

INTRINSIC RELIGIOSITY AND SPIRITUAL WELL-BEING AS
MODERATORS OF THE RELATION BETWEEN
WISDOM AND PSYCHOLOGICAL WELL-BEING IN ELDERLY

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

NİLSU BORHAN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE OF DEVELOPMENTAL
PSYCHOLOGY
IN
THE DEPARTMENT OF PSYCHOLOGY

SEPTEMBER 2017

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 : NILSU BORHAN

Signature :

ABSTRACT

INTRINSIC RELIGIOSITY AND SPIRITUAL WELL-BEING AS MODERATORS OF THE RELATION BETWEEN WISDOM AND PSYCHOLOGICAL WELL-BEING IN ELDERLY

Borhan, Nilsu

M.S. Department of Psychology

Supervisor : Prof. Dr. Özlem Bozo

September 2017, 150 pages

The current study aimed to investigate the moderator roles of intrinsic religiosity and spiritual well-being on the relation between wisdom and psychological well-being in older adults. Participants of the study were 165 older people (97 females and 68 males) and age range was between 65 and 88 ($M = 70.30$, $SD = 5.26$). Participants were given demographic information form, Three-Dimensional Wisdom Scale, Religious Orientation Scale, Spiritual Well-being subscale of the Mental, Physical and Spiritual Well-being Scale, Psychological Well-being Scale / Flourishing Scale, Geriatric Depression Scale, Purpose in Life Test, and Heartland Forgiveness Scale. Confirmatory factor analysis was conducted to test the original three factor structure of Three-Dimensional Wisdom Scale that was translated into Turkish. Convergent, divergent, and criterion-related validities were tested by several independent t-test analyses, analysis of variance (ANOVA), and pearson correlation coefficients. Moderation analyses were also run to examine the moderator roles of intrinsic religiosity and spiritual well-being. Results suggested that Turkish version of Three-Dimensional Wisdom Scale is a reliable and valid measurement instrument except

the reliability and validity of the affective wisdom subscale. In addition, intrinsic religiosity and spiritual well-being did not moderate wisdom and psychological well-being association in the present study.

Keywords: Wisdom, Three-Dimensional Wisdom Scale, Intrinsic Religiosity, Spiritual Well-being, Psychological Well-being

ÖZ

YAŞLILARDAKİ BİLGELİK VE PSİKOLOJİK İYİ OLUŞ ARASINDAKİ İLİŞKİNİN MODERATÖRLERİ OLARAK İÇSEL DİNDARLIK VE SPİRİTÜEL İYİ OLUŞ

Borhan, Nilsu

Yüksek Lisans, Psikoloji Bölümü

Tez Yöneticisi : Prof. Dr. Özlem Bozo

Eylül 2017, 150 sayfa

Bu çalışma, yaşlı insanlarda bilgelik ile psikolojik iyi oluş arasındaki ilişkide içsel dindarlığın ve spiritüel iyi oluşun düzenleyici rollerini araştırmayı amaçlamaktadır. Araştırmanın katılımcıları 165 yaşlı insandı (97 kadın ve 68 erkek) ve yaş aralığı 65 ve 88 ($O = 70.30$, $SS = 5.26$) arasındaydı. Katılımcılara, Üç-Boyutlu Bilgelik Ölçeği, Dini Oryantasyon Ölçeği, Ruhsal, Fiziksel ve Spiritüel İyi Oluş Ölçeğinin Spiritüel İyi oluş Alt Ölçeği, Psikolojik İyi Oluş Ölçeği/Gelişme Ölçeği, Geriyatrik Depresyon Ölçeği, Hayat Amacı Ölçeği ve Heartland Affetme Ölçeği verilmiştir. Türkçeye çevrilen Üç Boyutlu Bilgelik Ölçeğinin orijinal üç faktör yapısını test etmek için doğrulayıcı faktör analizi yapılmıştır. Yakınsak, ıraksak ve ölçüt ile ilgili geçerlilikleri, bağımsız t testi analizleri, varyans analizi (ANOVA) ve pearson korelasyon katsayıları ile test edilmiştir. İçsel dindarlık ve spiritüel iyi oluşun düzenleyici rollerini incelemek için moderasyon analizleri de yapılmıştır. Sonuçlar, Üç-Boyutlu Bilgelik Ölçeğinin Türkçe versiyonunun, duygusal bilgeliğin güvenilirliği ve geçerliliği dışında, güvenilir ve geçerli bir ölçüm aracı olduğunu ileri

sürmüştür. Buna ek olarak, bu çalışmada içsel dindarlık ve spiritüel iyi oluş, bilgelik ve psikolojik iyi oluş ilişkisini düzenlememiştir.

Anahtar Kelimeler: Bilgelik, Üç-Boyutlu Bilgelik Ölçeği, İçsel Dindarlık, Spiritüel İyi Oluş, Psikolojik İyi Oluş

To My Husband and Son...

ACKNOWLEDGEMENTS

Initially and most importantly, I would like to thank Prof. Dr. Özlem Bozo, who has been always very supportive and thoughtful to me. I am very grateful to her since she encouraged me a lot during this process and gave me useful advices so that I can complete my master's thesis succesfully. Afterwards, I would like to thank Prof. Dr. Sibel Kazak Berument and Asst. Prof. Dr. Şenil Ünlü Çetin for their precious suggestions and contributions.

I would like to mention some of the colleagues who were very helpful and comforting during such a stressful period. Research assistants İlker Dalğar and Elif Manuoğlu stood by me all the time whenever I need and they did their best to help me.

I would also like to thank my parents, brother, and husband. They always believed in me and gave me so much support so far. Finally, I would like to specify my love and thanks for my little baby in my belly. His presence and feeling him were very strong motivators for me.

TABLE OF CONTENTS

PLAGIARISM.....	iii
ABSTRACT	iv
ÖZ	vi
DEDICATION.....	viii
ACKNOWLEDGEMENTS.....	iv
TABLE OF CONTENTS	x
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
CHAPTER	
1. INTRODUCTION	1
1.1 Background of the Study	1
1.2 Factors Affecting PWB of Old Population.....	2
1.2.1 Wisdom: Definition, Theories, and Assessment	16
1.2.2 Wisdom, Intrinsic Religiosity, Spirituality, and PWB of Old Population	26
1.3 Aims of the Study	33
2. METHOD	36
2.1 Participants	36
2.2 Measures	38
2.2.1 Three-Dimensional Wisdom Scale (3D-WS)	39
2.2.2 Religious Orientation Scale (ROS)	41
2.2.3 Mental, Physical, and Spiritual Well-being Scale (MPS).....	42
2.2.4 Purpose in Life Test (PIL)	44
2.2.5 Geriatric Depression Scale (GDS)	45
2.2.6 Heartland Forgiveness Scale (HFS)	46
2.2.7 Psychological Well-being Scale (PWS)	47
2.3 Procedure	48

2.4 Statistical Analyses	48
3. RESULTS	49
3.1 Descriptive Analyses of the Measures of the Study.....	49
3.2 Psychometric Properties of 3D-WS	50
3.2.1 Confirmatory Factor Analysis	50
3.2.2 Internal Consistency Reliability	58
3.2.3 Convergent and Divergent Validities.....	58
3.2.4 Criterion-Related Validity	59
3.2.5 Correlation Coefficients among Age, 3D-WS and Its Subscales.....	65
3.3 Differences of the Levels of Demographic Variables on the Measures of the Study	65
3.4 Correlation Coefficients among the Measures of the Study	68
3.5 Moderation Analyses for Wisdom and Psychological Well-being	69
4. DISCUSSION	72
4.1 Findings Regarding CFA and Psychometric Properties of 3D-WS	72
4.2 Findings About the Differences among the Levels of Demographic Variables on the Measures of the Study	78
4.3 Findings of Correlation Analyses among the Measures of the Study	83
4.4 Findings of Moderation Analyses for Wisdom and Psychological Well-being Association	86
4.5 Limitation of the Current Study	87
4.4 Strenghts of the Current Study	88
4.5 Implications of the Findings and Suggestions for Future Studies	88
REFERENCES	90
APPENDICES	
A. Demographic Information Form	113
B. Three Dimensional Wisdom Scale	114
C. Religious Orientation Scale (ROS)	118
D. Mental, Physical and Spiritual Well-being Scale (MPS)	120
E. Purpose in Life Test (PIL)	122
F. Geriatric Depression Scale (GDS)	126

G. Heartland Forgiveness Scale (HFS)	128
H. Psychological Well-being Scale (PWS)/Flourishing Scale (FS)	130
I. Informed Consent Form	131
J. Ethics Committee Approval	133
K. Turkish Summary/Türkçe Özet	134
L. Tez Fotokopisi İzin Formu	150

LIST OF TABLES

TABLES

Table 2.1 Socio-Demographic Characteristics of the Sample.....	37
Table 3.1 Descriptive Characteristics of the Measures	49
Table 3.2 Demographic Features of Participants	51
Table 3.3 Factor Covariances and Error Covariances of the Final Model	54
Table 3.4 Unstandardized Factor Loadings, Standardized Factor Loadings, and Their Standard Errors for Three Factor Confirmatory Model of Turkish 3D-WS	56
Table 3.5 Convergent and Divergent Validities of Turkish 3D-WS	59
Table 3.6 Criterion-Related Validity of Turkish 3D-WS Including T-test and ANOVA result	64
Table 3.7 Pearson Correlation Coefficients between Measures of Study	68
Table 3.8 Psychological Well-being Predicted from Wisdom and Intrinsic Religiosity	70
Table 3.9 Psychological Well-being Predicted from Wisdom and Spiritual Well- being	71

LIST OF FIGURES

FIGURES

Figure 1.1 First Model of the Study	35
Figure 1.2 Second Model of the Study	35
Figure 3.1 Standardized Solutions for Confirmatory Factor Analysis for the First Model	52
Figure 3.2 Mean Score of Reflective Wisdom for Physical Illness vs No Physical Illness Groups	61
Figure 3.3 Mean Scores of Overall, Affective, Reflective, and Cognitive Wisdom for Different Levels of Education.....	63
Figure 3.4 Mean Score of Spiritual Well-being for Gender Groups	66
Figure 3.5 Mean Scores of Intrinsic Religiosity and Spiritual Well-being for Physical Illness.....	66
Figure 3.6 Mean Scores of Intrinsic Religiosity and Spiritual Well-being for Different Levels of Education.....	68
Figure 3.7 Illustration for the Absence of Moderation Effect of Intrinsic Religiosity on Wisdom–Psychological Well-being Relation	70
Figure 3.8 Illustration for the Absence of Moderation Effect of Spiritual Well-being on Wisdom–Psychological Well-being Relation	71

CHAPTER 1

INTRODUCTION

1.1. Background of the Study

Individuals who are at the age of 65 or older have been accepted as “old adults” in general, and ages between 65 and 74 are classified as “early old adults” and ages above 74 are regarded as “late old adults”. It is not certain where this classification comes from. Yet, it may be derived from the Chancellor of the German Empire Prince Bismark, who allowed the individuals at the age of 65 to receive a pension since, in those times, he may have thought that persons generally decease prior to age 65 (Orimo, Ito, Suzuki, Araki, Hosoi & Sawabe, 2006). Still, thanks to the developments in medicine, number of years that people are expected to live have risen dramatically (Orimo et al., 2006). According to World Population Prospects, while human lifespan increases, the global population is getting older since fertility decreases. In 2015, individuals who are 60 years old or older than 60 constituted 12 percent of the world population. Besides, it is estimated that 22 percent of the world population or 2.1 billion people will be 60 years old or older in 2050 (United Nations, Department of Economic and Social Affairs, Population Division, 2015). Turkey is one of the countries where the aging process will take place in a rapid pace; 201 % increase in older population of Turkey between the years 2008 and 2040 has been expected (Mandiracioğlu, 2010).

As old population has been increasing, the problems related to aging has become more important. This is the reason why studying older population is crucial. In the literature, numerous studies suggest the link between life satisfaction and psychological well-being (PWB) among different age groups (Garcia & Archer, 2012; Heo, Chun, Lee, & Kim, 2016; Meléndez, Thomàs, Oliver, & Navarro, 2009;

Perstling & Rothmann, 2012; Rathore, Kumar, & Gautam, 2015; Zhang & Liu, 2007) Therefore, it can be inferred that increasing PWB of an old person is necessary for higher life satisfaction of his. Besides, many older people come across with a lot of undesirable life conditions, which affect their physical health, financial, political, social resources, mobility and psychological health negatively (Heap & Fors, 2015). Hence, one of the important duties of psychological research is identifying the predictors of elderly's PWB.

In the next section of the introduction, factors that have an impact on PWB of old individuals will be reviewed.

1.2. Factors Affecting PWB of Old Population

According to Bradburn (1969), an individual's standing on the psychological well-being is regarded as an outcome of her standing on two separate components; positive and negative affect. When positive affect exceeds negative affect, it means that the person has high level of PWB, which is compatible with pleasure-pain models in this respect. Afterwards, Ryff (1989) suggested a different definition for PWB and claimed that PWB is composed of *self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth*. Also, PWB was evaluated within the scope of *self-esteem, social involvement, mental balance, control of self and events, sociability, happiness* (Massé et al., 1998), and *feelings of competence* (Diener et al., 2009). Since life satisfaction is positively correlated with PWB and depression is negatively correlated with it (Ryff & Keyes, 1995), they have been used as manifestations of PWB in many studies.

In the literature, there are many studies that examined the factors affecting PWB of elderly people. As expected, physical health is closely related to PWB among elderly (Abas, Punpuing, Jirapramupitak, Tangchonlatip, & Leese, 2009; Arun, 2008; Bhullar, Hine, & Myall, 2010; Cho, Martin, Margrett, MacDonald, & Poon, 2011; Hacıhasanoğlu & Türkleş, 2008; Han & Shibusawa, 2015; Heidrich, 1993) Presence of chronic diseases decreases PWB of older adults significantly (Abas et al., 2009;

Hacıhasanoğlu & Türkleş, 2008). In addition, both objective and subjective or perceived physical health can affect PWB of people. Findings from the study of Cho et al. (2011) suggest that there is a strong association between perceived health and PWB. Moreover, perceived health acted as the mediating variable between objective health and PWB in the same study. Furthermore, an elderly person's decreased physical activity arising from the decline in physical functions and from the risk of falls or accidents leads to poor health outcomes (Wagner, LaCroix, Buchner, & Larson, 1992). Since physical activity is likely to improve physical health and improved physical health probably means better psychological well-being, some studies investigated its effect on PWB (Bhamani, Khan, Karim, & Mir, 2015; Ciairano, Liubicich, & Rabaglietti, 2010; Han & Shibusawa, 2015; Moore & Bracegirdle, 1993; Wagner, LaCroix, Buchner, & Larson, 1992). In the longitudinal study of the Han and Shibusawa (2015), it was demonstrated that older adults who are physically active and involved in leisure activities are more likely to have better PWB. Furthermore, physical activity was found to be related to less depressive symptoms (Bhamani, Khan, Karim, & Mir, 2015; Bozo, Toksabay, & Kürüm, 2009), vanished decreases in physiologic reserve, reduced risk of coronary heart disease, and predicted less osteoporotic fractures (Wagner, LaCroix, Buchner, & Larson, 1992), all of which can also improve aged people's PWB. If Turkey context is considered, it would be necessary to mention the study of Arun (2008) that utilized the data of Euromodule (2001). The data included the evaluations of 587 old Turkish people who were at the age of 55 or above and the results revealed the importance of physical health (i.e., chronic health problems, need for continuous medication, and satisfaction with general health) and psychological health (i.e., psychological problems such as stress or anxiety and level of happiness) as determinants of life satisfaction.

Socidemographic variables such as gender (Inglehart, 2002; Patrick, Cottrell, & Barnes, 2001; Pinguart & Sörensen, 2001), age (Personal Finance Research Centre, 2014; Hansen & Slagsvold, 2012; Hohaus & Spark, 2013; Sutin et al., 2013; Wu, Schimmele, & Chappell, 2012; Zhao et al., 2012), education (Espanha & Ávila,

2016; Huang, Wang, Li, Xie, & Liu, 2010; Teerawichitchainan, Pothisiri, & Long, 2015), retirement (Coursolle, Sweeney, Raymo, & Jeong, 2008; Drentea, 2002; Kim & Moen, 2002; Latif, 2011; Finnish Institute of Occupational Health, 2007), income (Arber, Fenn, & Meadows, 2013; Arendt, 2005; Arun, 2008; Personal Finance Research Centre, 2014; Lloyd, 2015; National Council on Ageing and Older People, 1999), wealth (Hochman & Skopek, 2013), and living arrangements (Chou, Ho, & Chi, 2006; Hu, Cheng, Peng, Zhang, & Huang, 2012; Russell & Taylor, 2009; Teerawichitchainan, Pothisiri, & Long, 2015) were also found to be related to PWB of aged. Firstly, gender plays a crucial role in PWB of old individuals. Findings from the meta-analysis conducted by Pinguart and Sörensen (2001) suggest that old women are prone to be less happy; have poorer life satisfaction, self-esteem, subjective health, and more feelings of loneliness. This may be due to the fact that women are more likely to be widowed, have lower SES, health problems, and lack of competence. Similarly, Inglehart (2002) demonstrated that older females were less happy than their male counterparts. This may be the case for the developed societies in which social worth of elderly women is underestimated, indicating that culture determines the gender differences with regard to wellbeing. Yet, in the study of Patrick, Cottrell, and Barnes (2001), older women living in rural areas reported higher negative affect than older men living in rural areas although there were not any gender differences in terms of positive affect. In Turkey, results seem to be different than the other studies in the literature; Arun (2008) found that no significant differences exist between life satisfaction levels of old men and women in Turkey. Hence, it is probable that psychological well-being of Turkish older men and women may not be significantly different from each other, as well. Yet, Turkish women showed more tendency to have depression than Turkish men in the study of Hacıhasanoğlu and Türkleş (2008), in which 349 old participants composed of the sample. All in all, most of the studies indicated that aged women are disadvantageous in terms of PWB as compared to aged men.

The relationship between age and PWB seems to be complex. While some studies indicated that PWB improves with age (Personal Finance Research Centre, 2014;

Hohaus & Spark, 2013), other studies showed exactly the opposite (Ercan Şahin & Emiroğlu, 2013; Zhao et al., 2012) or stability of PWB in older ages (Hansen & Slagsvold, 2012). Ercan Şahin and Emiroğlu (2013) conducted a study with 184 old Turkish adults at the age of 65 or above and living in nursing home, and in their study they found that as the age of the participants increased, their quality of life levels were likely to decrease. Aging is likely to be associated with depressive symptoms especially for the old people below the age of 80 (Zhao et al., 2012). Moreover, the relation between aging and depression can be mediated by medical illness and thus, when such variables are controlled, the connection between age and depression may diminish (Wu, Schimmele, & Chappell, 2012). Besides, birth cohort may moderate the association between age and depression; people who experienced financial difficulties of the early 20th century reported poorer wellbeing than those lived on welfare (Sutin et al., 2013). Hence, it is not surprising that a number of studies have indicated that low income (Arber, Fenn, & Meadows, 2013; Arendt, 2005; Arun, 2008; Lloyd, 2015; National Council on Ageing and Older People, 1999), worse financial situation and satisfaction (Personal Finance Research Centre, 2014), worse subjective financial well-being (Arber, Fenn, & Meadows, 2013), and poor wealth (Hochman & Skopek, 2013) result in poor wellbeing among old people. This is also true for old people in Turkey; Arun (2008) found that income levels in Turkey is one of the important variables that determines life satisfaction of aged people. In addition, older people generally have a tendency to feel younger than their chronological ages (Beyene, Becker, & Mayenand, 2002), which is associated with better subjective wellbeing (Westerhof & Barrett, 2005), higher life satisfaction, and lower depressive symptoms (Arim, Hubley, & D'Almeida, 2005). To conclude, the literature is mixed about the relation between age and PWB and many variables including medical illness, birth cohort, income, financial situation, and subjective aging affect this relation.

Another sociodemographic variable, education, seems to boost PWB of aged people. Higher level of education is likely to decrease the risk of late life depression (Hacıhasanoğlu & Türkleş, 2008; Huang et al., 2010) and related to better

psychological health (Teerawichitchainan, Pothisiri, & Long, 2015). Hacıhasanoğlu and Türkleş (2008) conducted a study that included 571 old Turkish people and they investigated which factors are influential on depression levels of old adults. This study indicated that as the education level of the participants increased, depression levels of them tended to lower. Since old persons with low levels of education have poor self-efficacy and cognitive function, low level of education may become a risk factor for depression. Moreover, it has been demonstrated that not only physical health but also sufficient knowledge about one's own physical health can predict a better PWB (Tokuda, Doba, Butler, & Paasche-Orlow, 2009; Zou, Chen, Fang, Zhang, & Fan, 2016). Health literacy may depend on the education level of the individuals; as the education level increases, their health literacy also increases (Espanha & Ávila, 2016). Therefore, education may have an indirect positive effect on PWB of old adults through increasing health literacy. In conclusion, it seems that higher education is associated with better PWB both directly and indirectly through health literacy.

One of the important transition process for old population is retirement, which has positive influences on PWB of older adults (Kim & Moen, 2002; Latif, 2011) such as decreases in depressive symptoms (Coursolle, Sweeney, Raymo, & Jeong, 2008), increases in perceived health and functional capacity (Finnish Institute of Occupational Health, 2007), less anxiety, distress, and increases in positive affect (Drentea, 2002). Although retirement from a demanding job disrupting one's family life might relieve the person, retirement may not take away worries regarding family life stressors, especially among older females (Coursolle, Sweeney, Raymo, & Jeong, 2008). Moreover, feelings of self-worth, flexibility, determining novel objectives, perceived access to interpersonal resources, not having remorse about past life, engaging in leisure time activities, and living in extended family system can improve PWB of retirees (Sharma, Karunanidhi, & Chitra, 2015). The picture in Turkey is quite different than other countries regarding retirement of old people; since the pension is not sufficient for retired people (Demirbilek, 2007), it is possible that their retirement did not have any favorable impact on their psychological well-

being. Since Turkey is a developing country where a transition process from a large family to a nuclear family has occurred, this situation has become even more of a problem; younger generations who want to establish their own nuclear family have moved away from the aged individuals of their home gradually (Sığın, 2016). To sum up, it can be concluded that retirement is a favorable process improving old people's wellbeing but it is a stressful period for Turkish old adults.

In addition to the sociodemographic variables, some personality traits may take part in wellbeing of aged people. Self-compassion (Homan, 2016), playfulness (Waldman-Levi, Bar-Haim Erez, & Katz, 2015), big five personality traits (i.e., high openness to experience, conscientiousness, extraversion, agreeableness, and low neuroticism) (DeNeve & Cooper, 1998; Isaacowitz & Smith, 2003; Ready, Akerstedt, & Mroczek, 2011), optimism, and health-related hardiness (Smith, Young, & Lee, 2004) are likely to be predictors of better PWB. Optimism and perceived control can mediate the relation between falls of older people and their wellbeing (Ruthig et al, 2007). It was concluded that fall of an old person leads to decreased control and optimism, which has adverse effects on health and wellbeing consequences. It seems that not only external factors but also internal factors including personality traits influence well-being of old population.

Social support is another important factor that has an impact on PWB and many studies tried to examine its association with PWB of the aged (Merz & Considine, 2009; Phillips, Siu, Yeh, & Cheng, 2008; Poulin, Deng, Ingersoll, Witt, & Swain, 2012; Ryan & Willits, 2007; Thanakwanga, Ingersoll-Dayton, & Soonthornhdada, 2012). *1) How big the social support network of old person is, 2) how often he/she keeps in touch with his/her support network, and 3) how much he/she is satisfied with it* might relate to PWB (Phillips, Siu, Yeh, & Cheng, 2008). Still, social network may not have a direct impact on PWB. Rather, it may show its effect by social support. In other words, social support can mediate the relation between social network and PWB (Thanakwanga, Ingersoll-Dayton, & Soonthornhdada, 2012). In addition, in contrast to what Phillips, Siu, Yeh, and Cheng (2008) suggested, PWB of aged individuals may not be dependent on the size of social network (Thanakwanga,

Ingersoll-Daytonb, & Soonthorndhada, 2012) or number of family members or friends providing support; rather, the quality of relationships matters for PWB (Arun, 2008; Ryan & Willits, 2007). For Turkey context, Arun (2008) proposed that social relationships in Turkey was not regarded as a dimension of life satisfaction. This situation might be explained by three reasons; One reason is that there is not any cultural fund that is convenient for social participation and organization. Second reason might be that social services/support is already met by traditional mechanisms. Final reason might be that since Arun included number of friends and frequency of meeting friends as the social relationships dimension of life satisfaction, he stated that these indicators might not be sufficient to show importance of social relationships. Rather, quality of relationships is more essential for life satisfaction. Furthermore, Phillips, Siu, Yeh and Cheng (2008) also demonstrated that how much elderly people are satisfied with social support provided by their family rather than friends or others is the strongest predictor of their PWB. Similarly, Thanakwanga, Ingersoll-Daytonb, and Soonthorndhada (2012) found that both perceived family and friendship support are significantly connected with PWB of old people; but perceived family support is more essential. In addition, the relation between family support and wellbeing can be moderated by attachment style (Merz & Consedine, 2009). Among securely attached individuals, emotional support has more positive impact on wellbeing and instrumental support has less negative impact on wellbeing. However, the study of Takahashi, Tamura, and Tokoro (1997) that investigated whether the pattern of social relationships has an effect on PWB of old persons in a sample of 148 old Japanese people who are above the age of 65, it was revealed that except the old individuals with lone-wolf pattern who are deprived of a dominant affective figure in their lives, there were not any significant differences between PWB of old individuals with different patterns of affective relationships (i.e., spouse dominant pattern, child dominant pattern, and friend dominant pattern). It seems that although social relationships with others are necessary for PWB of aged people, it cannot be stated that one type of relationship is better all the time than others (Takahashi, Tamura, & Tokoro, 1997). Yet, culture may determine whether perceived family or perceived friendship support is more important. For instance,

Poulin, Deng, Ingersoll, Witt, and Swain (2012) have investigated how family and friendship support affect PWB in Chinese and American culture. Perceived friendship support was more important for an American, while family support was more essential for a Chinese person. In conclusion, social support is a crucial and necessary factor for better PWB of old adults and culture decides which type of social support (i.e., family support, friendship support) is more essential.

When the importance of social support is considered, it is not surprising that old people living alone or in an institutionalized setting or nursing home are more likely to have worse PWB since they might lack social support and social network. İçli (2004) conducted a study with 84 old Turkish people in a nursing home in Turkey and indicated that 32.1 % of the participants said that they did not have any visitors, 19 % of the participants said that their children visit them once a month, 17.9 % of the participants said that their sister/brother, grandchildren, and relatives visit them once a month, and 10.7 % of the participants said that their sister/brother, grandchildren, and relatives visit them once a couple of months. The participants reported their sadness about this situation since they expect to be visited more frequently as a part of Turkish traditional culture based on respect for the old people. Such poor social support might result in the association between late life depression and living alone or in an institutionalized setting or nursing home (Chou, Ho, & Chi, 2006; Hu et al., 2012; Russell & Taylor, 2009). Thus, social support may be a protective factor for late life depression of old people living alone. Living with an adult child or family also improves wellbeing of old parents (Russell & Taylor, 2009; Teerawichitchainan, Pothisiri, & Long, 2015). It seems that people living alone are deprived of social support and social network and thus, they are under the risk of experiencing late life depression and social support can decrease that risk.

Yet another variable regarding PWB of old people is parenthood. Childbearing has clearly an impact on PWB of aged person but it is controversial whether being a parent is beneficial or not for PWB of older adults. While some studies indicated that childless people have worse psychological well-being and parenthood is likely to result in better PWB (Drew & Silverstein, 2004; Zhang & Liu, 2007), other studies

revealed exactly the opposite (Evenson & Simon, 2005; McLanahan & Adams, 1987). Zhang and Liu (2007) demonstrated that childless old persons have poorer life satisfaction and feel lonelier and more anxious than old persons with children. Yet, feelings of loneliness and anxiety can depend on socio-demographic and socio-economic variables since when such variables are controlled, the relation between childlessness and feelings of loneliness and anxiety vanishes. The relation between childlessness and PWB can be mediated by marital status and gender (Gibney, Delaney, Codd, & Fahey, 2015; Hank & Wagner, 2013; Hansen, Slagsvold, & Moum, 2009; Muhammad & Gagnon, 2009). The old person who is widowed, divorced or never married tends to experience permanent negative impact on his PWB indicated by depressive mood and quality of life (Gibney, Delaney, Codd, & Fahey, 2015; Hank & Wagner, 2013). In addition, being a parent can be advantageous for a woman in terms of cognitive well-being, but not for a man (Hansen, Slagsvold, & Moum, 2009). The relation between being a biological parent and PWB seems to be different than the relation between being a stepparent and PWB. In fact, being a stepparent may not affect elderly people's PWB (Pudrovska, 2009) or it may have a negative impact on their PWB (Pace & Shafer, 2015). Grandparenthood can also be a predictor of PWB for older adults (Grundy et al., 2012; Mahne & Huxhold, 2015; Muller & Litwin, 2011; Reitzes & Mutran, 2004). It seems that being a grandparent is associated with better PWB and this relation depends on many variables such as education (Mahne & Huxhold, 2015), centrality of the grandparent role including 3 different components of grandparenting; the frequency of contact with grandchildren, beliefs and attitudes about grandparenting and grandparent-focused role occupancy (Muller & Litwin, 2011). As expected, grandparenthood positively influences elderly's PWB but parenting is more strongly associated with PWB because as the proximity between generations increases, role identification and the effect of the role on wellbeing become more powerful. This situation conforms to social and genetic theories (Drew & Silverstein, 2004). In conclusion, the parenthood and PWB relation among old population is a controversial issue in the literature and many variables (i.e., gender, socioeconomic and sociodemographic variables, marital status, being a biological versus being a

stepparent) affect this relation. In addition, there is a consensus regarding positive effect of grandparenting on PWB of the aged.

Marital relationship also plays a role in old people's PWB (Barnett, Brennan, Raudenbush, & Marshall, 1994; Carr, Cornman, & Freedman, 2016; Darghouth, Brody, & Alegría, 2015; Kim & McKerny, 2002; Kumar, 2015; Singh & Kiran, 2005; Stokes, 2016; Williams, 2003). Marital satisfaction or marital adjustment (Kumar, 2015), marital quality (Carr, Cornman, & Freedman, 2016; Kim & McKerny, 2002; Stokes, 2016; Williams, 2003), marital role quality (Barnett, Brennan, Raudenbush, & Marshall, 1994), and marital status (Darghouth, Brody, & Alegría, 2015; Hacıhasanoğlu & Türkleş, 2008; Kim & McKerny, 2002; Perkins et al., 2016; Singh & Kiran, 2005; Williams, 2003) seem to be related to PWB. Singh and Kiran (2005) conducted a study to explore levels of PWB among 200 old individuals with different marital statuses. Percentages of the high level of PWB were 67 %, 41 %, and 20 % for the married, widowed, and single old people, respectively. Moreover, percentages of the low level of PWB were 16 %, 37 %, and 80 % for the married, widowed, and single old people, respectively. Consistent with this study, Hacıhasanoğlu and Türkleş (2008) found that incidence rates of depression in divorced Turkish old people were significantly higher than married Turkish old people. These results indicated that PWB of married elderly individuals are better than that of single or widowed elderly. Furthermore, a number of studies indicated that divorce can have an adverse effect on PWB of old persons (Bowen & Jensen, 2015; Gray, Vaus, Qu, & Stanton, 2011; Pudrovská & Carr, 2008; Solomou, Richards, Huppert, Brayne, & Morgan, 1998). Nevertheless, low neuroticism, high extraversion, openness, and resilience might contribute persons' adaptation to divorce (Perrig-Chiello, Hutchison, & Morselli, 2014). Moreover, the relation between divorce and PWB of older people may be affected by current marital status; being a divorced person and being currently alone resulted in worse PWB for both females and males (Bowen & Jensen, 2015; Gray, Vaus, Qu, & Stanton, 2011; Solomou et al., 1998; Symoens, Bastiaens, Mortelmans, & Bracke, 2013). In the study of Solomou et al. (1998), remarrying was found to be crucial especially for older

men's life satisfaction and social engagement. Besides, Gray, Vaus, Qu, and Stanton (2011) found that divorce earlier in life is disadvantageous for older males in terms of perceived social support and life satisfaction but their general and mental health later in life do not seem to be affected by divorce. Yet, for older females, divorce affects not only their perceived social support and life satisfaction but also their general and mental health negatively. Although remarriage can have a buffering effect on wellbeing of elderly, it may not remove all the negative effects of divorce. When compared to married older women, remarried older women are prone to feel lonely and have less social contact. Both divorced and remarried older women were found to be less satisfied with their financial status, have less feelings of safety and sense of belonging to their local community. Remarried older men was less satisfied with their financial status, felt less sense of belonging to their community and lonelier due to lack of someone to assist them when needed. In contrast to the literature indicating long term negative effects of divorce on people's wellbeing, Symoens, Bastais, Mortelmans, and Bracke (2013) demonstrated that later life divorce does not decrease life satisfaction of elderly or result in more depressive symptoms in the long run. To sum up, most of the research demonstrate that divorce is a risk factor for PWB of old individuals. In addition, divorce might have more negative impact on well-being of divorced older women. Remarriage and some personality traits might compensate the decrease in PWB resulted from the divorce whereas being currently alone seems to make well-being worse. Although remarriage can boost PWB of both elderly women and men, it does not extinguish all the negative effects of divorce.

