst also being vulnerable to the shadows of loss, vulnerability, and existential questioning.

2.4 Resilience

2.4.1 Definition of Resilience. Resilience, a pivotal concept in psychology and ageing, is understood through various scholarly definitions and perspectives. However, the definition and operationalization of resilience vary across studies, reflecting its complexity and the diverse contexts in which it unfolds. Initially conceptualized by Werner and Smith (1982), resilience was described as the ability to thrive despite adversity, underlining its significance in developmental psychology. Masten (2001) further refined this definition, emphasizing resilience as “ordinary magic,” a common capacity of individuals to recover from setbacks. Greenberg (2006) added that resiliency can also be described as protective or beneficial processes that mitigate negative outcomes when faced with risky conditions. According to Rutter (2006), resilience fundamentally refers to the interactive concept

of experiencing significant risks and still achieving a relatively positive psychological outcome.

Furthermore, Denckla et al. (2020) conceptualize resilience as a trait or personal quality, viewing it as an individual's stable capacity to maintain psychological stability and physical health when confronting adversity. Such a conceptualization, however, often emphasizes internal attributes and personal strengths, such as optimism, cognitive flexibility, and coping strategies, which enhance the individual's ability to navigate through hardships (Denckla et al., 2020). Likewise, Ahern et al., (2008) outlined resilience as a personal trait characterized by the ability to effectively manage and withstand stress. Contrarily, Ryff (1989) perceive resilience as a dynamic process, an ongoing adjustment, and adaptation to changing circumstances. In this view, resilience is not merely the presence of protective factors or absence of risk factors but involves the interaction between risk and protective factors at multiple levels, including individual, community, and broader societal levels. This perspective allows for a more holistic understanding of resilience, recognizing that individuals do not operate in isolation but are influenced by a network of relationships and environmental contexts.

In short, resilience is a multidimensional concept often referred to as a dynamic process or attribute that enables individuals to adapt successfully in the face of "adversity", "trauma", or significant sources of stress such as health challenges or unfavourable social, economic, or environmental circumstances (American Psychological Association [APA], 2002).

In synthesizing these perspectives, it becomes evident that resilience is an evolving concept, deeply intertwined with individual and contextual variables, and crucial in understanding the ageing process. Therefore, it is of utmost importance to consider its multifaceted nature to construct a comprehensive and nuanced understanding, enabling a rich exploration of how resilience interfaces with life satisfaction, loneliness, and meaning in life among older adults.

2.4.2 Protective and Risk Factors of Resilience

***2.4.2.1 Biological Factors*.** Biological factors play a pivotal role in influencing resilience, particularly in older individuals. According to Feder, Nestler and Charney (2009), one primary biological determinant of resilience is genetics. Their seminal research contends that genetic predispositions, for instance, can influence the regulation of stress hormones, affecting an individual's ability to cope with adversity (Feder, Nestler & Charney, 2009). Genetic polymorphisms, particularly in genes associated with the stress response, such as the serotonin transporter gene, have been implicated in variations in resilience among individuals (Stein, Campbell-Sills & Gelernter, 2009). Upon analysis, a relationship emerged between the 5HTTLPR and the resilience scores obtained from CDRISC-10. The study adjusted for various factors, such as ancestry proportion scores, to ensure the precision of the associations found. Participants carrying the 's' allele of the 5HTTLPR showed a trend toward lower resilience scores, with each presence of the 's' allele associating with a one-point reduction in the CDRISC-10 scores, approximately (Stein, Campbell-Sills & Gelernter, 2009). Furthermore, possessing the 's' allele correlated with a higher likelihood of being categorized as having low resilience, as compared to individuals with two 'l' alleles. These results highlight the potential role of the 5HTTLPR in determining the variability in emotional resilience among individuals, indicating its role in affecting how individuals manage and recover from stress (Stein, Campbell-Sills & Gelernter, 2009).

Neurobiological factors also significantly impact resilience. Structures and functionalities within the brain, particularly those associated with the neuroendocrine and immune systems, play critical roles in determining how individuals respond to stress. The hypothalamic-pituitary-adrenal (HPA) axis, a central stress response system, is particularly crucial in mediating the biological response to stressors, influencing coping and adaptation mechanisms (McEwen, 2000).

In conclusion, biological factors such as genetics, neurobiology, and physical health are instrumental in determining an individual's resilience. These elements intertwine with psychological and environmental aspects, orchestrating a multifaceted resilience response to life's adversities.

***2.4.2.2 Individual Factors*.** Individual factors exert a substantial influence on resilience, shaping how individuals navigate adversities and stressors. At the core

of these factors lie individual personality traits, such as optimism, self-efficacy, and adaptability. For instance, Carter (1998) contends that people with a predisposition towards a positive outlook and confidence in their abilities to manage challenges tend to exhibit higher resilience. According to Carter (1998), such traits foster adaptive coping strategies, enabling individuals to effectively manage and recover from adversities. Furthermore, Bonnanno (2004) underlines cognitive processes, including perception and interpretation of stressors, also play a crucial role in resilience. Individuals who are able to reframe adversities as challenges rather than threats are more likely to engage in problem-solving and maintain psychological well-being in the face of difficulties (Bonanno, 2004).

In addition to the foregoing, emotion regulation capacities significantly impact resilience. Tugade and Fredrickson (2004) found that adequate emotion regulation facilitates adaptive responses and recovery from adverse experiences. The ability to manage and modulate emotional responses to stress contributes to maintaining balance and preventing overwhelming distress (Tugade & Fredrickson, 2004). Moreover, in the realm of interpersonal factors, social competencies, including communication skills and empathy, bolster resilience. These competencies enhance the quality of social interactions and support received from social networks, which are essential components of resilient outcomes (Ong, Bergeman & Boker, 2009).

In summation, individual factors, ranging from inherent personality traits to acquired emotional and social competencies, are instrumental in determining resilience. They shape the adaptive strategies individuals employ to navigate, cope with, and recover from adversities.

2.4.2.3 Environmental Factors. Environmental factors also have a profound impact on the development and sustenance of resilience. A crucial environmental influence stems from the availability and quality of social support networks. Southwick et al. (2016), for instance, assert the importance of social connections and supportive relationships in bolstering individuals' capacities to navigate adversity. These networks provide emotional backing, practical assistance, and valuable interpersonal interactions that enhance coping mechanisms (Southwick et al., 2016). Educational and workplace environments also significantly contribute to resilience. Supportive and enriched environments in these domains foster the

development of coping skills, self-efficacy, and problem-solving abilities (Masten, 2014; Shatté et al., 2017). They cultivate a sense of purpose and competence, instrumental in enhancing individuals' resilience against various adversities (Masten, 2014; Shatté et al., 2017).

Moreover, the broader community and cultural context within which individuals reside are indispensable in shaping resilience. Communities equipped with resources and infrastructures such as accessible healthcare services, educational opportunities, social support networks, recreational facilities, and safe living environments cultivate resilient individuals (Rutter, 1987; Ungar, 2011; Werner, Smith & Garmezy, 1998;). Contrarily, environments marked by instability, violence, or lack of resources hinder the development of resilient attributes (Ungar, 2013).

In conclusion, the environment, ranging from immediate social circles to broader community structures, plays a pivotal role in moderating resilience. Supportive environments, rich in resources and social capital, foster the development and maintenance of resilience, enhancing individuals' capacities to effectively negotiate adversities.

2.4.2.4. Family Factors. It is important to understand that the family factors are also significant in terms of shaping resilience where both protective and risk factors are involved. Parental symptoms of illness and psychopathology, divorce, death, single parenthood, and adolescent motherhood are additional familial risk factors that can determine a child’s psychological stability and resilience (Gizir, 2020). These conditions are adverse and lead to instability and stress thus reducing resilience in children and adolescents. For example, children who experience parental divorce may suffer emotional and psychological problems that limit them from handling life challenges appropriately.

On the other hand, several aspects of family can increase resilience. Family plays a vital role in a child’s life because parental care and other family members help the child to get emotional support and feel protected (Gizir, 2020). Parenting practices that are protective, like having clear and orderly household rules, which are very important in increasing resilience, provide children with strategies to counteract stress and develop a predictable routine to help in regulating their behavior. Furthermore, when parents set moderate and realistic aspirations for their children, these can help in

developing self-efficiency and coping mechanisms for dealing with adversities, which are essential for success (Gizir, 2020). These protective factors thus emphasize the need for a healthy and structured family as a way of promoting resilience among children and adolescents, showing that the relationship between risk and protective factors is a complex one in the development of resilience among children and adolescents.

Resilience and Aging

In the context of older adults, the definition of resilience also incorporates the idea of successful adaptation despite risks associated with ageing, such as chronic health conditions, losses, and decline in functional abilities. The concept is sometimes extended to include not only the ability to maintain function in the face of adversity but also to grow and thrive, capturing the essence of positive psychology and personal growth despite ageing-related challenges (Hildon et al., 2008). It embodies the idea of bouncing back from difficult experiences and is intrinsic to the process of successful ageing (Smith & Hollinger-Smith, 2014).

Carol Ryff's (1989) model of psychological well-being further enriches the understanding of resilience by linking it to self-acceptance, personal growth, and autonomy. Ryff's (1989) study demonstrated that resilience involves a multidimensional interplay of internal strengths and external resources, crucial for adapting to age-related changes. Additionally, research by Gruenewald and Seeman (2010) explored the social and biological dimensions of resilience, emphasizing how social support networks and physiological health interact to bolster resilience in older adults. This comprehensive view of resilience, incorporating individual attributes and external support systems, is essential for understanding how older adults navigate the complexities of ageing, maintain life satisfaction, and continue to find meaning in life despite the challenges they face (Gruenewald & Seeman, 2010; Ryff, 1989; Vaillant, 2002).

Furthermore, Vaillant's (2002) Harvard Study of Adult Development emphasized resilience as a crucial factor in successful ageing, highlighting how coping mechanisms, emotional regulation, and life adaptations contribute to long-term well-being. This perspective underscores the importance of maintaining positive relationships and a sense of purpose in fostering resilience among older adults.

Vaillant's (2002) findings suggest that resilience is not merely about surviving but also about finding ways to thrive amid life's challenges.

To conclude, resilience among older adults reflects their capacity to adapt and thrive in the face of aging-related challenges, highlight the role of strong support systems, continuous community engagement, proactive health care, and a positive mindset in fostering well-being and longevity.

2.5 Loneliness

2.5.1 Definition of Loneliness. Loneliness is a multifaceted emotional response that is prevalent among the elderly, emanating from a perceived deficit in one's social interactions and relationships (Donovan & Blazer, 2020). The conceptual clarity of loneliness is further compounded by its intersectionality with various aspects such as solitude, isolation, and alienation, each carrying distinct yet intertwined significances (Mansfield et al., 2019). Solitude, for instance, refers to the state of being alone without necessarily feeling lonely, signifying a potential voluntariness and comfort in being alone (Long et al., 2003; Wang, 2014). Isolation, on the other hand, involves an objective state of minimal social contact, which can lead to feelings of loneliness but is not synonymous with it (Hawkley & Cacioppo, 2010). Alienation extends beyond physical or social isolation to describe a profound sense of estrangement or disconnect from society or one's community, which can exacerbate feelings of loneliness (Mansfield et al., 2019). Scholarly investigations frequently delineate loneliness as a subjective experience that denotes a discrepancy between desired and actual social relationships (Akhter-Khan et al., 2022; Hawkley & Cacioppo, 2010).

In their seminal study, Perlman and Peplau (1998) explained the essence of loneliness by introducing the discrepancy model, which suggests that loneliness occurs when there is a huge difference between the real social relations of a person and the social connections, he/she longs for. The model stresses that loneliness is not only the consequence of being alone but rather the subjective psychological discomfort one feels when his/her social needs are not fulfilled. Perlman and Peplau (1998) differentiated the two kinds of loneliness; the emotional one which is a result of the absence of an intimate attachment figure and the social one which happens when a person is not part of a wider social network or does not belong to a community.

Emotional loneliness is usually associated with the important relationships like those with a spouse or close friend while social loneliness is about the absence of the broader social integration (Perlman & Peplau, 1998). This twofold classification showed the fact that loneliness is a many-sided phenomenon and its effects on people's mental and physical health are different. Emotional loneliness generally causes a stronger worrying and the feeling of being alone, while social loneliness can result in boredom and restlessness. The differences between the two types of loneliness are the key to the development of the targeted interventions that will deal with them both and the outcomes of each of them.

A nuanced understanding of loneliness appreciates its dynamic nature, wherein it is not merely the physical absence of companionship but extends to include emotional loneliness, characterized by the absence of a significant attachment or a confidant (Dykstra, 2009; Yanguas, Pinazo-Henandis & Tarazona-Santabalbina, 2018). Therefore, it encapsulates both social and emotional dimensions, painting a broader picture of a longing for deeper social integration and meaningful relationships. Therefore, as Malli et al. (2022) contend, this complexity in its nature suggests that loneliness is not universally experienced the same way, allowing for variances in depth, persistence, and influence based on individual circumstances and perceptions.

This highlights the individual variability and subjectivity inherent in the experience of loneliness, requiring a nuanced approach in academic explorations and practical interventions.

2.5.2 Factors of Loneliness

***2.5.2.1 Social and Marital Status*.** The influence of marital and family status on the experience of loneliness in older adults is substantial and multifaceted. A plethora of research underscores marriage or the presence of a significant partner as a pivotal element in alleviating feelings of loneliness, primarily due to the companionship, emotional support, and social interactions that a partner inherently offers (Hawkley & Cacioppo, 2010; Perlman & Peplau, 1984). Such relational attachments often furnish older individuals with a consistent source of emotional sustenance, buffering against the vulnerabilities associated with loneliness (Hawkley & Cacioppo, 2010).

However, the transition into widowhood heralds a profound shift in the social and emotional landscapes of older adults. The resultant absence of a lifelong companion often precipitates intensified feelings of loneliness and social isolation (Adams, Sanders, & Auth, 2004; Freak-Poli et al., 2022). Furthermore, the quality of marital relationships also holds significant weight; fulfilling marriages can be protective, whereas tumultuous or strained relationships may not yield the same protective benefits against loneliness (Hsieh & Hawkley, 2017).

Family structures and relationships further intertwine with the fabric of loneliness in older adulthood. Family, as a cornerstone of one's social network, plays an indispensable role in the emotional well-being of older individuals. Family ties imbued with warmth, support, and frequent interaction operate as bulwarks against loneliness (Dykstra & Fokkema, 2007). Conversely, strained familial relationships, characterized by conflict, misunderstanding, or neglect, may exacerbate feelings of loneliness and detachment (Dykstra & Fokkema, 2007). Moreover, the geographical proximity of family members and the frequency of familial interactions also wield influence. The physical or emotional absence of family, due to geographical distance or otherwise, can foster a sense of isolation and augment the sentiment of loneliness among the elderly (Wenger & Burholt, 2004).

In conclusion, marital and family statuses are instrumental in shaping the contours of loneliness in the lives of older individuals. They act as essential components of the social and emotional ecosystems, modulating the degrees of loneliness experienced in the twilight years of life.

2.5.2.2 Social Changes and Retirement. Social changes and retirement are monumental transitions that profoundly impact the lives of older adults, oftentimes cultivating an environment where feelings of loneliness can flourish (Hawkley & Kocherginsky, 2017). Retirement, a pivotal event in an individual's life, signifies not only an end to professional commitments but also a shift away from structured daily routines and work-based social interactions (Wang, 2007). This sudden withdrawal from a socially active work environment to a more solitary daily life can precipitate a sense of loss and isolation, making it a fertile ground for loneliness to manifest (Wang, 2007). Additionally, retirement may entail a redefinition of social roles and self-identity, which may influence older adults' sense of belonging and community

participation (Comi, Cottini & Lucifora, 2022; Litwin & Tur-Sinai, 2015). The readjustment to new social roles can be challenging and may create feelings of inadequacy or reduce opportunities for meaningful social engagements, contributing to feelings of loneliness.

The sphere of social changes encompasses diverse elements, such as the relocation of family members, changes in social roles, or the death of peers and loved ones. Such transitions necessitate the constant re-evaluation and adjustment of one's social networks and support systems (Dykstra, 2009). For instance, the relocation of children or close friends can diminish the frequency of personal interactions, fostering a perceived sense of social scarcity and augmenting feelings of loneliness (Dykstra, 2009).

Furthermore, societal views and attitudes toward ageing and retirement could also impact the experience of loneliness among older adults (Singh & Misra, 2009). Ageist views or stereotypes can lead to the marginalization of the elderly, limiting their opportunities for meaningful societal participation and enhancing feelings of social isolation (Victor et al., 2000).

Recognizing the multifaceted factors contributing to loneliness among older adults highlights the complexity of their social experiences and the importance of addressing these challenges to improve their quality of life.

2.5.3 Loneliness and Ageing. Loneliness acts as a considerable stressor, catalysing emotional distress and a heightened susceptibility to mood disorders, thereby undermining mental health resilience in older populations (Mushtaq et al., 2014). Similarly, Cacioppo et al. (2006) have illuminated loneliness as a significant precursor to various mental health challenges among the elderly, such as depression and anxiety. Moreover, loneliness often leads to the contraction of social networks, diminished social interactions, and a withdrawal from previously cherished social activities (Aartsen & Jylhä, 2011). Such shifts in social dynamics precipitate a state of social isolation, further augmenting the cyclic nature of loneliness and its pervasive impacts on the lives of older adults.

In addition to mental health and social relations repercussions, loneliness also extends its influence on the physical health of elderly individuals. A study by Hawkley and Cacioppo (2010) have indicated a linkage between loneliness and a myriad of

physical health complications, including cardiovascular diseases, impaired immune function, and an increased risk of mortality. Such outcomes accentuate loneliness as a notable risk factor that exacerbates vulnerability to a spectrum of health adversities in older adulthood.

Loneliness can instigate a trajectory of cognitive deterioration, diminishing cognitive reserves and exacerbating the vulnerabilities of the elderly to neurodegenerative disorders (Wilson et al., 2007). Thus, a study conducted by Wilson et al. (2007) indicated that loneliness was associated with an increased prevalence of disorders such as Alzheimer's disease.

2.6 Related Studies

Life satisfaction, meaning in life, resilience and loneliness among elderly become a popular subject that have been studied nationally and internationally in recent years. In this part, related international and national studies regarding these concepts were explained in detailed below.

2.6.1 International Studies. Lou & Ng (2012) investigated the strategies for managing loneliness among older Chinese adults who live alone from a resilience perspective, and cultural and social factors. The participants of this study, which were 13 older adults in Hong Kong who were single-living but not severely lonely, were purposively recruited. Through semi-structured interviews, the researchers identified three primary themes of resilience; cognitive, self & personality, and social relations. Participants were able to identify how they were able to manage changes in receiving family support, and there are some positive aspects of living independently such as avoiding arguing with parents/in-laws. They praised themselves for their capacity to manage work and crises independently. The self and personality resilience were connected with self-organization for the benefit of a group. Regarding the impact on others, participants mentioned the necessity to preserve their health status and psychological state to prevent putting pressure on their families. They engaged in work-related and leisure activities to enhance positive affect and to reduce negative affect. It was revealed that individuals valued social activities that provided them with social or emotional support and thus positively influenced their life satisfaction and loneliness levels. As a result, the study revealed that Chinese older adults are capable

of combating loneliness if they concentrate on raising their collective self-esteem and taking part in proactive social activities.

Furthermore, Szcześniak et al. (2020) examined how loneliness, self-esteem, and life satisfaction are related to one another among elderly adults in Poland. The findings showed that loneliness is inversely associated with self-esteem and life satisfaction. On the other hand, self-esteem was found to have a positive relationship with life satisfaction, and thus increased self-esteem could improve overall life satisfaction in the elderly. One of the study's main findings is that self-esteem partially explains the linkage between loneliness and life satisfaction. This indicates that self-esteem helps to mediate the effects of loneliness on life satisfaction, thereby underlining its significance to elderly people.

Gerino et al. (2017), employed a cross-sectional survey involving 290 older adults in Italy, measures of psychological factors included the UCLA Loneliness Scale, Geriatric Anxiety Inventory, and World Health Organization Quality of Life Brief Version. The findings indicated that resilience and mental health explain the relationship between loneliness and quality of life (QoL). In particular, there was a significant negative relationship between loneliness, resilience, mental health, and QoL such that high levels of loneliness predicted low levels of resilience and mental health, which in turn predicted poor QoL.

In the study by Song and Li (2023), community-based services are examined for their effects on the life satisfaction of older Chinese adults, and psychological resilience is assumed to mediate the process. The data for the study are derived from the Chinese Longitudinal Healthy Longevity Survey (CLHLS) which covers four waves from 2008 to 2018. The sample involves 2440 older adults from 23 provinces, and this makes the data strong enough for a longitudinal analysis. The method applied in the study was the fixed-effects panel model, which included individual and time variables, ensuring causal conclusions. Life satisfaction was measured using a single-item scale, while the availability of community-based (CB) services was captured using eight social services. Positive and negative affective symptoms were assessed with a five-item Psychological Resilience scale. Findings revealed that CB services are positively related to life satisfaction among the elderly. In addition, psychological resilience was identified as the moderator of this relationship, which indicates that life

satisfaction is enhanced by the use of CB services because these services increase resilience levels.

A quantitative study done by Hayat et al. (2016) in Pakistani among 212 elderly individuals (119 men and 93 women). 124 of them were living with their family, and 88 of them were living in old-age homes. Ego Resiliency Scale, Self-Assessed Wisdom Scale and Satisfaction with Life Scale were used to explain the correlation between resilience, wisdom and life satisfaction of the elderly. The results revealed that resilience and wisdom were positively correlated with life satisfaction of elderly people. The study also indicated that resilience played a mediator role between wisdom and life satisfaction in old adults living with families.

Yan et al. (2020) explored how meaning in life and social support mediate the relationship between living arrangements and life satisfaction among older people. 90 male, 125 female, over age 60 individuals volunteered. 101 of them were living in nursery homes and 114 of them were living in community homes. According to their accommodation style; social support, presence of meaning, search for meaning and life satisfaction levels were analysed. The study found that the relationship between living arrangements and life satisfaction was mediated by presence of meaning in life. Community-dwelling adults reported greater life satisfaction, higher social support, and greater meaning in life compared to nursing home residents.

2.6.2. National Studies. A qualitative study conducted by Özmete (2008) in Ankara to determine the meaning of life in old age. 10 female and 9 male participants over the age of 65 volunteered. The interviews, which consisted of 15 open-ended questions, aimed to gather information on the meaning of life in old age based on both objective and subjective well-being indicators. Objective indicators included "economic well-being," "housing situation," and "health and lifestyle," while subjective indicators encompassed "life satisfaction," "happiness," and "interpersonal relationships and family interaction." The study found that elderly people who have economic security, good health, and positive family relationships have higher life satisfaction. By contrast, people with health problems or low economic status are less likely to have a high level of life satisfaction.

Softa et al. (2015) investigated the variables that affect the levels of satisfaction with life among elderly people with reference to those living in nursing homes. The

study was carried out in one of the nursing homes located in Kastamonu with 17 women and 43 men aged 65 and above. It was yielded that social relations, previous work experience, and educational attainment have a positive influence on the level of satisfaction with life. On the other hand, it was found that factors such as gender, economic status, and health conditions including coronary artery disease and chronic obstructive pulmonary disease did not influence the life satisfaction score.

Erol et al. (2016) examined the feelings about loneliness and life satisfaction of the elderly those who are 65 years old and above, residing in rural and urban areas of Türkiye. The sample is made up of 210 elderly people, 70 of whom live in rural areas (Bartin province) and 140 of whom live in urban areas (Kocaeli province). Data were gathered through face-to-face interviews using the socio-demographic characteristics form, the Satisfaction with Life Scale (SWLS), the UCLA Loneliness Scale, and the Standardized Mini-Mental Test (SMMT). The study results revealed the disparities in life satisfaction and loneliness between the rural and the urban elderly. Elderly residing in rural areas obtained higher scores on life satisfaction than those in the urban areas, and this difference was significant. On the other hand, urban dwellers had more UCLA loneliness scores than rural residents, also showed significant difference. Moreover, specific components of quality of life that impacted life satisfaction were the presence of a long-term ailment, taking of medicine, and utilization of walking aids. People without chronic diseases, who are not on medication or using any assistive devices, have higher life satisfaction rates among elderly people. On the other hand, the participants who had these health problems expressed lower life satisfaction. Moreover, respondents who did not have a child in their household reported higher life satisfaction scores than respondents with children.

Kapikiran (2016) examined the role of perceived social support for the link between loneliness and life satisfaction among the elderly in the Aegean region of Türkiye. The participants of the study are 110 persons aged 65 and above, the data were collected by means of face-to-face interviews using the following instruments: the Demographic information form, Satisfaction with Life Scale (SWLS), Multidimensional Scale of Perceived Social Support (MSPSS), and UCLA Loneliness Scale. The findings revealed that social support fully mediated the interaction between loneliness and life satisfaction, meaning that increasing social support can increase life satisfaction by reducing the impacts of loneliness. Some of the demographic factors

include gender, education level, income level, and living status all of which affect the main variables of the study. Female participants perceived significantly lower level of social support than male participants. Individuals who have attained higher level of education are likely to experience less loneliness as compared to their counterparts with low education standards. Single elderly people and those dwelling in rural areas have lower life satisfaction and perceived social support than their counterparts living with a spouse or relatives. Individuals with higher income reported higher life satisfaction and social support, and less loneliness.

Kiliç et al. (2016) examined the life satisfaction and attitude toward life among elderly patients at Family Health Center in Erzurum-Türkiye. This survey was conducted with a sample of 252 respondents consisted of 137 women and 115 men with 65 years and above. The instruments used to gather data comprised of a questionnaire form, namely the Life Satisfaction Scale (LSS), and the Life Attitude Profile Scale (LAPS). Based on the results, there was a negative relationship between age and life satisfaction. Likewise, life attitude profiles, subdimensions as meaning in life, purpose in life, and life choices/responsibilities also showed a decline with age. The findings also revealed that the scores in meaning of life and life choices/responsibilities were comparatively higher among men than women. Employed people also scored higher in life attitude profiles than unemployed people. Higher educational status and adequate income also predicted higher life satisfaction and a positive attitude to life. This research also indicated that the patients with chronic diseases and those who took medicines frequently had lower scores in both life satisfaction and attitude toward life. On the other hand, the elderly respondents who had a positive perception of their health had a higher mean score in both the life satisfaction and life attitude profiles. Participants who were married or living with a partner attended social events and went outside often had higher life satisfaction and more positive life attitudes. Hence, it is clear that the elderly should keep on being active and continue to interact with people in their society.