Regarding gender differences about the effects of marriage on PWB, mixed results are present; while some studies revealed that no differences are evident between PWB of married men and women (Barnett, Brennan, Raudenbush, & Marshall, 1994; Kim & McKenry, 2002; Stokes, 2016), other studies demonstrated a difference regarding the way PWB of women and men are affected by marriage (Carr, Cornman, & Freedman, 2016; (Darghouth, Brody, & Alegría, 2015; Fincham, Beach, Harold, & Osborne, 1997; Wang, Wang, Li & Miller, 2014). In the study of Carr,

Cornman, and Freedman (2016), it was revealed that marital evaluations are connected to frustration, sadness, and worry among husbands and wives and this connection was more powerful for marital strain rather than support. While marital strain was related to more sadness and worry for females, marital support was related to less worry for males. Being separated or divorced can be disadvantageous for women in terms of their PWB while older men are not affected by divorce (Darghouth, Brody, & Alegría, 2015; Gray, Vaus, Qu, & Stanton, 2011). In addition, while the level of marital satisfaction is likely to affect depression level among wives, depression level of husbands may affect their marital satisfaction. This may be because depressed men are prone to experience more withdrawal from their relationships than depressed women. Thus, depression decreases marital satisfaction of men more than women (Fincham, Beach, Harold, & Osborne, 1997). A similar study of Wang, Wang, Li & Miller (2014) examined the relation between marital satisfaction and depressive symptoms with a sample of 423 old Chinese people. Marital Discord Model of Depression (MDMD) suggested by Beach, Sandeen, and O'Leary (1990) was partially proven and it was revealed that men's marital satisfaction was linked to their wives' depressive symptoms (as cited in Wang, Wang, Li, & Miller, 2014). Yet, women's marital satisfaction was not associated with their husbands' depressive symptoms. In line with these results, Thomeer, Umberson, and Pudrovska (2013) also found that while a woman's depressive symptoms were a predictor of her husband's future depressive symptoms, a man's depressive symptoms were not related to his wife's future depressive symptoms. This is because depressed women may lead to hostility, isolation, and negative emotions in their marital relationships while depressed men are likely to cause emotional burden for their wives giving support for them. In conclusion, controversial findings exist about whether older men or older women are affected more by marital relationship. Moreover, an important finding about this topic was that the marital satisfaction might influence depression level among older women but that the reverse was true for older men meaning that depression level of older men might determine their marital satisfaction.

Since death of a loved one, especially death of the spouse is a traumatic experience for individuals, it is inevitable that it reduces their PWB dramatically. Plenty of studies were interested in bereavement and its effects on elderly (Arun & Arun, 2011; Bennett, Hughes, & Smith, 2003; Burton, Haley, & Small, 2005; Carr et al., 2000; Lee, DeMaris, Bavin, & Sullivan, 2001; Perkins et al., 2016; Spahni, Bennett, & Perrig-Chiello, 2016; Thuen, Reime, & Skrautvoll, 1997). If the death was sudden or unexpected or if the person had to provide care for his spouse who died of a continuous critical condition, it becomes even more devastating for a person and lessen PWB of that person. It was demonstrated that widowhood is associated with decreased positive affect, self-esteem, and satisfaction with health, difficulty with physical activities, increased depressive symptoms, anxiety, loneliness, lower sense of coherence regarding meaningfulness, and poor life satisfaction (Carr et al., 2000; Holden, Kim, & Novak, 2010; Lee & DeMaris, 2007; Perkins et al., 2016; Spahni, Bennett, & Perrig-Chiello, 2016; Thuen, Reime, & Skrautvoll, 1997). However, *social support* (Thuen, Reime & Skrautvoll, 1997), *spousal support* (Spahni, Bennett, & Perrig-Chiello, 2016), and *trait resilience* (Bennett & Soulsby, 2012; Burton, Haley, & Small, 2005; Spahni, Bennett, & Perrig-Chiello, 2016) may contribute to the adaptation to widowhood or bereavement. In addition, effect of bereavement on PWB of the elderly person may be depend on how close the deceased person was to her. Losing a spouse or a close relative is likely to be more destructive than losing a relative or a friend. Death of a child also can be devastating; it was associated with depressive symptoms, more health problems, decreased self-rated health, marital disruption, emotional distress, and PTSD symptoms among parents (Lee, Gleib, Weinsteinb, & Goldman, 2014; Murphy et al., 1998; Murphy et al., 1999; Rogers, Floyd, Seltzer, Greenberg, & Hong, 2008). D'epinay, Cavalli, and Spini (2003) tried to find out the relation between death of a loved one and health among very old age group. In this longitudinal study, no differences were found between the bereaved and two control groups about physical ailments and functional health. Yet, it was found that death of a close relative and death of a relative/friend leads to more depressive symptoms and loneliness, respectively. Other variables affecting the relation between widowhood and PWB were; gender (Arun & Arun,

2011; Bennett, Hughes, & Smith, 2003; Lee & DeMaris, 2007; Lee, DeMaris, Bavin, & Sullivan, 2001; Perkins et al., 2016), widowhood duration (Perkins et al., 2016), marital relationship (Carr et al., 2000; Spahni, Bennett, & Perrig-Chiello, 2016), context of death (Bennett & Soulsby, 2012; Spahni, Bennett, & Perrig-Chiello, 2016), and dissatisfaction with financial status (Holden, Kim, & Novak, 2010). While some studies demonstrated that women are better in adapting widowhood (Bennett & Soulsby, 2012; Lee & DeMaris, 2007; Lee, DeMaris, Bavin, & Sullivan, 2001), other studies indicated just the opposite (Arun & Arun, 2011; Perkins et al., 2016). Men's insufficient coping skills about widowhood may arise from having less social networks, disliking domestic labor, insufficiency in helping their children, and showing less emotional expression than women, which prevent them receiving help and support from the others (Lee, DeMaris, Bavin, & Sullivan, 2001; Perkins et al., 2016), while women's inadequate coping skills about widowhood are likely to result from financial difficulties, loss of their inheritance rights and overall purpose in the household (Arun & Arun, 2011; Perkins et al., 2016). Financial difficulties may be the case especially for widowed women in Turkey; Arun and Arun (2011) stated that Turkish widowed women form economically the most fragile fraction of Turkish society. Another study conducted by Perkins et al. (2016) tried to find out the relation between widowhood duration, gender, and health outcomes with old Indian participants. Results suggested that widowed old women are prone to have worse self-rated health, more psychological distress, and impaired cognitive ability as well as having a prevalent mental disorder and hypertension. Except for the cognitive ability and having a prevalent mental disorder, this result was not found for the elderly men. Furthermore, while widowed old women had poor health outcomes regardless of the widowhood duration, married old men and widowed old men did not show any differences for most health outcomes regardless of the widowhood duration (Sasson & Umberson, 2014). Similarly, Bulucu and Ünsal (2004) suggested that being an old women in Turkey is a risk factor for being disabled and being dependent in daily life and instrumental daily life activities. In summary, widowhood is a tough process for old people and many variables (i.e., gender of the widowed person, context of death, closeness to deceased person etc.) change the relation

between widowhood and PWB. Resilience, spousal support, and social support are crucial factors in cases of bereavement and widowhood experienced by old people.

In this section of introduction, definition and measurement of PWB were mentioned briefly. Afterwards, the variables influencing PWB of old people (i.e., physical health and physical activity, sociodemographic and socioeconomic variables, personality traits, social support, parenthood and grandparenthood, marital relationship, and marital status including widowhood and divorce) were explained since these variables are likely to take part in the relations between wisdom, intrinsic religiosity, spiritual well-being and PWB.

In the next section of introduction, definition, theories, and assessment of wisdom will be explained in detail.

1.2.1. Wisdom: Definition, Theories, and Assessment

It is not an easy task to define wisdom since both general definitional and wisdom specific problems are in question. General definitional problems result from the difficulty of defining anything due to the requirement for an extensive linguistic effort and lack of certainty regarding definitions. Secondly, there are some wisdom specific problems that make difficult to define it. These problems arise from its complexity, deepness, and diversity (Walsh, 2015). According to Walsh (2015), commonalities of different definitions of wisdom are, “Prosocial attitudes and behaviors, social decision making/pragmatic knowledge of life, reflection/self-understanding, value relativism/tolerance, recognition of and effectiveness with uncertainty and ambiguity, perspicacity, and emotional homeostasis” (p. 282). Consistent with these shared features, wisdom was found to be associated with knowledge, life experience, cognitive complexity, benevolence, empathy, love for humanity, self-reflection, acceptance of others’ values (Glück & Bluck, 2011), moral reasoning (Pasupathi & Staudinger, 2001), and humility (Choi & Landeros, 2011; Krause, 2016). Although wisdom, intelligence, and spirituality overlap to a certain degree, they are obviously different constructs (Jeste et al., 2010; Fengyan & Hong, 2012). Besides, men and women may conceptualize wisdom differently; while men

think that intelligence is more important element of wisdom, women think that love for humanity and acceptance of others' views and values are more crucial components of wisdom. Thus, while men emphasize cognitive part of wisdom more, women focus on affective part of it (Glück, Strasser, & Bluck, 2009). To sum up, wisdom is a construct that is hard to define and it does not have only one definition although there are some shared characteristics of different wisdom definitions and overlap of wisdom with other constructs (i.e., intelligence and spirituality).

To understand wisdom more clearly, how wisdom and religiosity are interrelated should be clarified. As Ardel (2003) claimed, religiosity and wisdom are not the same constructs and they do not have to be present in the same person simultaneously. Yet, individuals are likely to have problems about differentiating those when completing 3D-WS. In fact, it makes sense that people might confuse wisdom and religiosity since wisdom and religion may not be totally independent from each other, which is evident in many studies. For instance, in the study of Adamovová (2013), positive correlation between orthodoxy and cognitive and reflective dimensions of wisdom was evident and even, the term *wise religiosity* was suggested. Another study conducted by Lloyd (2012) mentions wisdom as a very important virtue of Judeo-Christian way of thinking. Yet, while studying wisdom, psychologists are prone to ignore religious and spiritual parts of it. Furthermore, the assumption that wisdom merely relates to Christianity is false (McLaughlin & McMinn, 2015). In his book, Walsh (2014) examines and explains how wisdom exists in different religions including Judaism, Islam, Hinduism, Daoism, and Buddhism. Similarly, wisdom in Turkish culture seems to be closely related to religion. In his study, Onal (2009) explained "hikma", which corresponds to the concept of wisdom in east cultures including Indian, Chinese, Turkish and Islamic cultures. He stated that the understanding of wisdom that emerges in Turks found itself a compatible place within Islam as a collective value system. He also claimed that in contrast to the west, philosophy, religion, science and morality, even art have never been separated in the east. In this respect, it can be concluded that Turkish wisdom and religion are nested. These studies illustrate the association between

religion and wisdom. What's more is spirituality exists in this association, as well. In general, this is also true for the wisdom of Turkish wise figures such as Rumi who was a Sufist (Berkmen, n.d.). In summary, although religion, spirituality, and wisdom are not the same constructs, it should not be ignored that they have some common features and in Turkish culture, wisdom generally encompasses both religion and spirituality.

Sternberg (1998) categorizes theories of wisdom and mentions explicit and implicit theories of wisdom. Implicit theories try to find out conceptions of wisdom based on the individuals' folk conceptions. Therefore, coming up with a correct meaning of wisdom is not the aim. Rather, the main objective is finding a meaning of wisdom based on individuals' beliefs regardless of their accuracy. Moreover, implicit theories of wisdom are affected by many variables such as culture (Ferrari et al., 2016), age (Glück & Bluck, 2011), gender, education, and self-assessed wisdom (Weststrate, Ferrari, &, 2016). Explicit theories, on the other hand, are conducted by expert theorists and researchers rather than the common people and use constructs of psychological human development while studying wisdom (Sternberg, 1998). In the literature, studies about implicit theories of wisdom (Ferrari et al., 2016; Glück & Bluck, 2011; Glück, Strasser & Bluck, 2009; Krause, 2016; Pasupathi & Staudinger, 2001; Sternberg, 1985; Weststrate, Ferrari, & Ardelt, 2016) are more prevalent than studies about explicit theories of wisdom (Baltes & Smith, 1990; Jeste et al., 2010; Sternberg, 1998). This may be because wisdom is a construct that is highly influenced by variables such as culture, age or gender. In conclusion, implicit theories propose definition of wisdom by an expert whereas implicit theories attach importance to layperson's beliefs when defining wisdom.

As people age, it is generally assumed that people will become wiser. Yet, this may not be the case all the time. Some studies pointed out that older adults are better at wisdom related knowledge, judgement, and skills such as prosocial behaviors, resolving social conflicts, emotional homeostasis (Lim & Yu, 2015), knowledge database, abstract reasoning, reflective understanding, emotional empathy, and

emotional regulation (Takahashi & Overton, 2002). However, declines in cognitive skills (Gordon & Jordan, 2017) and intellectual functioning at old ages (Staudinger, 1999) may have a negative effect on the relation between age and wisdom.

Furthermore, culture may also influence this relation (Grossman et al., 2012; Thomson, 2002). To illustrate, Grossman et al. (2012) conducted a study with 186 Japanese and 225 Americans from different age groups to find out effect of cultural differences on the association between age and wisdom. It was shown that Japanese become wise at earlier ages than Americans and older Americans is wiser than their young counterparts. All in all, it can be concluded that older age might be both advantageous and disadvantageous for the development of wisdom and that culture may determine the age-wisdom relation.

One of the explicit theory of wisdom, *the Balance Theory of Wisdom*, suggests that wisdom is the practice of tacit knowledge by the help of “values toward the goal of achieving a common good (a) through a balance among multiple intrapersonal, interpersonal, and extrapersonal interests and (b) in order to achieve a balance among responses to environmental contexts: adaptation to existing environmental contexts, shaping of existing environmental contexts, and selection of new environmental contexts” (Sternberg, 1998, p. 353). Recently, Fengyan and Hong (2012) have developed a new theory of wisdom that incorporates *morality and intelligence* as essential dimensions of wisdom. According to this novel theory, wisdom develops by means of *heredity, environment* (including fetal environment, family environment, natural environment and social environment), *education*, and *self-effort*. Fengyan and Hong (2012) also proposed a new categorization for wisdom; *moral* wisdom and *natural* wisdom. While main components of moral wisdom are morality and creativity, natural wisdom is interested in subjects of natural science, which intends to find out natural laws. The wisdom acquired from natural sciences such as physics, mathematics, chemistry, biology etc. is natural wisdom. Moral wisdom, on the other hand, is applied in humanities and social sciences such as fine arts, psychology, ethics, etc. Another explicit theory of wisdom suggested by Baltes and Smith (1990), *Berlin Wisdom Paradigm* demonstrated that wisdom is an expert knowledge

requiring five criteria, which are 1) *Rich factual knowledge about life* 2) *Rich procedural knowledge about life* 3) *Lifespan contextualism* 4) *Relativism of values and life priorities*, and 5) *Recognition and management of uncertainty*. McKee and Barber (1999) proposed another explicit theory of wisdom; they claimed that there is a similarity between the definition of wisdom and the Jean Piaget's experiment in which five-year-old children state that there are more buttons than pennies (since buttons take up more space although number of pennies and buttons are equal). Similar to the illusion perceived by those children, it was suggested that "three aspects of the case—the pellucid insight that a belief is illusory, the freedom from further temptation by or vulnerability to the error, and the empathetic identification with those who are prey to the illusion—together constitute the essence of wisdom." (McKee & Barber, 1999, pp 153). Thus, the state of mind characterizing these three aspects is referred to as "seeing through illusion".

In addition to his explicit theory of wisdom, Sternberg also proposed an implicit theory of wisdom in which he conducted four experiments. In the first experiment, behavioral features of intelligent, creative, and wise persons were determined by 25, 26, 20, and 26 professors from art, business, philosophy, and physics, accordingly. 17 laypersons also determined the same features. Findings suggested that wisdom and intelligence were the most associated constructs whereas wisdom and creativity were the least associated ones regardless of the kind of the sample (either professors or commonpersons). In the second experiment, 40 Yale students categorized *reasoning ability, sagacity, learning from ideas and environment, good judgement skills, expeditious use of information, perspicacity* as being wise. In experiment three, the participants evaluated themselves on questionnaires measuring behaviors obtained from commonpersons' implicit theories of intelligence, creativity, and wisdom. Afterwards, each participant's response pattern on the questionnaires was correlated with the prototype questionnaire filled out by commonpersons in the first experiment and hereby, questionnaires were scored. Significant correlations between wisdom prototype scores and social intelligence measures of the George Washington and Chapin tests were reported. Thus, it can be concluded that people's conceptions

of wisdom correspond to the characteristics of social intelligence. In the final experiment, participants assessed the intelligence, creativity, and wisdom of hypothetical persons for whom letters of recommendation involving the behaviors acquired from implicit theories were present. Similar to the result of the first experiment, the highest correlation belonged to the relation between *wisdom* and *intelligence* indicating that ratings for the hypothetical persons in this experiment had the same pattern the ratings of hypothetical persons in the first experiment. Participants in the experiments think that the common trait of an intelligent and a wise person was *the analytical reasoning ability*. On the other hand, *sagacity* (listening to others, knowing how to reason recommendation, and coping with various kinds of people) is present in wise individuals but it may not be present in intelligent people. The correlation between creativity and wisdom may be even negative; while the wise individual is believed to be a protector of her and others' experiences, the creative individual is believed to object such experiences.

The study of Choi and Landeros (2011) involving interviews with 18 old wise people from low and middle SES to investigate how tough life experiences and coping can help development of wisdom can be also regarded as an example for implicit theory of wisdom. *Acceptance, Forgiveness, and Patience with Others* were prevalent themes of the life lessons. All the participants in the study were passionate readers regardless of their education level and thus, they emphasized the necessity of constant self-improvement as a feature of wisdom in the interviews. Moreover, the fact that they were spending their time and money for the sake of others at the time of interviews can be regarded as a kind of wisdom practice. Consistent with the virtue of humility possessed by wise persons, when the participants were said that others regard them as wise, they said that they do not see themselves as wise.

Since meaning of wisdom highly depends on culture, someone who is exemplified as a wise figure may also differ across cultures. At this point, meaning of wisdom based on Turkish culture might be mentioned. Ozdemir (2010) examines the meaning of Turkish wisdom and mentioned a significant Turkish wise figure in his study. He

states that in Turkish culture, Nasreddin Hodja is a character that is known as a wise person who has the features of humor and critical thinking. Nasreddin Hodja is regarded as the symbol of Turkish humor and philosophy. In his stories, it is remarkable that although everyone subjects him to an examination, he never tests anyone. This cannot be explained merely by his tolerance. Rather, by creating the character of Nasreddin Hodja, Turkish people put themselves into the center of self-criticism and stay healthy by questioning their lives. Nasreddin Hodja proves his wisdom by putting himself into the center of criticism and shows that wisdom begins with self-criticism (Ozdemir, 2010). Another example might be Yunus Emre, who is regarded as one of the most wise person in Turkish culture and who internalizes Sufi belief system, believes that humans are reflection of God and all people in the world are equal. Hence, he loves all people since he loves God. He thinks that everyone should be tolerant to each other, understand each other and have forgiveness for each other (Berkmen, n.d.). Another wise figure in Turkish culture, Rumi who is similar to Yunus Emre in terms of adopting Sufism, proposes similar thoughts and beliefs (Berkmen, n.d.). Farabi, yet another wise figure in Turkish culture and a philosopher, states that the most famous objective in life is happiness and he tries to explain how people can reach happiness (Tokat, 2006). There are too many other wise individuals in the history of Turkey that cannot be mentioned here. In this context, wisdom concept in Turkey can also be defined in a limitless way and its definition differ based on the characteristics of the wise person, his/her philosophical standpoint, etc. Although Turkish culture is very rich regarding number of famous wise figures, there is not any wisdom scale that is specifically designed for Turkish people.

As wisdom is not a unidimensional construct having a single definition, its assessment as well is not unidimensional. One of the widely-used measure of wisdom is *Three-Dimensional Wisdom Scale (3D-WS)* created by Ardel (2003) for old population. This scale measures three components of wisdom; affective (compassionate), reflective, and cognitive dimensions, which is consistent with Erikson's stage model of human development. Ericson (1982) defined wisdom as a

merit arised from the overcoming of the eighth psychosocial crisis that involves integrity versus despair, in elderly people. Ericson et al. (1986) stated that an old person's duty is to face with terms of their present life and the unchangeable past. Thus, this person needs to comprehend and admit the life as it is, which is about the acceptance of decreases in physical health and the matter of death. (as cited in Ardel, 2003).

3D-WS is a scale that may not work with people from low SES or people with low levels of education since it was applied to a sample of people who were retired professors and retired educators. This might be specifically true for cognitive dimension of 3D-WS, since it assesses person's comprehension of life and the wish to know the truth; individuals having those features are likely to have higher levels of education, higher occupational status, or higher income. Moreover, Ardel (2003) found a negative association between age and 3D-WS indicating that younger participants are likely to have higher levels of education than their aged counterparts. Yet, it was also suggested that age was unrelated to years of education or education degree. As a step for the further investigation of this issue, Ardel (2009) conducted a study with 464 undergraduate students and 178 old people who were above the age of 52. According to the results, university students were likely to report higher cognitive wisdom than older group and this can be explained by their high education level. In contrast, older group was likely to report higher reflective and affective wisdom when older university students were removed from the data. Regarding gender differences, results suggested that men and women got similar scores regarding overall wisdom and reflective wisdom in both age groups. Yet, men were prone to have higher scores on cognitive part of wisdom in older group, whereas women were prone to have higher scores on affective part of wisdom in both age groups. Furthermore, no significant gender differences were evident among the highest rated 25% of the participants in terms of three components of wisdom for both age groups. Thus, this study indicated that cognitive wisdom decreases with age due to decrease in education level while affective and reflective wisdom increase with age. In addition, about gender differences, this study suggested that women are

advantageous about affective wisdom but men are advantageous regarding cognitive wisdom. However, gender differences vanished among the highest rated 25 % of the participants regardless of the age. Cheraghi, Kadivar, Ardel, Asgari, and Farzad (2015) conducted a similar study in which 3D-WS was applied to an Iranian sample to find out the roles of age and gender in wisdom development. Results showed that age was positively correlated with three-dimensional wisdom among males and individuals with higher levels of education. Age was negatively correlated with cognitive component of wisdom among females and individuals with lower levels of education. However, there was a positive correlation between age and the compassionate, self-transcendent component of wisdom for both sexes. Besides, females were likely to have higher compassionate (i.e., affective) wisdom, but no gender differences were evident in terms of cognitive wisdom. It was also indicated that older females were prone to have lower scores on cognitive, reflective, and overall wisdom. Thus, this study contradicted with the Ardel's studies (Ardel, 2003; Ardel, 2009) by both finding a positive association between age and overall wisdom and negative association between age and reflective wisdom among women. Besides, this study found no significant gender differences regarding cognitive wisdom, which is also in contrast to Ardel's studies. Yet, it was consistent with Ardel's results since this study also found both the women's inclination to report higher affective wisdom, positive association between age and affective wisdom, and the negative association between age and cognitive wisdom. Similar study conducted by Maroof, Khan, Anwar, and Anwar (2015) produced different results regarding the effect of gender on wisdom. They found that men were prone to report higher affective wisdom, reflective wisdom, and overall wisdom as compared to women. In addition, similar to the findings of Cheraghi et al. (2015), there was not a significant difference between men and women about cognitive dimension of wisdom. To conclude, 3D-WS (especially cognitive wisdom subscale) might be a more suitable scale for the younger people who are highly educated, have high SES, occupational status, or income. Regarding age, gender, and their relations with overall 3D-WS and three components of wisdom (i.e., affective, cognitive, and reflective wisdom), the literature seems to be mixed up.

Other wisdom scales include Self-Assessed Wisdom Scale (SAW-S; Webster, 2003), Wisdom Development Scale (WDS; Brown & Greene, 2006), Foundational Value Scale (FVS; Jason et al., 2001), and The Adult Self-Transcendence Inventory (ASTI, Levenson, Jennings, Aldwin, & Shiraishi, 2005). The SAW-S is a 30 item 6-point Likert-scale and it measures wisdom according to the five distinct but overlapping categories that is supposed be present in a wise person: “(1) *emotional regulation*, (2) *humor*, (3) *critical life experiences*, (4) *reflectiveness / reminiscence*, and (5) *openness to experience*.” (Webster, 2003). The WDS is a 79 item, 7-point Likert-scale and it was created through the theory of Brown (2004) which examined wisdom as consisting of six interconnected components (as cited in Brown & Greene, 2006): *Self Knowledge, Understanding of Others, Judgment, Life Knowledge, Life Skills, and Willingness to Learn* (Brown & Green, 2006). The FVS is a 38 item, 5 Point-Likert-scale and has five factors: *Harmony, Warmth, Intelligence, Nature, and Spiritual* (Jason et al., 2001). The ASTI is an 18 item, 4 point-Likert-scale and was created according to Tornstam’s (1994) construct of gerotranscendence (as cited in Levenson, Jennings, Aldwin, & Shiraishi, 2005).

Although all the wisdom scales mentioned seem to be quite reliable and valid instruments, peer assessments of wisdom might also be as credible as a self-report measure. In fact, Redzanowski and Glück (2013) investigated the similarities and differences between the results of peer ratings of wisdom, self-ratings of wisdom and 3D-WS. It was showed that these three methods of wisdom assessment were not statistically interrelated. Hence, they are likely to measure distinct concepts. Nevertheless, it was claimed that assessment of wisdom through peer ratings can be an option to measure wisdom in some studies.

In this section of introduction, the difficulties when defining wisdom, implicit and explicit theories of wisdom, and assessment tools for wisdom were reviewed. In the

next section of introduction, the relations between wisdom, intrinsic religiosity, spirituality, and PWB of old population will be explained in detail.

1.2.2. Wisdom, Intrinsic Religiosity, Spirituality, and PWB of Old Population

There is a general opinion suggesting that wisdom leads to positive psychological outcomes for elderly individuals. Studies seem to verify this opinion, since wisdom was found to be related to higher life satisfaction, better physical health, increased quality of family relationships (Ardelt, 1997; Ardelt, 2000), better emotional well-being (Etezadi & Pushkar, 2013), personality growth (openness to experience, psychological mindedness and a sense of well-being derived from growth, purpose in life, and autonomy), personality adjustment (life satisfaction, high agreeableness, and conscientiousness, low neuroticism, a sense of well-being regarding positive relations with others, self-acceptance, and environmental mastery), generativity (Wink, & Staudinger, 2014), and subjective well-being (Ardelt & Edwards, 2015; Ardelt & Jeste, 2016) among old population. *Practical wisdom* which is “to know what to aim at – to know the purpose of being a friend or a father or a teacher or a statesman” (Schwartz & Sharpe, 2006) was also found to be positively associated with PWB (Krause & Hayward, 2014; Krause & Hayward, 2015). There is not any specific study showing the relation between Turkish wisdom and psychological well-being. Yet, it can be inferred that there is a positive link between these two by examining the features of well-known wise individuals in Turkish culture such as Yunus Emre, Rumi, and Farabi. It is more than likely that such wise people are happy and that they have higher inner peace and psychological well-being. Overall, it is obvious that both general literature and Turkish literature suggests that wisdom supports psychological well-being of the individuals.

Religion and wisdom resemble each other due to the fact that both of them have methodological problems in terms of their definitions. First difficulty results from the nature of religion; in order to define religion, one of the three principal theories should be adopted: 1) religion from the metaphysical viewpoint, 1) religion as psychologically lived through by individuals, and 3) religion as a cultural or social

influence. After deciding one of these theories, second difficulty comes out; either *essentialist* (determines essential factors for something to be entitled as a “religion”) or *polythetic* (does not necessitate that all religions share certain factors) types of definition should be chosen. Dimensions of religion can be considered as *belief*, *identity*, and *a way of life*. Religion as belief point out *doctrines*, whereas religion as identity refers to *attachment with a group* based on family, ethnicity, race, or nationality. Religion as a way of life, on the other hand, is linked to behaviors, rituals, and traditions that can differentiate the person from members of different religions (Gunn, 2003).

In the literature, there are few studies demonstrating a negative relation between religion and PWB. For instance, Brown and Tierney (2007) studied the relation between religiosity and subjective well-being with a sample of Chinese elderly people and it was indicated that religious participation was associated with poorer well-being. Yet, many studies claimed that religion is an essential part of overcoming of problems of senile. For instance, Şentepe (2015) conducted a study with a sample of 115 Turkish old participants who are at the age of 60 or older. The results of this study demonstrated that majority of the sample said that they think themselves as religious and it was found that most of them use positive religious coping and active coping styles. Besides, the same study suggested that the ones who evaluated their health as average and good were more religious as compared to the participants who evaluated their health as poor. Thus, religion should not be judged as a defense, an ineffective way of coping, or a kind of rejection (Emery & Pargament, 2004). Yılmaz (2013) mentioned the necessity of a religion education for old adults. He claimed that since in old adulthood, people experience both physical and psychological problems and they need more love and care of others, an accurate religion education can help them adapt this new period of life and make them feel happy and peaceful.

Especially, influence of religion can be more crucial for PWB of the elderly residing in institutions (Ercan Şahin & Emiroğlu, 2014; Gull & Dawood, 2013) and having a physical health problem such as post acute coronary syndrome (Bekke-Hansen et al., 2014) or chronic medical conditions (Momtaz et al., 2012). Ercan Şahin and

Emiroğlu (2014) investigated quality of life of old people in a nursing home in Turkey and they found that worship is one of the important activities of their participants. Religious attendance (Aranda, 2008) or synagogue (Levin, 2013) or church attendance, belief salience (Dezutter, Soenens, & Hutsebaut, 2006; Leondari & Gialamas, 2009), personal prayer (Levin, 2013; Maltby, Lewis, & Day, 1999), organizational, nonorganizational, and subjective components of religious involvement (Frazier, Mintz, & Mobley, 2005), feelings of God-mediated control (Krause, 2005), positive religious coping (Lee, Nezu, & Nezu, 2014; Lewis, Maltby, & Day, 2005), religious beliefs and practices (Gull & Dawood, 2013; Maheshwari & Singh, 2009), and strong religious identity (Greene & Elliot, 2010) were associated with either better PWB or PWB related outcomes such as happiness, life satisfaction, positive affect, high optimism, self-worth, low depressive symptoms, and low death anxiety.