Şahin and Özçetin (2020) investigate the levels of life satisfaction and hopelessness among elderly individuals living in nursing homes in Ankara, Türkiye. The study used a descriptive design which included 129 women and 136 men participant aged 65 and over. Participants were selected based on criteria such as age, ability to communicate, absence of hearing problems, and lack of psychiatric

conditions or dementia. The study utilized the Life Satisfaction Index A (LSIA) and the Beck Hopelessness Scale (BHS) to collect data through face-to-face interviews. The findings indicated that the elderly participants generally exhibited low life satisfaction and moderate levels of hopelessness. Specifically, those aged 84 and above, unmarried or widowed individuals, and those with lower educational attainment reported significantly lower life satisfaction and higher hopelessness. In contrast, participants with higher education levels, longer durations of stay in the nursing home, and greater satisfaction with their living conditions showed higher life satisfaction and lower hopelessness. Additionally, the study found a significant negative correlation between life satisfaction and hopelessness, suggesting that higher life satisfaction was associated with lower levels of hopelessness.

Chapter 3

Methodology

This chapter explained the research design, participants of the study, data collection instruments, data collection procedure, data analysis and the limitations of the study.

3.1 Research Philosophy

The research philosophy that was chosen for this study is rooted in positivism which holds that reality is stable and can be observed and described in an objective manner not interfering with the phenomena being studied (Park, Konge, and Artino, 2020). This strategy conforms to the quantitative character of the research coupled with the fact that it includes measurable variables and aims to determine statistical associations among them. Positivism allows for the application of standardized and reliable measuring instruments for empirical data collection thus enabling the objective analysis of life satisfaction, resilience, meaning in life, and loneliness constructs among the elderly (Teo, 2018). Using a standardized methodology and objective measures, such as the Brief Resilience Scale and the Satisfaction with Life Scale, this study is positivist, implying that the results are reliable, valid, and able to add to the existing list of literature on the age and life satisfaction (Babbie, 2016; Creswell & Creswell, 2023).

The choice of the positivist research philosophy is supported by its well-established practice within the social sciences, especially in research of the older population that requires accurate quantifiable data to understand complex phenomena of the human psyche (Johnson & Onwuegbuzie, 2004; Smith, 2003). Positivism in this regard permits empirical testing of theoretical hypotheses by way of structured methodologies and statistical analyses and therefore, acts as a strong foundation for the investigation of the relationships between sociodemographic factors and psych outcomes in the aged Creswell & Creswell (2023). On the other hand, the positivist approach is favourable for the repetition of research, an essential part of knowledge development in gerontology and psychology (Kalelioglu, 2021).

In conclusion, this study uses positivism as the research philosophy to underpin the methodological rigor, which is consistent with its quantitative nature and permits a structured exploration of the relationships among important psychological variables in the context of aging. In addition to being consistent with the established research paradigms in the field, this approach also adds to the understanding of life satisfaction, meaning in life, resilience, and loneliness among elderly.

3.2 Research Method

This study is framed within a quantitative research type, specifically employing a correlational research design. The quantitative research approach is characterized by the collection of numerical data and the application of statistical methods to ascertain relationships between variables (Creswell & Creswell, 2023). This method is particularly apt for the investigation at hand, which aims to discern and quantify the relationships between life satisfaction, meaning in life, resilience, and loneliness among the elderly, alongside considering the impact of sociodemographic factors. Moreover, the decision to utilize a quantitative approach is underpinned by its ability to provide structured and reliable data that can be generalized to broader populations, which is crucial in the context of aging studies where variability across individuals is significant (Cohen, Manion, & Morrison, 2013; Creswell & Creswell, 2023). Moreover, the correlational design was chosen because it allows for the examination of the strength and direction of relationships between multiple variables without necessitating manipulation or control, which is ethical and practical when studying vulnerable populations such as the elderly (Salkind, 2010).

The use of a quantitative, correlational approach is further justified by existing literature, which suggests that this method is effective for exploring complex interrelations among psychological constructs within large samples, thereby enhancing the understanding of factors influencing the well-being of older adults (Finkelstein, King, & Lichtenberg, 2010; Malhotra & Wong, 2020). This approach aligns with the objectives of this study, as it facilitates the identification of significant predictors of

life satisfaction, meaning in life, resilience, and loneliness, thereby contributing valuable insights to the field of gerontological psychology.

3.3 Participants

The sample of the study consisted of 355 participants who is 65 or over. The sample involved 49.9% women (n=177) and 50.1% men (n=178). The age ranged between 65 to 92, with the mean of 72.44 (SD=5.02). 1.1% of the individuals were literate (n=4), 11.5% had primary school degree (n=41), 21% had middle school degree (n=21), 34.4% had high school degree (n=122), 12.4% had academy degree (n=44), 27.9% had university degree (n=99) and 6.5% had master's degree (n=23). One of the participant's education status is unknown. 76.1% of the individuals were married (n=270), 11.5% of the individuals were lost their partner (n=41), 9% of the individuals were divorced (n=32) and 3.4% of the individuals weren't married (n=12). 79.9% of the participants were on their first marriage (n=283), 11.5% of them were on their twice marriage (n=41), 3% of them were on their third marriage (n=1) and 8.5% of them were not married (n=30). 6.8% of the participants' lost their partner (n=24) , 10.4% divorced (n=37), 9.3% due to other reasons remarried. Most of the participants, 73.2%, were on their first marriage (n=260). 91.8% of the participants had children (n=326) meanwhile 8.2% hadn't (n=29). Almost half of the participants, 56.6% were living with their partner (n=201), 20.3% were living with their partner and child (n=72), 24% of them were only living with their child (n=24), 1.1% were living with their relatives (n=4), 13.2% were living alone (n=47) and 2% were living in a nursing home (n=7). Regarding their working status, 13.8 % were retired and still working (n=49), 56.1% were retired (n=199), %11.3 weren't retired (n=40) and %18.6 never worked before (n=66). Regarding their income level, 3.4% were belonged to low (n=12), 3.9% were belonged low-middle (n=14), 47.9% were belonged to middle (n=170), 36.9% were belonged to middle-high (n=131) and 7.9% were belonged to high level of income group (n=28). Regarding their social life, 5.4% of the participants were seeing their friends everyday (n=19), 13.5% of them twice or thrice a week (n=48), 17.5% seeing them once a week (n=62), 16.1% seeing them twice or thrice a month (n=57), 38.3% seeing once a month (n=136), 7.3% seeing them few in a month

(n=26) and 2% doesn't have any friends (n=7). Regarding the health condition of the participants, 96.6% reported that they didn't need others' assistance (n=343) in their daily life meanwhile 3.4% were reported that they need support (n=12). Most of the volunteers, 87% reported that they didn't receive professional help before (n=309), while the rest of the volunteers, 13% reported that they did (n=46). 4.2% of the volunteers stated that they need professional help now (n=15), and 95.8% of the volunteers stated the opposite (n=340).

Table 1

Descriptive Statistics of Participants

Demographical Variables	Mean	SS	n	%
Gender				
Female			177	49.9
Male			178	50.1
Age	72.44	5.02		
65			18	5.1
66			20	5.6
67			23	6.5
68			26	7.3
69			43	12.1
70			13	3.7
71			21	5.9
72			42	11.8
73			23	6.5
74			12	3.4
75			8	2.3
76			15	4.2
77			22	6.2
78			36	10.1
79			13	3.7
80			4	1.1
81			1	0.3
82			2	0.6

83	4	1.1
84	2	0.6
85	1	0.3
86	1	0.3
87	1	0.3
88	2	0.6
89	1	0.3
92	1	0.3
Education		
Literate	4	1.1
Primary School	41	11.5
Middle School	21	5.9
High School	122	34.4
Academy	44	12.4
University	99	27.9
Masters	23	6.5
Marital Status		
Married	270	76.1
Lost a Partner	41	11.5
Divorced	32	9.0
Never Married	12	3.4
Number of Marriage		
First Marriage	283	79.7
Second Marriage	41	11.5
Third Marriage	1	.3
Not Married	30	8.5
Remarriage		
Widow	24	6.8
Divorced	37	10.4
First Marriage	260	73.2
Other	33	9.3
Having Child		

Yes	326	91.8
No	29	8.2
Living with		
Partner	201	56.6
Partner and child	72	20.3
Child	24	6.8
Relatives	4	1.1
Alone	47	13.2
Nursery House	7	2.0
Working Status		
Retired and working	49	13.8
Retired	199	56.1
Not retired, still working	40	11.3
Never worked	66	18.6
Income		
Low	12	3.4
Low-Middle	14	3.9
Middle	170	47.9
Middle-High	131	36.9
High	28	7.9
Social Life		
Everyday	19	5.4
2-3 Times a Week	48	13.5
Once a Week	62	17.5
2-3 Times a Month	57	16.1
Once a Month	136	38.3
Few Months	26	7.3
No Friends	7	2.0
Need Support		
No	343	96.6
Yes	12	3.4
Received Professional Help		

	Yes	46	13.0
	No	309	87.0
Need Professional Support			
	Yes	15	4.2
	No	340	95.8

The study used both snowball and convenient sampling strategies to collect data from the population who are 65 years and older. Snowball sampling, which was also referred to as a chain-referral sampling technique, is a method commonly used in social science research where a population of interest is hard to reach or identify (Biernacki & Waldorf, 1981; Parker, Scott & Geddes, 2019). This method includes the current participants referring the future participants who are their friends hence making the size of the sample grow like a snowball rolling down a hill. The reason for choosing snowball sampling is that this method is deemed efficient in approaching specific, usually underrepresented populations (Creswell & Creswell, 2023). Furthermore, many of the elderly might be isolated because of reasons such as health conditions, geographical location, and social situations. Snowball sampling is more suitable in the situation of a hard-to-reach population as it enables the researcher to use the social network of the population to approach the population (Goodman, 1961).

Convenient sampling where the participants are available and enthusiastic to participate is especially suitable for exploratory studies and in situations where time and resources are constrained (Golzar & Tajik, 2022; Simkus, 2023). Through the integration of both approaches, the study sought to optimize the advantages of snowball sampling and convenient sampling in terms of feasibility and ensure a completer and more typical group of older adults. In the meantime, convenient sampling simplified data collection from easily accessible subjects and created the basis for additional referrals through snowball sampling.

This manner of study is especially appropriate in research concerned with such matters as loneliness and life satisfaction of the aged. People who have had prior interactions with the research can serve as allies to those who may be wary about their confidentiality, hence, urging them to participate (Atkinson & Flint, 2001). The study sought to employ both sampling techniques to minimize any biases by prompting a

rich variety of individuals to start referral chains to improve the sample's heterogeneity.

It was argued that using both snowball sampling and convenient sampling could provide important insights into the experiences and perceptions of particular groups, thus enhancing the understanding of complex social phenomena (Noy, 2008). This multi-component approach has guaranteed that we involve a wider range of people, thus creating a strong ground for studying the social processes influencing the elderly.

3.4 Data Collection Instruments

The data collection for this study was meticulously designed to capture a comprehensive understanding of life satisfaction, resilience, meaning in life, and loneliness among individuals aged 65 and over. The instruments utilized include the Informed Consent Form (see Appendix A), Demographic Information Form (see Appendix B), The Satisfaction with Life Scale (see Appendix C), The Meaning in Life Questionnaire (see Appendix D), The Brief Resilience Scale (see Appendix E), and the UCLA Loneliness Scale III (not presented since the researcher did not give permission). These tools were chosen based on their reliability and validity in previous research, ensuring the accuracy and relevance of the data collected (Diener et al., 1985; Russell, 1996; Smith et al., 2008; Steger et al., 2006).

3.4.1 Demographic information form. It gathers essential data on socio-demographic factors, providing insight into how variables such as age, education, and health status may influence life satisfaction. This aligns with the study's aim to explore the impact of socio-demographic factors on life satisfaction and other psychological constructs, as highlighted by prior studies indicating significant relationships between these factors and mental health outcomes in the elderly (Pinquart & Sörensen, 2000). The participants were asked to provide details about their gender, age, marital status, education level, work status, parental status, socialization frequency, income, and health condition. DIF was prepared by the researcher.

3.4.2 Satisfaction with life scale (SWLS). According to Diener (1984), the subjective thoughts of individuals are formed by two main factors: emotional and cognitive components. The Satisfaction with Life Scale was developed by Diener, Emmons, Larsen and Griffin (1985) to evaluate individuals' life satisfaction from the cognitive perspective. The adaption to the Turkish language was made by Dağlı and Baysal (2016). The scale has 5 questions with a 7-point Likert-type scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). There are no reverse-coded items therefore high scores indicate high satisfaction. The meaning of the total score is listed below:

- 31 - 35 Extremely satisfied
- 26 - 30 Satisfied
- 21 - 25 Slightly satisfied
- 20 Neutral
- 15 - 19 Slightly dissatisfied
- 10 - 14 Dissatisfied
- 5 - 9 Extremely dissatisfied

The Cronbach Alpha reliability of the adapted study was 0.88. In this research Cronbach Alpha was calculated as .86.

3.4.3 Meaning in life questionnaire (MLQ). The scale was created by Steger, Frazier, Oishi and Kaler (2006) to measure meaning in life. It is a 7-point Likert scale ranging from 1 (Absolutely True) to 7 (Absolutely Untrue) which, includes two subscales: Presence of Meaning and Search for Meaning. The Presence of Meaning covers the participant's feelings towards his life, meanwhile, the Search for Meaning contains the participant's thoughts and impositions about his life. In MLQ, there are 10 items. Items number 1,4,5,6,9 is about the Presence of Meaning and items number 2,3,7,8,10 belongs to Search for Meaning dimension. Item number 9 is reverse-coded. To calculate the total score, the "Search for Meaning" part should be coded reversibly.

The scale was validated in Turkish by Nur Demirtaş (2010). Cronbach alpha of MLQ is .86 (Demirbaş & İşmen, 2015). In the present study, Cronbach alpha was found .82 for presence of meaning and .85 for search for meaning subcategory.

3.4.4 Brief resilience scale (BRS). BRS was developed by Smith, Dalen, Wiggins, Tooley, Christopher and Bernard (2008) to evaluate the capability of recovering or showing regression after facing stressful life events. It is a 5-point Likert-type scale which consists of 6 items. It ranges from 1 (strongly disagree) to 5 (strongly agree). 2., 4., and 6., items are reverse coded. Acquiring a high score on the scale refers to stronger resilience. The adaptation of the BRS was carried out by Doğan (2015). The sample was formed of 295 Turkish university students, and the reliability of the adapted scale was found .83 by using internal consistency. Similarly, for this study, it was calculated .83 as well.

3.4.5 UCLA loneliness scale (version III). UCLA Loneliness Scale is an instrument designed to measure perceived loneliness by Daniel Wayne Russel (1996). The scale is composed of three factors: lonely, non-lonely, and global loneliness factors. It is adapted to Turkish by Durak, M & Senol-Durak (2010). UCLA LS3 is a 4-point Likert scale ranging from 1 (Never) to 4 (Always). The scale consists of 9 reverse-scored items. Gaining a high score refers high degree of loneliness. In the elderly studies, Cronbach Alpha was found .90 for global loneliness, .84 for loneliness, and .85 for non-loneliness. In the present study, Cronbach alpha was calculated .91 for global loneliness, .88 for loneliness and for .88 non-loneliness.

3.5 Data Collection Process

3.5.1 Ethics and permissions. Ethics must be considered in any research study, particularly in a study that involves human participants. This study had full compliance with the ethical code of conduct of Bahçeşehir University to ensure that all research activities are conducted with the highest level of integrity and respect for the participants. The purpose of these guidelines is to assure the rights and welfare of the

participants of the research and consequently, reflecting the universal ethical principles enshrined in the Declaration of Helsinki (World Medical Association, 2013). Before data collection, all participants gave their informed consent. The informed consent form of this study was designed to be simple to comprehend so that participants would understand what they were agreeing to participate in the study (Denzin & Lincoln, 2011). Hence, the form included a comprehensive explanation of the study's purpose, methods, possible risks, and advantages. The participants were guaranteed of their freedom to drop out of the research at any time without any punishment, being in the spirit of autonomy and voluntariness. This transparency and respect for participant autonomy are critical in gerontological research, where ethical considerations are paramount (Moody & Sasser, 2018). Confidentiality and privacy were very crucial in the whole research. Data of participants were treated with utmost confidentiality; personal identities were erased to ensure invisibility. This practice follows ethical norms which are aimed at ensuring the protection of sensitive information especially when concerning the elderly who are a potentially vulnerable population (Israel & Hay, 2006).

In conclusion, by strictly following the Bahçeşehir Ethical guidelines and integrating internationally accepted ethical standards, the dignity, rights, and interests of the subjects were provided.

3.5.2 Data collection procedure. The data was collected in person, through phone calls and online channels. For in person data collection process, the researcher has been in public places such as parks, pharmacy, butcher malls and found volunteers there by her grandma's assistance. The participants were more likely to join the research when they saw an elderly people next to the researcher. Also, local neighbourhood businesses asked their customers to fill the questionnaires. The researcher left some of the forms in the shops and picked them up when they were filled in.

For online data collection, the link of the survey was shared by researcher's online communication channels which were WhatsApp and Facebook. The process included measures to ensure clarity and ease of understanding, such as providing instructions in simple language and offering assistance if needed, especially in terms of technological aspects. To give an example, some of the elderly participants

completed the survey through a phone call with the researcher to check if they were using the website correctly. This consideration is vital in minimizing the potential for misunderstanding and ensuring that the data accurately reflects the participants' experiences and perceptions (Creswell & Creswell, 2023).

Elderly people who were willing to help shared the survey with their family and friends both physically and digitally. The survey lasted approximately 6 to 10 minutes. The data was collected between August 2023- February 2024.

3.5.3 Data analysis procedure. The data analysis for this study was conducted by using SPSS 25. The process began with preliminary analyses to assess descriptive statistics of the scales and the normality of data distribution, revealing that the data was not distributed normally. Tabachnick and Fidell (2013) stated that skewness and kurtosis values which are between -1.5 and +1.5, indicates a normal distribution. For this study, the skewness values ranged between -.867 and .2.559, and kurtosis values indices ranged between -.296 and 24.511 These necessitated further adjustments to ensure the accuracy of subsequent analyses.

The main analytical method was hierarchical regression analysis. This technique allows for a stepwise assessment of how each independent variable contributes to explaining the variance in the dependent variable (Ross and Willson, 2017). Different blocks of variables were entered in successive steps to observe their incremental contributions. For instance, socio-demographic variables (age, gender, marital status and social life) were entered first, followed by psychological factors (search for meaning, presence of meaning, resilience, and loneliness. This stepwise approach clarified the distinct contribution of each group of variables. Given that the normality assumption was violated, bootstrapping was performed using 2,000 samples to calculate the 95% bias-corrected and accelerated bootstrap confidence intervals. Bootstrapping is a non-parametric method that allows for robust statistical inference, particularly in samples where the data may not follow a normal distribution. This process provides more accurate confidence intervals and significance levels, reducing bias that might occur in conventional analyses. The adjusted R^2 value was examined in the hierarchical regression to determine the proportion of variance in the dependent

variable explained by the independent variables. This adjusted value provides a more accurate representation by considering the number of predictors and the sample size.

The deletion of outliers in the analysis makes the analysis more efficient. Mahalanobis Distance is commonly used technique to determine outliers in the social sciences (Osborne & Overbay, 2004). To calculate Mahalanobis Distance, the degrees of freedom in the $\chi 2$ table searched according to the number of independent variables (9 variables in the study) (Tabachnick & Fidell, 2013). $\chi 2$ table indicated that the highest value should be 16.26, and it was found to be as 15.24 for .001 significance level. Furthermore, the multicollinearity assumption was tested by the Variance Inflation Factor (VIF) and Tolerance values. A VIF value less than 10 and a tolerance value greater than .10 revealed no multicollinearity issue (Tabachnick & Fidell, 2013). Multicollinearity assumption was also tested by Spearman Rank Correlation Coefficient Analysis. The correlation values are $r<.85$ indicates that there is no multicollinearity (Kline, 2011).

The Durbin-Watson statistic was checked to identify any potential autocorrelation in residuals from the regression analysis. Since the Durbin-Watson value reported as 2.006 which is in the range of 1.5-2.5 (Tabachnick & Fidell, 2013) indicate that there is no autocorrelation problem in this study.

3.6 Assumptions

In the study, it was assumed that all people in the study participated voluntarily, answered the questions sincerely and honestly.

3.7 Limitations

This study, while providing valuable insights into the life satisfaction of the elderly, encountered several limitations that must be acknowledged. First, a significant challenge was ensuring that older participants were comfortable and adept at completing the survey, particularly given the potential technological barriers. The digital divide between generations can lead to difficulties in navigating online platforms and understanding electronic forms, which could have impacted the accuracy and completeness of the responses. Efforts were made to provide clear instructions and support, but the inherent technological challenges associated with

online surveys could have deterred some individuals from participating or from providing thorough responses (Creswell & Creswell, 2023).

Moreover, the extensive number of questions posed in the study, coupled with the natural cognitive decline that accompanies aging, emerged as a significant limitation. As individuals age, cognitive abilities such as memory, attention, and information processing tend to diminish (Posner, 1997). This decline can impede elderly respondents' capacity to fully comprehend and accurately answer a large set of questions, leading to potential misunderstandings and incomplete responses (Schneider et al., 2022). It is essential to consider these cognitive limitations in general.

Furthermore, the reliance on self-reported data presents another limitation. While self-report surveys are a standard method for collecting data on personal experiences and perceptions, they are subject to biases such as social desirability or recall bias. The self-report nature of the questionnaires was chosen to empower participants, allowing them to complete the scales at their own pace and in the comfort of their surroundings, which is particularly important when dealing with potentially sensitive topics such as loneliness and life satisfaction. This approach is supported by literature indicating that self-report questionnaires can reduce social desirability bias and increase the accuracy of responses, especially among older adults. Participants may provide answers they believe are expected or acceptable rather than their true feelings or may not accurately remember past events or feelings, which can skew the results (Creswell & Creswell, 2023).

Lastly, the study’s cross-sectional design limits the ability to draw causal inferences from the data. While correlations between variables such as loneliness, resilience, and life satisfaction can be identified, it is not possible to determine the directionality of these relationships or establish cause-and-effect dynamics. Longitudinal studies would be required to observe changes over time and better understand the causal relationships among the variables.

Chapter 4

Results

This chapter details the outcomes of the statistical analysis in relation to the research question. Initially, preliminary analyses were conducted to check assumptions and assessment of normally distributed errors. This was followed by hierarchical multiple regression analysis.

4.1 Preliminary Analysis of the Study

Descriptive characteristics of the measures used in the study were investigated by means, standard deviations, minimum and maximum values of the Satisfaction with Life Scale (SWLS), The Meaning in Life Questionnaire (MLQ); the subscales of Presence of Meaning and Search for Meaning, The Brief Resilience Scale (BRS), and UCLA Loneliness Scale, and it's subscales which were Lonely, Non-Lonely, and Global Loneliness. The results were presented in Table 2.

As Table 2 displayed, the mean and standard deviation scores of the participants were found for Satisfaction with Life Scale (SWLS) as 16.08 ± 3.18, for The Brief Resilience Scale (BRS) as 21.07 ± 4.27, for The Meaning in Life Questionnaire (MLQ) as 24.62 ± 5.79, for subscale of the Presence of Meaning as 24.62 ± 5.79, and for Search for Meaning subscale as 19.62 ± 5.84, for UCLA Loneliness Scale (UCLA L3) as 44.44 ± 9.36.

To verify the normality of the data set, skewness and kurtosis values were investigated. UCLA L3's Skewness value was -.539 and Kurtosis value was .886. BRS was found to be -.867 for Skewness and 1.409 for Kurtosis. SWLS was calculated as -.009 for Skewness and 1.625 for Kurtosis. MLQ's presence of meaning component skewness value was -.009 and kurtosis value was 1.625. MLQ's search for meaning dimension skewness value was -.479 and kurtosis value was .296. The analyses were based on 95% reliability level.

Table 2

Descriptive Statistics for the Variables in the Study

Measures	N	*Min*	*Max*	M	*SD*	Skewness	Kurtosis
Satisfaction with Life Scale	355	5.00	25.00	16.08	3.18	-.009	1.625
MLQ- Presence of Meaning	355	5.00	81.00	24.62	5.79	2.559	24.511
MLQ- Search for Meaning	355	5.00	35.00	19.62	5.84	-.479	.296
Brief Resilience Scale	355	6.00	30.00	21.07	4.27	-.867	1.409
UCLA Loneliness Scale	355	20.00	78.00	44.44	9.36	-.539	.886

Table 3

Correlation Results of Socio-demographic Variables and Meaning in Life, Resilience, and Loneliness on Life Satisfaction

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1.Life Satisfaction	1	0.69	-.143**	-.176**	-.221**	.435**	-.112**	.245*	-.352**
2. Gender		1	.009	-.113*	-.126*	.021	.003	-.053	.038
3. Age			1	.266**	.075	-.138**	.018	.006	.079
4. Marital Status				1	.011	-.154**	.062	-.098	.155**
5. Social Life					1	-.255**	.097	.037	.237**
6. Presence of Meaning						1	-.075	.202**	-.521**
7. Search for Meaning							1	.004	.207**
8. Resilience								1	-.201**
9. Loneliness									1

** p<.01

*p<.05

4.1.1 Results of predictive variables of life satisfaction of elderly.

Hierarchical regression analyses were employed to explore the predictive role of socio-demographic variables (age, gender, marital status, and social life), meaning in life (search for meaning, presence of meaning), resilience, and loneliness on life satisfaction. Before moving on to the hierarchical regression analysis, the relationship among study variables was tested with Spearman rank correlation coefficient analysis. The relationship between life satisfaction and socio-demographic variables (age, gender, marital status, and social life) and meaning in life, resilience, loneliness variables were showed in Table 3.

According to Table 3, life satisfaction and gender has no significant relationship ($r= .069$; $p>.05$). Life satisfaction and age ($r= -.143$; $p<.01$), marital status ($r= -.176$; $p<.01$), and social life ($r= -.221$; $p<.01$) had a significant negative relationship. Life satisfaction and search for meaning has a negative significant correlation ($r= -.112$; $p<.05$) whereas life satisfaction and presence of meaning has a significant correlation in a positive way ($r= .435$; $p<.01$). Life satisfaction and resilience has a positive significant correlation ($r= .245$; $p<.01$). In addition, life satisfaction and global loneliness has a negative significant relationship ($r= -.352$; $p<.01$).

Gender and age have no significant relationship ($r= .009$; $p>.05$). Gender and marital status have a negative significant correlation ($r= -.113$; $p<.05$). Similarly, gender and social life has a significant relationship in a negative way ($r= -.126$; $p<.05$). Gender and presence of meaning ($r= .021$; $p>.05$), gender and search for meaning ($r= .003$; $p>.05$), gender and resilience ($r= -.053$; $p>.05$), and gender and loneliness ($r= .038$; $p>.05$) have no significant relationship.

Age and marital status have a significant positive relationship ($r= .266$; $p<.01$). Age and social life have no significant relationship ($r= .075$; $p>.05$). Age and presence of meaning has a significant negative correlation ($r= -.138$; $p<.01$). Age and search for meaning ($r= .018$; $p>.05$), age and resilience ($r= .006$; $p>.05$), age and loneliness ($r= .079$; $p>.05$) have no significant correlation.