Moreover, health and happiness of the person may depend on whether that person has liberal or fundamentalist religious beliefs. It was found that while liberal religious beliefs were associated with better health outcomes and less happiness, fundamentalist beliefs were found to be related to worse health outcomes and more happiness independent of strength of religious identity. The surprising negative association between fundamentalism and poor health may be due to: 1) fundamentalist people's transferring liability for physical health problems to a higher power and 2) having deterministic point of view to life, which decreases the possibility of getting medical help or engaging healthy behaviors. The reverse is likely to be true for the people with liberal religious beliefs. Religion and wisdom together might be beneficial for the PWB of individuals. Krause and Hayward (2015) found that 1) church attendance results in *practical wisdom*, 2) persons having practical wisdom are more prone to live through awe of God, 3) awe of God results in feeling of connectedness with others, and 4) this feeling of connectedness brings about higher life satisfaction. Similarly, church attendance, practical wisdom and self-rated health were found to be related to each other among middle-aged and old-aged individuals (Krause & Hayward, 2014). However, making a distinction between

intrinsic (personal) and *extrinsic (social) religiosity* might be necessary not to overgeneralize the positive relation between religion and PWB. In fact, only positive relation between intrinsic religiosity and PWB of old people or negative relation between extrinsic religiosity and PWB were evident in many studies (Dezutter, Soenens, & Hutsebaut, 2006; García-Alandete & Bernabé Valero, 2013; Göcen, 2013; Maltby, Lewis, & Day, 1999; Momtaz, Ibrahim, Hamid, & Yahaya, 2010; Osborne, Milojev, & Sibley, 2015) although there are also studies suggesting positive effects of both intrinsic and extrinsic religiosity on PWB of elderly (i.e., Momtaz, Ibrahim, Hamid, Yahaya, & Abdullah, 2012). Positive impact of extrinsic religiosity on well-being may result from the acquisition of respect due to social status that religion provides. This social status helps old individuals gain a power against younger individuals and thus, the loss of other sources arised from old age can be repaired (Shkolnik, Weiner, Malik, & Festinger, 2001). Yet, intrinsic religiosity was found to be positively correlated with mental health (Dezutter, Soenens, & Hutsebaut, 2006), psychological hardiness (Erdoğan, 2015), life satisfaction (Osborne, Milojev, & Sibley, 2015), happiness (together with positive religious coping) (Lewis, Maltby, & Day, 2005), decreased depressive symptoms, lower trait anxiety, higher self-esteem (Maltby, Lewis, & Day, 1999), and psychological well-being (García-Alandete & Bernabé Valero, 2013; Göcen, 2013). In the study of Göcen (2013), the association between intrinsic religiosity and psychological well-being was investigated with a sample of 611 Turkish people whose age ranged from 17 to 60 and it was revealed that while intrinsic religiosity was positively correlated with “Purpose in life”, “Self-acceptance”, “Personal Growth”, and “Positive Relations with Others” subscales of psychological well-being, it had no association with the subscales “Autonomy” and “Environmental Mastery”. According to Tokur (2016), the person with a solid internal religious motivation values himself and his environment, he is conscious of the existential value that one possesses, he is respected by others and thus, he becomes a person with a high level of self-esteem. This might explain the positive association between intrinsic religiosity and psychological well-being. Moreover, intrinsic religiosity might mediate the relation between widowhood and PWB since it was suggested that

intrinsic religiosity may contribute adaptation to spousal loss and thus, increase PWB (Momtaz, Ibrahim, Hamid, & Yahaya, 2010). This may explain why widowed Christian people are prone to live through an increment in their religious beliefs and church attendance (Brown, Nesse, House, & Utz). Yet, studies also show that not only intrinsic religiosity but also extrinsic religiosity may play a positive role in PWB of elderly by decreasing the negative impact of chronic medical conditions (Momtaz et al., 2012). Yet, an important issue that should be considered while examining the relation between religious orientation and PWB is cultural context. If the culture is *highly religious*, PWB is supposed to have positive correlation with general religiosity and even higher positive correlation with intrinsic religiosity. In cultures with *little religiosity*, on the other hand, religious persons might have worse or similar PWB in comparison to the general population (Lavrič & Flere, 2008). To conclude, although most research claimed positive influences of religion on well-being of elderly, many studies indicated that extrinsic religiosity seems to have negative effects on well-being. However, there are also some studies that demonstrated positive effects of extrinsic religiosity. In addition, cultural context should not be ignored when considering religion and PWB relation.

Spirituality is resembling the concepts of wisdom and religiosity regarding difficulty of its definition. Jernigan (2001) proposes this definition for spirituality: “*Spirituality is the organization (centering) of individual and collective life around dynamic patterns of meanings, values, and relationships that are trusted to make life worthwhile (or, at least, livable) and death meaningful*” (p. 418). He also underlined the cultural and religious variables affecting this definition and this seems to explain the difficulty of defining spirituality. Spirituality and spiritual-wellbeing are very similar terms and they are used interchangeably in many studies, still they are not the same constructs; spirituality is a broader term. According to *the Four Domains Model of Spiritual Health and Wellbeing*, characteristics of the relationship that an individual has with herself, with others, with nature and/or with God forms her spiritual well-being in four areas; *Personal, Communal, Environmental, and Transcendental*. Spiritual health results from the joined influence of spiritual well-

being in those areas. Hence, spiritual health is improved by favorable relationships in every area, and is likely to be arised by containing more areas (Fisher, 2011).

To define and understand spirituality more clearly, it may also be necessary to look at the blurred boundary between religion and spirituality, which is an area of interest for plenty of studies. Even in some studies, religion was regarded as one of the dimensions of spirituality (e.g., Vosloo, Wissing, & Temane, 2009). Zinnbauer et al. (1997) conducted a study in which one of the aims was differentiating the people defining themselves as “spiritual and religious” and defining as “spiritual but not religious”. While religiousness was related to more authoritarianism, religious established tenets, intrinsic religiosity, parental religious participation, self-righteousness, and church attendance, spirituality was related to mystical experiences, New Age beliefs, higher income, and emotionally painful experiences resulting from the clergy. Yet, it was also claimed that these two concepts are interrelated to some degree; both were associated with rate of personal prayer, church attendance, intrinsic religiosity, and religious established tenets. In the same study, few people defined themselves as merely spiritual and they had less inclination to assess religion favorably, to practice church attendance and prayer, to internalize religious ortodoxy or Christian faith. However, they were more prone to participate in activities about spiritual growth, to be agnostic, to think of religion and spirituality as distinct and convergent concepts, to internalize “new age” faith, and to have mystical experiences. Also, such people were more likely to view religion as an instrument to extrinsic goals (e.g. seeing others as inferior to themselves and keeping away from personal liability). Similarly, in the qualitative study of Gall, Malette, and Guirguis-Younger (2011) some people claimed that spirituality includes a global interrelatedness, while religion helps people enter and be part of a community and that its profit mainly results from *instrumental and social support*. Another similarity between these two concepts is that both spirituality and religion include *prosocial inclination* and *conscientiousness*. Yet, while focus on conservation was specific to religion, openness to change and to experience was specific to spirituality (Saroglou & Muñoz-García, 2008). All of these findings specify that spirituality and religion are interrelated concepts but that differences are also evident between these two.

Furthermore, people can define themselves as both religious and spiritual, or as solely spiritual, or as only religious.

Spirituality or spiritual well-being were found to be related to better PWB (Greenfield, Vaillant, & Marks, 2009; Kirby, Coleman, & Daley, 2004), fewer depression symptoms (Mills et al., 2014), and higher life satisfaction (Cowlshaw, Niele, Teshuva, Browning, & Kendig, 2013). Spirituality's effect on life satisfaction is likely to be mediated by *meaningfulness* (positively correlated) and *comprehensibility* (negatively correlated) dimensions of Antonovsky's (1987) sense of coherence term (as cited in Cowlshaw et al., 2013). Moreover, gender is likely to act as a moderator for the relation between *religious well-being* component of spiritual well-being and PWB (sense of coherence; satisfaction with life; positive affect and negative affect); women were found to have higher religious well-being than men (Vosloo, Wissing, & Temane, 2009). Spirituality or spiritual well-being and religiosity together were found to be associated with less depressive symptoms (Lawler-Row & Elliot, 2009; Lucette, Ironson, Pargament, & Krause, 2016; Yoon & Lee, 2006), more subjective well-being, higher purpose in life, more positive relationships with others (Lawler-Row & Elliot, 2009), less need for social support, and higher life satisfaction (Yoon & Lee, 2006). Spirituality and religiosity might be more crucial especially for frail elderly (Kirby, Coleman, & Daley, 2004) or institutionalized elderly (Fry, 2000). Nevertheless, some studies indicated positive impact of religiosity only (not spirituality) on PWB (e.g., Hafeez & Rafique, 2013). All in all, studies generally found that spirituality and spiritual well-being are beneficial for PWB of old persons. In fact, together with religion, spirituality or spiritual well-being can even be more beneficial for old people's well-being.

Wisdom may not be directly related to positive outcomes; mediators or moderators can play a role in such relations or wisdom may show its positive effect by eliminating adverse situations. Etezadi and Pushkar (2013) investigated the effect of mediators of the relation between emotional well-being and wisdom with a sample of 360 retired old people. It was suggested that wisdom has positive influences on

emotional well-being of elderly by means of adaptive coping style (problem-focused coping and positive reinterpretation), sense of meaning (life engagement), and perceived control. Similarly, Ardel and Edwards (2015) figured out that purpose in life has a partial mediator role between the relation between wisdom and wellbeing, directly and by a sense of mastery. Another study confirmed that reflective wisdom may show its beneficial effect on subjective well-being of elderly through minimizing the negative effect of disadvantageous life events (Ardelt & Jeste, 2016). Yet, this association may not be in effect for cognitive and compassionate wisdom. This is because unless people build calmness to approve the reality as it is and to recognize beyond the immediate situations to transfer the current situation in a bigger context, obvious vision of reality and showing sympathy and compassion for others may not be beneficial for well-being in tough times. In conclusion, wisdom is associated with favorable outcomes for elderly population and it shows its effect both directly and indirectly through mediators including adaptive coping style, perceived control, and decreasing the negative effect of disadvantageous life events.

In this section of introduction, wisdom and PWB relation, definitions of religion, intrinsic religious orientation and extrinsic religious orientation, and their effects on PWB of elderly were reviewed. In the last section of introduction, the aims of the study, the hypotheses, and the model of the study will be explained.

1.3. Aims of the Study

Literature suggests that wisdom, intrinsic religiosity, and spiritual well-being all have positive relations with PWB. Furthermore, it was mentioned that wisdom in Turkish culture includes both religious and spiritual aspects. Empirical evidence has not been present regarding whether Turkish wise people have intrinsic religious orientation and high spiritual well-being, but it is obvious that the several well-known wise figures in Turkish culture having intrinsic (personal) religious orientation and high levels of spiritual well-being. Unlike the people with extrinsic (social) religious orientation, they did not take the advantage of religion for their own profit (Allport & Ross, 1967). Thus, this situation raises a question: Is it possible that both intrinsic

religiosity and high spiritual well-being strengthen the positive association between wisdom and PWB? This question has not been answered yet, since there is not any study examining the effects of intrinsic religious orientation and spiritual well-being as moderators on the relation between wisdom and PWB. It has been not known whether the strength of the wisdom and PWB relation is affected by intrinsic religiosity and/or spiritual well-being and if they affect this relation, how important the roles they have in this relation has been uncertain. The current study has importance in this sense and its main objective is to investigate how intrinsic religiosity and spiritual well-being influence wisdom-PWB association (see Figure 1.1 and Figure 1.2) among old Turkish individuals. Following hypotheses belonged to the present study:

1. Wisdom-PWB association will be stronger for the participants who have higher levels of spiritual well-being. In other words, spiritual well-being would moderate wisdom-PWB association.
2. Wisdom-PWB association will be stronger for the participants who have higher levels of intrinsic religiosity. In other words, intrinsic religiosity would moderate wisdom-PWB association.

To test these two hypotheses, since there has been not any Turkish wisdom scale, Three-Dimensional Wisdom Scale (3D-WS) will be translated into Turkish and its psychometric properties will be examined. Therefore, secondary aims of the current study is translation of 3D-WS into Turkish and examination of its psychometric properties.

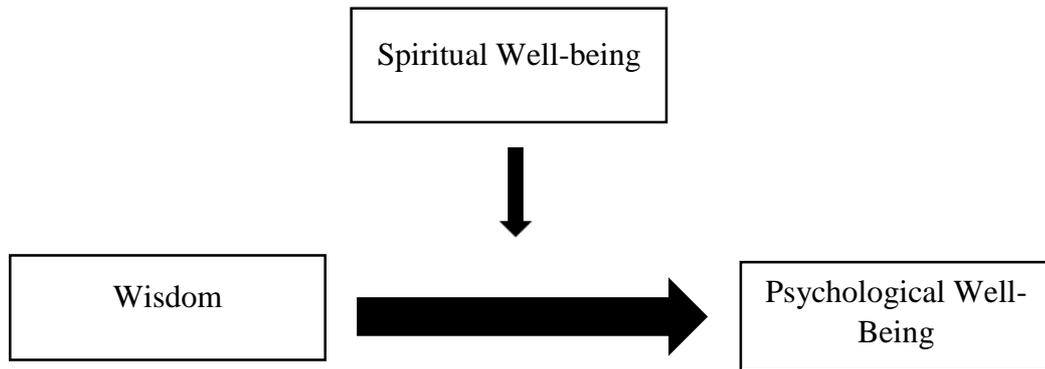


Figure 1.1. First model of the study

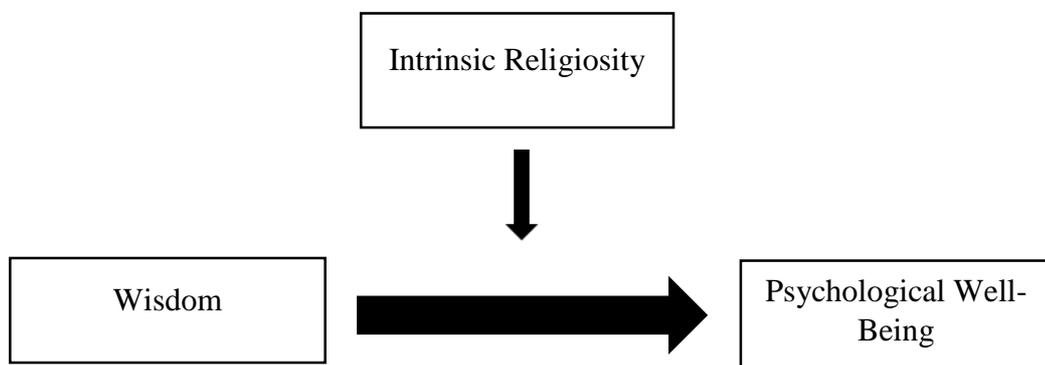


Figure 1.2. Second model of the study

CHAPTER 2

METHOD

2.1. Participants

Initially, there were 172 participants in the study. Convenience sampling method was used to recruit participants and psychology students were asked to administer the questionnaires to their grandparents or to any elderly person whom they can easily access. Since 7 questionnaires included too many missing items, they were excluded from the study. Thus, 165 participants remained; 68 participants (41.2 %) were males and 97 participants (58.8 %) were females. The age range of the participants was between 65 and 88 ($M = 70.30$, $SD = 5.26$). With regard to educational level, out of 164 participants (one of the participants did not specify his educational level); 72 (43.6 %) participants were literate or not literate or graduate of primary school; 47 (28.5 %) participants were either graduate of secondary school or graduate of high school; 45 (27.3 %) participants had Bachelor's or Master's or PhD degree. Furthermore, 139 (84.2 %) participants were either retired or not working anymore, whereas 26 (15.8 %) participants were still working. Out of 165, 129 (78.2 %) of them had pension whereas 36 (21.8 %) of them did not have it. Concerning perceived income levels, out of 162 participants (three participants did not specify their income levels), 32 (19.4 %) participants reported low income; 119 (72.1 %) participants reported middle income; and 11 (6.7 %) participants reported high income. With regard to marital status, out of 164 participants (one of the participants did not specify his marital status), 53 (32.1 %) participants were single (including single, divorced, or widowed); 111 (67.3 %) participants were married. Out of 164 participants (One of the participants did not specify with whom he/she lives together or whether he/she lives alone.), 27 (16.4 %) participants reported that they live alone; 63 (38.2 %) participants reported that they live with their husbands or wives; 74 (44.8 %) participants reported that they live with their families (includes not only husbands or wives but also daughters and sons). In addition, 73 (44.2 %) participants reported physical illness and 92 (55.8 %) participants did not report any physical illnesses.

Only 9 (5.5 %) participants reported that they had psychological problems while 155 (93.9 %) participants did not report any psychological problems. The number of participants who received treatment due to physical or psychological problem was 46 (27.9 %) and the number of participants who did not receive any treatments was 119 (72.1 %) (see Table 2.1).

Table 2.1. *Socio-Demographic Characteristics of the Sample*

Variables	<i>N</i> (165 participants)	%	<i>M</i>	<i>SD</i>
Gender				
Female	97	58.8		
Male	68	41.2		
Age			70.30	5.26
Education				
Not literate/Literate/Primary school	72	43.6		
Secondary school/High school	47	28.5		
Bachelor's/Master's/Doctoral degree	45	27.3		
Income				
Low	32	19.4		
Middle	119	72.1		
High	11	6.7		
Marital Status				
Single/Divorced/Widowed	53	32.1		
Married	111	67.3		
Occupation				
Employed	26	15.8		
Unemployed/Retired	139	84.2		
Pension				
Available	129	78.2		

Table 2.1. (Continued)

Not available	36	21.8
Residence		
Alone/Caregiver	27	16.4
Wife/Husband	63	38.2
Family	74	44.8
Physical Illness		
Yes	73	44.2
No	92	55.8
Mental Illness		
Yes	9	5.5
No	155	93.9
Treatment		
Yes	46	27.9
No	119	72.1

2.2. Measures

Initially, demographic information form including questions about gender, age, income, occupation (i.e., whether the participant is still working, retired or not working), marital status, pension (i.e., whether the participant has pension or not), residence (i.e., with whom the participant lives), physical and mental illness (i.e., whether the participant has any physical or mental illnesses or not), and treatment (i.e., whether the participant receives any treatments due to physical or mental illnesses or not) was given (see Appendix A). Afterwards, participants were administered a number of scales, which were Three Dimensional Wisdom Scale (3D-WS), Religious Orientation Scale (ROS), Spiritual Well-being subscale of the Mental, Physical and Spiritual Well-being Scale (MPS), Psychological Well-being Scale (PWS) / Flourishing Scale (FS).

Moreover, in order to test the validity of 3D-WS, Geriatric Depression Scale (GDS), Purpose in Life Test (PIL), and Heartland Forgiveness Scale (HFS) were given.

2.2.1. Three-Dimensional Wisdom Scale (3D-WS)

Three Dimensional Wisdom Scale (3D-WS) was developed by Ardelt (2003) to measure cognitive, affective, and reflective dimensions of wisdom. Out of 39 items of 3D-WS, 14 items belong to the cognitive component; 12 items belong to the reflective component; and 13 items belong to the affective component of wisdom. With regard to reply options, wisdom scale items were classified as two clusters. Items that begin with *I, me, or my* were evaluated on scale ranging from 1 (*definitely true of myself*) to 5 (*not true of myself*). Other items are Likert-type scale version ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). The items of the cognitive dimension evaluate individual's understanding of life or wish to find out the reality. This involves the knowledge of contradictory (e.g. positive and negative) sides of human nature, endurance of unclarity and ambiguity, and competence about taking crucial decisions in spite of the unexpected and uncertain situations. The reflective dimension evaluates the competence of considering phenomena and circumstances from distinct point of views and abstaining from subjectivity and accusation of others for one's own emotions. The affective dimension covers whether the person has favorable feelings and behavior toward other beings, and does not have unfavorable or insensitive feelings and behavior toward others. In Ardelt's (2003) study, cronbach's alpha value of the items of; the cognitive component of 3D-WS was .78, the reflective component of 3D-WS was .75, and the affective component of 3D-WS was .74, at time 1 and Cronbach's alpha value of the items of; the cognitive component of 3D-WS was .85, the reflective component of 3D-WS was .71, and the affective component of 3D-WS was .72, at time 2 (after 10 month). Ardelt (2003) found the 10 month test-retest reliability of 3D-WS as .85. The correlations among the cognitive, reflective, and affective components of the 3D-WS were between .30 and .50 in the same study. Ardelt (2003) performed confirmatory factor analysis and the factor loadings of the three dimensions of the 3D-WS were significant,

standardized values were between .50 and .84. In terms of convergent validity, she found significant positive correlations between 3D-WS and Pearlin and Schooler's (1978) Mastery Scale (.63), Fazio's (1977) General Well-Being Schedule (.45), Crumbaugh and Maholick's (1964) Purpose in Life Test (PIL) (.61), and four adapted items from the OARS Multidimensional Functional Assessment Questionnaire for subjective health (Center for the Study of Aging and Human Development, 1975) (.30). In addition, significant negative correlations were found between 3D-WS and the Center for Epidemiologic Studies Depression Scale (CES-D) (-.59), four adapted items from the OARS Multidimensional Functional Assessment Questionnaire (Center for the Study of Aging and Human Development, 1975) and the Americans' Changing Lives Questionnaire, Wave I (House, 1994) for feelings of economic pressure (-.23), the Death Attitude Profile-Revised (Wong, Reker, & Gesser, 1994) for death avoidance (-.33), and for fear of death (-.56). Concerning discriminant validity of 3D-WS, Ardel (2003) found that the participants' marital and retirement status, gender, race, per capita income, and social desirability were irrelevant to their 3D-WS scores. Yet, she found significant positive correlations between 3D-WS and education (.21), and the status of the longest-held occupation (.19) even though these correlations were not as strong as the correlations between 3D-WS and mastery, general well-being, purpose in life, subjective health, depression, death avoidance, and fear of death. Besides, the correlation between 3D-WS and Self-Assessed Wisdom Scale (SAW-S) was found as .76 in the study of Taylor and Bates (2011).

Thomas, Bangen, Ardel, and Jeste (2015) conducted a study in order to form abbreviated 3D-WS. Out of 39 items, 12 of them were selected in order to eliminate worries about reliability, internal structure, and content representativeness. The correlation between total 3D-WS and 3D-WS-12 was .70 and the correlations between subscales of 3D-WS and 3D-WS-12 ranged from .52 to .57. Total score of 3D-WS-12 were mainly influenced by the general Wisdom factor. While Wisdom explained 69% of variance in 3D-WS-12 total scores, the integration of Cognitive, Affective, and Reflective factors only explained 9%. Reliabilities on the basis of

subscales ranged from .69 to .70 for 3D-WS and from .62 to .64 for 3D-WS-12. Reliabilities on the basis of items were the same for the 3D-WS while for the 3D-WS-12 the correlations ranged from .73 to .74. Since 3D-WS-12 involves less items than 3D-WS, it is not surprising that its total scores yield less reliability than total scores of 3D-WS (for 3D-WS, see Appendix A).

3D-WS was translated into Turkish by the present author. Firstly, all items of 3D-WS were translated into Turkish. Afterwards, items were retranslated into English by a certified translator. The original items and these retranslated items were compared. If there is a difference between them, Turkish items were checked out and necessary changes were made in order to make them more equivalent to original items. For the current sample, overall reliability coefficient of the scale was .84. Reliability coefficients for cognitive, affective, and reflective subscales of the scale were .68, .70, and .79, respectively (for Turkish 3D-WS, see Appendix B).

2.2.2. Religious Orientation Scale (ROS)

Religious Orientation Scale (ROS) was developed by Allport and Ross (1967) in order to measure whether the individuals have extrinsic or intrinsic religious orientation and it has 10 items. People that have extrinsic orientation are prone to utilize religion for their self-interests. Such people benefit from religion in many ways; ensuring safety and comfort, socialization and diversion, promotion, and self-justification. On the other hand, intrinsically oriented individuals give priority to religion and try to adapt their remaining demands to religion. In ROS, 1 point refers to the most intrinsic answer, whereas 5 point refers to the most extrinsic answer. According to the multiple group factor analysis conducted by Gorsuch and McPherson (1989), it was found that extrinsic factor has two subfactors; socially extrinsic and personally extrinsic. The internal reliability of Extrinsic Subscale of ROS was .66 and the internal reliability of the Intrinsic Subscale of ROS was .82 (Gorsuch & McPherson, 1989).

Turkish adaptation of ROS was conducted by Kayiklik (2000). Although the original scale is composed of 20 items, since the items are in English and they are developed for the people from different culture, the original scale could not be used without modification and it was adapted to Turkish culture. Therefore, while the original ROS has 2 factors and 20 items, Turkish version of it is a one-factor scale with 10 items. Similar to original ROS, since every item of the Turkish version of the scale has a value between 1 and 4, the highest score can be 40 and the lowest score can be 10. Answer options were formed as 4-point Likert type scale. The internal consistency of Turkish version of ROS was .78 and item-total correlations were between .26 and .59, which means that this scale is a reliable instrument for the measurement of religious orientation (Kayiklik, 2000). In the present study, the internal consistency reliability coefficient of the scale was .85 (for ROS, see Appendix C).

2.2.3. Mental, Physical and Spiritual Well-being Scale (MPS)

Mental, Physical and Spiritual Well-being Scale (MPS) was developed by Vella-Brodrick and Allen (1995). MPSWS assesses mental, physical, and spiritual dimensions of well-being, by integrating Mental, Physical, and Spiritual subscales each of which consists of 10 items. Integration of mental, physical, and spiritual components to assess wellbeing is consistent with the holistic idea of nourishing the mind, body and spirit and maintaining a balanced way of life. Although focus is on the positive sides of these three components of wellbeing, the fact that assessment of wellbeing should also involve the assessment of ill-health is taken into consideration. Therefore, some items of the physical subscale appraise illness based on the participants' reported actions instead of their emotions or ideas so that response bias and subjectivity are minimized. For concurrent validity of MPS, General Health Questionnaire and Spiritual Well-being Scale were administered by Vella-Brodrick and Allen (1995). The correlations between General Health Questionnaire and Mental, Physical, Spiritual subscales of MPS were -.22, -.38, and -.10 respectively. Correlation between General Health Questionnaire and spiritual subscale of MPS

was not significant. The reason of these negative correlations was that high score on MPS shows better health while high score on General Health Questionnaire shows poor health. Although the correlations were statistically significant, little common variance was found since General Health Questionnaire concentrates on mental illness while MPS mostly assesses positive mental health. Vella-Brodrick and Allen (1995) used the Spiritual Well-being Scale to test the validity of spiritual subscale of MPS, and the correlation between them was .82, which is a proof of the validity of spiritual subscale of MPS.

In the study of Green (2006), factor structure of MPS was examined by administering MPS to 175 crime victims. In order to find out initial factors, a principal component analysis was used. Factors that have eigenvalues of 1.0 or higher remained. After principal component analysis with varimax rotation, 30 MPS items were decreased to a three factor solution. Mental, Physical, and Spiritual Subscales showed sufficient internal reliability (.83, .82, and .78, respectively). These three factors explained 57% of the variance (11% Mental Subscale, 25% Physical Subscale, and 21% Spiritual Subscale). According to reliability analysis of MPS (Vella-Brodrick & Allen, 1995), the internal consistencies of Mental, Physical, and Spiritual subscales of MPS were .75, .81, and .85, respectively. In addition, one month test-retest reliability of Mental, Physical, and Spiritual subscales of MPS were found by Vella-Brodrick and Allen (195) as .94, .87, and .97, respectively. Therefore, it seems that MPS is a reliable instrument for the measurement of mental, physical, and spiritual well-being.

MPS was translated into Turkish by Bozo (unpublished). Bozo found the internal consistency of the Turkish version of MPS as .60. The correlation between Subjective Well-Being Scale (Tuzgöl-Dost, 2005) and MPS was found as .32 by Bozo, which is an evidence of convergent validity of MPS. Since Bozo found negative correlations between Beck Depression Inventory and MPS (-.31) and the between Brief Symptom Inventory and MPS (-.26), it seems that MPS has the divergent validity. For the present study, only Spiritual Subscale of MPS was given

to the participants. For the current sample, the internal consistency reliability coefficient of Spiritual Well-being subscale was .84 (for MPS, see Appendix D).

2.2.4. Purpose in Life Test (PIL)

Purpose in Life Test (PIL) was developed by Crumbaugh and Maholick (1964) in order to measure the level of purpose in life that is explored by an individual. It has 16 items that are based on *existentialism*, especially *logotherapy*, and a *prediction* to find out what kind of material can differentiate patients from healthy people. Reply options for all of the items were formed as a 7-point scale. Crumbaugh and Maholicak (1964) found item-total correlations (Pearson r 's) ranging between -.06 and .82. The reliability of PIL revised total score computed by the odd-even method was .81, Spearman-Brown corrected to .90. As predicted, in the study of Crumbaugh and Maholick (1964) that includes both patients and healthy people as participants, PIL significantly differentiated patients from healthy individuals, which can be an indication of discriminant validity of PIL. In the same study, the correlation between PIL and *The Frankl Questionnaire* was .68, which shows that both scales measure existential frustration. The correlation between *K (Validity) and D (Depression) subscales of MMPI* and PIL were found as .39 and -.30 by Crumbaugh and Maholick (1964), respectively. This is not unexpected as K scale evaluates defensiveness, it is a fact that people who have high level of "purpose in life" are prone to be sufficiently defensive and less depressive (Crumbaugh & Maholick, 1964).

PIL was translated into Turkish by Kırac (2015). According to reliability analysis of PIL by Kırac, item-total correlations of Turkish PIL ranged from .31 to .77. Cronbach's alpha coefficient was .91, showing a high level of reliability. Also, split-half reliability of PIL was .92 in the same study, showing very high level of reliability. Cronbach alpha coefficients for *quality of life, meaning and purpose, and freedom* factors of Turkish PIL were .89, .82, and .61 by Kırac (2015), respectively. Since psychometric properties of four original PIL items (8, 12, 13, 15) were insufficient, they were discarded from Turkish version of PIL. For the current

sample, the internal consistency reliability coefficient of the overall scale was .89. Reliability coefficients for quality of life, meaning and purpose, and freedom factors were .84, .76, and .74, respectively (for PIL, see Appendix E).

2.2.5. Geriatric Depression Scale (GDS)

Geriatric Depression Scale (GDS) was developed by Yesavage et al. (1983). GDS is a screening measure that is created to evaluate depression in older individuals. Since an old person may be puzzled by a measure including many answer choices, yes/no format was selected as the answer choices of GDS items. There are 30 items that involve various dimensions of depression including somatic and cognitive feelings of pain, motivation, future/past orientation, self-image, losses, agitation, obsessive symptoms, and mood. It was indicated that GDS is able to differentiate nondepressed, mildly depressed, and severely depressed elderly. Yesavage et al. (1983) found both alpha-coefficient and split-half reliability of GDS as .94. They found one week test-retest reliability of GDS as .85. Therefore, GDS seems to be a reliable scale for the measurement of depression in older adults. The correlation between GDS and the Zung Self-Rating Depression Scale (SDS) was .84 and the correlation between GDS and the Hamilton Rating Scale for Depression (HRS-D) was .83 in the same study, which are indications of concurrent validity of GDS.

GDS was translated into Turkish by Ertan and Eker (2000). They found one week test-retest reliability of Turkish GDS as .74 and cronbach's alpha coefficient of GDS as .91. Item-total correlations of Turkish GDS ranged from .22 to .72 in the same study. In terms of discriminant validity, they suggested that Turkish GDS differentiated the retirement home group and major depression group significantly. In the present study, the internal consistency reliability coefficient of the scale was .89 (for GDS, see Appendix F).

2.2.6. Heartland Forgiveness Scale (HFS)

Heartland Forgiveness Scale (HFS) was developed by Thompson et al. (2005). It is a self-report scale with 18 items designed to measure the tendency of forgiveness. Items 1 to 6 evaluate *forgiveness of self*, items 7 to 12 evaluate forgiveness of others, and items 13 to 18 evaluate forgiveness of situations. Individuals determine to what degree each item is true or false for them on a 7-point scale. Thompson et al. (2005) found the internal consistency of HFS displayed by Cronbach's alpha coefficient as .87. They also found the correlations between HFS subscales (*self, other, situation*) ranging from .31 to .60. To determine the validity of HFS, Thompson and his colleagues examined both the correlation between HFS and dispositional measures (Mauger et al.'s Forgiveness of Others, Mauger et al.'s Forgiveness of Self, Multidimensional Forgiveness Inventory) and the correlation between HFS and nondispositional measures (Interpersonal Relationship Resolution Scale, Transgression-Related Interpersonal Motivations Inventory, Enright Forgiveness Inventory). The correlations between HFS and Mauger et al.'s Forgiveness of Self (FS), HFS and Mauger et al.'s Forgiveness of Others (FO), and HFS and Multidimensional Forgiveness Inventory (MFI) were .51, .47, and .47, respectively. Although it is a dispositional scale, they found a weak correlation between Willingness To Forgive (WTF) and HFS (.20). Weak correlations were also found between HFS and undispositional measures that were Interpersonal Relationship Resolution Scale (.17), Transgression-Related Interpersonal Motivations Inventory (-.25), and Enright Forgiveness Inventory (.19).

HFS was translated into Turkish by Bugay and Demir (2010). They found the Cronbach's alpha coefficients for HFS total, forgiveness of self subscale, and forgiveness of other subscale as .81, .64, and .79, respectively. They indicated the convergent validity of Turkish HFS by the correlations between The Satisfaction with Life Scale (SWLS) and HFS total (.32), HFS self (.20), HFS other (.14), and HFS situation (.38) subscales. Additionally, strong negative correlations was found between the Ruminative Response Scale and HFS self (-.35), HFS situation (-.35),

and HFS total (-.33), apart from HFS other subscale (-.08) in the same study. For the present sample, the internal consistency reliability coefficient of the overall scale was .79. The reliability coefficients for self, others, and situations subscales were .54, .73, and .72, respectively (for HFS, see Appendix G).

2.2.7. Psychological Well-Being Scale (PWS) / Flourishing Scale (FS)

Psychological Well-Being Scale (PWS) was developed by Diener et al. (2009) in order to measure individual's psychological well-being that shows ideal human functioning. Items of the scale involves essential dimensions of human functioning including positive relationships, feelings of competence, and possessing meaning and purpose in life. PWB has 8 items and reply choices are 7-point scale changing from strong disagreement to strong agreement. Internal consistency of PWB indicated by Cronbach's alpha coefficient was .86 and one-month test-retest reliability of PIL was .71 (Diener et al., 2009). Diener and his colleagues claimed that PWB has one factor with an eigenvalue above 1.0 (4.0) that explained 50% of the variance in answers. The factor scores were between 0.58 (feeling respected) and 0.76 (having a specified goal and meaning in life). They found the correlations between PWB and two similar scales, Deci and Ryan's Basic Need Satisfaction Scale (2000) and The Ryff Scales of Psychological Well-Being (2008) as .69 and .80 (for the subscales of Ryff scales *Autonomy, Growth, Mastery, Relationships, Self-acceptance, and Purpose*, the correlations ranged from .39 to .70), indicating high convergent validity of PWB. It seems that PWB is a reliable and valid scale for the measurement of psychological well-being.

Telef (2001) translated PWB into Turkish and examined its psychometric properties. In his study, he administered the scale to 529 pre-service teachers. According to exploratory factor analysis that he conducted, 41.94% of the variance was explained and the factor loadings of the items ranged from .54 to .76. Reliability of PWB indicated by Cronbach's Alpha coefficient was found as .80 by Telef (2001). He found the test-retest reliability of the scale as .86. PWB can be regarded as a valid

and reliable scale to use in research. In the present sample, the internal consistency reliability coefficient of the scale was .87 (for PWS, see Appendix H).

2.3. Procedure

Prior to data gathering, ethical approval was obtained from Middle East Technical University Human Subjects Ethics Committee (see Appendix J). Questionnaires were given to participants after the informed consent (see Appendix I) and demographic information forms.

2.4. Statistical Analyses

Statistical analyses were performed by The Statistical Package for Social Sciences (SPSS), version 23 for Windows. Initially, confirmatory factor analysis was conducted for Turkish version of 3D-WS with EQS 6.1 software with maximum likelihood estimation to test the fit of the data to the original three-factor model. Internal consistency reliabilities of Turkish 3D-WS and its subscales were examined. Afterwards, convergent and divergent validities of 3D-WS were analyzed by zero-order correlations. Independent-samples t test and one way between-subjects Analysis of Variance (ANOVA) were utilized to investigate criterion-related validity of 3D-WS by examining whether 3D-WS and its subscales differentiated on the levels of socio-demographic variables (i.e., gender and physical illness, educational attainment) or not. A number of ANOVA was also used to investigate whether the other scales of the study (i.e., Religious Orientation Scale, Psychological Well-being Scale, and Spiritual Well-being subscale of Mental, Physical, Spiritual Well-being Scale) were different based on the levels of socio-demographic variables. Correlations among the continuous variables used in the study were investigated by zero-order correlations. Finally, moderation analysis was run to explore the moderator roles of intrinsic religiosity and spirituality on the wisdom-psychological well-being relation.

CHAPTER 3

RESULTS

3.1. Descriptive Analyses of the Measures of the Study

Means, standard deviations, minimum-maximum scores, and internal consistency coefficients (Cronbach's alpha) were calculated for Three Dimensional Wisdom Scale (3D-WS) and its subscales (i.e., affective wisdom, reflective wisdom, and cognitive wisdom), Religious Orientation Scale (ROS) and spiritual subscale of Mental, Physical, Spiritual Well-being Scale (MPS), Psychological Well-being Scale (PWB) and its subscales (i.e., autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance), Geriatric Depression Scale (GDS), Heartland Forgiveness Scale (HFS) and its subscales (i.e., forgiveness of others, forgiveness of self, and forgiveness of situations), Purpose in Life Test (PIL) and its subscales (i.e., quality of life, meaning and purpose, and freedom). The number of participants, mean and standard deviation values, maximum and minimum values, and Cronbach's alpha coefficients of each measure were shown in Table 3.1.

Table 3.1. *Descriptive characteristics of the measures (N = 165)*

Measures	Mean	SD	min	max	Cronbach's Alpha
3D-WS					
Affective Wisdom	3.32	.53	1.92	4.62	---
Reflective Wisdom	3.35	.65	1.25	4.67	.79
Cognitive Wisdom	2.90	.53	1.71	4.43	.71
Overall Wisdom	3.19	.45	2.04	4.27	.80
ROS	20.73	6.89	8	38.66	.85
MPS					
Spiritual Well-being	37.43	8.40	16	50	.84
PWB	43.20	8.36	18	56	.87
HFS					
Forgiveness of Others	25.88	6.90	11	42	.73
Forgiveness of Self	27.97	5.32	14	41	.54

Table 3.1. (Continued)

Forgiveness of Situations	26.75	6.31	10	42	.72
PIL					
Quality of Life	32.07	7.88	12	49	.84
Meaning and Purpose	38.01	8.65	17	105.45	.76
Freedom	9.31	2.96	2	14	.74
GDS	9.75	6.58	0	29	.89

Note. 3D-WS = Three-Dimensional Wisdom Scale, ROS = Religious Orientation Scale, MPS = Mental, Physical, Spiritual Well-being Scale, PWB = Psychological Well-being Scale, GDS = Geriatric Depression Scale, HFS = Heartland Forgiveness Scale, PIL = Purpose in Life Test.

Note 2. Overall wisdom score is calculated by obtaining the average of affective, reflective, and cognitive wisdom scores

Note 3. Internal reliabilities of overall, affective, cognitive, and reflective wisdom were calculated after the items 2, 3, 4, 8, 11, 14, 17, 19, 24, 27, 30, 33, and 36 were excluded. Since affective wisdom had only two items, Cronbach's alpha was not calculated.

3.2. Psychometric Properties of 3D-WS

3.2.1. Confirmatory Factor Analysis

A confirmatory factor analysis (CFA) was conducted to examine the factor structure of 3D-WS. Before performing CFA, the data were analyzed to confirm the accuracy of data entry and detect missing values. The frequency analysis indicated that all values are within the acceptable range. Afterwards, a CFA with three factors, each including thirteen items was investigated by EQS 6.5. Covariance matrix was used as data entry in testing the model. Maximum likelihood estimation was examined to estimate the model. Chi square (χ^2), Comparative fit index (CFI), and root mean square error of approximation (RMSEA) were examined to evaluate the model fit (Hu & Bentler, 1998).

Since the multivariate kurtosis was evident in data (Mardia's $z = 12.10$), the analysis required the interpretation of robust statistics. However, since the program, EQS, was unable to process the data, the analysis was interpreted as normal. Standard

residual matrix demonstrated that average off-diagonal absolute standardized residual was .07. Based on residual distributions, 35 % of the residuals was between 0 and -0.1, and 36.54 % of the residuals was between 0.1 and 0. Hence, totally 71.54 % of the residuals was between -0.1 and 0.1. The original three-factor model with 39 items did not show an overall sufficient fit to the data ($\chi^2(699) = 1363.2, p < .001$, CFI = .551, RMSEA = .076, 90 % CI [0.070, 0.082]) (see Table 3.2). Unstandardized factor loadings of affective wisdom items A2, A4, A8, A14, B2, B4, B9, B12, B15, B18, B21 and unstandardized factor loadings of cognitive wisdom items A3 and A11 were not significant. Apart from these items, standardized factor loadings were .13 and .35 for affective subscale, they were between .26 and .62 for cognitive wisdom, and they were between .31 and .62 for reflective wisdom (see Figure 3.1). Moreover, shared variances between indicators and factors were ranged from 2 % to 12 % for affective wisdom, from 7 % to .38 for cognitive wisdom, and from 10 % to 39 % for reflective wisdom. Correlation between reflective and affective wisdom was found to be .76, correlation between cognitive and affective wisdom was found to be .44, and correlation between cognitive and reflective wisdom was found to be .47.

Table 3.2. Goodness-of-fit indicators of models for 3D-WS ($N = 165$)

Model	χ^2	<i>df</i>	CFI	RMSEA	90 % CI
Initial Model	1363.2*	699	.551	.076	.070 - .082
Trimmed Model	652.90*	321	.614	.079	.070 - .088
Modified Model 1	551.95*	293	.696	.073	.064 - .082
Modified Model 2	475.92*	289	.780	.063	.052 - .072

Note. * $p < .001$

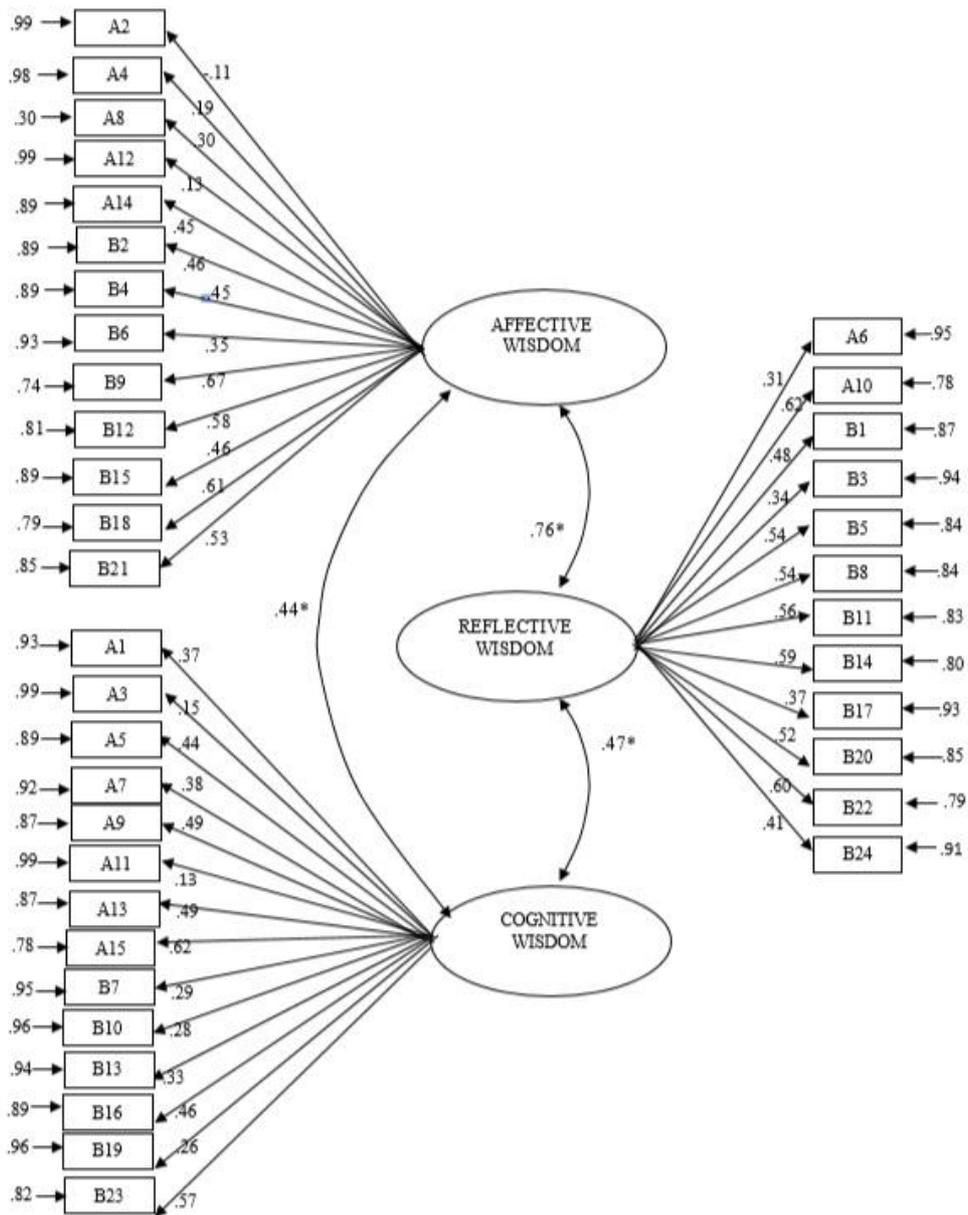


Figure 3.1. Standardized solutions for confirmatory factor analysis for the first model. * $p < .05$.

To get a lower chi-square and obtain a better fit, the model was trimmed by deleting these unloaded items from their factors (Garson, 2015), and the trimmed model showed a better but still insufficient fit to the data ($\chi^2(321) = 652.90, p < .001, CFI = .614, RMSEA = .079, 90\% \text{ CI } [0.070, 0.088]$). For further modifications, Lagrange Multiplier (LM) Test was examined. The modification index recommended that

adding covariance between the errors of items B5 (I always try to look at all sides of a problem) and B17 (When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information), between the errors of items B5 and B1 (I try to look at everybody's side of a disagreement before I make a decision), and between the errors of items B1 and B20 (Before criticizing somebody, I try to imagine how I would feel if I were in their place) would significantly improve the model fitness. All these items belong to the reflective dimension of wisdom and they are very similar to each other in terms of meaning and thus, these modifications were done in turn. Firstly, adding a covariance between the errors of items B5 and B17 would result in a significant (i.e., 26.12 point) decrease in the chi-square. Secondly, adding a covariance between the errors of items B5 and B1 would provide a significant (i.e., 26.42 point) decrease in the chi-square. Finally, adding a covariance between the errors of items B1 and B20 would bring about a significant (i.e., 24.02 point) decrease in the chi-square. These three modifications together would result in a significant (i.e., 108.17 point) decrease in the chi-square. The new model showed much better fit to the data and chi-square difference was significant ($\Delta X^2(28) = 100.95, p < .001$) yet there was still room for improvement regarding CFI and RMSEA, indicating a poor fit ($\chi^2(293) = 551.95, p < .001, CFI = .696, RMSEA = .073, 90\% \text{ CI } [0.064, 0.082]$).

Finally, the LM test recommended adding covariance between the errors of items B14 (Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems) and B19 (I am hesitant about making important decisions after thinking about them), between the errors of items A15 (People are either good or bad) and A13 (A person either knows the answer to a question or he/she doesn't), between the errors of items B3 (When I'm upset at someone, I usually try to "put myself in his or her shoes" for a while) and B20 (Before criticizing somebody, I try to imagine how I would feel if I were in their place), and between the errors of items B1 (I try to look at everybody's side of a disagreement before I make a decision) and B17 (When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of

information). Again, theoretically, it made sense to add error covariances of these items, since they have similar meanings. Firstly, adding a covariance between the errors of items B14 and B19 would result in a significant (i.e., 25.33 point) decrease in the chi-square. Secondly, adding a covariance between the errors of items A15 and A13 would provide a significant (i.e., 18.58 point) decrease in the chi-square. Thirdly, adding a covariance between the errors of items B3 and B20 would bring about a significant (i.e., 14.73 point) decrease in the chi-square. Finally, adding a covariance between the errors of items B1 and B17 would lead to a significant (i.e., 13.33 point) decrease in the chi-square. These three modifications together would result in a significant (i.e., 71.99 point) decrease in the chi-square. The final model showed a good fit to the data ($\chi^2(289) = 475.92, p < .001, CFI = .780, RMSEA = .063, 90\% \text{ CI } [0.052, 0.072]$), and the chi square difference was significant ($\Delta\chi^2(4) = 76.03, p < .001$), implying a better fit of the model (see Table 3.2.). Error covariances and factor covariances of the final model were presented in Table 3.3.

Table 3.3. Factor covariances and error covariances of the final model

	Factor Covariances	Error Covariances
Factors		
Reflective – Affective	.12	
Cognitive – Affective	-.05	
Cognitive – Reflective	.23*	
Items		
A15 – A13		.35*
B5 – B1		.33*
B17 – B1		.27*
B20 – B1		.30*
B20 – B3		.35*
B17 – B5		.35*
B19 – B14		.49*

Note. * $p < .05$

In the final model, significant standardized factor loadings ranged from .33 to .48 for the affective subscale, from .23 to .57 for the reflective subscale, and from .25 to .65 for the cognitive subscale (see Table 3.4). Shared variances between indicators and factors were between 7 % and 42 % for reflective wisdom, 11 % and 22 % for affective wisdom, and 8 % and 33 % for cognitive wisdom. Affective wisdom explained 16 % of the total variance, reflective wisdom explained 67 % of the total variance, and the cognitive wisdom explained 26 % of the total variance.

Table 3.4. Unstandardized factor loadings, standardized factor loadings and their standard errors for three factor confirmatory model of Turkish 3D-WS (N = 165)

İtems	B	β	SE
Affective Wisdom (13 items)			
A2- Kendilerine sadece acıyan mutsuz insanlardan rahatsızım	-.76	-.12	.75
A4- İnsanlar duyguları ve hayvanlara karşı duyarlılığı abartmaktadırlar	1.51	.19	1.21
A8- Asla sevmeyeceğimi bildiğim tanıdığım bazı insanlar var	2.40	.30	1.74
A12 (reversed)- Her türlü insanla rahat olabilirim	1**	.33	
A14- İnsanların başı dertteyse ve yardıma ihtiyaç duysalar bile bunu kendime dert etmem	2.85	.45	1.97
B2 (reversed)- Yardıma muhtaç insanlar gördüğümde, onlara bir şekilde yardım etmeye çalışırım	2.47	.46	1.70
B4- Hiç sevmediğim öyle insanlar var ki enselendiklerinde ve yaptıkları şeyden dolayı cezalandırıldıklarında içten içe sevinirim	3.74	.45	2.58
B6 (reversed)- Bazen herkese gerçek bir şefkat duyarım	1.20*	.48	.58
B9- İnsanlar ihtiyaç duyduğunda, çoğu zaman onları teselli etmem	4.84	.67	3.27
B12- İnsanlar sorun yaşadığında, onlar için bazen çok üzülmem	4.64	.58	3.16
B15- Bazen insanlar benimle konuşurken, kendimi onların uzaklaşmasını dilerken bulurum	3.79	.46	2.61
B18- Diğer insanların dertlerini dinleme işine bulaşmak istemem	4.83	.61	3.27
B21- Benimle tartışan insanlara hemen öfkelenirim	4.47	.53	3.05
Reflective Wisdom (12 items)			
A6- Mevcut şartların değişseydi kendimi çok daha iyi hissederdim	.48*	.35	.13
A10- Hatam olmasa bile, benim için işler çoğunlukla ters gider	.83*	.62	.13
B1 (reversed)- Anlaşmazlık durumlarında bir karar vermeden önce herkesin bakış açısını öğrenmeye çalışırım	.68*	.33	.13
B3 (reversed)- Birine bozulduğumda genelde kendimi bir süreliğine onun yerine koymaya çalışırım	.50*	.26	.13
B5 (reversed)- Problemlere her zaman bütün açılardan bakmaya çalışırım	.66*	.45	.12
B8- Neler yaşadığıma dönüp baktığımda, kırgın hissetmekten kendimi alamıyorum	.93*	.62	.17
B11- İşler ters gittiğinde ya çok öfkelenir ya da bunalıma girerim	.97*	.54	.17

Table 3.4. (Continued)

B14- Bazen duygusal anlamda o kadar dolu olurum ki sorunlarımla başa çıkmanın birçok yolunu düşünemeyecek hale gelirim	1**	.63	
B17 (reversed)- Bir sorundan dolayı kafam karıştığında yaptığım şeylerden ilki olayı gözden geçirmek ve ilgili tüm bilgileri göz önünde bulundurmak olur	.47*	.27	.11
B20 (reversed)- Birini eleştirmeden önce, onun yerinde olsaydım nasıl hissederdim diye düşünmeye çalışırım	.80*	.43	.15
B22- Geriye dönüp olanlara baktığımda, kendimi aldatılmış hissederim	1.04*	.65	.17
B24- Bazen olaylara başka birinin açısından bakmakta zorlanırım	.64*	.45	.14
Cognitive Wisdom (14 items)			
A1- Bu karmaşık dünyamızda neler olup bittiğini bilebilmemizin tek yolu güvenilir liderlere ya da uzmanlara itimat etmektir	1**	.41	
A3- Hayat aslında çoğu zaman aynıdır	.34	.15	.21
A5- Neredeyse bütün insanları dürüst ya da hilekar olarak sınıflandırabilirsin	1.20*	.45	.32
A7- Herhangi bir şeyi yapmanın sadece tek bir doğru yolu vardır	.96*	.39	.28
A9- Değiştirilemeyecek şeyler hakkında çok şey bilmemek daha iyidir	1.08*	.47	.29
A11- Cahil olan insan mutludur	.38	.13	.27
A13- İnsan bir sorunun cevabını ya biliyordur ya da bilmiyordur	1.05*	.38	.28
A15- İnsanlar ya iyidir ya kötüdür	1.49*	.54	.36
B7- Bir şeyler hakkında derinlemesine düşünmek zorunda kalacağım ihtimali olan durumları öngörmeye ve bu durumlardan kaçınmaya çalışırım	.70*	.28	.25
B10- Bir problemin çözümü olduğunu düşünmüyorsam, o problem benim için çok da cazip değildir	.61*	.23	.24
B13- Çoğu zaman insanların davranışlarını anlamam	.74*	.31	.26
B16- Olayların nasıl bu hale geldiğini anlamaya çalışmak yerine olurlarına bırakmayı tercih ederim	1.12*	.50	.31
B19- Önemli kararlar alma konusunda üzerlerinde düşündükten sonra kararsız kalırım	.67*	.32	.26
B23- Bir problemin çözümünün altında yatan nedenleri anlamaktansa sadece çözümü bilmek benim için yeterlidir	1.46*	.57	.37

Note 1. * $p < .05$; ** stands for the items that were fixed to 1

Note 2. B, β , and SE values of the items A2, A3, A4, A8, A11, A14, B2, B4, B9, B12, B15, B18, and B21 were obtained from the output of the first analysis since they were poor items to proceed the analysis. For the rest of the items, B, β , and SE values were obtained from the final analysis

Note 3. Please see Appendix B for original items

3.2.2 Internal Consistency Reliability

Internal consistency reliability of Turkish 3D-WS was calculated after the items 2, 3, 4, 8, 11, 14, 17, 19, 24, 27, 30, 33, and 36 were excluded. Therefore, since there were only two items in the affective wisdom factor remained, reliability of the affective wisdom factor was not calculated. Cronbach's alpha values for the reflective and cognitive dimensions of 3D-WS were .79 and .71 respectively, indicating that reflective and cognitive dimensions showed acceptable internal reliabilities. Cronbach's alpha value for the overall wisdom scale was .80, which is an evidence for good internal reliability (see Table 3.1).

As Ardelt (2003) suggested, moderate correlations ($r \geq .30$) among the subscales of the 3D-WS are sufficient to admit its internal reliability. Correlation between reflective wisdom and cognitive wisdom ($r = .38, p < .01$) and correlation between reflective and affective wisdom ($r = .23, p < .01$) were positive and significant but the correlation between affective and cognitive wisdom was negative and non-significant ($r = -.10, p > .05$), which is an unexpected result (see Table 3.7.). According to Ardelt's criteria, although significant positive correlation between reflective and cognitive wisdom supports a good internal reliability, internal reliability of 3D-WS seems to be questionable in terms of affective wisdom and its relation to other two subscales. Relatively poor reflective-affective wisdom association and negative non-significant correlation between affective and cognitive wisdom may be explained by the fact that affective wisdom was only composed of two items.

3.2.3 Convergent and Divergent Validities

To test the convergent and divergent validities of the Turkish 3D-WS, Heartland Forgiveness Scale (HFS) (Thompson et al., 2005), Purpose in Life Test (PIL) (Crumbaugh & Maholick, 1964), and Geriatric Depression Scale (GDS) (Yesavage et al., 1983) were administered to the participants. There was a significant positive correlation between overall 3D-WS wisdom score and HFS ($r = .56, p < .01$). Correlations of affective ($r = .29, p < .01$), reflective ($r = .66, p < .01$), cognitive

dimensions ($r = .17, p < .05$) of 3D-WS with HFS were also positive. In addition, positive significant correlations were evident among the PIL and 3D-WS overall wisdom score ($r = .44, p < .01$), affective ($r = .26, p < .01$), reflective ($r = .49, p < .01$). Moreover, Psychological Well-being Scale (Diener et al., 2009) was positively correlated with overall wisdom ($r = .47, p < .01$), reflective wisdom ($r = .51, p < .01$), and affective wisdom ($r = .28, p < .01$), which are also evidences for convergent validity of 3D-WS. These positive correlations indicated that 3D-WS can be considered as a wisdom scale that has convergent validity.

Besides, convergent validity, we also tested divergent validity of 3D-WS. Accordingly, GDS and overall ($r = -.55, p < .01$), affective ($r = -.16, p < .05$), reflective ($r = -.66, p < .01$), and cognitive wisdom ($r = -.31, p < .01$) were correlated negatively. Thus, it can be suggested that 3D-WS seems to have both divergent and convergent validities (see Table 3.5).

Table 3.5. *Convergent and divergent validities of Turkish 3D-WS*

	Correlations			
	Overall Wisdom	Affective Wisdom	Reflective Wisdom	Cognitive Wisdom
Measures				
Forgiveness	.56**	.29**	.66**	.17*
Purpose in Life	.44**	.26**	.49**	.11
Depression	-.55**	-.16*	-.66**	-.31**
Psychological Well-being	.47**	.28**	.51**	.13

Note. * $p < .05$, ** $p < .01$

3.2.4. Criterion-Related Validity

To test the criterion-related validity of 3D-WS, independent samples *t*-test analysis and one-way between subjects Analysis of Variance (ANOVA) were conducted.

In the literature, it was found that affective wisdom is higher among women than men (Ardelt, 2009; Cheraghi et al., 2015). Moreover, a significant positive association was evident between 3D-WS and both general well-being and subjective health (Ardelt, 2003). Therefore, means of the levels of gender and physical illness (i.e., whether the participants reported any physical illnesses or not) were compared by the t-test analysis. Overall results were presented in Table 3.6. Overall wisdom levels of the participants did not show any differences between men ($m = 3.16$, $sd = .43$) and women ($m = 3.20$, $sd = .48$); $t(163) = -.53$, $p > .05$. There was not any significant difference between men ($m = 3.15$, $sd = .89$) and women ($m = 3.40$, $sd = .74$); $t(163) = -1.88$, $p > .05$ in terms of affective wisdom. Men ($m = 3.42$, $sd = .56$) and women ($m = 3.31$, $sd = .71$); $t(163) = .56$, $p > .05$ had also similar scores on reflective wisdom. Cognitive wisdom scores were similar between men ($m = 2.90$, $sd = .55$) and women ($m = 2.93$, $sd = .63$); $t(163) = -.25$, $p > .05$, as well. Moreover, the participants with physical health problem ($m = 3.14$, $sd = .50$) and participants without any physical health problem ($m = 3.22$, $sd = .43$); $t(163) = 1.12$, $p > .05$ got similar scores on overall wisdom. Affective wisdom levels of the participants with physical health problem ($m = 3.34$, $sd = .86$) and participants without any physical health problem ($m = 3.27$, $sd = .82$); $t(163) = -.60$, $p > .05$ were also similar. Likewise, the difference between cognitive wisdom levels of the participants who reported physical illness ($m = 2.85$, $sd = .56$) and participants who did not report any physical illness ($m = 2.97$, $sd = .60$); $t(163) = 1.30$, $p > .05$ was statistically non-significant. Yet, the participants who reported physical illness had significantly lower reflective wisdom ($m = 3.24$, $sd = .68$) as compared to the participants who did not report any physical illnesses ($m = 3.44$, $sd = .62$); $t(163) = 1.98$, $p < .05$ (see Figure 3.2).

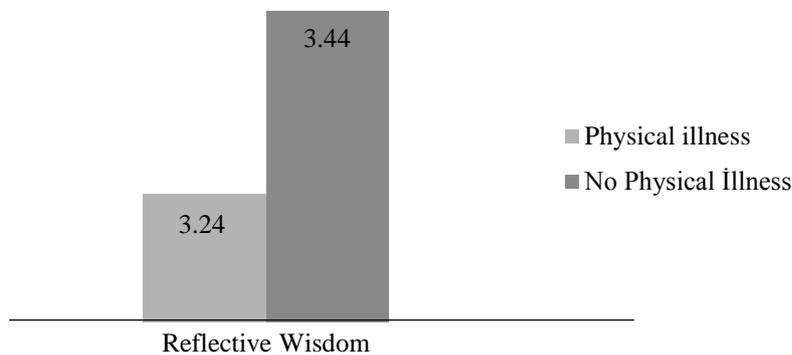


Figure 3.2. Mean score of reflective wisdom for physical illness vs no physical illness groups

Secondly, since Ardelt (2003) found a positive association between educational attainment and 3D-WS, one-way between subjects analysis of variance (ANOVA) was run to find out if 3D-WS differentiates participants with different education levels in the current sample. Initially, participants were classified into three different groups; One group was composed of illiterate and literate participants, and participants with primary school education. Other group included both middle school and high school graduates. The third group was composed of university graduates and graduates with a higher degree (graduates of master and Ph.D. programs). Results showed that overall wisdom ($F[2, 161] = 5.10, p < .01, n_p^2 = .06$), reflective wisdom ($F[2, 161] = 10.77, p < .01, n_p^2 = .12$), and cognitive wisdom ($F[2, 161] = 9.99, p < .01, n_p^2 = .11$) significantly differentiated education levels but affective wisdom ($F[2, 161] = 1.28, p > .05, n_p^2 = .01$) did not. Post hoc comparisons by Tukey HSD test for overall wisdom indicated that participants who were university graduates or had a higher degree had significantly higher overall wisdom ($m = 3.37, sd = .32$) than the participants who were illiterate, literate or graduates of primary school ($m = 3.11, sd = .51$) and participants who were graduates of middle school or high school ($m = 3.13, sd = .45$). Yet, overall wisdom levels of the participants who

were illiterate or literate or were graduates of primary school ($m = 3.11, sd = .51$) and the participants who were graduates of primary or middle school ($m = 3.13, sd = .45$) were not significantly different from each other. Similarly, post hoc comparisons by Tukey HSD for reflective wisdom showed that university graduate participants or participants having a higher degree reported significantly higher reflective wisdom ($m = 3.69, sd = .45$) than the illiterate, literate, or primary school graduate participants ($m = 3.14, sd = .72$) and the middle school or high school graduate participants ($m = 3.35, sd = .57$). Yet, reflective wisdom levels of the illiterate, literate, or primary school graduate participants ($m = 3.14, sd = .72$) were not significantly different from the reflective wisdom of the middle school or high school graduate participants ($m = 3.35, sd = .57$). Post hoc comparisons by Tukey HSD were also same for cognitive wisdom indicating that participants who were university graduates or had a higher degree reported significantly higher cognitive wisdom ($m = 3.23, sd = .56$) than the illiterate, literate, or primary school graduate participants ($m = 2.78, sd = .53$) and the participants who were either middle school or high school graduates ($m = 2.83, sd = .59$). Yet, cognitive wisdom levels of the participants who were illiterate, literate, or were graduates of primary school ($m = 2.78, sd = .53$) were not significantly different from the reflective wisdom of the middle school or high school graduate participants ($m = 2.83, sd = .59$). These results demonstrated that overall, reflective, and cognitive wisdom significantly differentiated only university graduate participants and participants with postgraduate education level from the others who had lower educational attainment. Having middle school or high school degree, being illiterate, literate, or primary school graduate did not appear to be differentiated by overall, reflective, and cognitive wisdom levels significantly (see Figure 3.3). To conclude, it seems that 3D-WS is a scale that has criterion-related validity.