Marital status and social life have no significant relationship ($r= .011$; $p>.05$). Marital status and presence of meaning have a negative significant correlation ($r= -$

.154; p<.01). Marital status and search for meaning (r= .062; p>.05), marital status and resilience (r= -.098; p>.05) have no significant relationship. Marital status and loneliness have a significant positive correlation (r= -.155; p<.01).

Social life and presence of meaning has a significant negative relationship (r= -,255; p<.01). Social life and search for meaning (r= -.097; p>.05), social life and resilience (r= -.098; p>.037) have no significant correlation. Social life and resilience have a positive significant correlation (r= .237; p<.01).

Presence of meaning and search for meaning has no significant correlation (r= .075; p>.05). Presence of meaning and resilience has a positive significant correlation (r= .202; p<.01) meanwhile presence of meaning and resilience have a negative significant correlation (r= -.521; p<.01). Search for meaning and resilience has no significant relationship (r= .004; p>.05). Search for meaning and loneliness has a positive significant relationship (r= .207; p<.01). Resilience and loneliness have a negative significant relationship (r= -.201; p<.01).

4.1.2. Results of hierarchical regression analysis.

After Pearson Correlation analysis, to determine the role of socio-demographic variables (age, gender, marital status, social life), meaning in life (both search for meaning and presence components), resilience, and loneliness on life satisfaction over individual 65 years old, hierarchical regression analysis was conducted. In Table 4, the results of the hierarchical regression analysis were presented.

Table 4

Hierarchical Regression Analysis Results for Life Satisfaction of Elderly

Model	Variable	*B*	*Bias*	*t*	*95% Confidence Interval*		*R*	R^2	*F*	*p*
					Lower	Upper				
Model 1							0.282	0.08	6.023	.000
	(Constant)	19.71	-0.017	0.001	14.038	25.646				
	Age	-.048	0	0.245	-0.131	0.03				.245
	Male	.001	-0.001	0.997	-0.649	0.626				.997
	Single	-1.2	-0.002	0.009	-2.06	-0.323				.009
	Once a Week	.771	0.004	0.05	-0.003	1.538				.050
	Few Months	-1.313	0.015	0.044	-2.627	-0.03				.044
Model 2							.555	.308	21.95	.000
	(Constant)	10.37	-.092	.001	5.261	15.53				
	Age	-.021	.001	.505	-.086	0.042				.505
	Male	.191	-.005	.487	-.377	0.739				.487
	Single	-.605	-.013	.089	-1.329	0.098				.089
	Once a Week	-.044	.019	.902	-.733	0.732				.902
	Few Months	-.901	.022	.096	-1.987	0.135				.096
	Presence of Meaning	0.32	-0.001	0.001	0.244	0.388	.			.001

	Search for Meaning	-0.023	0.002	0.453	-0.08	0.04				.453
Model 3							0.569	0.324	20.67	0.000
	(Constant)	9.116	-0.109	0.001	4.077	14.052				
	Age	-0.027	0.001	0.39	-0.09	0.035				.390
	Male	0.179	-0.005	0.518	-0.383	0.723				.518
	Single	-0.58	-0.01	0.093	-1.289	0.115				.093
	Once a Week	0.163	0.018	0.661	-0.541	0.918				.661
	Few Months	-0.665	0.029	0.215	-1.691	0.346				.215
	Presence of Meaning	0.298	-0.001	0.001	0.224	0.37				.001
	Search for Meaning	-0.022	0.002	0.46	-0.081	0.042				.460
	Resilience	0.101	0.002	0.021	0.025	0.188				.021
Model 4							0.586	0.343	19.96	0.000
	(Constant)	13.23	-0.083	0.001	7.357	18.744				
	Age	-0.03	0.001	0.322	-0.092	0.033				.322
	Male	0.258	-0.007	0.349	-0.288	0.797				.349
	Single	-0.485	-0.011	0.157	-1.17	0.207				.157
	Once a Week	0.055	0.014	0.873	-0.636	0.781				.873
	Few Months	-0.584	0.028	0.249	-1.574	0.375				.249
	Presence of Meaning	0.246	-0.002	0.001	0.163	0.327				.001

Search for Meaning	-0.011	0.001	0.718	-0.071	0.053	.718
Resilience	0.087	0	0.04	0.012	0.174	.040
Loneliness	-0.058	0	0.009	-0.102	-0.014	.009

The first model which contained socio-demographic variables (age, gender, marital status, social life) was significant (R = .282, R^2 = .080, F (5,353) = 6.023). It was concluded that age (B=.-.048; p>.01) and being male (B=.001; p>.01) did not significantly predict life satisfaction. However, the results indicated that being single (B= -1.200; p<.01), meeting friends once a week (B= .771; p=.05), meeting friends every 2-3 months (B=-1.313; p<.05) predicted life satisfaction of the elderly. All these variables explained %4.8 of life satisfaction.

In the second model, age (B= -.021; p>.01), being male (B=.191; p>.01), being single (B= -.605; p>.01), meeting friends once a week (B= -.044; p>.01), meeting friends every 2-3 months (B=-.901; p>.01), and searching meaning in life (B= -.023; p>.01) did not predict life satisfaction. But presence of meaning in life (B= .320; p<.01) predicted life satisfaction of elderly. The second model was significant (R= .555, R^2 = .308, F (7; 353) =21,954, p<.01) and explained %30.8 of the variance. Presence of meaning was contributed to these variables 22.8% (Change in R^2 =.228).

In the third model, age (B= -.027; p>.01), being male (B=.179; p>.01), being single (B= -.580; p>.01), meeting friends once a week (B= .163; p>.01), meeting friends every 2-3 months (B=-.665; p>.01), and searching meaning in life (B= -.022; p>.01) did not predict life satisfaction. But presence of meaning in life (B= .298; p<.01), and resilience (B= .101; p<.05) predicted life satisfaction of elderly. The third model was also significant (R= .569, R^2 = .324, F (7; 353) =20.673, p<.01) and explained %32.4 of the variance. The contribution of resilience was 1.6% (Change in R^2 =.016).

Lastly, in the fourth model, it was revealed that age (B= -.030; p>.01), being male (B=-.258; p>.01), being single (B= -.485; p>.01), meeting friends once a week (B= .055; p>.01), meeting friends every 2-3 months (B=-.584; p>.01), and searching meaning in life (B= -.011; p>.01) did not predict life satisfaction. On the other hand, presence of meaning in life (B= .246; p<.01), resilience (B= .087; p<.05), and loneliness (B= -.058; p<.01) predicted life satisfaction of elderly. This model was significant, too (R= .586, R^2 = .343, F (7; 353) =19.958, p<.01). With the contribution of loneliness (1.9%), the explanation rate of the model increased to 34.3%.

Chapter 5

Discussion & Conclusion

This section discusses the complex interplay between meaning in life, resilience, and loneliness, and their collective impact on life satisfaction among individuals aged 65 and over. Through a detailed analysis, the relationships highlighted by existing literature are examined against the backdrop of the findings from this study.

5.1 Discussion of the Predictors of Life Satisfaction

The results of the correlation and regression analyses among sociodemographic variables (age, gender, marital status, social life), meaning in life, resilience, loneliness and life satisfaction were presented and then interpreted. It was yielded that there was no correlation between gender and life satisfaction, and gender did not predict life satisfaction. Similarly, Eshkoor et. al.'s (2015) study didn't show significant difference in life satisfaction in terms of gender. Another study conducted by Saeed and Bokharey (2015) consisted of 111 participants aged between 56-70 years, found out that there were no significant differences between male and female participants. A study done by Jersey Liang (1982) in social gerontology area, also revealed that there was no gender difference regarding life satisfaction. Contrary to the findings of the present study, Kolosnitsyna et. al, (2017) indicated in their study that there were significant gender differences in life satisfaction. According to their results, women who had a job and higher education tend to have higher life satisfaction compared to men. Especially at older times, generally women were not allowed to have an education and work. The fact that Turkish women stay away from education and working life may have caused no gender difference in the current study.

A negative correlation between age and life satisfaction were found in the study however age didn't predict life satisfaction. Eshkoor et al. (2015) also revealed in their 2322 sample sized study that age didn't show any significant difference on life satisfaction among elderly people of Malay. Another cross-sectional survey which was

conducted in India among elderly people (Banjare, 2015) didn't find any significant difference in life satisfaction in terms of age. Recent literature examined a U-shaped relationship between life satisfaction and age (Ree & Alessie, 2011). According to the U graph, young and old adults are happier than middle-aged adults (Galambos et al., 2020). Age 50 stands for the bottom, and after 80's the graph makes a peak. It indicates that while middle age can be a challenging period for life satisfaction, people often find renewed satisfaction and contentment in their later years due to fewer responsibilities. It's a controversial topic whether if it's applicable for everyone or not however studies underlined that there were other significant variables that affect life satisfaction during aging such as birth cohort. Therefore, just like the findings of the current study, many researchers cannot directly predict life satisfaction regarding age.

It was found a negative significant relationship between marital status and life satisfaction. Also, it was concluded that marital status didn't predict life satisfaction consistenly. At the first model, being single was predicting life satisfaction, but the predictive role was dropped after meaning in life added to the second model. A longitudinal study done by Chou and Chi (1999) claimed that marital status didn't play a significant role on life satisfaction. The sample population was consisted of elderly Chinese population of Hong Kong. Like Istanbul, Hong Kong is a crowded city with mixed cultures. On the other hand, marital status is usually pointed out to be a major determinant of life satisfaction with married people usually reporting higher satisfaction because they have emotional support and companionship (Fengler, Danigelis, & Grams, 1982). Eshkoor et. al. (2015) studied life satisfaction and the variables that had an effect on it, found out that Malay people who were living with a partner, showed higher satisfaction compared to the single respondents. It must be noted that the interrelationship between marital status and life satisfaction is not linear or universally applicable. According to the Resource Theory, individuals in relationships such as marriage benefit from shared resources like emotional support, financial stability, social connections. However, as individuals age they may develop alternative resources outside marriage such as friendship, communal activities. Besides, it should be considered that the sample of this study generally had arranged marriages. Moreover, even if they were not happy in their marriage, staying married was thought to be better than nothing, as remaining single or divorce was not considered an option. Even though the predictive role of being single was not

consistent, it might be the reason of its role on life satisfaction of elderly. They didn't choose their partners and they stayed in the marriage although they didn't want to.

Even though a negative significant relationship between social life and life satisfaction were found in the study, the predictive role of social life didn't not significant. At the first model, meeting friends once a week or every 2-3 months had a predictive role for life satisfaction of elderly. However, this role did not continue and dropped after meaning in life added to the second model. According to the study of Palmore and Luikart (1972), social contacts had no significant effect on life satisfaction. On the other hand, the study presented by Amati et. al. (2018), found that frequency of seeing friends had a positive impact on life satisfaction. The researchers underlined the importance of trusting people and sharing problems were crucial in terms of increasing satisfaction of life. Moreover, Okamoto (2018), carried out a study, consisted of 612 people; varied from age 65 to 84 years old and examined the relationship between social activities and life satisfaction among elder people. The results revealed that women felt more satisfied when they were socially active. Social life and active participation are the key factors in the development of life satisfaction (Havighurst, 1961; Litwin and Tur-Sinai, 2015). This could be related to the specific way of social interactions in our sample or other compensatory ways, for example, individual hobbies or family support, which could fulfil the social needs of old people. The researchers underlined the importance of trusting people and sharing problems were crucial in terms of increasing satisfaction of life. There may be other factors at play that overshadow the influence of social life on life satisfaction in this study. For instance, individual differences in personality traits, coping strategies, or external stressors such as financial problems, health issues.

Meaning in life were examined in two components separately; presence of meaning and search for meaning. The presence of meaning was positively correlated with life satisfaction and predicted the life satisfaction of elderly. The results indicated that presence of meaning explained 22.8% of life satisfaction among elderly which means that meaning in life is the most crucial element to increase the life satisfaction of elderly. This result is in line with the literature which asserts that a feeling of purpose and meaning is vital for the psychological well-being and life satisfaction of the elderly (Frankl, 1963; Steger et al., 2006). The existence of the meaning of life is the base on which people understand their life and its experiences, therefore, it is the main source

of their satisfaction and happiness (Steger et al., 2006). A study of Kartol et al. (2023) revealed that individuals who had higher satisfaction of life, find life for meaningful. Another research done in United States (Park et al., 2010) examined the correlation between meaning in life and life satisfaction, and found that presence of meaning was positively correlated with life satisfaction. The literature reveals that older people who have a sense of meaning in their lives are more likely to deal with life's difficulties, hence, the significance of creating a sense of purpose in the elderly was emphasized (Heintzelman & King, 2014). The concept of meaning in life is closely linked with Erik Erikson's Integrity vs. Despair stage of psychosocial development. The feeling of meaning often results from a positive evaluation of one's life experiences, achievements, and relationships. A meaningful life narrative presents a coherent sense of purpose, enhancing overall life satisfaction and facilitating individuals face the end of life with peace and acceptance.

On the other hand, search for meaning and life satisfaction had a negative correlation, and it didn't play a predictive role on life satisfaction. The result of the current study was similar to the findings of Park et al.'s (2010) study. The study done by 731 respondents revealed that the search for meaning had been correlated negatively with life satisfaction. However, Lau et al.'s (2018) study found that there was a significant positive association between the search of meaning and life satisfaction which contradicts with the present study. Baumeister (1991) stated that active search for meaning can also result in life satisfaction. Nevertheless, the mere search for meaning, without a successful resolution, may not increase life satisfaction and on the contrary, it may be related to distress and lower well-being (Steger et al., 2008). Havighurst (1961) noted the importance of continuing to participate in social, physical, and mental activities of older adults to maintain their roles, self-esteem and sense of purpose, which are essential components of a meaningful life in Activity Theory. However, a meaningful life goes beyond mere activity; it involves a deeper sense of purpose, fulfilment, and significance in one's actions and experiences.