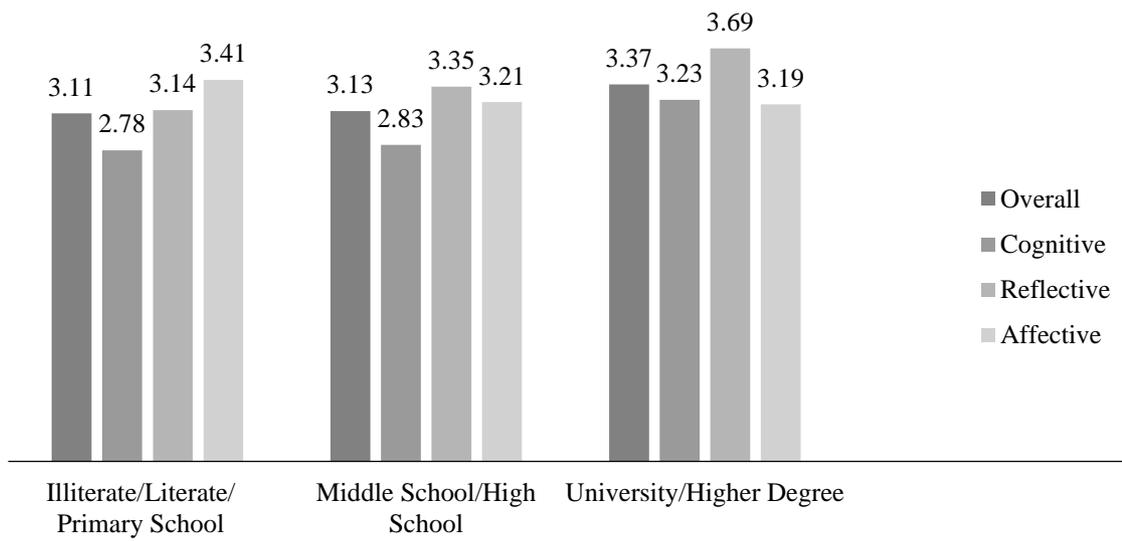


Figure 3.3. Mean scores of overall, affective, reflective, and cognitive wisdom for different levels of education

Table 3.6. Criterion-related validity of Turkish 3D-WS including *t*-test and ANOVA results

Variables	Overall Wisdom			Affective Wisdom			Reflective Wisdom			Cognitive Wisdom		
	<i>m</i>	<i>sd</i>	<i>t</i> (163)	<i>m</i>	<i>sd</i>	<i>t</i> (163)	<i>m</i>	<i>sd</i>	<i>t</i> (163)	<i>m</i>	<i>sd</i>	<i>t</i> (163)
Gender			-.53			-1.88			.56			-.25
Females	3.20	.48		3.40	.74		3.31	.71		2.93	.63	
Males	3.16	.43		3.15	.89		3.42	.56		2.90	.55	
Physical Illness			1.12			-.60			1.98*			1.30
Yes	3.14	.50		3.34	.86		3.24	.68		2.85	.56	
No	3.22	.43		3.27	.82		3.44	.62		2.97	.60	
	<i>m</i>	<i>sd</i>	<i>F</i> (163)	<i>m</i>	<i>sd</i>	<i>F</i> (163)	<i>m</i>	<i>sd</i>	<i>F</i> (163)	<i>m</i>	<i>sd</i>	<i>F</i> (163)
Education			5.10**			1.28			10.77**			9.99**
1	3.11	.51		3.41	.86		3.14	.73		2.78	.53	
2	3.13	.45		3.21	.80		3.36	.58		2.83	.59	
3	3.37	.32		3.19	.80		3.69	.45		3.23	.56	

Note 1. * $p < .05$, ** $p < .01$

Note 2. For education, 1 = illiterate, literate, or primary school education, 2 = middle school or high school education, 3 = university or higher degree

3.2.5 Correlation Coefficients among Age, 3D-WS and Its Subscales

Age and wisdom relation has been focus of interest for many studies (e.g., Ardelt, 2010; Gordon & Jordan, 2017). Therefore, this relation was investigated within the scope of this study, too. Pearson correlation coefficients were computed and it was indicated that overall ($r = -.10, p > .01$), affective ($r = -.04, p > .01$), and reflective wisdom ($r = -.05, p > .01$) did not have significant correlations with the age of the participants. However, there was a significant negative correlation between cognitive wisdom and age ($r = -.10, p < .05$), meaning that as the age of the participants increased, their cognitive wisdom levels decreased.

3.3. Differences of the Levels of Demographic Variables on the Measures of the Study

Differences of the levels of demographic variables on the measures of the study (i.e., Spiritual Well-being subscale of MPS, Religious Orientation Scale, and Psychological Well-being Scale) were calculated by independent samples *t*-test analyses for variables with two levels (i.e., gender and physical illness) and by one way between-subjects ANOVA for the variable with more than two levels (i.e., education).

Results of independent samples *t*-test analysis showed that psychological well-being and intrinsic religious orientation were not different based on the gender of the participants; Psychological well-being levels of the women ($m = 43.55, sd = 8.33$) were not significantly different from psychological well-being levels of the men ($m = 42.70, sd = 8.45$); $t(163) = -.64, p > .05$ and intrinsic religiosity levels of the women ($m = 19.82, sd = 6.59$) were not significantly different from intrinsic religiosity levels of the men ($m = 21.88, sd = 7.19$); $t(163) = 1.81, p > .05$. However, this was not true for spiritual well-being; female participants had significantly higher spiritual well-being ($m = 39.15, sd = 7.99$) than their male counterparts ($m = 34.98, sd = 8.43$); $t(163) = -3.22, p < .05$ (see Figure 3.4). In addition, the participants having a physical illness reported significantly lower intrinsic religious orientation ($m = 19.47, sd = 6.49$) than the participants who did not have any physical illnesses ($m =$

21.73, $sd = 7.06$); $t(163) = 2.11, p < .05$. However, the reverse was true for spiritual well-being; The participants who had a physical illness had significantly higher spiritual well-being ($m = 39.26, sd = 7.27$) than the participants who did not have any physical illnesses ($m = 35.98, sd = 8.98$); $t(163) = -2.52, p < .05$ (see Figure 3.5). Moreover, psychological well-being levels of the participants who had physical illness ($m = 42.43, sd = 8.68$) were not significantly different from the psychological well-being levels of the participants who did not have any physical illnesses ($m = 43.81, sd = 8.11$); $t(163) = 1.05, p > .05$.

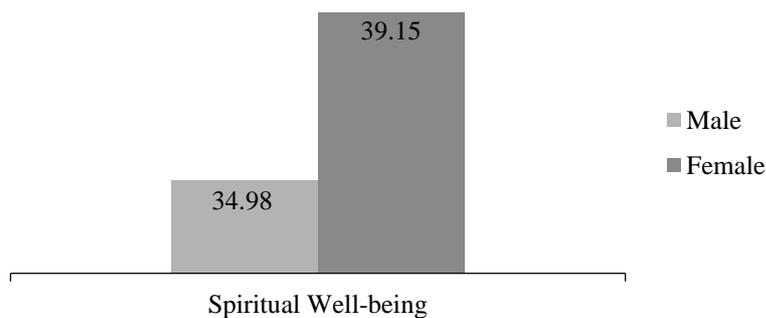


Figure 3.4. Mean score of spiritual well-being for gender groups

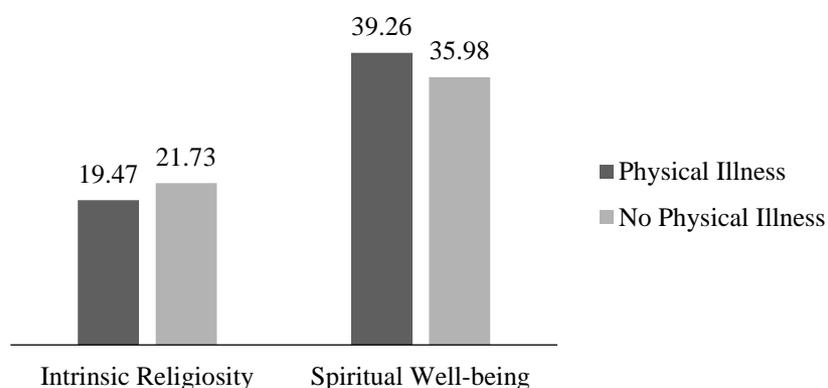


Figure 3.5. Mean scores of intrinsic religiosity and spiritual well-being for physical illness

One-way between subjects ANOVA revealed that psychological well-being of the participants were not different based on their education level. Yet, participants' intrinsic religious orientation levels varied with their educational attainment. ($F[2, 161] = 14.34, p = .00, \eta_p^2 = .151$) at the $p < .05$ level. Post hoc comparisons by Tukey HSD indicated that the participants who were university graduates or had a higher degree reported significantly higher intrinsic religious orientation ($m = 24.57, sd = 7.27$) than the middle school or high school graduate participants ($m = 21.10, sd = 7.19$). Moreover, the participants graduated from middle school or high school reported significantly higher intrinsic religious orientation ($m = 21.10, sd = 7.19$) than the participants who were illiterate, literate, or were primary school graduates ($m = 18.07, sd = 5.17$). These results suggested that as the education level increased, the participants were likely to have higher intrinsic religious orientation (see Figure 3.8). Similarly, spiritual well-being of the participants changed based on the educational level of the participants ($F[2, 161] = 6.11, p = .003, \eta_p^2 = .071$) at the $p < .05$ level. Post hoc comparisons by Tukey HSD pointed out that the participants who were university graduates or had a higher degree reported significantly lower spiritual well-being ($m = 34.30, sd = 9.36$) than illiterate, literate or primary school graduate participants ($m = 39.70, sd = 7.40$). Yet, there were not any significant differences between the university graduate or higher degree group ($m = 34.30, sd = 9.36$) and the middle school or high school group ($m = 37.13, sd = 8.01$) in terms of the spiritual well-being. Similarly, the difference between the spiritual well-being levels of the middle school or high school group ($m = 37.13, sd = 8.01$) and illiterate, literate or primary school group ($m = 39.70, sd = 7.40$) was not significant (see Figure 3.6). In summary, spiritual well-being was significantly different in between the participants who had a university degree or higher degree from the other participants who had lower educational attainment. Yet, spiritual well-being was not different between middle school or high school graduates and the primary school graduates, illiterate or illiterate participants.

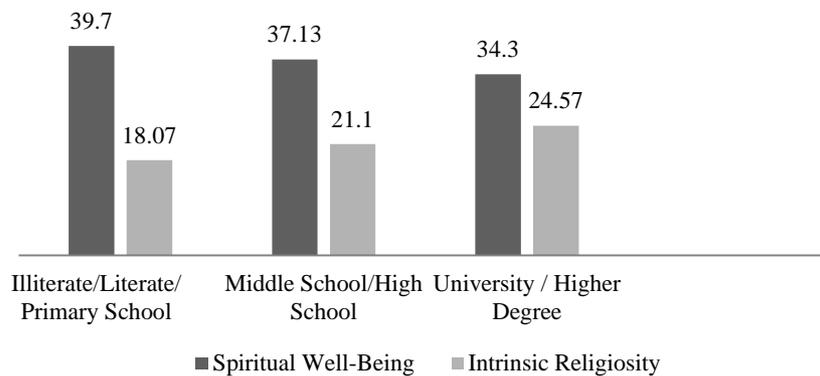


Figure 3.6. Mean scores of intrinsic religiosity and spiritual well-being for different levels of education

3.4. Correlation Coefficients among the Measures of the Study

The intercorrelations among the measures of the study were examined by calculating Pearson correlation coefficients for Three-Dimensional Wisdom Scale and its subscales (i.e., affective, reflective, and cognitive wisdom), Spiritual Well-being subscale of Mental, Physical, Spiritual Well-being Scale, Religious Orientation Scale, and Psychological Well-being/Flourishing Scale. Overall results were shown in Table 3.7.

Table 3.7. Pearson correlation coefficients between measures of the study

	1	2	3	4	5	6	7
1. Psychological Well-being	.87						
2. Overall Wisdom	.469**	.80					
3. Affective Wisdom	.281**	.670**	--				
4. Reflective Wisdom	.512**	.772**	.227**	.79			
5. Cognitive Wisdom	.132	.538**	-.107	.380**	.71		
6. Spiritual Well-being	.198*	.100	.097	.095	.009	.84	
7. Intrinsic Religiosity	-.097	.011	-.173*	.034*	.236**	-.663**	.85

Note 1. * $p < .05$, ** $p < .01$.

Note 2. Cronbach's alpha coefficients of the study measures are presented in bold font on the diagonal.

Note 3. Since only two items of affective wisdom left after the confirmatory factor analysis, its reliability could not be calculated.

Overall wisdom and psychological well-being were correlated positively ($r = .47, p < .01$). Hence, it seems that the wiser participants tend to have higher psychological well-being, as well. Significant positive correlations were found between affective wisdom and psychological well-being ($r = .28, p < .01$) and reflective wisdom and psychological well-being ($r = .51, p < .01$). In other words, the participants who had more reflective wisdom or more affective wisdom were likely to have better psychological well-being. However, cognitive wisdom was not correlated with psychological well-being significantly. Similarly, overall wisdom was not associated with intrinsic religiosity and spiritual well-being. A negative correlation was found between affective wisdom and intrinsic religiosity ($r = -.17, p < .05$), which means that as the participants' affective wisdom increased, their level of intrinsic religiosity tended to decrease or vice versa. Cognitive wisdom ($r = .23, p < .01$) and reflective wisdom ($r = .03, p < .05$), on the other hand, were positively correlated with intrinsic religious orientation. Therefore, the participants who had high levels of cognitive and reflective wisdom tended to report more intrinsic religiosity. Affective ($r = .09, p > .05$), reflective ($r = .09, p > .05$), and cognitive wisdom ($r = .00, p > .05$) were not correlated with spiritual well-being significantly.

Intrinsic religiosity was negatively correlated with spiritual well-being ($r = -.66, p < .01$) meaning that the participants who reported higher intrinsic religious orientation were prone to have lower spiritual well-being or vice versa. Spiritual well-being and psychological well-being were found to be correlated positively with each other ($r = .19, p < .05$). In other words, the participants who reported better spiritual well-being showed a tendency to have better psychological well-being, as well. Finally, there was a nonsignificant correlation between intrinsic religiosity and psychological well-being ($r = -.09, p > .05$).

3.5. Moderation Analyses for Wisdom and Psychological Well-Being

Moderator roles of the intrinsic religiosity and spiritual well-being on the relation between overall wisdom and PWB were investigated through the macro written by Hayes and Matthes (2009). Firstly, intrinsic religiosity and wisdom interaction for the prediction of psychological well-being was investigated (see Table 3.8).

According to the results, the overall model was significant ($R^2=.23$, $F(3, 161) = 16.11$, $p < .001$). Nevertheless, the interaction effect was not significant ($B = .05$, $SE = .18$, $t = .29$, $p > .05$) (see Figure 3.7). Therefore, these results suggested that there was not any significant moderator effect of intrinsic religious orientation on the wisdom and psychological well-being relation.

Table 3.8. Psychological well-being predicted from wisdom and intrinsic religiosity

Predictor	β	p	95% CI
Intrinsic Religiosity	-.30	.62	-1.48, .88
Wisdom	.7.43	.06	-.37, 15.22
Intrinsic religiosity x Wisdom	.05	.77	-.31, .41

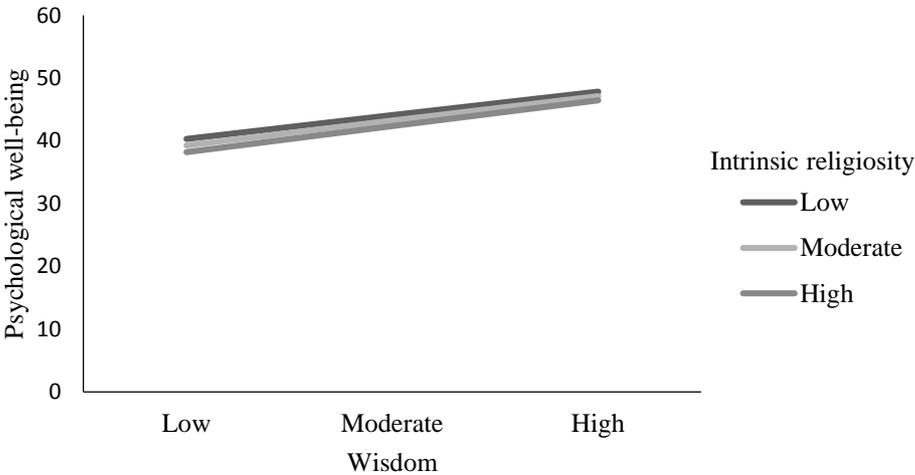


Figure 3.7. Illustration for the absence of moderation effect of intrinsic religiosity on wisdom – psychological well-being relation

Secondly, spiritual well-being and wisdom interaction for the prediction of psychological well-being was examined (see Table 3.9). According to the results,

both overall model ($R^2=.26$, $F(3, 161) = 19$, $p < .001$) and the interaction effect were significant ($B = -.30$, $SE = .15$, $t = -2$, $p < .05$) (see Figure 3.8). However, when Johnson and Neyman (1936) technique was utilized, there was not any critical value that changes the significance of the wisdom and PWB relation. Therefore, it was concluded that spiritual well-being did not moderate this relation, too. In conclusion, these results demonstrated that neither hypothesis 2 nor hypothesis 3 was supported since intrinsic religious orientation and spiritual well-being did not significantly moderate the relation between wisdom and psychological well-being.

Table 3.9. Psychological well-being predicted from wisdom and spiritual well-being

Predictor	β	p	95% CI	
Spiritual well-being*	1.15	.02	-65.88,	11.84
Wisdom*	20.05	.00	8.12,	31.99
Spiritual well-being x Wisdom	-.31	.05*	-.61,	.00

Note. * $p < .05$

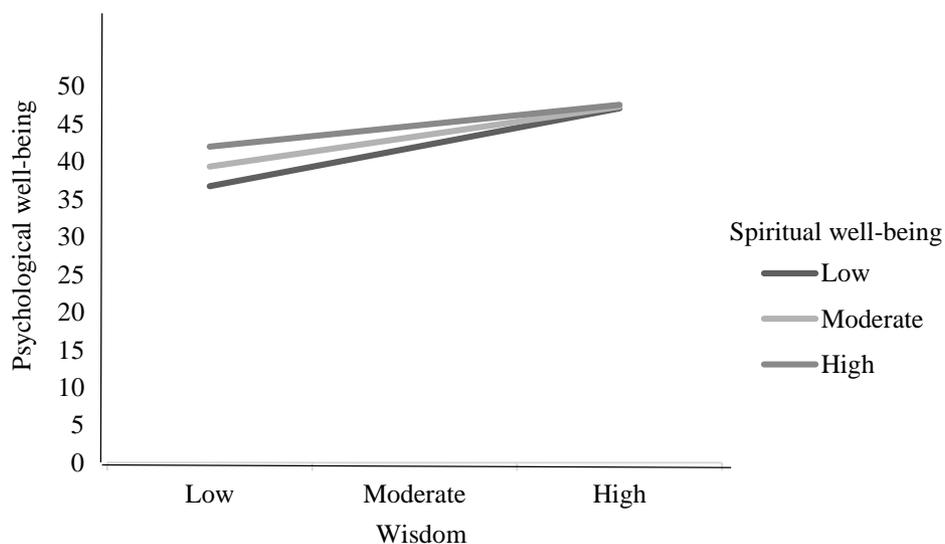


Figure 3.8. Illustration for the absence of moderation effect of spiritual well-being on wisdom – psychological well-being relation

CHAPTER 4

DISCUSSION

The main aim of the current study was to translate Three-Dimensional Wisdom Scale (3D-WS) into Turkish and examine its psychometric properties, to investigate the wisdom- psychological well-being (PWB) relation, and the moderator roles of the spiritual well-being and intrinsic religious orientation on the wisdom-PWB relation. Initially, confirmatory factor analysis (CFA) was performed to test the factor structure of the Turkish 3D-WS and then, its psychometric properties (i.e., internal consistency reliability, convergent and divergent validities, and criterion-related validity) were examined. Secondly, differences between the levels of demographic variables (i.e., gender, physical illness, and education) on the measures of the study were explored. Afterwards, intercorrelations among the measures of the study were reported. Finally, two moderation models were tested to find out the moderator roles of spiritual well-being and intrinsic religious orientation on the wisdom-PWB relation.

In this chapter, the results of these analyses will be discussed by reviewing the relevant literature and focusing on the hypotheses of the study. Next, strengths and limitations of the study will be explained. Eventually, the implications of the study and the directions for the future research will be mentioned.

4.1. Findings Regarding CFA and Psychometric Properties of 3D-WS

Confirmatory factor analysis (CFA) was conducted to test the factor structure of Turkish 3D-WS. After necessary modifications were done and 13 poor items (i.e., 2, 3, 4, 8, 11, 14, 17, 19, 24, 27, 30, 33, and 36) were excluded from 3D-WS, Turkish

version of 3D-WS could provide a sufficient fit to the original three-factor structure for the current Turkish sample. In the final model, significant standardized factor loadings ranged from .33 to .48 for the affective subscale, from .23 to .57 for the reflective subscale, and from .25 to .65 for the cognitive subscale. Shared variances between indicators and factors were between 7 % and 42 % for reflective wisdom, 11 % and 22 % for affective wisdom, and 8 % and 33 % for cognitive wisdom. Affective wisdom explained 16 % of the total variance, reflective wisdom explained 67 % of the total variance, and the cognitive wisdom explained 26 % of the total variance. It is not surprising that reflective wisdom had the highest percentage of the explained variance. As Ardel (2003) stated that reflective wisdom should have the highest factor loading, since it boosts both cognitive and affective dimensions of wisdom.

There might be a few reasons of why three modifications were needed to make Turkish 3D-WS fit the original factor structure. Low educational attainment of the participants may be one of these reasons. In fact, Ardel (2003) evaluated the construct validity of 3D-WS with a sample in which the participants at least had a high school degree. Hence, it is likely that items of 3D-WS were more appropriate for highly educated old people. In the current study, only 45 (27.3 %) participants out of 165 were university graduates or had a higher degree, while 72 (43.6 %) participants were illiterate, literate, or primary school graduates. Therefore, it is likely that they had difficulty in understanding the items of 3D-WS. Besides, original items of 3D-WS were translated into Turkish but they were not adapted to Turkish culture. From the point of view of implicit theories, conception of wisdom is largely affected by several variables including culture (Ferrari et al., 2016), age (Glück & Bluck, 2011), gender, and education (Weststrate, & Ferrari, 2016). Wisdom concept in Turkish culture has not been investigated so far; and thus, “Turkish wisdom” should be explored and defined. Since 3D-WS is a scale that is more appropriate for Western cultures, it may not fit well to Turkish people and culture. Due to the cultural differences in terms of meaning, Turkish participants may have perceived the items as meaningless. Since the poorest factor was affective wisdom, most of its items were deleted for the sake of a better model fit and only two of its items left.

Therefore, Turkish 3D-WS became a wisdom scale that is mostly composed of reflective and affective wisdom. It is possible that wisdom in Turkish cultural context may be mostly composed of reflective and cognitive components rather than affective component. In other words, reflective wisdom and cognitive wisdom might be more dominant than affective wisdom. For instance, Nasreddin Hodja who is the most known wise person of Turkish culture and whose jokes are told, uses humor and critical thinking when giving lessons to people in his environment (Ozdemir, 2010). According to Ozdemir (2010), Nasreddin Hodja generally self-criticizes rather than criticizing other people around him. This is not due to his tolerance for others. By criticizing himself, he indicates that wisdom begins with self-criticism. In this context, it seems that his attitudes and behaviors are compatible with cognitive wisdom (i.e., the knowledge of positive and negative sides of human nature, inherent boundaries of knowledge, and of life's ambiguity and unpredictability) and reflective wisdom (i.e., consideration of the phenomena and of events from different viewpoints to improve self-awareness and self-insight) rather than affective wisdom (i.e., feeling sympathy and compassion for others) (Ardelt, 2003). Another possibility is that content of Turkish wisdom's affective component may be totally different from the content of affective wisdom defined by 3D-WS. Therefore, it is crucial that Turkish wisdom and its components should be investigated to develop a new wisdom scale specifically designed for Turkish culture.

In terms of internal consistency reliability, Cronbach's alpha value of the overall 3D-WS was .80, indicating a good internal reliability. Cronbach's alpha values for reflective and cognitive wisdom factors were acceptable; they were .79 and .71, respectively. Since only two items of the affective wisdom remained after the factor analysis, its reliability could not be calculated. Moreover, Ardelt (2003) suggested at least moderate correlations ($r \geq .30$) among the subscales of 3D-WS. Turkish 3D-WS could not meet this assumption; the correlations among cognitive, reflective, and affective wisdom ranged from .23 to .38 in the present study. Moreover, the correlation between cognitive and affective wisdom was negative and non-significant. Relatively poor reflective-affective wisdom association and negative non-significant correlation between affective and cognitive wisdom may be

explained by the fact that affective wisdom had only two items. Overall, Turkish 3D-WS and its subscales reflective and cognitive wisdom had good internal consistency reliabilities.

Besides internal consistency reliability, convergent, divergent, and criterion-related validities of the Turkish 3D-WS were also examined. Heartland Forgiveness Scale (HFS), and Purpose in Life (PIL) were used to test the convergent validity of 3D-WS; and Geriatric Depression Scale (GDS) was utilized for its divergent validity. Firstly, significant positive correlations were evident among HFS and affective, reflective, cognitive, and overall wisdom. This finding is consistent with the study of Taylor and Bates (2011). Similarly, significant positive correlations were found between PIL and affective, reflective, cognitive, and overall wisdom. As expected, significant negative correlations between GDS and affective, reflective, cognitive, and overall wisdom were found. Moreover, correlation of Psychological Well-being Scale (PWS) with overall, reflective, and affective wisdom were also significant and positive. These results are in line with the studies of Ardel (2003) and of Taylor and Bates (2011). According to these findings, Turkish 3D-WS appears to have convergent and divergent validities.

As a part of testing criterion-related validity of Turkish 3D-WS, it was examined whether overall, cognitive, reflective, and affective wisdom differentiate female and male participants. Independent samples *t*-tests showed that overall, reflective, affective and cognitive wisdom were not different based on gender of the participants. In terms of gender differences in overall, reflective, affective, and cognitive wisdom, literature seems to be mixed up. Some studies found that there are not any gender differences in overall and reflective wisdom (Ardelt, 2009) and that women tend to score higher on affective wisdom (Ardelt, 2009; Cheragri et al., 2015), whereas men tend to score higher on cognitive wisdom (Ardelt, 2009). However, one study demonstrated that men tend to score higher on affective, reflective, and overall wisdom (Maroof, Khan, Anwar, & Anwar, 2015). Additionally, both Cheragri et al. (2015) and Maroof, Khan, Anwar, and Anwar (2015) indicated that no significant differences exist between men and women

regarding cognitive wisdom. Therefore, it can be concluded that the current study supports some of the previous research, since women and men obtained similar scores in overall, reflective, affective, and cognitive wisdom.

After looking at gender differences, it was investigated whether 3D-WS and its subscales can differentiate the participants who reported physical illness and the participants who did not report any physical illness. Ardelt (2003) found that there was a significant positive correlation between 3D-WS and both general well-being and subjective health. Similarly, Krause and Hayward (2014) indicated that if the wisdom level of an elderly person increases, s/he is more likely to think that she is healthy. However, the current study found that there were not any significant differences in terms of overall, cognitive, and affective wisdom between the participants who reported physical illness and the participants who did not report any physical illness. Thus, this finding seems to contradict with the previous research. The reason may be related to the fact that the participants in the current study were not asked to assess their general well-being or general health. Rather, they were asked to report only whether they have a physical and psychological illness or not. It is likely that having a physical illness may not necessarily mean the evaluation of health as bad. For instance, a participant having a chronic disease such as diabetes may not evaluate his/her general well-being as bad. For this reason, such non-significant outcomes may have come out. Yet, *t*-test analysis in the present study also indicated that the participants who had one or more than one physical illness had significantly lower reflective wisdom than the participants who did not have any physical illness. Therefore, reflective wisdom seems to differentiate the participants who reported physical illness and who did not report any physical illness. As Ardelt (2003) stated, reflective wisdom is about being able to look at the events, situations, or ideas in different ways. If a person fails to do that, s/he might fail to perceive the world as it is, and due to this inaccurate perception, unfavorable feelings such as depression or hate might emerge in that person. This maybe the reason why lower reflective wisdom was associated with lower PWB in the current study. Furthermore, some studies indicated that poor physical health may result in lower PWB. For instance, Cho et al. (2011) found that worse physical health is related to higher

negative affect; or Abas et al. (2009) found that it is related to lower congruity, lower interconnectedness with intimate individuals, lower respect from others, lower admission, and lower pleasure. Perhaps, since such an individual having a lower PWB due to her physical illness might have difficulty thinking others' viewpoints and thus, s/he may not develop such an objectivity. This case may explain why there is a positive relation between reflective wisdom and physical health.

To test criterion-related validity of Turkish 3D-WS regarding education level of the participants, a number of ANOVAs were run. According to results, overall, reflective, and cognitive wisdom significantly differentiated the participants with different educational levels; but affective wisdom did not. Results suggested that having a bachelor's degree or a higher degree was related to increased levels of overall, reflective, and cognitive wisdom. Similarly, Ardel (2009) and Glück (2013) found that higher education level is associated with higher overall and cognitive wisdom, but they did not find the same results for reflective wisdom. Ardel (2003) explained the reflective dimension as having different viewpoints and abstaining from subjectivity and criticisms (i.e., not accusing others or circumstances for someone's own situation or emotions). According to Ardel (2000), Blanchard-Fields and Norris (1995), and Sternberg (2000), although reflective wisdom is not only about the evaluation of intellectual reflective understanding that is more likely to be present in highly educated persons, still it is possible that educational attainment can influence it to some degree (as cited in Cheragri et al., 2015). In summary, Turkish version of 3D-WS seems to have convergent, divergent and criterion-related validities.

Finally, age and wisdom relation was investigated in the current study. The current study failed to find any significant correlations in terms of overall, affective, and reflective wisdom but cognitive wisdom was found to have significant negative correlation with age. Literature suggests that old age can be both advantageous (Ardel, 2010; Lim & Yu, 2015; Takahashi & Overton, 2002) and disadvantageous (Gordon & Jordan, 2017; Staudinger, 1999) for the development of wisdom. Disadvantage of the old age can be related to lowered cognitive skills (Gordon &

Jordan, 2017) and intellectual functioning (Staudinger, 1999). Therefore, such finding was not very surprising. Nonsignificant correlations between affective, reflective, and overall wisdom can be explained by low educational attainment of the participants of the current study. This is consistent with the study of Ardel (2010), in which she compared university students and old adults in terms of wisdom and found that old people with a university degree reported higher reflective and affective wisdom than university students and old people who were not university graduates.

4.2. Findings About the Differences among the Levels of Demographic Variables on the Measures of the Study

To figure out how levels of demographic variables might differ on the measures of the study including Spiritual Well-being subscale of MPSWS, Religious Orientation Scale, and Psychological Well-being Scale, independent samples *t*-test analyses for variables with two levels (i.e., gender and physical illness) and one-way between subjects ANOVA for the variable with more than two levels (i.e., education level) were performed.

In terms of gender, the results showed that aged women and men were not significantly different from each other regarding PWB. Most studies, on the other hand, demonstrated that elderly women are prone to be less happy, have lower life satisfaction, self-esteem and subjective health, higher negative affect, and more feelings of loneliness (Inglehart, 2002; Patrick, Cottrell, & Barnes, 2001; Pinqart & Sörensen, 2001). This contradiction with the literature may be explained by the measurement of PWB by different indicators. In the present study, Diener's Psychological Well-being Scale/Flourishing Scale (2009), in which PWB is measured in relation to *autonomy, growth, mastery, relationships, self-acceptance, and purpose*, was used. This measurement difference might be responsible for the insignificant gender-PWB relation in the current study. Moreover, Pinqart and Sörensen (2001) stated that women are more likely to be widowed, have lower SES, have health problems, and lack competence; and thus, they had lower PWB as compared to men. Yet, in the current study, female participants were generally

married individuals living with their husbands or their family and majority of them had middle income levels. Therefore, women and men may have obtained similar scores on PWB. In addition, this result may not be that surprising when the Turkey context is considered; Arun (2008) found similar results. Similarly, there was not any significant gender difference regarding religious orientation of the participants in the present study. Although the number of studies investigating the differences between men and women in terms of religious orientation is limited, these studies suggested that females tend to report higher extrinsic religious orientation than males (Flere, 2007; Pierce Jr, Cohen, Chambers, & Meade, 2007; Wilkinson, 2004). Different sample characteristics might have resulted in such a contradictory finding. While the participants of these studies were generally young university students, the sample of the current study was composed of participants above the age of 65. Possibly, as people age, this difference might have diminished. The only difference between female and male participants was in their spiritual well-being level; females reported significantly higher spiritual well-being than males. This finding was in line with the literature (e.g., Hammermeister, Flint, El-Alayli, Ridnour, & Peterson, 2005; Jung, Kyoung, & Bolin, 2015; Vosloo, Wissing, & Temane, 2009). Differences in socialization of men and women may explain this finding. Women are more likely to socialize to raise children, collaborate, do emotional regulation, and look for social approval via external resources (Hammermeister et al., 2005). Women's life experiences, coping strategies and roles that are expected from them are different from men. Levin (1994) claimed that socially acceptable roles, traits, and behaviors for women are more congruent with religious doctrines that were accepted as subcategory of spiritual well-being by Hammermeister and his colleagues (as cited in Hammermeister et al., 2005). Therefore, higher spiritual well-being in women is an expected finding. All in all, the current study demonstrated that contrary to the other studies, neither PWB nor religious orientation were different between genders, but women tended to report higher spiritual well-being than men, which is consistent with previous studies.

The literature suggested that physical health is considerably important for PWB of elderly people (Abas, Punpuing, Jirapramupitak, Tangchonlatip, & Leese, 2009;

Bhullar, Hine, & Myall, 2010; Cho, Martin, Margrett, MacDonald, & Poon, 2011; Han & Shibusawa, 2015; Heidrich, 1993). Chronic disease impairments (Abas et al., 2009) and low perceived physical health (Cho et al., 2011) were found to be correlates of decreased PWB. The current study also investigated whether having a physical illness influences the participants' levels of PWB. Surprisingly, results showed that there were not any significant PWB differences evident between the participants who had physical illness and the participants who did not have any physical illness. As mentioned before, it is possible that reporting a physical illness does not mean that the person thinks that her health is bad, which reveals the importance of *perceived* health. About physical illness-religiosity relation, it was found that the participants who reported physical illness had lower intrinsic religiosity as compared to the participants who did not report any physical illness. In the literature, there are contradictory findings about this association. One study found that extrinsic religious orientation is associated with decreased physical health while intrinsic orientation is linked to better health outcomes (McIntosh & Spilka, 1990). However, Son and Wilson (2011) found that religion is related to better health outcomes in terms of perceived health and physical symptomatology but it was not related to physical health. Therefore, the current study supports the view that intrinsic religiosity is associated with better physical health. Theoretically speaking, people with lower intrinsic and higher extrinsic orientation have a tendency to believe in external control, which may inhibit active coping style and result in worse health outcomes. This may clarify why the participants with physical health problem tended to report lower intrinsic religiosity. As regard to spiritual well-being, the reverse was found. The participants who had a physical illness had significantly higher spiritual well-being than the participants who did not have any physical illness. This is an interesting finding when it is considered the fact that religion and spirituality are interrelated. Similar to the findings on religiosity, the literature suggested that spirituality is correlated with better health outcomes such as fewer depressive symptoms (Mills et al., 2014) and better subjective well-being (Lawler-Row & Elliot, 2009). Participants with physical health problems are likely to have poor PWB (Abas et al., 2009; Bhullar, Hine, & Myall, 2010; Cho et al., 2011; Han & Shibusawa, 2015; Heidrich, 1993), and thus, they may try to improve their damaged

PWB by their spiritual well-being (Bekke-Hansen et al., 2014; Momtaz et al., 2012). In conclusion, the current study indicated that participants with physical health problem had similar PWB scores with the participants without any physical health problems; and that the participants having physical illness had lower intrinsic religiosity than the participants who did not report any physical illness; and that spiritual well-being of the participants with physical health problems are higher than spiritual well-being of the participants without physical health problems.

It was explored whether educational level of the participants differentiated them on PWB, religious orientation, and spiritual well-being. Studies pointed out negative relation between education level and risk for late life depression (Huang et al., 2010), and positive relation between education level and psychological health (Teerawichitchainan, Pothisiri, & Long, 2015) or mental health (Zhang, Chen, McCubbin, McCubbin, & Foley, 2011), and life satisfaction (Lee & Lee, 2013). Teerawichitchainan, Pothisiri, and Long (2015) explained that individuals with low levels of education may have poor self-efficacy and cognitive function, which constitutes a risk factor for depression among older people. In fact, Lee and Lee (2013) stated that elderly people with higher education are less prone to have depressive symptoms and they are more likely to have better cognitive skills and higher life satisfaction (as cited in Jung et al., 2010). Another explanation might be that higher education level is associated with higher health literacy (Espanha & Ávila, 2016; Tokuda, Doba, Butler, & Paasche-Orlow, 2009; Zou, Chen, Fang, Zhang, & Fan, 2016), which is associated with better well-being outcomes. A different explanation came from the study of Zhang et al. (2011), which proposed that the connection between education and health is mediated by social well-being (i.e., social integration, social contribution, social actualization, and social coherence). As contradictory with the previous research, the current study did not find a significant positive association between educational level and PWB of the participants. In the current study, 83 % of the participants reported that they live either with their husband/wife or with their family, and this may be implying relatively higher levels of social and psychological well-being. There are studies indicating that living with an adult child or family is advantageous for well-being of

the elderly people (Russell & Taylor, 2009; Teerawichitchainan, Pothisiri, & Long, 2015). Lee and Lee (2013) also claimed that life satisfaction of the elderly people with low levels of education is adversely affected by being unmarried and low frequency of interaction with their children and friends. Thus, as stress buffer hypothesis of Cohen and Wills (1985) suggested, one explanation for such a result might be that high levels of social support might have buffered the adverse effects of low education level on their PWB in the current study. In summary, contrary to previous studies, the current study failed to find a significant association between educational attainment and PWB of the participants and the fact that most of the participants were still living with their family members can explain this unexpected result.

In contrast to non-significant education–PWB relation, a significant positive association between education and intrinsic religious orientation was evident in the present study. This result is compatible with the study of Allport and Ross (1967), in which a negative association was proposed between education level and extrinsic religiosity. They explained that low education level leads to a tendency in the person to be egocentric and exclusionist, which is likely to promote extrinsic religious orientation while reducing intrinsic religious orientation. Similarly, education–spiritual well-being relation was significant but in a negative direction. Yet, participants who had a university degree or a higher degree did not significantly differ from high school or middle school graduates; and high school or middle school group was not significantly different from illiterate, literate, or primary school group. Only significant difference emerged between the group composed of university graduates or individuals having a higher degree and the group composed of illiterate or literate individuals or primary school graduates; spiritual well-being level of the first group was significantly lower than the latter group. There are not plenty of studies investigating the link between education level and spirituality. Yet, this finding appears to be in line with the study of Vahia et al. (2011), in which the predictors of spirituality among 1973 elderly women were examined and a significant negative spirituality–education association was suggested. In the same study, it was claimed that spirituality provides a coping strategy in case of adverse

life events, which boosts resilience. In addition, since spirituality was associated with lower income, lower educational attainment, and lower marriage rates, researchers proposed that such life conditions necessitate coping strategies and traits such as resilience. Similarly, participants who had low educational level in the current study may need more spirituality that leads to coping strategies and resilience than the participants with higher educational attainment. To conclude, the participants who have lower educational attainment tended to have significantly higher spiritual well-being, whereas the individuals with a bachelor's degree or a higher degree were prone to report significantly lower spiritual well-being.

4.3. Findings of Correlation Analyses among the Measures of the Study

In the present study, the intercorrelations among the measures of the study including Three-Dimensional Wisdom Scale and its subscales (i.e., affective, reflective, and cognitive wisdom), Spiritual Well-being subscale of Mental, Physical, Spiritual Well-being Scale, Religious Orientation Scale, and Psychological Well-being/Flourishing Scale were calculated by Pearson correlation analysis.

Firstly, the wisdom–PWB relation was examined and as expected, overall wisdom, affective wisdom, and reflective wisdom were found to be correlates of higher psychological well-being. In terms of subscales, affective and reflective wisdom were both correlated positively with PWB. On the other hand, the cognitive dimension was not significantly associated with PWB but there was a positive trend. Reflective wisdom was expected to correlate with higher levels of psychological well-being but cognitive and affective wisdom were not expected. Ardelt and Jeste (2016) stated that reflective wisdom is possible to show its favorable effect on subjective well-being of elderly through minimizing the negative effect of disadvantageous life events. However, they specified that such an effect may not be the case for cognitive and affective wisdom. Unless people build calmness to approve the reality as it is and to recognize beyond the immediate situations to transfer the current situation in a bigger context, obvious vision of reality (i.e.,

cognitive wisdom) and showing sympathy and compassion for others (i.e., affective wisdom) may not be helpful for well-being in tough times. Thus, the finding regarding significant positive correlation between affective wisdom and PWB was unexpected. Since most items of affective wisdom were excluded for the sake of obtaining a better model fit, it is likely that different results may have emerged. About the positive association between overall wisdom and PWB, Ardel (2003; 2016) found similar results. Other studies supported this finding, as well (Krause, & Hayward, 2015; Wink & Staudinger, 2016). Wisdom was found to be correlates of higher life satisfaction, better physical health, increased quality of family relationships (Ardel, 1997; Ardel, 2000), better emotional well-being (Etezadi & Pushkar, 2013), personality growth (openness to experience, psychological mindedness and a sense of well-being derived from growth, purpose in life, and autonomy), personality adjustment (life satisfaction, high agreeableness, and conscientiousness, low neuroticism, a sense of well-being regarding positive relations with others, self-acceptance, and environmental mastery), generativity (Wink, & Staudinger, 2014), and subjective well-being (Ardel & Edwards, 2015; Ardel & Jeste, 2016) among elderly population. Development of wisdom in old people may be associated with one's successful aging and level of psychosocial development, which are more important for well-being than objective life conditions (Ardel, 1997). Moreover, the positive link between wisdom and PWB can be mediated by problem focused coping, positive reappraisal coping, perceived control, life engagement (Etezadi & Pushkar, 2013), and purpose in life (Ardel & Edwards, 2015). Besides, Wink and Staudinger (2016) suggested that wise people are more likely to report *generativity* which is a wish to take care of the next descendants, which may also explain positive wisdom–psychological well-being relation. Overall, the current study revealed that overall, reflective, and affective wisdom are positively correlated with PWB.

A plenty of studies pointed out that wisdom and religiosity is associated (Adamovová, 2013; Krause & Hayward, 2014; 2015; Lloyd, 2012; McLaughlin & McMinn, 2015). However, these studies did not investigate the relation of wisdom specifically with intrinsic religiosity. Unfortunately, the number of studies that

examined this association is very scarce. In the current study, there was no significant association between wisdom and intrinsic religiosity. Ardel (2003) stated that religiosity and wisdom are different constructs and they do not have to be present simultaneously in the same person and she found that overall wisdom and intrinsic religiosity are unrelated (Ardelt, 2008). While there was no significant association between overall wisdom and religiosity, the findings were different for different dimensions of wisdom. While cognitive and reflective wisdom had small positive correlations with intrinsic religiosity, affective wisdom had small negative correlation with it. These findings are partly in line with previous research. In the study of Adamaová (2013), in which 125 university students were the participants, it was found that 3D-WS reflective and cognitive subscales were positively correlated with religiosity but she did not find a similar result for affective wisdom and claimed that these relations are moderated by openness to experience. The reason why affective wisdom had negative correlation with intrinsic religiosity, which is inconsistent with Adamaová's (2013) findings, may have resulted from affective wisdom being composed of only two items. Likewise, there was a non-significant wisdom–spiritual well-being correlation in the present study. Although there has not been a specific study that examined wisdom–spiritual well-being relation directly, it was expected that they would correlate significantly since spirituality or spiritual well-being was known to be related to religiosity (Gall, Malette, & Guirguis-Younger, 2011; Saroglou & Muñoz-García, 2008; Vosloo, Wissing, & Temane, 2009; Zinnbauer et al., 1997), which has been associated with wisdom in the literature. Yet, since even religiosity and wisdom was unrelated in the current study, it is not very surprising to find non-significant spirituality-wisdom relation. Besides, spirituality is a concept that is much broader than religiosity, some studies did even propose religiosity as a dimension of spirituality (e.g., Vosloo, Wissing, & Temane, 2009).

Most studies in the literature suggested that people who have higher spiritual well-being and are more religious tend to have fewer depressive symptoms (Lawler-Row & Elliot, 2009; Lucette, Ironson, Pargament, & Krause, 2016; Yoon & Lee, 2006), higher subjective well-being, higher purpose in life, more positive relationships with

others (Lawler-Row & Elliot, 2009), less need for social support, and higher life satisfaction (Yoon & Lee, 2006). However, there are also a few studies that proposed just the opposite for religiosity–psychological well-being relation; for instance, Brown and Tierney (2007) found that the people who have more religious participation are more likely to have worse subjective well-being. In the current study, the participants who reported better spiritual well-being showed a tendency to have better psychological well-being, which is congruent with the existing literature. However, contrary to expectations, intrinsic religiosity and PWB were not associated significantly and the direction of the relation was negative, meaning that higher levels of intrinsic religiosity was related to lower levels of PWB. García-Alandete and Bernabé Valero (2013) found that intrinsic religiosity is positively associated with PWB and extrinsic religiosity is negatively associated with it. However, their sample was composed of 180 Spanish undergraduate students. Thus, the differences between the samples of the current study and García-Alandete and Bernabé Valero’s (2013) study in terms of culture, age and education level might account for the contradictory findings.

4.4. Findings of Moderation Analyses for Wisdom and Psychological Well-Being Association

To test the hypothesis 1 and hypothesis 2 of the present study, moderation analyses were run to find out moderator roles of intrinsic religiosity and spiritual well-being on the relation between wisdom and PWB. Neither intrinsic religiosity nor spiritual well-being had significant moderator role on this relation, which means the rejection of the both hypotheses. There might be several reasons of such results. Moderately positive wisdom–PWB association may be explained by other mediating or moderating variables that influence this relation. To illustrate, the study conducted by Etezadi and Pushkar (2013) suggested that problem focused coping, positive reappraisal coping, perceived control, and life engagement can mediate wisdom and PWB association. In addition, it is important which measurement instrument was used to evaluate wisdom and how wisdom is operationally defined in this instrument. Wisdom is such a complex, deep, and diverse construct (Walsh, 2015) that it is hard

to define and measure it due to both general definitional and wisdom specific problems. Therefore, the literature suggested many definitions of wisdom (e.g., Choi & Landeros, 2011; Glück & Bluck, 2011; Krause, 2016; Pasupathi & Staudinger, 2001). Inevitably, the way it is defined directly affects how it is going to be measured. For instance, Self-Assessed Wisdom Scale (SAW-S; Webster, 2003) measures wisdom according to the five distinct but overlapping categories that should be present in a wise person: Emotional regulation, humor, critical life experiences, reflectiveness/reminiscence, and openness to experience. In this context, how it measures wisdom is quite different than 3D-WS and thus, if it was used in the present study, results of the moderation analyses would change. Although intrinsic religiosity is more strictly defined, similar problem also may be valid for spirituality that is also difficult to define. Moreover, the fact that affective wisdom had only two items left after the factor analysis might have affected the overall wisdom scores, too. This might explain why results of the moderation analyses were found non-significant.

4.5. Limitations of the Current Study

The current study has some shortcomings that should be mentioned. First, since the participants were elderly people with low educational attainment from middle social class, it is likely that this sample did not represent Turkish population and they may have had problems when completing the questionnaires. 3D-WS, on the other hand, is a scale that was developed for highly educated elderly people. Although Ardelt (2003) obtained good psychometric properties of the scale, the sample of study was composed of people who were retired professors and retired educators. Moreover, since 3D-WS was translated into Turkish but it was not adapted to Turkish culture and it is more suitable for Western societies, the participants in this study may have had extra difficulty in understanding the items. Besides, psychometric properties of Turkish 3D-WS were satisfactory but not highly reliable. It seems that this scale is not appropriate for Turkish elderly people. Future studies should search for the definition and dimensions of wisdom in Turkish cultural context and a more reliable instrument should be developed to measure wisdom in Turkey. It should also be

noted that relatively poor psychometric properties of 3D-WS might have affected the results of the other analyses and thus, results of this study should be considered with caution. Especially, since most of the affective wisdom items were deleted and only two items were left, analyses that included affective wisdom should be evaluated with more caution. After 3D-WS is revised by adapting it to Turkish culture or after developing a new wisdom scale for Turkish population, moderator roles of spiritual well-being and intrinsic religiosity on relation between wisdom and psychological well-being should be further investigated.

4.6. Strengths of the Current Study

There are some strengths of the current study. This study is the first study that translated a wisdom scale into Turkish. Moreover, how wisdom, its dimensions, intrinsic religiosity, and spiritual well-being are associated with each other and the moderator roles of intrinsic religiosity and spiritual well-being on the relation between wisdom and psychological well-being were investigated for the first time with a Turkish sample. This study is kind of a preliminary analysis suggesting that wisdom in Turkish cultural context may be mainly composed of reflective and cognitive wisdom, rather than affective wisdom, especially for elderly population. Moreover, it reveals the importance of wisdom and spiritual well-being for the psychological well-being of elderly people.

4.7. Implications of the Findings and Suggestions for Future Studies

Several implications of the findings obtained from the current study should be taken into consideration. Firstly, this study showed the necessity of a revised version of 3D-WS or a new wisdom measure that is much more appropriate for Turkish elderly people. It is recommended for future research that exploratory studies, especially qualitative ones, should be conducted to understand the meaning of wisdom concept in Turkey and develop a wisdom scale that has good psychometric qualities. Afterwards, associations among the variables of this study and the moderation hypotheses of the current study should be tested further, since our findings may not reflect the true nature of associations between variables due to relatively poor

psychometric properties of 3D-WS. Additionally, other potential mediating and moderating variables for wisdom–PWB relation should be investigated. Besides, it is important to keep in mind that sample characteristics of the present study was not representative of the Turkish elderly population. Majority of the participants were low-educated and married people from middle social class. Thus, the hypotheses of the current study should be re-tested with a more representative sample, and/or different samples can be recruited to examine the same association. For instance, widowed people or people who live alone, people from low and high social classes, people with higher educational attainment, and people from different age groups can be included in such a study.

The current study demonstrated that reflective, affective, overall wisdom, and spiritual well-being are associated with higher well-being levels of elderly population. Wisdom is known to be a part of successful aging among elderly and thus, psychologists and social workers who work with elderly population should consider this association. For instance, they may develop interventions that target improvement or facilitation of reflective and affective wisdom. Similarly, when considering well-being of the elderly population, spiritual well-being should not be ignored. Present study found that spiritual well-being of the participants with a physical health problem was higher than spiritual well-being of the physically healthy participants. This association may imply that elderly people who have physical health problem try to cope with these problems by spirituality. Thus, spiritual well-being should be supported especially for the elderly people suffering from a physical health problem.

REFERENCES

- Abas, M. A., Punpuing, S., Jirapramupitak, T., Tangchonlatip, K., & Leese, M. (2009). Psychological wellbeing, physical impairments and rural aging in a developing country setting. *Health and Quality of Life Outcomes*, 7(1), 66. doi:10.1186/1477-7525-7-66
- Abolfathi Momtaz, Y., Hamid, T. A., Ibrahim, R., Yahaya, N., & Abdullah, S. S. (2012). Moderating effect of Islamic religiosity on the relationship between chronic medical conditions and psychological well-being among elderly Malays. *Psychogeriatrics*, 12(1), 43–53. doi:10.1111/j.1479-8301.2011.00381.x
- Adamovová, L. (2013). Wise religiosity: The relationship between religiosity and wisdom moderated by personality traits. *Studia Psychologica*, 55(3), 181–195. doi:10.21909/sp.2013.03.634
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5(4), 432–443. doi:10.1037/h0021212
- Alves, P., Morgado, L., & Oliveira, B. de. (2014). Wisdom assessment: Portuguese adaptation of the self-assessed wisdom scale—SAWS—by Jeffrey Webster. *Psychologica*, 57(1), 39–57. doi:10.14195/1647-8606_57_1_3
- Aranda, M. P. (2008). Relationship between religious involvement and psychological well-being: A social justice perspective. *Health and Social Work*, 33(1), 9–21. doi:10.1093/hsw/33.1.9
- Arber, S., Fenn, K., & Meadows, R. (2014). Subjective financial well-being, income and health inequalities in mid and later life in Britain. *Social Science and Medicine*, 100, 12–20. doi:10.1016/j.socscimed.2013.10.016
- Ardelt, M. (1997). Wisdom and life satisfaction in old age. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 52(1), P15-P27.
- Ardelt, M. (2000). Antecedents and effects of wisdom in old age. *Research on Aging*, 22(4), 360–394.
- Ardelt, M. (2003). Empirical assessment of a three-dimensional wisdom scale. *Research On Aging*, 25(3), 275–324. doi:10.1177/0164027503251764
- Ardelt, M., (2008). Wisdom, religiosity, purpose in life, and attitudes toward death. *International Journal of Existential Psychology and Psychotherapy*, 2(1), 1–10.

- Ardelt, M. (2009). How similar are wise men and women? A comparison across two age cohorts. *Research in Human Development, 6*(1), 9–26. doi:10.1080/15427600902779354
- Ardelt, M. (2016). Disentangling the relations between wisdom and different types of well-being in old age: findings from a short-term longitudinal study. *Journal of Happiness Studies, 17*(5), 1963–1984. doi:10.1007/s10902-015-9680-2
- Ardelt, M. (2010). Are older adults wiser than college students? A comparison of two age cohorts. *Journal of Adult Development, 17*(4), 193–207. doi:10.1007/s10804-009-9088-5
- Ardelt, M., & Edwards, C. A. (2016). Wisdom at the end of life: An analysis of mediating and moderating relations between wisdom and subjective well-being. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences, 71*(3), 502–513. doi:10.1093/geronb/gbv051
- Ardelt, M., & Jeste, D. V. (2016). Wisdom and hard times: The ameliorating effect of wisdom on the negative association between adverse life events and well-being. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 0*(0), gbw137. doi:10.1093/geronb/gbw137
- Arendt, J. N. (2005). Income and “outcomes” for elderly: Do the poor have a poorer life? *Social Indicators Research, 70*(3), 327–347.
- Arun, Ö. (2008). Yaşlı bireyin Türkiye serüveni: kaliteli yaşlanma imkanı üzerine senaryolar. *Gaziantep University-Journal of Social Sciences, 7*(2), 313–330.
- Arun, B. K. (2011). Widowhood: The most salient problem for elderly women. *Gaziantep University Journal of Social Sciences, 10*(4), 1515–1527.
- Baltes, P., & Smith, J. (1990). Toward a psychology of wisdom and its ontogenesis. In R. Sternberg (Ed.), *Wisdom: Its Nature, Origins, and Development*, 87–120. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139173704.006
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom. A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *The American Psychologist, 55*(1), 122–136. doi:10.1037/0003-066X.55.1.122
- Barnett, R. C., Brennan, R. T., Raudenbush, S. W., & Marshall, N. L. (1994). Gender and the relationship between marital- role quality and psychological distress. *Psychology of Women Quarterly, 18*(1), 105–127.
- Bekke-Hansen, S., Pedersen, C. G., Thygesen, K., Christensen, S., Waelde, L. C., & Zachariae, R. (2013). The role of religious faith, spirituality and existential

- considerations among heart patients in a secular society: Relation to depressive symptoms 6 months post acute coronary syndrome. *Journal of Health Psychology*, 19(6), 740–753. doi:10.1177/1359105313479625
- Bennett, K. M., Hughes, G. M., & Smith, P. T. (2003). “I think a woman can take it”: widowed men’s views and experiences of gender differences in bereavement. *Ageing International*, 28(4), 408–424. doi:10.1007/s12126-003-1012-x
- Bennett, K. M., & Soulsby, L. K. (2012). Wellbeing in bereavement and widowhood. *Illness, Crisis, & Loss*, 20(4), 321–337. doi:10.2190/IL.20.4.b
- Berkmen, H. (n. d.). *Mevlana Jelaluddin Rumi*. 2, Retrieved from <http://www.halukberkmen.net/pdf/83.pdf>
- Berkmen, H. (n. d.). *The Sufi Poet: Yunus Emre*. 3, Retrieved from <http://www.halukberkmen.net/pdf/103.pdf>
- Beyene, Y., Becker, G., & Mayen, N. (2002). Perception of aging and sense of well-being among Latino elderly. *Journal of Cross-Cultural Gerontology*, 17(2), 155–172.
- Bhamani, M. A., Khan, M. M., Karim, M. S., & Mir, M. U. (2015). Depression and its association with functional status and physical activity in the elderly in Karachi, Pakistan. *Asian Journal of Psychiatry*, 14, 46–51. doi:10.1016/j.ajp.2014.12.004
- Bhullar, N., Hine, D. W., & Myall, B. R. (2010). *Physical decline and psychological wellbeing in older adults: A longitudinal investigation of several potential buffering factors*. Australia: Australian Academic Press.
- Bowen, G. L., & Jensen, T. M. (2015). Late-life divorce and postdivorce adult subjective well-being. *Journal of Family Issues*, 38(10), 1363–1388. doi:10.1177/0192513X15596197
- Bradburn, N. M. (1969). *The structure of psychological well-being*. Chicago: Aldine Publishing Company.
- Brown, P. H., & Tierney, B. (2009). Religion and subjective well-being among the elderly in China. *Journal of Socio-Economics*, 38(2), 310–319. doi:10.1016/j.socec.2008.07.014
- Brown, S. L., Nesse, R. M., House, J. S., & Utz, R. L. (2004). Religion and emotional compensation: results from a prospective study of widowhood. *Personality and Social Psychology Bulletin*, 30(9), 1165–1174. doi:10.1177/0146167204263752

- Bugay, A., & Demir, A. (2010). A Turkish version of heartland forgiveness scale. *Procedia - Social and Behavioral Sciences*, 5(2), 1927–1931. doi:10.1016/j.sbspro.2010.07.390
- Bulucu, G. D., & Ünsal, A. (2014). Sosyoekonomik düzeyi düşük bir bölgede evde yaşayan yaşlıların bakım gereksinimleri. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*, 3(1), 577–587.
- Burton, A. M., Haley, W. E., & Small, B. J. (2006). Bereavement after caregiving or unexpected death: Effects on elderly spouses. *Aging Mental Health*, 10(3), 319–326. doi:10.1080/13607860500410045
- Carr, D., Cornman, J. C., & Freedman, V. A. (2016). Marital quality and negative experienced well-being: An assessment of actor and partner effects among older married persons. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, 71(1), 177–187. doi:10.1093/geronb/gbv073
- Carr, D., House, J. S., Kessler, R. C., Nesse, R. M., Sonnega, J., & Wortman, C. (2000). Marital quality and psychological adjustment to widowhood among older adults a longitudinal analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 55(4), S197–S207. doi:10.1093/geronb/55.4.S197
- Chang-Quan, H., Zheng-Rong, W., Yong-Hong, L., Yi-Zhou, X., & Qing-Xiu, L. (2010). Education and risk for late life depression: a meta-analysis of published literature. *International Journal of Psychiatry in Medicine*, 40(1), 109–124. doi:10.2190/PM.40.1.i
- Chang-Quan, H., Zheng-Rong, W., Yong-Hong, L., Yi-Zhou, X., & Qing-Xiu, L. (2010). Education and risk for late life depression: a meta-analysis of published literature. *International Journal of Psychiatry in Medicine*, 40(1), 109–124. doi:10.2190/PM.40.1.i
- Cheraghi, F., Kadivar, P., Ardelt, M., Asgari, A., & Farzad, V. (2015). Gender as a moderator of the relation between age cohort and three-dimensional wisdom in Iranian culture. *The International Journal of Aging and Human Development*, 81(1–2), 3–26. doi:10.1177/0091415015616394
- Cho, J., Martin, P., Margrett, J., Macdonald, M., & Poon, L. W. (2011). The relationship between physical health and psychological well-being among oldest-old adults. *Journal of Aging Research*, 2011, 1–8. doi:10.4061/2011/605041
- Choi, N. G., & Landeros, C. (2011). Wisdom from life's challenges: qualitative interviews with low- and moderate-income older adults who were nominated as

- being wise. *Journal of Gerontological Social Work*, 54(6), 592–614.
doi:10.1080/01634372.2011.585438
- Chou, K.-L., Ho, a H. Y., & Chi, I. (2006). Living alone and depression in Chinese older adults. *Aging and Mental Health*, 10(6), 583–591.
doi:10.1080/13607860600641150
- Ciairano, S., Liubicich, M. E., & Rabaglietti, E. (2010). The effects of a physical activity programme on the psychological wellbeing of older people in a residential care facility: an experimental study. *Ageing & Society*, 30(4), 609–626. doi:10.1017/S0144686X09990614
- Cohen, S., & Wills, T. A. (1985). Stress, Social Support, and the Buffering Hypothesis. *Psychological Bulletin*, 98(2), 310–357.
- Coursolle, K. M., Sweeney, M. M., Raymo, J. M., & Ho, J. (2010). The association between retirement and emotional well-being: does prior work – family conflict matter?. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, 65B(5), 609–620. doi:10.1093/geronb/gbp116
- Cowlishaw, S., Niele, S., Teshuva, K., Browning, C., & Kendig, H. (2013). Older adults' spirituality and life satisfaction: a longitudinal test of social support and sense of coherence as mediating mechanisms. *Ageing & Society*, 33(7), 1243–1262. doi:10.1017/S0144686X12000633
- Crumbaugh, J. C., & Maholick, L. T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology*, 20(2), 200-207.
- Darghouth, S., Brody, L., & Alegria, M. (2015). Does marriage matter? Marital status, family processes, and psychological distress among latino men and women. *Hispanic Journal of Behavioral Sciences*, 37(4), 482–502.
doi:10.1177/0739986315606947
- Demirbilek, S. (2007). Yaşlılık ve emeklilik ilişkisinin sosyolojik boyutu. *Selçuk Üniversitesi Sosyal Bilimler MYO Dergisi*, 10(1-2), 131–146.
- DeNeve, K. M., & Cooper, H. (1998). The happy personality: a meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124(2), 197–229. doi:10.1037/0033-2909.124.2.197
- D'Epina, C. J. L., Cavalli, S., & Spini, D. (2003). The death of a loved one: Impact on health and relationships in very old age. *Omega: Journal of Death and Dying*, 47(3), 265–284. doi:10.2190/3GMV-PGL9-UD68-NEKW

- Dezutter, J., Soenens, B., & Hutsebaut, D. (2006). Religiosity and mental health: A further exploration of the relative importance of religious behaviors vs. religious attitudes. *Personality and Individual Differences, 40*(4), 807–818. doi:10.1016/j.paid.2005.08.014
- Diener, E., Wirtz, D., Biswas-diener, R., Tov, W., Kim-prieto, C., Choi, D., & Oishi, S. (2009). Assessing well-being. The Collected Works of Ed Diener. *Social Indicators Research Series, 39*, 247–266. doi:10.1007/978-90-481-2354-4_12
- Drentea, P. (2002). Retirement and mental health. *Journal of Aging and Health, 14*(2), 167–194. doi: 10.1177/089826430201400201
- Drew, L. M., & Silverstein, M. (2004). Inter-generational role investments of great-grandparents: Consequences for psychological well-being. *Ageing & Society, 24*(1), 95–111. doi:10.1017/S0144686X03001533
- Emery, E. E., & Pargament, K. I. (2004). The many faces of religious coping in late life: Conceptualization, measurement, and links to well-being. *Ageing International, 29*(1), 3–27. doi:10.1007/s12126-004-1007-2
- Ercan Şahin, N., & Emiroğlu, O. N. (2014). Huzurevinde yaşayan yaşlıların yaşam kalitesi ve yaşam kalitesini etkileyen faktörler. *Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi, 1*(1), 57–66.
- Erdoğan, E. (2015). Tanrı algısı, dini yönelim biçimleri ve öznel dindarlığın psikolojik dayanıklılıkla ilişkisi: üniversite örnekleme. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 12*(29), 223–246.
- Ertan, T., & Eker, E. (2000). Reliability, validity, and factor structure of the geriatric depression scale in Turkish elderly: are there different factor structures for different cultures? *International Psychogeriatrics, 12*(2), 163–172.
- Espanha, R., & Ávila, P. (2016). Health Literacy Survey Portugal: A Contribution for the Knowledge on Health and Communications. *Procedia Computer Science, 100*, 1033-1041. doi:10.1016/j.procs.2016.09.277
- Etezadi, S., & Pushkar, D. (2013). Why are wise people happier? an explanatory model of wisdom and emotional well-being in older adults. *Journal of Happiness Studies, 14*(3), 929–950. doi:10.1007/s10902-012-9362-2
- Evenson, R. J., & Simon, R. W. (2005). Clarifying the relationship between parenthood and depression. *Journal of Health and Social Behavior, 46*(4), 341–358. doi:10.1177/002214650504600403

- Fengyan, W., & Hong, Z. (2012). A New Theory of Wisdom: Integrating Intelligence and Morality. *Online Submission*, 2(1), 64–75.
- Ferrari, M., Abdelaal, Y., Lakhani, S., Sachdeva, S., Tasmim, S., & Sharma, D. (2016). Why is Gandhi wise? A cross-cultural comparison of Gandhi as an exemplar of wisdom. *Journal of Adult Development*, 23(4), 204–213. doi:10.1007/s10804-016-9236-7
- Fincham, F. D., Beach, S. R. H., Harold, G. T., & Osborne, L. N. (1997). Marital satisfaction and depression: different causal relationships for men and women? *Psychological Science*, 8(5), 351–357. doi:10.2307/4006321
- Finnish Institute of Occupational Health. (2007). *Retirement, transition, and wellbeing: A 16-year longitudinal study*. Helsinki, Finland: Jorma Seitsamo.
- Fisher, J. (2011). The four domains model: Connecting spirituality, health and well-being. *Religions*, 2(1), 17–28. doi:10.3390/rel2010017
- Flere, S. (2007). Gender and religious orientation. *Social Compass*, 54(2), 239–253. doi:10.1177/0037768607077035
- Frazier, C., Mintz, L. B., & Mobley, M. (2005). A multidimensional look at religious involvement and psychological well-being among urban elderly African Americans. *Journal of Counseling Psychology*, 52(4), 583–590. doi:10.1037/0022-0167.52.4.583
- Fry, P. S. (2000). Religious involvement, spirituality and personal meaning for life: Existential predictors of psychological wellbeing in community-residing and institutional care elders. *Aging & Mental Health*, 4(4), 375–387. doi:10.1080/713649965
- Gall, T. L., Malette, J., & Guirguis-Younger, M. (2011). Spirituality and religiousness: A diversity of definitions. *Journal of Spirituality in Mental Health*, 13(3), 158–181. doi:10.1080/19349637.2011.593404
- Garcia, D., & Archer, T. (2012). Adolescent life satisfaction and well-being. *Journal of Alternative Medicine Research*, 4(3), 271–279.
- García-Alandete, J., & Bernabé-Valero, G. (2013). Religious orientation and psychological well-being among Spanish undergraduates. *Acción Psicológica*, 10(1), 135–148. doi:10.5944/ap.10.1.7040
- Garson, G. D. (2015). *Structural Equation Modeling*. Asheboro: Statistical Publishing Associates.