Resilience is usually the main factor that is required to have a good life and well-being, mainly in the face of adversities (Masten, 2001). Literature showed that resilience, which is the capacity to withstand and recover from problems is the major factor that helps older people to be happy with their lives (Smith and Hollinger-Smith, 2014). In the study, a significant positive correlation between resilience and life

satisfaction were found and resilience predicted life satisfaction. A longitudinal study of Song and Li (2023) stated that resilience played a mediating role in life satisfaction. The findings are also supported by a research done by Beutel et al. (2010), which was consisted of 2144 German men. Their research revealed that life satisfaction is strongly correlated with resilience. Lazarus & Folkman's (1984) theory of Transactional Model of Stress and Coping explains the outcomes of the current study. The model proposes that individuals assess stressful situations based on their perceived ability to cope with them and resilience provides effective coping strategies to mitigate stressors. Similarly, in the study elderly who had higher resilience showed greater life satisfaction. Besides personal aspects of resilience, a part of the data might be explained by Istanbul's strong historical background which probably affected collective resilience. The elderly residents who saw war, economic crises, witnessed harsh political regimes have different perspectives through difficult situations and ability to cope with it which may lead to higher satisfaction. Thus, Cohn et al. (2009), highlighted those positive emotions support resilience which develops resources for living well, eventually increases life satisfaction of the individual. It is crucial to focus on increasing resilience in interventions and emphasize the need for policies that support community-based services, age-friendly environments, and improved service accessibility and funding. Introducing programs which promote psychological well-being through recreation and group therapy are fundamental for enhancing the quality of life for older adults.

Finally, the result of the study revealed that loneliness and life satisfaction had a negative significant relationship, and loneliness predicted life satisfaction. The findings are supported by the literature. Loneliness can exacerbate feelings of despair and discontent, significantly impacting the overall well-being and life satisfaction of older adults (Cacioppo et al., 2006). A research conducted of 179 elderly people by Szcześniak et al. (2020) revealed that loneliness was negatively correlated with life satisfaction. A longitudinal ageing study done in India, with a sample size of 31,464 individuals aged 60 years and above, revealed that elderly people who reported loneliness had low life satisfaction (Muhammad et al., 2023). Besides, Lou and Ng (2012) also revealed that social isolation has a detrimental outcome on the quality of life of elderly people by reducing their level of happiness and raising the prevalence of mental disorders. Similar to Türkiye, Chinese culture supported the culture of

extended family living which encourages social relations and family support. However, the social change in the country is increasing the elderly population who live alone, which is against the traditional Chinese culture and brings up the loneliness issue. Furthermore, the authors endorsed the key role of resilience which is made up of factors that could reduce loneliness. Additionally, Song and Li (2023) underlined that services like community support include life care, health services, and social activities to improve their well-being; enhance the physical well-being of elderly people, decrease the likelihood of developing chronic diseases, and encourage interaction with others, which can prevent loneliness and increase the quality of life. Also, results of a study done by University of the Third Age (Koçak, 2024) showed that there is a weaker negative correlation between loneliness and life satisfaction compared to the non-participants. This means that the educational and social programs offered by University of the Third Age can help reduce the impact of loneliness. Studying is not only an enriching way to occupy the mind but also a way to develop interactions and social connections which help eliminate loneliness.

The outcome of the current study might be explained by Social Support Theory and Self-Determination Theory. Social Support Theory suggests that social relationships and networks play a crucial role in promoting well-being and buffering against stressors. According to this theory, individuals with low levels of loneliness have access to strong social support systems, which provide emotional support a sense of belonging. Similarly, Self-Determination Theory claimed that feeling socially connected and supported allows individuals to experience a sense of belonging and fulfilment, contributing to overall well-being. Another reason of the outcome might be due to cultural effects. Collectivist cultures like in Türkiye, often have strong social support structures, such as extended family networks, which can mitigate feelings of loneliness and enhance life satisfaction. Individuals in collectivist cultures may feel a greater sense of security and belonging within their social groups, which can contribute to overall life satisfaction. Özmete (2008) also stressed the role of family support in the context of elderly people and recommend that the changes of policies increasing people's well-being and provision of housing for elderly citizens are necessary.

To summarize, the presence of meaning, resilience and loneliness predicted life satisfaction of elderly.

5.2 Conclusion

In this study, which examined the predictive role of meaning in life, resilience, and loneliness on life satisfaction among 65 years aged + above individuals, the following results were reached.

- There was no correlation between life satisfaction and gender.
- There was a negative correlation between life satisfaction and age.
- There was a negative correlation between life satisfaction and marital status.
- There was a negative correlation between life satisfaction and social life.
- There was a positive correlation between life satisfaction and the presence of life.
- There was a negative correlation between life satisfaction and searching for meaning.
- There was a positive correlation between life satisfaction and resilience.
- There was a negative correlation between life satisfaction and loneliness.
- Gender didn’t predict life satisfaction.
- Age didn’t predict life satisfaction.
- Marital status didn’t predict life satisfaction.
- Social life didn’t predict life satisfaction.
- The presence of meaning predicted life satisfaction.
- The search for meaning didn’t predict life satisfaction.
- Resilience predicted life satisfaction.
- Loneliness predicted life satisfaction.

5.3 Recommendations

5.3.1 Recommendations for Researcher

- **Expand the Sample Size and Geographic Scope:** Future studies should be oriented to the collection of data from the larger and more diverse sample in the different parts of Türkiye. This way the results would be more applicable and generalizable.

- **Longitudinal Studies:** Carrying out longitudinal studies to see the changes in life satisfaction and its predictors over time will be a better way to comprehend the dynamics and causal connections of these variables.

- **Broader the research:** Increasing the number of studies on the elderly to better comprehend their peculiar needs and the reasons that make their life happy or unhappy is recommended since the population is aging and the old people have specific problems that they have to face. Researchers can build on this study's insights to explore other factors that may influence life satisfaction and psychological well-being, such as cultural differences, environmental factors, and personal history.

5.3.2 Recommendations for Practitioners

The findings of this research have practical implications for policymakers, healthcare practitioners, and community organizations.

- **Develop Special Programs:** The results of this study call for the development of preventive approaches and education programs that would enhance life satisfaction and promote social and educational engagement of elderly people to enhance the quality of their lives. The programs should focus on the importance of having a purpose and meaning in life, and improving resilience at the same time as they deal with loneliness and social isolation.

- **Create Social Environments:** To make the elderly feel they are not alone and to be able to communicate with other people, supportive social environments must be created. Such environments may be community centers, social clubs, and other projects that are directed to the socialization and the involvement of people in social life. Some of the programs that are targeted at increasing social connectedness, providing opportunities for meaningful engagement, and fostering coping skills may improve the overall quality of life and well-being of older people. Intervention strategies that support social inclusion and ensure that lonely people are given access to meaningful social roles within their communities can go a long way in reducing loneliness.

- **Modifying Policies:** Healthcare policies that make health care more accessible, social policies that encourage social activity, and education and training policies that allow seniors to continue learning and growing on their own can all make a senior's life much better.

The conclusions drawn suggest the need to adopt culturally sensitive strategies to improve the quality of life of the elderly who are often alone. The policy should give a green light to older adults living alone and encourage the formation of various social support networks. This could enhance coping and well-being hence enhanced psychological health which is in harmony with the culture of unity and support from the family and the community.

REFERENCES

Aartsen, M., & Jylhä, M. Onset of loneliness in older adults: results of a 28 year prospective study. *European Journal of Ageing, 8*, 31–38 (2011). https://doi.org/10.1007/s10433-011-0175-7

Adams, K.B., Sanders, S. & Auth, E.A. (2004). Loneliness and depression in independent living retirement communities: risk and resilience factors. *Aging & Mental Health*, 8(6), 475–485. https://doi.org/10.1080/13607860410001725054.

Ahern, N. R., Ark, P., & Byers, J. (2008). Resilience and coping strategies in adolescents. *Paediatric Care*, *20*(10), 32–36. https://doi.org/10.7748/paed2008.12.20.10.32.c6903

Akhter-Khan, S.C., Prina, M., Wong, G.H.Y., Mayston, R. & Li, L. (2022). Understanding and addressing older adults' loneliness: The social relationship expectations framework. Perspectives on Psychological Science, 18(4), p.174569162211272. https://doi.org/10.1177/17456916221127218.

Amati, V., Meggiolaro, S., Rivellini, G. *et al.* (2018). Social relations and life satisfaction: the role of friends. *Genus* 74, 7. https://doi.org/10.1186/s41118-018-0032-z.

American Psychological Association (2002). *The road to resilience*. [online] Apa.org. Available at: https://www.apa.org/monitor/oct02/pp [Accessed 15 Oct. 2023].

Arber, S. & Ginn, J. (1991). *Gender and later life*. Sage Publications (CA).

Arber, S., & Timonen, V. (Eds.). (2012). *Contemporary grandparenting: Changing family relationships in global contexts* (1st ed.). Bristol University Press. https://doi.org/10.2307/j.ctt9qgrr8

Atkinson, R., & Flint, J. (2001). Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social Research Update*, *33*, 1-4.

Babbie, E. (2016). *The Practice of Social Research* (14th ed.). Cengage Learning.

Baltes, P.B. & Smith, J. (2003). New frontiers in the future of aging: from successful aging of the young old to the dilemmas of the fourth age. *Gerontology*, *49*(2), 123–135. https://doi.org/10.1159/000067946.

Banjare, P., Dwivedi, R. & Pradhan, J. (2015). Factors associated with the life satisfaction amongst the rural elderly in Odisha, India. *Health Quality Life Outcomes 13,* 201. https://doi.org/10.1186/s12955-015-0398-y

Beehr, T.A. & Bennett, M.M. (2007). *Aging and Work in the 21st Century*. *Psychology Press eBooks*. https://doi.org/10.4324/9780203936948.

Belsiyal, X., Panghal, C., Rawat, V. & Dhar, M. (2022). Impact of cognitive impairment on activities of daily living among older adults of North India. *Journal of Family Medicine and Primary Care*, 11(11), 6909. https://doi.org/10.4103/jfmpc.jfmpc_266_22.

Ben-Zur, H. (2012). Loneliness, optimism, and well-being among married, divorced, and widowed individuals. *The Journal of Psychology*, 146(1-2), pp.23–36. https://doi.org/10.1080/00223980.2010.548414.

Beutel, M. E., Glaesmer, H., Wiltink, J., Marian, H., & Brähler, E. (2010). Life satisfaction, anxiety, depression and resilience across the life span of men. *The Aging Male*, *13*(1), 32–39. https://doi.org/10.3109/13685530903296698

Biddle, B.J. (1986). Recent developments in role theory. *Annual Review of Sociology*, 12(1), 67–92. https://doi.org/10.1146/annurev.so.12.080186.000435.

Biernacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research, 10*(2), 141-163. https://doi.org/10.1177/004912418101000205

Bonanno, G.A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, 59(1), 20–28. https://doi.org/10.1037/0003-066x.59.1.20.

Bowling, A. (2008). Enhancing later life: How older people perceive active ageing? *Aging & Mental Health*, 12(3), 293–301. https://doi.org/10.1080/13607860802120979.

Cacioppo, J.T., Hughes, M.E., Waite, L.J., Hawkley, L.C. & Thisted, R.A. (2006). Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. *Psychology and Aging*, 21(1), 140–151. https://doi.org/10.1037/0882-7974.21.1.140.

Carr, D. & Springer, K.W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, *72*(3), 743–761. https://doi.org/10.1111/j.1741-3737.2010.00728.x

Carver, C.S. (1998). Resilience and thriving: issues, models, and linkages. *Journal of Social Issues*, 54(2), 245–266. https://doi.org/10.1111/0022-4537.641998064.

Chen, C. (2001). Aging and life satisfaction. *Social Indicators Research*, 54, 57–79. https://doi.org/10.1023/A:1007260728792

Chloe, L., Anita, F. & Claire, A. (2018). Resiliency, meaning in life, and life satisfaction: an examination of moderating effects. *Acción Psicológica*, 15(2), 5-14. https://doi.org/10.5944/ap.15.2.22256

Choi, K., Jeon, G.S. & Jang, K.S. (2020). Gender differences in the impact of Intergenerational Support on Depressive Symptoms among Older Adults in Korea. *International Journal of Environmental Research and Public Health*, 17(12), 4380. https://doi.org/10.3390/ijerph17124380.

Chou, K. L., & Chi, I. (1999). Determinants of life satisfaction in Hong Kong Chinese elderly: A longitudinal study. *Aging & Mental Health*, *3*(4), 328–335. https://doi.org/10.1080/13607869956109

Cohen, L., Manion, L., & Morrison, K. (2013). *Research Methods in Education* (7th ed.). Routledge.

Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: positive emotions increase life satisfaction by building resilience. *Emotion, 9*(3), 361–368. https://doi.org/10.1037/a0015952

Comi, S.L., Cottini, E. & Lucifora, C. (2022). The effect of retirement on social relationships. *German Economic Review*, 23(2), 275–299. https://doi.org/10.1515/ger-2020-0109.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed Methods Approaches* (5th Ed.). SAGE Publications.

Creswell, J.W. & Creswell, J.D. (2023). *Research design* (6th ed. SAGE Publications.

Dağlı, A. & Baysal, N. (2016). Yaşam doyumu ölçeğinin Türkçe'ye uyarlanması: Geçerlik ve güvenirlik çalışması. *Elektronik Sosyal Bilimler Dergisi*, 15(59), 1250-1262.