- Gibney, S., Delaney, L., Codd, M., & Fahey, T. (2017). Lifetime Childlessness, Depressive Mood and Quality of Life Among Older Europeans. *Social Indicators Research*, *130*(1), 305–323. doi:10.1007/s11205-015-1177-1
- Glück, J., & Bluck, S. (2011). Laypeople's conceptions of wisdom and its development: Cognitive and integrative views. *Journals of Gerontology- Series B Psychological Sciences and Social Sciences*, *66B*(3), 321–324. doi:10.1093/geronb/gbr011
- Glück, J., König, S., Naschenweng, K., Redzanowski, U., Dorner, L., Straßer, I., & Wiedermann, W. (2013). How to measure wisdom: Content, reliability, and validity of five measures. *Frontiers in Psychology*, *4*(405), 1–13. doi:10.3389/fpsyg.2013.00405
- Glück, J., Strasser, I., & Bluck, S. (2009). Gender differences in implicit theories of wisdom. *Research in Human Development*, *6*(1), 27–44. doi:10.1080/15427600902779370
- Gordon, J. K., & Jordan, L. M. (2016). Older is wiser? It depends who you ask... and how you ask. *Neuropsychology, Development, and Cognition. Section B, Aging, Neuropsychology and Cognition*, *24*(1), 1–21. doi:10.1080/13825585.2016.1171
- Gorsuch, R. L., & McPherson, S. E. (1989). Intrinsic/extrinsic measurement: I/E-revised and single-item scales. *Journal for the Scientific Study of Religion*, *28*(3), 348–354
- Göcen, G. (2013). Pozitif psikoloji düzleminde psikolojik iyi olma ve dini yönelim ilişkisi: yetişkinler üzerine bir araştırma. *Toplum Bilimleri Dergisi*, *7*(13), 97–130.
- Gray, M., De Vaus, D., Qu, L., & Stanton, D. (2010). Divorce and the wellbeing of older Australians. *Ageing and Society*, *31*(3), 475–498. doi:10.1017/S0144686X10001017
- Green, D. L. (2006). Investigation of the factor structure of the mental, physical and spiritual well-being scale. *Advances in Social Work*, *7*(2), 34–43.
- Green, M., & Elliott, M. (2010). Religion, health, and psychological well-being. *Journal of Religion and Health*, *49*(2), 149–163. doi:10.1007/s10943-009-9242-1
- Greene, J. A., & Brown, S. C. (2009). The wisdom development scale: Further validity investigations. *The International Journal of Aging and Human Development*, *68*(4), 289–320. doi:10.2190/AG.68.4.b

- Greenfield, E. A., Vaillant, G. E., & Marks, N. F. (2009). Do formal religious participation and spiritual perceptions have independent linkages with diverse dimensions of psychological well-being? *Journal of Health and Social Behavior*, *50*(2), 196–212. doi:10.1177/002214650905000206
- Grossmann, I., Karasawa, M., Izumi, S., Na, J., Varnum, M. E. W., Kitayama, S., & Nisbett, R. E. (2012). Aging and wisdom: Culture matters. *Psychological Science*, *23*(10), 1059–1066. doi:10.1177/0956797612446025
- Grundy, E. M., Albala, C., Allen, E., Dangour, A. D., Elbourne, D., & Uauy, R. (2012). Grandparenting and psychosocial health among older Chileans: A longitudinal analysis. *Aging & Mental Health*, *16*(8), 1047–1057. doi:10.1080/13607863.2012.692766
- Gull, F., & Dawood, S. (2013). Religiosity and subjective well-being amongst institutionalized elderly in Pakistan. *Health Promotion Perspectives*, *3*(1), 124–128. doi:10.5681/hpp.2013.014
- Gunn, T. J. (1999). The complexity of religion and the definition of “ religion ” in international law. *Harvard Human Rights Journal*, *16*(16), 189–215.
- Hacıhasanoğlu, R., & Türkleş, S. (2008). depression and affecting factors in the old at the age of 65 and over. *Journal of Anatolia Nursing and Health Sciences*, *11*(2), 55–60.
- Hafeez, A., & Rafique, R. (2013). Spirituality and religiosity as predictors of psychological well-being in residents of old homes. *8*(3), 288–301.
- Han, W. J., & Shibusawa, T. (2015). Trajectory of physical health, cognitive status, and psychological well-being among Chinese elderly. *Archives of Gerontology and Geriatrics*, *60*(1), 168–177. doi:10.1016/j.archger.2014.09.001
- Hank, K., & Wagner, M. (2013). Parenthood, marital status, and well-being in later life: Evidence from SHARE. *Social Indicators Research*, *114*(2), 639–653. doi:10.1007/s11205-012-0166-x
- Hansen, T., & Slagsvold, B. (2012). The age and subjective well-being paradox revisited: A multidimensional perspective. *Norsk Epidemiologi*, *22*(2), 187–195. doi:10.1586/14737167.4.5.581
- Hansen, T., Slagsvold, B., & Moum, T. (2009). Childlessness and psychological well-being in midlife and old age: An examination of parental status effects across a range of outcomes. *Social Indicators Research*, *94*(2), 343–362. doi:10.1007/s11205-008-9426-1

- Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior research methods*, *41*(3), 924-936.
- Heap, J., & Fors, S. (2015). Duration and accumulation of disadvantages in old age. *Social Indicators Research*, *123*(2), 411–429. doi:10.1007/s11205-014-0744-1
- Heidrich, S. M. (1993). The relationship between physical health and psychological well-being in elderly women: A developmental perspective. *Research in Nursing & Health*, *16*(2), 123–130.
- Heo, J., Chun, S., Lee, S., & Kim, J. (2016). Life satisfaction and psychological well-being of older adults with cancer experience: The role of optimism and volunteering. *International Journal of Aging & Human Development*, *83*(3), 274–289. doi:10.1177/0091415016652406
- Hochman, O., & Skopek, N. (2013). The impact of wealth on subjective well-being: A comparison of three welfare-state regimes. *Research in Social Stratification and Mobility*, *34*, 127–141. doi:10.1016/j.rssm.2013.07.003
- Hohaus, L. C., & Spark, J. (2013). Getting better with age: do mindfulness & psychological well-being improve in old age? *European Psychiatry*, *28*, 1. doi:10.1016/S0924-9338(13)77295-X
- Holden, K. C., Kim, J., & Novak, B. (2010). *Psychological adjustment to widowhood: The role of income, wealth and time*. Unpublished manuscript, Society of Actuaries and University of Wisconsin–Madison, USA.
- Homan, K. J. (2016). Self-Compassion and psychological well-being in older adults. *Journal of Adult Development*, *23*(2), 111–119. doi:10.1007/s10804-016-9227-8
- Hu, L. T., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, *3*(4), 424–453.
- İçli, G. (2004). Huzurevinde kalan yaşlılar üzerine bir araştırma. *Sosyoloji Araştırmaları Dergisi*, 5–24.
- Inglehart, R. (2002). Gender, aging, and subjective well-being. *International Journal of Comparative Sociology*, *43*(3–5), 391–408. doi:10.1177/002071520204300309
- Isaacowitz, D. M., & Smith, J. (2003). Positive and negative affect in very old age. *Journals of Gerontology: Psychological Sciences*, *58B*(3), P143–P152. doi:10.1093/geronb/58.3.P143

- Jason, L. A., Reichler, A., King, C., Madsen, D., Camacho, J., & Marchese, W. (2001). The measurement of wisdom: A preliminary effort. *Journal of Community Psychology, 29*(5), 585–598. doi:10.1002/jcop.1037
- Jernigan, H. L. (2001). Spirituality in older adults: A cross-cultural and interfaith perspective. *Pastoral Psychology, 49*(6), 413–437.
- Jeste, D. V., Ardel, M., Blazer, D., Kraemer, H. C., Vaillant, G., & Meeks, T. W. (2010). Expert consensus on characteristics of wisdom: A delphi method study. *Gerontologist, 50*(5), 668–680. doi:10.1093/geront/gnq022
- Jeste, D. V., & Oswald, A. J. (2014). Individual and societal wisdom: Explaining the paradox of human aging and high well-being. *Psychiatry, 77*(4), 317–331. doi:10.1521/psyc_2014_77_3_1.
- Johnson, P.O. & Neyman, J. (1936). Test of certain linear hypotheses and applications to some educational problems. *Statistical Research Memoirs, 1*, 57-93.
- Kıraç, F. (2015). Psychometric properties of the purpose in life scale: Factor structure and reliability. *The Journal of International Social Research, 8*(39), 490–500.
- Kim, H. K., & McKenry, P. C. (2002). The relationship between marriage and psychological well-being: A longitudinal analysis. *Journal of Family Issues, 23*(8), 885–911. doi:10.1177/019251302237296
- Kim, J. E., & Moen, P. (2002). Retirement transitions, gender, and psychological well-being: A life-course, ecological model. *The Journals of Gerontology: Series B, 57*(3), 212–222. doi:10.1093/geronb/57.3.P212
- Kirby, S. E., Coleman, P. G., & Daley, D. (2004). Spirituality and well-being in frail and nonfrail older adults. *The Journals of Gerontology: Series B, Psychological Sciences and Social Sciences, 59*(3), P123–P129. doi:10.1093/geronb/59.3.P123
- Krause, N. (2005). God-mediated control and psychological well-being in late life. *Research on Aging, 27*(2), 136–164. doi:10.1177/0164027504270475
- Krause, N. (2016). Assessing the relationships among wisdom, humility, and life satisfaction. *Journal of Adult Development, 23*(3), 140–149. doi:10.1007/s10804-016-9230-0
- Krause, N., & Hayward, R. D. (2015). Virtues, practical wisdom and psychological well-being: a christian perspective. *Social Indicators Research, 122*(3), 735–755. doi:10.1007/s11205-014-0709-4

- Krause, N., & Hayward, R. D. (2014). Religious involvement, practical wisdom, and self-rated health. *Journal of Aging and Health, 26*(4), 540–558. doi:10.1177/0898264314524437
- Krause, N., & Hayward, R. D. (2015). Assessing whether practical wisdom and awe of God are associated with life satisfaction. *Psychology of Religion and Spirituality, 7*(1), 51–59. doi:10.1037/a0037694
- Krause, N., & Markides, K. (1990). Measuring social support among older adults. *The International Journal of Aging and Human Development, 30*(1), 37–53.
- Kumar, P. S. (2015). Psychological well being and marital adjustment: A study on elderly couples in post parental stage of life. *Indian Journal of Gerontology, 29*(1), 77–90.
- Latif, E. (2013). The impact of retirement on mental health in Canada. *Journal of Mental Health Policy and Economics, 16*(1), 35–46. doi:10.1016/j.socec.2010.12.011
- Lavrič, M., & Flere, S. (2008). The role of culture in the relationship between religiosity and psychological well-being. *Journal of Religion and Health, 47*(2), 164–175. doi:10.1007/s10943-008-9168-z
- Lawler-Row, K. A., & Elliott, J. (2009). The role of religious activity and spirituality in the health and well-being of older adults. *Journal of Health Psychology, 14*(1), 43–52. doi:10.1177/1359105308097944
- Lee, E.-K. O., & Lee, J. (2013). Education, functional limitations, and life satisfaction among older adults in South Korea. *Educational Gerontology, 39*(7), 514–526. doi:10.1080/03601277.2012.701154
- Lee, G. R., & DeMaris, A. (2007). Widowhood, gender, and depression. *Research on Aging, 29*(1), 56–72. doi:10.1177/0164027506294098
- Lee, G. R., DeMaris, A., Bavin, S., & Sullivan, R. (2001). Gender differences in the depressive effect of widowhood in later life. *Journals of Gerontology: Social Sciences, 56*(1), S56–S61. doi:10.1093/geronb/56.1.S56
- Lee, M., Nezu, A. M., & Nezu, C. M. (2014). Positive and negative religious coping, depressive symptoms, and quality of life in people with HIV. *Journal of Behavioral Medicine, 37*(5), 921–930. doi.org/10.1007/s10865-014-9552-y

- Leondari, A., & Gialamas, V. (2009). Religiosity and psychological well-being. *International Journal of Psychology, 44*(11), 241–248. doi:10.1080/00207590701700529
- Levenson, M. R., Jennings, P. A., Aldwin, C. M., & Shiraishi, R. W. (2005). Self-transcendence: Conceptualization and measurement. *The International Journal of Aging and Human Development, 60*(2), 127–143. doi:10.2190/XRXM-FYRA-7U0X-GRC0
- Levin, J. (2013). Religious behavior, health, and well-being among Israeli Jews: Findings from the European Social Survey. *Psychology of Religion and Spirituality, 5*(4), 272–282. doi:10.1037/a0032601
- Lewis, C. A., Maltby, J., & Day, L. (2005). Religious orientation, religious coping and happiness among UK adults. *Personality and Individual Differences, 38*(5), 1193–1202. doi:10.1016/j.paid.2004.08.002
- Lim, K. T. K., & Yu, R. (2015). Aging and wisdom: Age-related changes in economic and social decision making. *Frontiers in Aging Neuroscience, 7*(120), 1–11. doi:10.3389/fnagi.2015.00120
- Lloyd, J. B. (2012). Psychological type and the religious quest for wisdom and maturity. *Mental Health, Religion & Culture, 15*(9), 837–847. doi:10.1080/13674676.2012.685607
- Love, A., Goldman, N., & Rodríguez, G. (2001). Gender, emotional support, and well-being among the rural elderly. *Sex Roles, 45*(1), 15–30.
- Lucette, A., Ironson, G., Pargament, K. I., & Krause, N. (2016). Spirituality and religiousness are associated with fewer depressive symptoms in individuals with medical conditions. *Psychosomatics, 57*(5), 505–513. doi:10.1016/j.psych.2016.03.005
- Maarof, R., Khan, M. J. Z., Anwar, M., & Anwar, A. (2015). A cross-sectional study of wisdom a matter of age and gender. *FWU Journal of Social Sciences, 9*(2), 63–71.
- Maheshwari, S., & Singh, P. (2009). Psychological well-being and pilgrimage: Religiosity, happiness and life satisfaction of Ardh-Kumbh Mela pilgrims (Kalpvasis) at Prayag, India. *Asian Journal of Social Psychology, 12*(4), 285–292. doi:10.1111/j.1467-839X.2009.01291.x
- Mahne, K., & Huxhold, O. (2015). Grandparenthood and subjective well-being: Moderating effects of educational level. *The Journals of Gerontology: Series B,*

Psychological Sciences and Social Sciences, 70(5), 782–792.
doi:10.1093/geronb/gbu147

- Maltby, J., Lewis, C. A., & Day, L. (1999). Religious orientation and psychological well-being: The role of the frequency of personal prayer. *British Journal of Health Psychology*, 4(4), 363–378. doi:10.1348/135910799168704
- Mandiracıoğlu, A. (2010). Dünyada ve Türkiye'de yaşlıların demografik özellikleri. *Ege Tıp Dergisi*, 49(10), 39–45.
- Massé, R., Poulin, C., Dassa, C., Lambert, J., Bélair, S., & Battaglini, A. (1998). The structure of mental health: Higher-order confirmatory factor analyses of psychological distress and well-being measures. *Social Indicators Research*, 45(1–3), 475–504. doi:10.1023/A:1006992032387
- Mcintosh, D., & Spilka, B. (1990). Religion and physical health: The role of personal faith and control beliefs. *Research in the Social Scientific Study of Religion*, 2, 167–194.
- McKee, P., & Barber, C. E. (1999). On defining wisdom. *The International Journal of Aging and Human Development*, 49(2), 149–164. doi:10.2190/8G32-BNV0-NVP9-7V6G
- McLanahan, S., & Adams, J. (1987). Parenthood and psychological well-being. *Annual review of sociology*, 13(1), 237–257.
- Mclaughlin, P., & McMinn, M. R. (2015). Studying wisdom: Toward a Christian integrative perspective. *Journal of Psychology and Theology*, 43(2), 121–130.
- Meléndez, J. C., Tomás, J. M., Oliver, A., & Navarro, E. (2009). Psychological and physical dimensions explaining life satisfaction among the elderly: A structural model examination. *Archives of Gerontology and Geriatrics*, 48(3), 291–295. doi:10.1016/j.archger.2008.02.008
- Melrose, J., Perroy, R., & Careas, S. (2015). World population prospects. *United Nations*, 1(6042), 587–592. doi:10.1017/CBO9781107415324.004
- Merz, E. M., & Consedine, N. S. (2009). The association of family support and wellbeing in later life depends on adult attachment style. *Attachment & Human Development*, 11(2), 203–221. doi:10.1080/14616730802625185
- Mills, P. J., Wilson, K., Iqbal, N., Iqbal, F., Alvarez, M., Pung, M. A., ... Redwine, L. (2015). Depressive symptoms and spiritual wellbeing in asymptomatic heart failure patients. *Journal of Behavioral Medicine*, 38(3), 407–415. doi:10.1007/s10865-014-9615-0

- Momtaz, Y. A., Ibrahim, R., Hamid, T. A., & Yahaya, N. (2010). Mediating effects of social and personal religiosity on the psychological well being of widowed elderly people. *OMEGA - Journal of Death and Dying*, *61*(2), 145–162. doi:10.2190/OM.61.2.d
- Moore, C., & Bracegirdle, H. (1994). The effects of a short-term, low-intensity exercise programme on the psychological wellbeing of community-dwelling elderly women. *British Journal of Occupational Therapy*, *57*(6), 213–216.
- Muhammad, A., & Gagnon, A. (2010). Why should men and women marry and have children? *Journal of Health Psychology*, *15*(3), 315–325. doi:10.1177/1359105309353216
- Muller, Z., & Litwin, H. (2011). Grandparenting and well-being: How important is grandparent-role centrality? *European Journal of Ageing*, *8*(2), 109–118. doi:10.1007/s10433-011-0185-5
- Murphy, S., Lohan, J., Braun, T., Johnson, L., Cain, K., & Beaton, R. (1999). Parents' health, health care utilization, and health behaviors following the violent deaths of their 12- to 28-year-old children: A prospective longitudinal analysis. *Death Studies*, *23*(7), 589–616. doi:10.1080/074811899200795
- National Council on Ageing and Older People. (1999). *Income, deprivation and well-being among older Irish people*. Dublin: National Council on Ageing and Older People.
- Neeta Sharma, K., Karunanidhi, S., & Chitra, T. (2015). Determinants of psychological well-being among retirees. *International Research Journal of Social Sciences*, *4*(3), 19–26.
- Ok, Ü. (2011). Dini tutum ölçeği: Ölçek geliştirme ve geçerlik çalışması. *Uluslararası İnsan Bilimleri Dergisi*, *8*(2), 528–549.
- Orimo, H., Ito, H., Suzuki, T., Araki, A., Hosoi, T., & Sawabe, M. (2006). Reviewing the definition of “elderly”. *Geriatrics & Gerontology International*, *6*(3), 149–158. doi:10.1111/j.1447-0594.2006.00341.x
- Osborne, D., Milojev, P., & Sibley, C. G. (2016). Examining the indirect effects of religious orientations on well-being through personal locus of control. *European Journal of Social Psychology*, *46*(4), 492–505. doi:10.1002/ejsp.2182
- Önal, M. (2009). Dinle uyumlu kolektif bir değer olarak doğu hikmeti. *Felsefe ve Sosyal Bilimler Dergisi*, *7*, 197–209.

- Özdemir, N. (2010). Mizah, eleştirel düşünce ve bilgelik: Nasreddin hoca. *Milli Folklor*, 22(87), 27–40.
- Pace, G. T., & Shafer, K. (2013). Parenting and depression: differences across parental roles. *Journal of Family Issues*, 36(8), 1001–1021. doi:10.1177/0192513X13506705
- Pasupathi, M., & Staudinger, U. M. (2001). Do advanced moral reasoners also show wisdom? Linking moral reasoning and wisdom-related knowledge and judgement. *International Journal of Behavioral Development*, 25(5), 401–415. doi:10.1080/01650250042000519
- Perkins, J. M., Lee, H., James, K. S., Oh, J., Krishna, A., Heo, J., ... Narayana, D. (2016). Marital status, widowhood duration, gender and health outcomes: A cross-sectional study among older adults in India. *BMC Public Health*, 16(1), 1032. doi:10.1186/s12889-016-3682-9
- Perrig-Chiello, P., Hutchison, S., & Morselli, D. (2014). Patterns of psychological adaptation to divorce after a long-term marriage. *Journal of Social and Personal Relationships*, 32(3), 386–405. doi:10.1177/0265407514533769
- Personal Finance Research Centre. (2014). *Financial well-being in later life: Evidence and policy*. Bristol, UK: David Hayes, Andrea Finney, Sharon Collard, Sara Davies & David Collings.
- Perstling, M., & Rothmann, S. (2016). Secondary traumatic stress, psychological wellbeing and life satisfaction of social workers in Namibia. *Journal of Psychology in Africa*, 22(1), 1–9. doi:10.1080/14330237.2012.10874515
- Phillips, D. R., Siu, O. L., Yeh, A. G. O., & Cheng, K. H. C. (2008). Informal social support and older persons' psychological well-being in Hong Kong. *Journal of Cross-Cultural Gerontology*, 23(1), 39–55. doi:10.1007/s10823-007-9056-0
- Pierce Jr, J. D., Cohen, A. B., Chambers, J. A., & Meade, R. M. (2007). Gender differences in death anxiety and religious orientation among US high school and college students. *Mental Health, Religion & Culture*, 10(2), 143–150. doi:10.1080/13694670500440650
- Pinquart, M., & Sörensen, 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), 195–213.
- Porzych, K., Polak-szabela, A., & Hadzik, K. (2015). Wisdom of the elderly. *Medical and Biological Sciences*, 29(2), 33–35. doi:10.12775/MBS.2015.015

- Poulin, J., Deng, R., Ingersoll, T. S., Witt, H., & Swain, M. (2012). Perceived family and friend support and the psychological well-being of American and Chinese elderly persons. *Journal of Cross-Cultural Gerontology*, 27(4), 305–317. doi:10.1007/s10823-012-9177-y
- Pudrovska, T. (2009). Parenthood, stress, and mental health in late midlife and early old age. *The International Journal of Aging and Human Development*, 68(2), 127–147. doi:10.2190/AG.68.2.b
- Pudrovska, T., & Carr, D. (2008). Psychological adjustment to divorce and widowhood in mid- and later life: do coping strategies and personality protect against psychological distress? *Advances in Life Course Research*, 13(8), 283–317. doi:10.1016/S1040-2608(08)00011-7
- Rathore, S., Kumar, A., & Gautam, A. (2015). Life satisfaction and life orientation as predictors of psychological well being. *The International Journal of Indian Psychology*, 3(1), 20–27.
- Ready, R. E., Åkerstedt, A. M., & Mroczek, D. K. (2012). Emotional complexity and emotional well-being in older adults: Risks of high neuroticism. *Aging and Mental Health*, 16(1), 17–26. doi:10.1080/13607863.2011.602961
- Redzanowski, U., & Glück, J. (2013). Who knows who is wise? Self and peer ratings of wisdom, 68, 391–394. doi:10.1093/geronb/gbs079.
- Reitzes, D. C., & Mutran, E. J. (2004). Grandparent identity, intergenerational family identity, and well-being. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 59(4), S213–S219.
- Richardson, V. E. (2006). A dual process model of grief counseling: findings from the changing lives of older couples (CLOC) study. *Journal of Gerontological Social Work*, 48(3–4), 311–329. doi:10.1300/J083v48n03
- Rogers, C. H., Floyd, F. J., Seltzer, M. M., Greenberg, J., & Hong, J. (2008). Long-term effects of the death of a child on parents' adjustment in midlife. *Journal of Family Psychology*, 22(2), 203–211. doi:10.1037/0893-3200.22.2.203
- Russell, D., & Taylor, J. (2009). Living alone and depressive symptoms: The influence of gender, physical disability, and social support among hispanic and non-hispanic older adults. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences*, 64(1), 95–104. doi:10.1093/geronb/gbn002
- Russell, L. B., Rusticus, S., & Hubley, A. M. (2004). A generation speaks out: Perceptions of aging in older adults. *Annual Meeting of the American Psychological Association (APA), Honolulu, Hawaii USA*.

- Ruthig, J. C., Chipperfield, J. G., Newall, N. E., Perry, R. P., & Hall, N. C. (2007). Detrimental effects of falling on health and well-being in later life: the mediating roles of perceived control and optimism. *Journal of Health Psychology, 12*(2), 231–248. doi:10.1177/1359105307074250
- Ryan, A. K., & Willits, F. K. (2007). Family ties, physical health, and psychological well-being. *Journal of Aging and Health, 19*(6), 907–920. doi:10.1177/0898264307308340
- Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719–727. doi:10.1037/0022-3514.69.4.719
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719–727. doi:10.1037/0022-3514.69.4.719
- Ryff, C. D. (1989). Happiness is everything, or is it? *Journal of Personality and Social Psychology, 57*(6), 1069–1081. doi:10.1037/034645
- Saroglou, V. & Munoz-Garcia, A. (2008). Individual differences in religion and spirituality: An issue of personality traits and / or values. *Journal for the Scientific Study of Religion, 47*(1), 83–101. doi:10.1111/j.1468-5906.2008.00393.x
- Sasson, I., & Umberson, D. J. (2014). Widowhood and depression: New light on gender differences, selection, and psychological adjustment. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 69*(1), 135–145. doi:10.1093/geronb/gbt058
- Schut, H. A., Stroebe, M. S., Bout, J. V. D., & Keijser, J. (1997). Intervention for the bereaved: Gender differences in the efficacy of two counselling programmes. *British Journal of Clinical Psychology, 36*(1), 63–72. doi:10.1111/j.2044-8260.1997.tb01231.x
- Schwartz, B., & Sharpe, K. E. (2006). Practical wisdom: Aristotle meets positive psychology. *Journal of Happiness Studies, 7*(3), 377–395. doi:10.1007/s10902-005-3651-y
- Shkolnik, T., Weiner, C., Malik, L., & Festinger, Y. (2001). The effect of Jewish religiosity of elderly Israelis on their life satisfaction, health, function and activity. *Journal of Cross-Cultural Gerontology, 16*(3), 201–219. doi:10.1023/A:1011917825551

- Sıgın, A. (2016). Çalışma hayatı ve emeklilik bağlamında Türkiye’de yaşlılık. *Pamukkale Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 25(1), 87–101
- Singh, A. B., & Kiran, U. V. (2005). Marital status and its impact on psychological well being of elderly. *South Asian Journal of Multidisciplinary Studies*, 2(3), 121–127.
- Smith, N., Young, A., & Lee, C. (2004). Optimism, health-related hardiness and well-being among older Australian women. *Journal of Health Psychology*, 9(6), 741–752. doi:10.1177/1359105304045373
- Solomou, W., Richards, M., Huppert, F. A., Brayne, C., & Morgan, K. (1998). Divorce, current marital status and well-being in an elderly population. *International Journal of Law, Policy and the Family*, 12(3), 323–344.
- Son, J., & Wilson, J. (2011). Religiosity, psychological resources, and physical health. *Journal for the Scientific Study of Religion*, 50(3), 588–603. doi:10.1111/j.1468-5906.2011.01588.x
- Spahni, S., Bennett, K. M., & Perrig-Chiello, P. (2016). Psychological adaptation to spousal bereavement in old age: The role of trait resilience, marital history, and context of death. *Death Studies*, 40(3), 182–190. doi:10.1080/07481187.2015.1109566
- Staudinger, U. M. (1999). Older and wiser? Integrating results on the relationship between age and wisdom-related performance. *International Journal of Behavioral Development*, 23(3), 641–664. doi:10.1080/016502599383739
- Sternberg, R. J. (1998). A balance theory of wisdom. *Review of General Psychology*, 2(4), 347–365. doi:10.1037/1089-2680.2.4.347
- Sternberg, R. J. (1985). Implicit theories of intelligence, creativity, and wisdom. *Journal of Personality and Social Psychology*, 49(3), 607–627. doi:10.1037/0022-3514.49.3.607
- Stokes, J. E. (2016). Marital quality and loneliness in later life: A dyadic analysis of older married couples in Ireland. *Journal of Social and Personal Relationships*, 34(1), 1–22. doi:10.1177/0265407515626309
- Strategic Society Centre. (2015). *Income, security and wellbeing: Helping savers choose a good retirement*. London, UK: James Lloyd.