Delli Pizzi, S., Padulo, C., Brancucci, A., Bubbico, G., Edden, R. A., Ferretti, A., Franciotti, R., et al. (2016). GABA content within the ventromedial prefrontal cortex is related to trait anxiety. *Social cognitive and affective neuroscience*, 11(5), 758–766. https://doi.org/10.1093/scan/nsv155

Demirbaş Çelik, N. (2010). yaşamda anlam ve yılmazlık meaning in life and ego-resilience. *Hacettepe Üniversitesi*, https://doi.org/10.13140/RG.2.2.21550.41288.

Demirbaş, N., & İşmen Gazioğlu, E. (2015). Yaşamda anlam ölçeği lise formu: Türkçe geçerlik ve güvenirliği. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 1*(33), 42-60. https://doi.org/10.21764/efd.88480

Denckla, C.A., Cicchetti, D., Kubzansky, L.D., Seedat, S., Teicher, M.H., Williams, D.R. and Koenen, K.C. (2020). Psychological resilience: an update on definitions, a critical appraisal, and research recommendations. *European Journal of Psychotraumatology*, 11(1), 1822064. https://doi.org/10.1080/20008198.2020.1822064.

Diener, E., Emmons, R.A., Larsen, R.J. and Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), pp.71–75. https://doi.org/10.1207/s15327752jpa4901_13.

Doğan, T. (2015) Kısa psikolojik sağlamlık ölçeği'nin türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. *The Journal of Happiness & Well-Being.* 3(1), 93-102.

Dolan, P., Peasgood, T. & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1), 94–122. https://doi.org/10.1016/j.joep.2007.09.001.

Donovan, N.J. & Blazer, D. (2020). social isolation and loneliness in older adults: review and commentary of a national academies report. *The American Journal of Geriatric Psychiatry*, 28(12), 1233–1244. https://doi.org/10.1016/j.jagp.2020.08.005.

Durak, M., & Senol-Durak, E. (2010). Psychometric qualities of the UCLA Loneliness Scale-Version 3 as applied in a Turkish culture. *Educational Gerontology*, *36*(10-11), 988–1007. https://doi.org/10.1080/03601271003756628

Dykstra, P.A. (2009). Older adult loneliness: myths and realities. *European Journal of Ageing*, [online] 6(2), pp.91–100. https://doi.org/10.1007/s10433-009-0110-3.

Dykstra, P.A. & Fokkema, T. (2007). social and emotional loneliness among divorced and married men and women: comparing the deficit and cognitive perspectives. *Basic and Applied Social Psychology*, 29(1), 1–12. https://doi.org/10.1080/01973530701330843.

Easterlin, R. A. (2001). Income and Happiness: Towards a Unified Theory. *The economic journal*, 111, 465-484. http://doi.org/10.1111/1468-0297.00646

Ercan Şahin, N., & Üzar Özçetin, Y. S. (2020). Huzurevinde yaşayan yaşlı bireylerin yaşam doyumu ve umutsuzluk düzeyi. *Mersin Üniversitesi Sağlık Bilimleri Dergisi, 13*(2), 167-176. https://doi.org/10.26559/mersinsbd.674370

Erikson, E.H. (1982). *The Life Cycle Completed*. New York: W.W. Norton.

Erol, S., Sezer, A., Şişman, F. N., Öztürk, S. (2016). Yaşlılarda yalnızlık algısı ve yaşam doyumu. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi, 5*(3), 60-69.

Eshkoor, S. A., Hamid, T. A., Mun, C. Y., & Shahar, S. (2015). An investigation on predictors of life satisfaction among the elderly. *IJASOS- International E-Journal of Advances in Social Sciences*, *1*(2), 207-212. https://doi.org/10.18769/ijasos.86859

Feder, A., Nestler, E.J. & Charney, D.S. (2009). Psychobiology and molecular genetics of resilience. *Nature Reviews Neuroscience*, [online] 10(6), 446–457. https://doi.org/10.1038/nrn2649

Fengler, A. P., Danigelis, N., & Little, V. C. (1983). Later life satisfaction and household structure: living with others and living alone. *Ageing and Society*, *3*(3), 357–377. https://doi:10.1017/S0144686X00010230

Folkman, S. (2013). *Stress: Appraisal and Coping*. In: Gellman, M.D., Turner, J.R. (eds) Encyclopedia of Behavioral Medicine. Springer, New York, NY. https://doi.org/10.1007/978-1-4419-1005-9_215

Fowler, F. J. (2013). *Survey Research Methods* (5th ed.). SAGE Publications.

Frankl, V.E. (1984). *Man's search for meaning: an introduction to logotherapy*. New York: Simon & Schuster.

Freak-Poli, R., Kung, C.S.J., Ryan, J. and Shields, M.A. (2022). Social isolation, social support, and loneliness profiles before and after spousal death and the buffering role of financial resources. *The Journals of Gerontology: Series B*, 77(5), 956–971. https://doi.org/10.1093/geronb/gbac039.

Galambos, N. L., Krahn, H. J., Johnson, M. D., & Lachman, M. E. (2020). The U shape of happiness across the life course: expanding the discussion. *Perspectives on psychological science: a journal of the Association for Psychological Science*, *15*(4), 898–912. https://doi.org/10.1177/1745691620902428

Gerino, E., Rollè, L., Sechi, C. and Brustia, P. (2017). Loneliness, resilience, mental health, and quality of life in old age: A Structural Equation Model. Frontiers in Psychology, 8. https://doi.org/10.3389/fpsyg.2017.02003.

Gil-Lacruz, M., Saz-Gil, M.I. and Gil-Lacruz, A.I. (2019). Benefits of older volunteering on well-being: An international comparison. Frontiers in Psychology, 10. https://doi.org/10.3389/fpsyg.2019.02647.

Gizir, C. (2007). Psikolojik Sağlamlık, risk faktörleri ve koruyucu faktörler üzerine bir derleme çalışması. *Turkish Psychological Counseling and Guidance Journal*, *3*(28), 113-128.

Greenberg, M. T. (2006). Promoting resilience in children and youth. *Annals of the New York Academy of Sciences*, *1094*(1), 139–150. https://doi.org/10.1196/annals.1376.013

Golzar, J., Noor, S., & Tajik, O. (2022). Convenience sampling. *International Journal of Education & Language Studies*, *1*(2), 72-77. https://doi.org/10.22034/ijels.2022.162981<

Goodman, L.A. (1961). Snowball sampling. *Annals of Mathematical Statistics*, *32*, 148-170. https://doi.org/10.1214/aoms/1177705148

Hank, K. & Jürges, H. (2007). Gender and the division of household labor in older couples. *Journal of Family Issues*, 28(3), 399–421. https://doi.org/10.1177/0192513x06296427.

Havighurst, R.J. (1961). Successful aging. *The Gerontologist*, [online] 1(1), 8–13. https://doi.org/10.1093/geront/1.1.8.

Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine 40*(2), 218–227. https://doi.org/10.1007/s12160-010-9210-8.

Hawkley, L.C. & Kocherginsky, M. (2017). Transitions in loneliness among older adults: a 5-year follow-up in the national social life, health, and aging project. *Research on Aging*, 40(4), 365–387. https://doi.org/10.1177/0164027517698965.

Hayat, Saba & Khan, Saira & Sadia, Rayna. (2016). Resilience, wisdom, and life satisfaction in elderly living with families and in old-age homes. *Pakistan Journal of Psychological Research*. 31 (2), 475-494.

Heintzelman, S.J. & King, L.A. (2014). Life is pretty meaningful. *American Psychologist*, 69(6), 561–574. https://doi.org/10.1037/a0035049.

Hildon, Z., Smith, G., Netuveli, G. & Blane, D. (2008). Understanding adversity and resilience at older ages. *Sociology of Health & Illness*, 30(5), 726–740. https://doi.org/10.1111/j.1467-9566.2008.01087.x.

Hopper, E. (2024, February 24). Maslow's hierarchy of needs explained. https://www.christianworldmedia.com/client/docs/603_1585079540_17.pdf

Hsieh, C. M (2004). Income and financial satisfaction among older adults in the united states. *Social Indicators Research* 66, 249–266. https://doi.org/10.1023/B:SOCI.0000003585.94742.aa

Hsieh, N. & Hawkley, L. (2017). Loneliness in the older adult marriage. *Journal of Social and Personal Relationships*, 35(10), 1319–1339. https://doi.org/10.1177/0265407517712480.

Hupkens, S., Machielse, A., Goumans, M. & Derkx, P. (2016). Meaning in life of older persons: An integrative literature review. *Nursing Ethics*, 25(8), 973–991. https://doi.org/10.1177/0969733016680122.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: a research paradigm whose time has come. Educational Researcher, 33(7), 14-26. https://doi.org/10.3102/0013189X033007014

Kaçan Softa, H., Ulaş Karaahmetoğlu, G., Erdoğan, O., Yavuz, S. (2015). Yaşlılarda yaşam doyumunu etkileyen bazı faktörlerin incelenmesi. *Yaşlı Sorunları Araştırma Dergisi*, *8*(1), 12-21.

Kalelioglu, U.B. (2021). Replicability: 21st century crisis of the positivist social sciences. *Uluslararası Sosyal Bilgilerde Yeni Yaklaşımlar Dergisi (IJONASS)*, 5(2), 400-425. https://doi.org/10.38015/sbyy.1003103.

Kalınkara, V. (2023). Aging perception and life satisfaction in older adults. *Yaşlı Sorunları Araştırma Dergisi*. 16(1), 23-33. https://doi.org/10.46414/yasad.1261637.

Kapıkıran, Ş. (2016). Yaşlılarda yalnızlık ile yaşam doyumu arasındaki ilişki: sosyal desteğin aracılık rolünün sınanması. *Yaşlı Sorunları Araştırma Dergisi, 9*(1), 13-25.

Kayhan Koçak, F., Karapınar, A., Yılmaz, M., Eryuva, H., Ergin, I., Akçiçek, S. (2024). The quality of life and loneliness among older adults in third age university: case control study. *Aging Medicine and Healthcare*. https://doi.org10.33879/AMH.XXX.2023.04040 (in press)

Kiliç, D., Türkoğlu, N., Adibelli, D., & Armut, S., (2016). Geriatrik yaş grubundaki kişilerin yaşam doyumu ve yaşam tutum profilleri arasındaki ilişki. *Cumhuriyet Hemşirelik Dergisi*,5, 1-8.

Kim, B.J., Chen, L., Xu, L. & Lee, Y. (2021). Self-rated health and subjective economic status in life satisfaction among older chinese immigrants: A cross-sectional study. *Healthcare*, 9(3), p.342. https://doi.org/10.3390/healthcare9030342.

Kolosnitsyna, M., Khorkina, N., & Dorzhiev, H. (2017). Determinants of life satisfaction in older Russians. *Ageing International*, *42*(3), 354–373. https://doi.org/10.1007/s12126-017-9297-3

Krause, N. (2007). Longitudinal study of social support and meaning in life. *Psychology and Aging*, [online] 22(3), 456–469. https://doi.org/10.1037/0882-7974.22.3.456.

Lars Tornstam (2005). *Gerotranscendence: A developmental theory of positive aging*. New York: Springer Pub. Co.

Lavretsky, H. (2014). *Resilience and aging: Research and practice*. Baltimore: Johns Hopkins University Press.

Lawton, M. P., & Nahemow, L. (1973). Ecology and the aging process. The psychology of adult development and aging. *American Psychological Association*, 619-674.

Liang, J. (1982). Sex Differences in Life Satisfaction among the Elderly, *Journal of Gerontology*, 37(1), 100–108, https://doi.org/10.1093/geronj/37.1.100

Litwin, H. & Tur-Sinai, A. (2015). The role of the social network in early retirement among older europeans. *Work, aging and retirement*, 1(4), 340–349. https://doi.org/10.1093/workar/wav013.

Lin, Y., Xiao, H., Lan, X., Wen, S. (2020) Living arrangements and life satisfaction: mediation by social support and meaning in life. *BMC Geriatrics 20*, 136 https://doi.org/10.1186/s12877-020-01541-8

Long, C.R., Seburn, M., Averill, J.R. & More, T.A. (2003). Solitude experiences: varieties, settings, and individual differences. *Personality and Social Psychology Bulletin*, 29(5), 578–583. https://doi.org/10.1177/0146167203029005003.

Lou, V.W.Q. & Ng, J.W. (2012). Chinese older adults' resilience to the loneliness of living alone: A qualitative study. *Aging & Mental Health, 16*(8), 1039–1046. https://doi.org/10.1080/13607863.2012.692764.

Lucas, R.E. (2005). Time does not heal all wounds: A longitudinal study of reaction and adaptation to divorce. *Psychological Science*, 16(12), 945–950. https://doi.org/10.1111/j.1467-9280.2005.01642.x.

Malhotra, N. K., & Wong, N. Y. (2020). *Marketing research: An applied approach* (5th ed.). Pearson Education.

Malli, M.A., Ryan, S., Maddison, J. & Kharicha, K. (2022). Experiences and meaning of loneliness beyond age and group identity. *Sociology of Health & Illness*, 45(1). https://doi.org/10.1111/1467-9566.13539.

Mandi, R. & Bansod, D.W. (2023). Exploring the nexus of health and happiness: A study on the life satisfaction of urban elderly in India. *Clinical Epidemiology and Global Health*, [online] 21, 101308. https://doi.org/10.1016/j.cegh.2023.101308.

Mansfield, L., Victor, C., Meads, C., Daykin, N., Tomlinson, A., Lane, J., Gray, K., & Golding, A. (2021). A conceptual review of loneliness in adults: Qualitative evidence synthesis. *International Journal of Environmental Research and Public Health*, *18*(21), 11522. https://doi.org/10.3390/ijerph182111522

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, *50*(4), 370–396. https://doi.org/10.1037/h0054346

Masten, A.S. (2014). Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6–20. https://doi.org/10.1111/cdev.12205.

McEwen, B.S. (2000). The neurobiology of stress: from serendipity to clinical relevance. *Brain Research*, 886(1-2), 172–189. https://doi.org/10.1016/s0006-8993(00)02950-4.

Moody, H. R., & Sasser, J. R. (2018). *Aging: concepts and controversies*. SAGE Publications.

Muhammad, T., Pai, M., Afsal, K., Saravanakumar, P., & Irshad, C. V. (2023). The association between loneliness and life satisfaction: examining spirituality, religiosity,

and religious participation as moderators. *BMC Geriatrics*, *23*(1), 301. https://doi.org/10.1186/s12877-023-04017-7

Mushtaq, R., Shoib, S., Shah, T. & Mushtaq, S. (2014). Relationship between loneliness, psychiatric disorders and physical health. A review on the psychological aspects of loneliness. *Journal of Clinical and Diagnostic Research*, 8(9), 1-4. https://doi.org/10.7860/jcdr/2014/10077.4828.

Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology: Theory & Practice*, *11*(4), 327–344. https://doi.org/10.1080/13645570701401305

Okamoto, H. (2008). Effects of social activities on life satisfaction among the elderly: Four Aspects in Men and Women. *Japanese Journal of Public Health, 55*, 388-395.

Ong, A.D., Bergeman, C.S. & Boker, S.M. (2009). Resilience comes of age: Defining features in later adulthood. *Journal of Personality*, [online] 77(6), 1777–1804. https://doi.org/10.1111/j.1467-6494.2009.00600.x.

Özmete, D. D. E. (2008). Yaşlılıkta yaşamın anlamının refah göstergeleri ile yordanması. *Sosyal Politika Çalışmaları Dergisi, 15*(15), 7-20. https://doi.org/10.21560/spcd.56132

Palmore, E., & Luikart, C. (1972). Health and social factors related to life satisfaction. *Journal of Health and Social Behavior*, *13*(1), 68–80. https://doi.org/10.2307/2136974

Papi, S. & Cheraghi, M. (2021). Multiple factors associated with life satisfaction in older adults. *Menopausal Review*, 20(2), 65–71. https://doi.org/10.5114/pm.2021.107025.

Park, N., Park, M., & Peterson, C. (2010). When is the search for meaning related to life satisfaction? *Applied Psychology: Health and Well-Being*, *2*(1), 1–13. https://doi.org/10.1111/j.1758-0854.2009.01024.x

Park, Y.S., Konge, L. & Artino, A.R. (2020). The positivism paradigm of research. *Academic Medicine*, [online] 95(5), 690–694. https://doi.org/10.1097/ACM.0000000000003093.

Parker, C., Scott, S. & Geddes, A. (2019). Snowball sampling. *SAGE Research Methods Foundations*.

Pavot, W. & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The Journal of Positive Psychology*, 3(2), 137–152. https://doi.org/10.1080/17439760701756946.

Perlman, D., & Peplau, L. A. (1984). Loneliness research: A survey of empirical findings. In L. A. Peplau & S. E. Goldston (Eds.), *Preventing the harmful consequences of severe and persistent loneliness* (pp. 13–46). National Institute of Mental Health.

Pinquart, M. (2002). Creating and maintaining purpose in life in old age: A meta-analysis. *Ageing International*, 27(2), 90–114. https://doi.org/10.1007/s12126-002-1004-2.

Pinquart, M. & Sorensen, S. (2001). gender differences in self-concept and psychological well-being in old age: A meta-analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(4), P195–P213. https://doi.org/10.1093/geronb/56.4.p195.

Pinquart, M., & Sörensen, S. (2000). Influences of socioeconomic status, social network, and competence on subjective well-being in later life: A meta-analysis. *Psychology and Aging*, *15*(2), 187–224. https://doi.org/10.1037/0882-7974.15.2.187

Posner, R. A. (1997). *Aging and Old Age*. University of Chicago Press.

Povedano-Diaz, A., Muñiz-Rivas, M., & Vera-Perea, M. (2019). Adolescents' life satisfaction: The role of classroom, family, self-concept and gender. *International journal of environmental research and public health*, *17*(1), 19. https://doi.org/10.3390/ijerph17010019

Ree, J., & Alessie, R. (2011a). Life satisfaction and age: Dealing with under-identification in age-period-cohort models. *Social Science & Medicine*, *73*(1), 177–182. https://doi.org/10.1016/j.socscimed.2011.04.008

Rogers, C.R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston: Houghton Mifflin.

Ross, A., Willson, V.L. (2017). Hierarchical multiple regression analysis using at least two sets of variables (in two blocks). In: Basic and Advanced Statistical Tests. Sense Publishers, Rotterdam. https://doi.org/10.1007/978-94-6351-086-8_10

Rowe, J.W. & Kahn, R.L. (1997). Successful aging. *The Gerontologist*, [online] 37(4), 433–440. https://doi.org/10.1093/geront/37.4.433.

Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment, 66*(1), 20–40. https://doi.org/10.1207/s15327752jpa6601_2

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316–331.https://doi.org/10.1111/j.1939-0025.1987.tb03541.x.

Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, *1094*(1), 1–12. https://doi.org/10.1196/annals.1376.002

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069

Saeed F, Bokharey IZ (2016) Gender differences, life satisfaction, its correlate and death anxiety in retirement. Journal of Psychology & Clinical Psychiatry 5(2): 00280. https://doi.org/10.15406/jpcpy.2016.05.00280

Sahin, N. & Ozcetin, Y.S. (2020). Huzurevinde yaşayan yaşlı bireylerin yaşam doyumu ve umutsuzluk düzeyi. *Mersin Üniversitesi Sağlık Bilimleri Dergisi, 13(2),* 167–176. https://doi.org/10.26559/mersinsbd.674370.

Salkind, N. J. (2010). Encyclopedia of research design. SAGE Publications.

Seligman, M.E.P. (2013). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York: Free Press.

Shatté, A., Perlman, A., Smith, B. & Lynch, W.D. (2017). The positive effect of resilience on stress and business outcomes in difficult work environments. *Journal of*

Occupational and Environmental Medicine, 59(2), 135–140. https://doi.org/10.1097/jom.0000000000000914.

Simkus, J. (2023). *Convenience sampling: Definition, method and examples*. [online] www.simplypsychology.org. Available at: https://www.simplypsychology.org/convenience-sampling.html

Singh, A. & Misra, N. (2009). Loneliness, depression and sociability in old age. *Industrial Psychiatry Journal*, [online] 18(1), 51–55. https://doi.org/10.4103/0972-6748.57861.

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194–200. https://doi.org/10.1080/10705500802222972

Smith, J. A. (2003). *Qualitative psychology: A practical guide to research methods*. SAGE Publications.

Smith, J.L. & Hollinger-Smith, L. (2014). Savoring, resilience, and psychological well-being in older adults. *Aging & Mental Health*, 19(3), 192–200. https://doi.org/10.1080/13607863.2014.986647.

Song, H. & Li, Z. (2023). Community-based service, psychological resilience and life satisfaction among Chinese older adults: A longitudinal study. *Geriatric Nursing*, *54*, 148–154. https://doi.org/10.1016/j.gerinurse.2023.09.004.

Southwick, S.M., Sippel, L., Krystal, J., Charney, D., Mayes, L. & Pietrzak, R. (2016). Why are some individuals more resilient than others: the role of social support. *World Psychiatry*, [online] 15(1), 77–79. https://doi.org/10.1002/wps.20282.

St. John, P.D. and Montgomery, P.R. (2010). Cognitive impairment and life satisfaction in older adults. *International Journal of Geriatric Psychiatry*, 25(8), 814–821. https://doi.org/10.1002/gps.2422.

Steger, M. F. (2009). Meaning in life. In S. J. Lopez & C. R. Snyder (Eds.), *Oxford handbook of positive psychology* (pp. 679–687). Oxford University Press.

Stein, M.B., Campbell-Sills, L. & Gelernter, J. (2009). Genetic variation in 5HTTLPR is associated with emotional resilience. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, 150B(7), 900–906. https://doi.org/10.1002/ajmg.b.30916.

Steptoe, A., Deaton, A. & Stone, A.A. (2015). Subjective wellbeing, health, and ageing. *The Lancet*, [online] 385(9968), 640–648. https://doi.org/10.1016/s0140-6736(13)61489-0.

Schneider, S., Junghaenel, D. U., Meijer, E., Zelinski, E. M., Jin, H., Lee, P.-J., et al. (2022). Quality of survey responses at older ages predicts cognitive decline and mortality risk. *Innovation in Aging*, *6*(3). https://doi.org/10.1093/geroni/igac027

Szcześniak, M., Bielecka, G., Madej, D., Pieńkowska, E. & Rodzeń, W. (2020). The role of self-esteem in the relationship between loneliness and life satisfaction in late adulthood: Evidence from Poland. *Psychology Research and Behavior Management*, 13, 1201–1212. https://doi.org/10.2147/prbm.s275902.

Teo, T. (2018). The consequences of 'positivism' in psychology. *Outline of Theoretical Psychology*, 8, 103–132. https://doi.org/10.1057/978-1-137-59651-2_5.

Tugade, M.M. & Fredrickson, B.L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320–333. https://doi.org/10.1037/0022-3514.86.2.320.

Tüik Kurumsal. (2024, March 27). *İstatisklerle Yaşlılar 2023*. TÜİK. dihttps://data.tuik.gov.tr/Bulten/Index?p=Istatistiklerle-Yaslilar-2023-53710#:~:text=Ya%C5%9Fl%C4%B1%20n%C3%BCfusun%20%250%2C1',y%C4%B1l%C4%B1nda%206%20bin%20609%20oldu.&text=Ya%C5%9Fl%C4%B1%20n%C3%BCfusun%20toplam%20n%C3%BCfus%20i%C3%A7indeki%20oran%C4%B1n%C4%B1n%20%10%2C0'%C4%B1,bir%20h%C4%B1z%20ile%20art%C4%B1%C5%9F%20g%C3%B6ster.

Uchino, B.N. & Rook, K.S. (2020). Emotions, relationships, health and illness into old age. *Maturitas*, 139, 42–48. https://doi.org/10.1016/j.maturitas.2020.05.014.

Ungar, M. (2011). The social ecology of resilience: addressing contextual and cultural ambiguity of a nascent construct. *The American Journal of Orthopsychiatry*, [online] 81(1), 1–17. https://doi.org/10.1111/j.1939-0025.2010.01067.x.

Ungar, M. (2013). Resilience, trauma, context, and culture. *Trauma, Violence, & Abuse*, 14(3), 255–266. https://doi.org/10.1177/1524838013487805.

Veenhoven, R. (1996). The study of life satisfaction. In W. E. Saris, R. Veenhoven, A. C. Scherpenzeel, & B. Bunting (Eds.), *A Comparative Study of Satisfaction with Life in Europe* (pp. 11-48, Chapter 1). Budapest: Eotvos University Press.

Victor, C., Scambler, S., Bond, J. & Bowling, A. (2000). Being alone in later life: loneliness, social isolation and living alone. *Reviews in Clinical Gerontology*, 10(4), 407–417. https://doi.org/10.1017/s0959259800104101.

Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92(2), 455–474 https://doi.org/10.1037/0021-9010.92.2.455.

Wang, Y. (2014). Culture and solitude: meaning and significance of being alone. Culture and solitude: meaning and significance of being alone. *University of Massachusetts Amherst*. https://doi.org/10.7275/7765850.

Wenger, G.C. & Burholt, V. (2004). Changes in levels of social isolation and loneliness among older people in a rural area: A twenty–year longitudinal study. *Canadian Journal on Aging*, 23(2), 115–127. https://doi.org/10.1353/cja.2004.0028.

Werner E. E. (1997). Vulnerable but invincible: high-risk children from birth to adulthood. *Acta Paediatrica (Oslo, Norway: 1992). Supplement*, *422*, 103–105. https://doi.org/10.1111/j.1651-2227.1997.tb18356.x

Williams, K. & Umberson, D. (2004). Marital Status, Marital Transitions, and Health: A gendered life course perspective. *Journal of Health and Social Behavior*, 45(1), 81–98. https://doi.org/10.1177/002214650404500106.

Wilson, R.S., Krueger, K.R., Arnold, S.E., Schneider, J.A., Kelly, J.F., Barnes, L.L., Tang, Y. & Bennett, D.A. (2007). Loneliness and risk of Alzheimer disease. *Archives of General Psychiatry*, [online] 64(2), 234–40. https://doi.org/10.1001/archpsyc.64.2.234.

Wong, P.T.P. (2014). Meaning in Life. In: Michalos, A.C. (eds) Encyclopedia of quality of life and well-being research. Springer, Dordrecht. https://doi.org/10.1007/978-94-007-0753-5_1755

Yalom, I.D. (1980). *Existential psychotherapy*. New York: Basic Books.

Yanguas, J., Pinazo-Henandis, S. & Tarazona-Santabalbina, F.J. (2018). The complexity of loneliness. *Acta Bio Medica : Atenei Parmensis*, [online] 89(2), 302–314. https://doi.org/10.23750/abm.v89i2.7404.

Yüksel, Müge & Kirikkanat, Berke & Yilmaz, Süheyla & Sevim, Erdem. (2016). Investigation of life satisfaction, meaning in life & loneliness levels of a group of elderly individuals in terms of some demographic variables. *Toplum ve Sosyal Hizmet. 27*, 65-76.