- Sutin, A. R., Terracciano, A., Milaneschi, Y., An, Y., Ferrucci, L., & Zonderman, A. B. (2013). The effect of birth cohort on well-being: the legacy of economic hard times. *Psychological Science, 24*(3), 379–385. doi:10.1177/0956797612459658
- Symoens, S., Bastiaens, K., Mortelmans, D., & Bracke, P. (2013). Breaking up, breaking hearts? Characteristics of the divorce process and well-being after divorce. *Journal of Divorce & Remarriage, 54*(3), 177–196. doi:10.1080/10502556.2013.773792
- Şentepe, A. (2015). Yaşlılık döneminde dini başaşaıkma. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi, 4*(1), 186–205.
- Takahashi, K., Tamura, J., & Tokoro, M. (1997). Patterns of social relationships and psychological well-being among the elderly. *International Journal of Behavioral Development, 21*(3), 417–430.
- Takahashi, M., & Overton, W. F. (2002). Wisdom: A culturally inclusive developmental perspective. *International Journal of Behavioral Development, 26*(3), 269–277. doi:10.1080/01650250143000139
- Taylor, M., Bates, G., & Webster, J. D. (2011). Comparing the psychometric properties of two measures of wisdom: predicting forgiveness and psychological well-being with the Self-Assessed Wisdom Scale (SAWS) and the Three-Dimensional Wisdom Scale (3D-WS). *Experimental Aging Research, 37*(2), 129–141. doi:10.1080/0361073X.2011.554508
- Teerawichitchainan, B., Pothisiri, W., & Long, G. T. (2015). How do living arrangements and intergenerational support matter for psychological health of elderly parents? Evidence from Myanmar, Vietnam, and Thailand. *Social Science and Medicine, 136*, 106–116. doi:10.1016/j.socscimed.2015.05.019
- Telef, B. B. (2011). The validity and reliability of the Turkish version of the Psychological Well-being Scale. *11th National Congress of Counseling and Guidance*. İzmir, Turkey.
- Thanakwang, K., Ingersoll-Dayton, B., & Soonthornhdhada, K. (2012). The relationships among family, friends, and psychological well-being for Thai elderly. *Aging & Mental Health, 16*(8), 993–1003. doi:10.1080/13607863.2012.692762
- Thomas, M. L., Bangen, K. J., Ardelt, M., & Jeste, D. V. (2017). Development of a 12-Item Abbreviated Three-Dimensional Wisdom Scale (3D-WS-12). *Assessment, 24*(1), 71–82. doi:10.1177/1073191115595714

- Thomeer, M. B., Umberson, D., & Pudrovskaya, T. (2013). Marital processes around depression: A gendered and relational perspective. *Society and Mental Health, 3*(3), 151–169. doi:10.1177/2156869313487224
- Thompson, L. Y., Snyder, C. R., Hoffman, L., Michael, S. T., Rasmussen, H. N., Billings, L. S., ... Roberts, D. E. (2005). Dispositional forgiveness of self, others, and situations. *Journal of Personality, 73*(2), 313–359. doi:10.1111/j.1467-6494.2005.00311.x
- Thuen, F., Reime, M. H., & Skrautvoll, K. (1997). The effect of widowhood on psychological wellbeing and social support in the oldest groups of the elderly. *Journal of Mental Health, 6*(3), 265–274. doi:10.1080/09638239718798
- Tokat, L. (2006). Farabi felsefesinde mutluluğun araştırılması. *Dinbilimleri Akademik Araştırma Dergisi, 6*(2), 133–157.
- Tokuda, Y., Doba, N., Butler, J. P., & Paasche-Orlow, M. K. (2009). Health literacy and physical and psychological wellbeing in Japanese adults. *Patient Education and Counseling, 75*(3), 411–417. doi:10.1016/j.pec.2009.03.031
- Tokur, B. (2016). İçsel dinî motivasyon ve özsaygı ilişkisi üzerine bir araştırma. *Ekev Akademi Dergisi, 20*(66), 159–175.
- United Nations, Department of Economic and Social Affairs, Population Division (2015). *World Population Prospects: The 2015 Revision, Key Findings and Advance Tables* (Working Paper No. ESA/P/WP.241). New York, US.
- Vahia, I. V., Depp, C. a, Palmer, B. W., Fellows, I., Golshan, S., Thompson, W., ... Jeste, D. V. (2011). Correlates of spirituality in older women. *Aging & Mental Health, 15*(1), 97–102. doi:10.1080/13607863.2010.501069
- Vella-Brodrick, D. A., & Allen, F. C. (1995). Development and psychometric validation of the mental, physical, and spiritual well-being scale. *Psychological Reports, 77*(2), 659–674.
- Vosloo, C., Wissing, M. P., & Temane, Q. M. (2009). Gender, spirituality and psychological well-being. *Journal of Psychology in Africa, 19*(2), 153–159. doi:10.1080/14330237.2009.10820274
- Wagner, E. H., LaCroix, A. Z., Buchner, D. M., & Larson, E. B. (1992). Effects of physical activity on health status in older adults I: Observational studies. *Annual Review of Public Health, 13*(1), 451–468.

- Waldman-levi, A., Erez, A. B., & Katz, N. (2015). Healthy aging is reflected in well-being, participation, playfulness, and cognitive-emotional functioning. *Healthy Aging Research, 4*, 1–7. doi:10.12715/har.2015.4.8
- Walsh, R. (Ed.). (2014). *World's Great Wisdom, The: Timeless Teachings from Religions and Philosophies*. SUNY Press.
- Walsh, R. (2015). What is wisdom? Cross-cultural and cross-disciplinary syntheses. *Review of General Psychology, 19*(3), 278–293. doi:10.1037/gpr0000045
- Wang, Q., Wang, D., Li, C., & Miller, R. B. (2014). Marital satisfaction and depressive symptoms among Chinese older couples. *Aging & Mental Health, 18*(1), 11–18. doi:10.1080/13607863.2013.805730
- Webster, J. D. (2003). An exploratory analysis of a Self-Assessed Wisdom Scale. *Journal of Adult Development, 10*(1), 13–22. doi:10.1023/A:1020782619051
- Westerhof, G. J., & Barrett, A. E. (2005). Age identity and subjective well-being: A comparison of the United States and Germany. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences, 60*(3), S129–S136. doi:10.1093/geronb/60.3.S129
- Weststrate, N. M., Ferrari, M., & Ardelt, M. (2016). The many faces of wisdom. *Personality and Social Psychology Bulletin, 42*(5), 662–676. doi:10.1177/0146167216638075
- Wilkinson, W. W. (2004). Religiosity, authoritarianism, and homophobia: A multidimensional approach. *The International Journal for the Psychology of Religion, 14*(1), 55-67.
- Williams, K. (2003). Has the future of marriage arrived? A contemporary examination of gender, marriage, and psychological well-being. *Journal of Health and Social Behavior, 44*(4), 470–487. doi:10.1126/scisignal.2001449
- Wink, P., & Staudinger, U. M. (2016). Wisdom and psychosocial functioning in later life. *Journal of Personality, 84*(3), 306–318. doi:10.1111/jopy.12160
- Wu, Z., Schimmele, C. M., & Chappell, N. L. (2012). Aging and late-life depression. *Journal of Aging and Health, 24*(1), 3–28. doi:10.1177/0898264311422599
- Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., & Leirer, V. O. (1982). Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research, 17*(1), 37–49. doi:10.1016/0022-3956(82)90033-4

- Yılmaz, M. (2013). Yaşlılıkta manevi destek ve din eğitiminin önemi. *Atatürk Üniversitesi İlahiyat Fakültesi Dergisi*, 39, 241–264.
- Yoon, D., & Lee, E. (2004). Religiousness/spirituality and subjective well-being among rural elderly whites, African Americans, and Native Americans. *Journal of Human Behavior in the Social Environment*, 10(1), 191–211. doi:10.1300/J137v10n01
- Zhang, W., Chen, Q., McCubbin, H., McCubbin, L., & Foley, S. (2011). Predictors of mental and physical health: Individual and neighborhood levels of education, social well-being, and ethnicity. *Health and Place*, 17(1), 238–247. doi:10.1016/j.healthplace.2010.10.008
- Zhang, W., & Liu, G. (2007). Childlessness, psychological well-being, and life satisfaction among the elderly in China. *Journal of Cross-Cultural Gerontology*, 22(2), 185–203. doi:10.1007/s10823-007-9037-3
- Zhang, Z., & Hayward, M. D. (2001). Childlessness and the psychological well-being of older persons. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(5), S311–S320. doi:10.1093/geronb/56.5.S311
- Zhao, K. X., Huang, C. Q., Xiao, Q., Gao, Y., Liu, Q. X., Wang, Z. R., ... & Xie, Y. Z. (2012). Age and risk for depression among the elderly: a meta-analysis of the published literature. *CNS spectrums*, 17(3), 142–154. doi:10.1017/S1092852912000533P
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., ... Butter, E. M. (1997). Religion and spirituality: Unfuzzifying the fuzzy. *Journal for the Scientific Study of Religion*, 36(4), 549–564. doi:10.2307/1387689
- Zou, H., Chen, Y., Fang, W., Zhang, Y., & Fan, X. (2016). The mediation effect of health literacy between subjective social status and depressive symptoms in patients with heart failure. *Journal of Psychosomatic Research*, 91, 33–39. doi:10.1016/j.jpsychores.2016.10.006

APPENDICES

Appendix A: Demographic Information Form

Demografik Bilgi Formu

1. Cinsiyetiniz: _____
2. Yaşınız: ____
3. Eğitim Durumunuz: _____
4. Mesleğiniz: _____
5. Aylık Gelir Miktarınız: Düşük Orta Yüksek
6. Şu anki medeni durumunuz (Bekar/Evli/Boşanmış/Dul):
7. Evinizde siz dahil kaç kişi yaşıyor?
8. Kiminle beraber yaşıyorsunuz?
9. Emekli maaşınız var mı?
10. Herhangi bir fiziksel rahatsızlığınız var mı? Varsa ne? _____
11. Herhangi bir psikolojik rahatsızlığınız var mı? Varsa ne? _____
12. Fiziksel ya da psikolojik tedavi görüyor musunuz? Varsa hangi tedaviler?

Appendix B: Three-Dimensional Wisdom Scale

A. This section asks you about your opinion and feelings. How strongly do you agree or disagree with the following statements? Please remember there are no right or wrong answers.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.					
2. I am annoyed by unhappy people who just feel sorry for themselves.					
3. Life is basically the same most of the time.					
4. People make too much of the feelings and sensitivity of animals.					
5. You can classify almost all people as either honest or crooked.					
6. I would feel much better if my present circumstances changed.					
7. There is only one right way to do anything.					
8. There are some people I know I would never like.					
9. It is better not to know too much about things that cannot be changed.					
10. Things often go wrong for me by no fault of my own.					
11. Ignorance is bliss.					

12. I can be comfortable with all kinds of people.					
13. A person either knows the answer to a question or he/she doesn't.					
14. It's not really my problem if others are in trouble and need help.					
15. People are either good or bad.					

B. How much are the following statements true of yourself?

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I try to look at everybody's side of a disagreement before I make a decision.					
2. If I see people in need, I try to help them one way or another.					
3. When I'm upset at someone, I usually try to "put myself in his or her shoes" for a while.					
4. There are certain people whom I dislike so much that I am inwardly pleased when they are caught and punished for something they have done.					
5. I always try to look at all sides of a problem.					
6. Sometimes I feel a real compassion for everyone.					
7. I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something.					
8. When I look back on what has happened to me, I can't help feeling resentful.					

9. I often have not comforted another when he or she needed it.					
10. A problem has little attraction for me if I don't think it has a solution.					
11. I either get very angry or depressed if things go wrong.					
12. Sometimes I don't feel very sorry for other people when they are having problems.					
13. I often do not understand people's behavior.					
14. Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems.					
15. Sometimes when people are talking to me, I find myself wishing that they would leave.					
16. I prefer just to let things happen rather than try to understand why they turned out that way.					
17. When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information.					
18. I don't like to get involved in listening to another person's troubles.					
19. I am hesitant about making important decisions after thinking about them.					
20. Before criticizing somebody, I try to imagine how I would feel if I were in their place.					
21. I'm easily irritated by people who argue with me.					
22. When I look back on what's happened to me, I feel cheated.					

23. Simply knowing the answer rather than understanding the reasons for the answer to a problem is fine with me.					
24. I sometimes find it difficult to see things from another person's point of view.					

Appendix C: Religious Orientation Scale

(Bu bölümde sizden maddelerde ifade edilen yargılara katılıp katılmadığınızı belirtmeniz istenmektedir. Lütfen sizin için en uygun olan şıkkın altındaki harfi daire içine alınız.)

Tamamen katılıyorum	Katılıyorum	Katılmıyorum	Hiç katılmıyorum	
a	b	c	d	
1. Dinimin gereklerini hayatımın her alanına uygulamaya çalışırım.	a	b	c	d
2. Allah'ın varlığını, her zaman güçlü bir şekilde hissederim.	a	b	c	d
3. Hayata ilişkin bütün düşüncelerimi dinsel inançlarım belirler.	a	b	c	d
4. Ahlaki bir hayat yaşadığım sürece, neye inandığım o kadar önemli değildir.	a	b	c	d
5. Dinimin gereklerini yerine getirmeme rağmen, dinsel düşüncelerimin günlük işlerimi etkilemesine izin vermem.	a	b	c	d
6. Herhangi bir engel olmadığı sürece, ibadetlerin aksatılmaması gerektiğini düşünürüm.	a	b	c	d
7. İnanan bir insan olmama rağmen, hayatımda dinden daha önemli şeylerin olduğunu düşünürüm.	a	b	c	d

8. Özellikle dinin benim için önemli olmasının nedeni, hayatın anlamına ilişkin pek çok soruya cevap vermesidir. a b c d
9. Kişilerin, diniyle ilgili çeşitli yayınları takip etmesi çok önemlidir. a b c d
10. Toplumsal ve ekonomik statümü koruyabilmek için, yer yer dinsel uygulamalarımdan taviz vermem gerektiğini düşünürüm. a b c d

**Appendix D: Spiritual Well-being Subscale of Mental, Physical and Spiritual
Well-being Scale**

Bütün soruların yanında cevabınızı işaretleyeceğiniz bir ölçek vardır. Lütfen her soru için ölçekteki seçeneklerden hangisine kendinizi daha yakın hissediyorsanız ona göre bir rakamı daire içine alınız. Lütfen tüm soruları dürüstçe cevaplayınız. Teşekkür ederiz.

Örnek:

Genellikle mutlu bir kişi misinizdir?	1 Sık sık	2	3	4	5 Asla
---------------------------------------	--------------	---	---	---	-----------

1. Zor zamanlarda ruhani yardıma uzanır mısınız (Örnek: Allah / Tanrı ya da daha yüksek bir varlık veya bir ibadet yeri, dua, hoca vs)?	1 Sık sık	2	3	4	5 Asla
2. Etik ya da ahlaki konulardaki tartışmalarla meşgul olurlar musunuz?	1 Sık sık	2	3	4	5 Asla
3. Dini veya ruhani konular hakkında okur ya da çalışır mısınız?	1 Sık sık	2	3	4	5 Asla
4. Ahlaki davranışlarınızı geliştirmek amacıyla kendi davranışlarınızı ciddiyle analiz ettiğiniz olur mu?	1 Asla	2	3	4	5 Sık sık

5. Başkalarının da ders alabileceği, hayata dair kazançlar elde ettiğinizde; bunları hangi sıklıkla yakın çevrenizle paylaşırsınız?	1 Asla	2	3	4	5 Sık sık
6. Ölümden sonra yaşama inanır mısınız?	1 Asla	2	3	4	5 Sık sık
7. İç huzurunuzu sağlamak için ne kadar süredir bir aktivitede bulunuyorsunuz (Örnek: Meditasyon, yoga, dua vs.)?	1 Hiç bulunmadım	2	3 Beş yıldan az	4	5 10 yıldan fazla
8. Ruhani konuları tartışır mısınız (Örnek: Hayatın amacı, din, iç huzur, ölüm vs.)?	1 Asla	2	3	4	5 Sık sık
9. Geçtiğimiz yıl içerisinde kişisel veya ruhani gelişiminizi arttırmaya çalıştınız mı (Örnek: Meditasyon, yoga, dua vs.)?	1 Sık sık	2	3	4	5 Asla
10. İç huzurunuzu elde etmek amacıyla meditasyon ve/veya dualardan faydalanır mısınız?	1 Sık sık	2	3	4	5 Asla

Appendix E: Purpose in Life Test

1. Ben genellikle...

1	2	3	4	5	6	7
Çok sıkılıyorum						Hayat dolu, coşkuluym

2. Hayatım...

1	2	3	4	5	6	7
Çok rutin						Her zaman heyecan verici

3. Hayatta...

1	2	3	4	5	6	7
Hiçbir hedefim yok						Çok açık hedeflerim var

4. Varolmamın...

1	2	3	4	5	6	7
Hiçbir anlamı ve amacı yok						Kesinlikle bir anlamı ve amacı var

5. Her günüm...

1	2	3	4	5	6	7
Tamamen aynı						Sürekli yeni ve farklı

6. Elimde olsaydı...

1	2	3	4	5	6	7
Hiç doğmamış olmayı seçerdim						Bu hayatımın aynısı gibi dokuz hayat daha isterdim

7. Şuan emekli olsaydım...

1	2	3	4	5	6	7
Hayatımın geri kalanını hiçbir şey yapmadan geçirirdim						Her zaman yapmayı istediğim heyecan verici şeyleri yapardım

8. Hayatım...

1	2	3	4	5	6	7
Bomboş ve ümitsizlikle dolu						Heyecan verici, güzel şeylerle dolu

9. Eğer bugün ölecek olsaydım...

1	2	3	4	5	6	7
Tamamen boş bir hayat geçirdiğim hissine kapılırdım						Yaşamaya değer bir hayat geçirdiğimi düşünürdüm

10. Hayatımı düşündüğümde...

1	2	3	4	5	6	7
Sık sık neden var olduğumu merak ederim						Her zaman var olmamda bir neden görürüm

11. Kendi seçimlerini yapma özgürlüğü hususunda, insanın...

1	2	3	4	5	6	7
Tamamen kalıtım ve çevrenin etkisi altında olduğuna inanıyorum						Hayattaki bütün seçimlerini yapmada tamamen özgür olduğuna inanıyorum

12. İntihar etmeyi...

1	2	3	4	5	6	7
Bir kurtuluş yolu olarak ciddi bir şekilde düşündüğüm oluyor						Hiçbir zaman aklımdan geçirmiyorum

13. Hayatta bir anlam ve amaç bulma yeteneğimin...

1	2	3	4	5	6	7
Hiç olmadığını düşünüyorum						Çok iyi olduğunu düşünüyorum

14. Hayatımı...

1	2	3	4	5	6	7
Ben değil, dışsal faktörler şekillendiriyor						Dışsal faktörler değil, ben şekillendiriyorum

15. Günlük işlerimi yapmak, benim için...

1	2	3	4	5	6	7
Zahmetli ve sıkıcıdır						Zevkli ve tatmin edicidir

16. Bence, hayatın...

1
Hiçbir
amacı
yok

2

3

4

5

6

7
Çok net bir
amacı var

Appendix F: Geriatric Depression Scale

Lütfen yaşamınızın son bir haftasında kendinizi nasıl hissettiğinize ilişkin aşağıdaki soruları kendiniz için uygun olan yanıtı işaretleyerek yanıtlayınız.

	Evet	Hayır
1) Yaşamınızdan temelde memnun musunuz?		
2) Kişisel etkinlik ve ilgi alanlarınızın çoğunu halen sürdürüyor musunuz?		
3) Yaşamınızın bomboş olduğunu hissediyor musunuz?		
4) Sık sık canınız sıkılır mı?		
5) Gelecekte umutsuz musunuz?		
6) Kafanızdan atamadığınız düşünceler nedeniyle rahatsızlık duyduğunuz olur mu?		
7) Genellikle keyfiniz yerinde midir?		
8) Başınıza kötü bir şey geleceğinden korkuyor musunuz?		
9) Çoğunlukla kendinizi mutlu hissediyor musunuz?		
10) Sık sık kendinizi çaresiz hissediyor musunuz?		
11) Sık sık huzursuz ve yerinde duramayan biri olur musunuz?		
12) Dışarıya çıkıp yeni bir şeyler yapmaktansa, evde kalmayı tercih eder misiniz?		
13) Sıklıkla gelecekte endişe duyuyor musunuz?		
14) Hafızanızın çoğu kişiden daha zayıf olduğunu hissediyor musunuz?		
15) Sizce şu anda yaşıyor olmak çok güzel bir şey midir?		
16) Kendinizi sıklıkla kederli ve hüzünlü hissediyor musunuz?		
17) Kendinizi şu andaki halinizle değersiz hissediyor musunuz?		
18) Geçmişle ilgili olarak çokça üzülüyor musunuz?		

19) Yaşamı zevk ve heyecan verici buluyor musunuz?		
20) Yeni projelere başlamak sizin için zor mudur?		
21) Kendinizi enerji dolu hissediyor musunuz?		
22) Çözumsuz bir durum içinde bulunduğunuzu düşünüyor musunuz?		
23) Çoğu kişinin sizden daha iyi durumda olduğunu düşünüyor musunuz?		
24) Sık sık küçük şeylerden dolayı üzülür müsünüz?		
25) Sık sık kendinizi ağlayacakmış gibi hisseder misiniz?		
26) Dikkatinizi toplamakta güçlük çekiyor musunuz?		
27) Sabahları güne başlamak hoşunuza gidiyor mu?		
28) Sosyal toplantılara katılmaktan kaçınır mısınız?		
29) Karar vermek sizin için kolay oluyor mu?		
30) Zihniniz eskiden olduğu kadar berrak mıdır?		

Appendix G: Heartland Forgiveness Scale

Hayatımız boyunca, kendi davranışlarımız, başkalarının davranışları veya kontrolümüz dışındaki durumlar nedeniyle olumsuz olaylar yaşayabiliriz. Bu olumsuz yaşantıların ardından belli bir zaman geçtikten sonra, kendimiz, diğer insanlar veya yaşanan durumlar hakkında olumsuz duygu veya düşüncelerimiz olabilir. Bu tür olumsuz olaylara genel olarak nasıl tepki verdiğinizi düşününüz ve aşağıda verilen her ifadenin yanına, tarif edilen olumsuz duruma genellikle nasıl tepki verdiğinizi ifade eden sayıyı (aşağıdaki 7'li değerlendirme ölçeğine göre) yazınız. Vereceğiniz yanıtlarda doğru veya yanlış cevap yoktur. Lütfen yanıtlarınızda olabildiğince dürüst ve samimi olunuz.

1	2	3	4	5	6	7
Beni hiç yansıtmıyor		Beni pek yansıtmıyor		Beni biraz yansıtıyor		Beni tamamen yansıtıyor

___ İşleri berbat ettiğimde önce kötü hissetmeme rağmen zamanla kendimi rahatlatabilirim.

___ Yaptığım olumsuz şeyler için kendime kin tutarım.

___ Yaptığım kötü şeylerden öğrendiklerim onlarla baş etmemde bana yardımcı olur.

___ İşleri berbat ettiğimde, kendimi kabul etmek benim için gerçekten çok zordur.

___ Yaptığım hatalara, zamanla daha anlayışlı olurum.

___ Hissettiğim, düşündüğüm, söylediğim ya da yaptığım olumsuz şeyler için kendimi eleştirmeyi durduramam.

___ Yaptığının yanlış olduğunu düşündüğüm kişiyi cezalandırmayı sürdürürüm.

___ Beni incitenlere karşı zamanla daha anlayışlı olurum.

___ Beni incitenlere karşı katı olmaya devam ederim.

___Başkaları bana geçmişte zarar vermiş de olsa, eninde sonunda onları iyi insanlar olarak görebilirim.

___Başkaları bana kötü davranırsa, onların hakkında kötü düşünmeye devam ederim.

___Biri beni hayal kırıklığına uğrattığında, bu olayı eninde sonunda geçmişte bırakabilirim.

___Kontrol edilemeyen nedenlerden dolayı işler ters gittiğinde, onlar hakkında olumsuz düşüncelere takılıp kalırım.

___Hayatımdaki kötü durumlara zamanla daha anlayışlı olabilirim.

___Hayatımdaki kontrol edilemeyen durumlar yüzünden hayal kırıklığına uğrarsam, onlar hakkında olumsuz düşünmeyi sürdürürüm.

___Hayatımdaki kötü durumlarla eninde sonunda barışıırım.

___Kimsenin hatası olmayan olumsuz durumları kabullenmek benim için gerçekten çok zordur.

___Kimsenin kontrolünde olmayan kötü durumlarla ilgili olumsuz düşüncelerimden, eninde sonunda kurtulurum.

Appendix H: Psychological Well-Being Scale

Aşağıda katılıp ya da katılmayacağınız 8 ifade vardır. 1-7 arasındaki derecelendirmeyi kullanarak, her bir madde için uygun olan cevabınızı belirtiniz.

- 1 Kesinlikle katılmıyorum
- 2 Katılmıyorum
- 3 Biraz katılmıyorum
- 4 Kararsızım
- 5 Biraz katılıyorum
- 6 Katılıyorum
- 7 Kesinlikle katılıyorum

1. Amaçlı ve anlamlı bir yaşam sürdürüyorum. ____
2. Sosyal ilişkilerim destekleyici ve tatmin edicidir. ____
3. Günlük aktivitelereime bağlı ve ilgiliyim. ____
4. Başkalarının mutlu ve iyi olmasına aktif olarak katkıda bulunurum. ____
5. Benim için önemli olan aktivitelerde yetenekli ve yeterliyim. ____
6. Ben iyi bir insanım ve iyi bir hayat yaşıyorum. ____
7. Geleceğim hakkında iyimserim. ____
8. İnsanlar bana saygı duyar. ____

Appendix I: Informed Consent Form

Bu çalışma Orta Doğu Teknik Üniversitesi Psikoloji Bölümü Yüksek Lisans Programı öğrencisi Nilsu Tosun tarafından Doç. Dr. Özlem Bozo danışmanlığında yürütülen bir çalışma olup, 65 yaş üzeri bireylerin bilgeliği ve yaşam doyumları arasındaki ilişkiyi ve bu ilişkiye dindarlık ve manevi açıdan iyi olma değişkenlerinin etkisini araştırmaktadır. Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır. Çalışma yaklaşık 20 dakika sürmektedir. İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz. Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak olup, araştırmanın amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır. Vereceğiniz cevaplar bu çalışma için çok büyük değer taşımaktadır. Bu nedenle sorulara sizi en iyi yansıtacak şekilde dürüstçe cevap vermeniz araştırmanın güvenilirliği açısından çok önemlidir. Dolduracağınız anketlerde size rahatsızlık verebilecek herhangi bir soru/talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı Orta Doğu Teknik Üniversitesi Psikoloji bölümünden Nilsu Tosun'a (mail/tel) yöneltebilirsiniz.

Araştırmacı Adı: Nilsu Tosun

E-mail: nilsu.tosun@metu.edu.tr

Cep Tel: 506 217 34 90

Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabilceğimi bilerek verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.

(Lütfen bu formu doldurup imzaladıktan sonra veri toplayan kişiye veriniz.)

Katılımcı Ad ve Soyadı:

İmza:

Tarih:

Appendix J: Ethics Committe Approval

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

DUMLUPINAR BULVARI 06800
ÇANKAYA ANKARA/TURKEY
T: +90 312 210 22 91
F: +90 312 210 79 59
ueam@metu.edu.tr
www.ueam.metu.edu.tr

Sayı: 28620816 /43

 ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY

09 ŞUBAT 2016

Gönderilen: Doç.Dr. Özlem BOZO

Psikoloji Bölümü

Gönderen: Prof. Dr. Canan SÜMER

İnsan Araştırmaları Komisyonu Başkanı

İlgi: Etik Onayı

Sayın Doç.Dr. Özlem BOZO danışmanlığını yaptığı Nilsu TOSUN'un "The Relation of Wisdom and Life Satisfaction in Old Individuals: The Moderating Roles of Intrinsic Religiosity and Spiritual Well-Being" başlıklı araştırması İnsan Araştırmaları Komisyonu tarafından uygun görülerek gerekli onay 2015-SOS-016 protokol numarası 01.02.2016-01.02.2017 tarihleri arasında geçerli olmak üzere verilmiştir.



Prof. Dr. Canan SÜMER

Uygulamalı Etik Araştırma Merkezi
İnsan Araştırmaları Komisyonu Başkanı

Appendix K: Turkish Summary/ Türkçe Özet

YAŞLILARDAKİ BİLGELİK VE PSİKOLOJİK İYİ OLUŞ ARASINDAKİ İLİŞKİNİN MODERATÖRLERİ OLARAK İÇSEL DİNDARLIK VE SPİRİTÜEL İYİ OLUŞ

GİRİŞ

1.3. Yaşlı Nüfusunun Psikolojik İyi Oluşunu Etkileyen Faktörler

Cinsiyet (Inglehart, 2002; Patrick, Cottrell, & Barnes, 2001), yaş (Collard, Sharon, Ercan Şahin & Emiroğlu, 2013; Hohaus & Spark, 2013; Sutin vd., 2013; Wu, Schimmele, & Chappell, 2012), eğitim (Espanha & Ávila, 2016; Hacıhasanoğlu & Türkleş, 2008; Huang, Wang, Li, Xie, & Liu, 2010), emeklilik (Coursolle, Sweeney, Raymo, & Jeong, 2008; Demirbilek, 2007; Drentea, 2002; Seitsamo, 2007), gelir (Arber, Fenn, & Meadows, 2013; Layte, Fahey, & Whelan, 1999; Lloyd, 2015; Sığın, 2016), zenginlik (Hochman & Skopek, 2013) ve yaşam düzenlerinin (Chou, Ho, & Chi, 2006; Russell & Taylor, 2009; Teerawichitchainan, Pothisiri, & Long, 2015) de aynı zamanda yaşlılarda psikolojik iyi oluş ile ilişkili olduğu bulunmuştur.

Sosyo-demografik değişkenlere ilaveten bazı kişilik özellikleri yaşlıların iyi oluş durumlarında rol alabilir. Öz duyarlılık (Homan, 2016), şakacılık (Waldman-Levi, Bar-Haim Erez, & Katz, 2015), beş büyük kişilik özelliği (örn., deneyime açık olma, vicdanlı olma, dışa dönüklük, uzlaşmacılık, ve düşük duygusal dengesizlik) (DeNeve & Cooper, 1998; Isaacowitz & Smith, 2003; Ready, Akerstedt, & Mroczek, 2011), iyimserlik, ve sağlıkla ilgili dayanıklılıkların (Smith, Young, & Lee, 2004) daha iyi bir psikolojik iyi oluşun yordayıcıları olması muhtemeldir.

Sosyal destek de psikolojik iyi oluş üzerinde olumlu etkisi olan önemli bir faktördür ve birçok çalışma sosyal desteğin yaşlılarda psikolojik iyi oluş ile olan ilişkisini incelemeye çalışmıştır (Arun, 2008; Dong & Eun-Kyoung, 2008; Merz & Consedine, 2009; Ryan & Willits, 2007; Thanakwanga, Ingersoll-Dayton, & Soonthorndhada, 2012).

Yaşlıların psikolojik iyi oluşu ile alakalı diğer bir değişken ise ebeveynliktir fakat ebeveyn olmanın yaşlı bireylerde psikolojik iyi oluş için yararlı olup olmadığı tartışmalıdır. Birtakım çalışmalar çocuksuz bireylerin daha kötü psikolojik iyi oluşa sahip olduklarını ya da ebeveynliğin muhtemelen daha iyi psikolojik iyi oluşa yol açtığını belirtirken (Drew & Silverstein, 2004; Zhang & Liu, 2007), diğer çalışmalar tam tersini ortaya koymaktadır (Evenson & Simon, 2005; McLanahan & Adams, 1987).

Evlilik ilişkisi de yaşlılarda psikolojik iyi oluş üzerinde rol oynamaktadır (Darghouth, Brody, & Alegría, 2015; Kim & McKerny, 2002; Kumar, 2015; Singh & Kiran, 2005; Stokes, 2016; Williams, 2003). Evlilik doyumu/uyumu (Kumar, 2015), evlilikteki ilişkinin kalitesi (Carr, Cornman, & Freedman, 2016; Kim & McKerny, 2002; Stokes, 2016; Williams, 2003), evlilik rolü kalitesi (Barnett, Brennan, Raudenbush, & Marshall, 1994) ve medeni hal (Darghouth, Brody, & Alegría, 2015; Kim & McKerny, 2002; Singh & Kiran, 2005; Williams, 2003) psikolojik iyi oluş ile alakalı görünmektedir.

Sevilen birinin kaybı, özellikle eşin, bireyler için travmatik bir deneyim olduğundan psikolojik iyi oluşlarını çarpıcı bir şekilde düşürmesi kaçınılmazdır. Pek çok çalışma, yas ve bunun yaşlı bireyler üzerindeki etkileri ile ilgilenmiştir (Arun & Arun, 2011; Carr vd., 2000; Lee, DeMaris, Bavin, & Sullivan, 2001; Perkins vd., 2016; Spahni, Bennett, & Perrig-Chiello, 2016; Thuen, Reime, & Skrautvoll, 1997). Dulluğun azalan olumlu duygulanım, öz saygı ve sağlık doyumuyla, fiziksel faaliyetlerde zorluk, artan depresif belirtiler, kaygı, yalnızlık, anlamlılıkla alakalı düşük uyum

algısı ve düşük yaşam doyumu ile bağlantılı olduğu ortaya konulmuştur (Carr vd., 2000; Holden, Kim, & Novak, 2010; Lee & DeMaris, 2007; Perkins vd., 2016).

1.3.1. Bilgelik: Tanımı ve Değerlendirilmesi

Walsh'a göre (2015), bilgeliğin farklı tanımlarının ortak özellikleri "Toplum yanlısı tutum ve davranışlar, sosyal karar verme/ hayatın pragmatik bilgisi, tefekkür/kendini anlama, değer göreceliği/tolerans, belirsizlik ve muğlaklığın bilinmesi ve bununla başa çıkılabilmesi, anlayış ve duygusal dengeleşim"dir. (p. 282).

Bilgeliği daha iyi anlayabilmek için, bilgeliğin ve dindarlığın birbiriyle nasıl ilişkili olduğu açıklığa kavuşturulmalıdır. Bilgelik ve din birbirinden tamamen bağımsız olmadığı için insanların bu iki kavramı karıştırmaları mantıklıdır, ki bu da pek çok çalışmada açıkça görülmektedir (Adamovová, 2013; Lloyd, 2012; Walsh, 2014). Benzer şekilde, Türk kültüründeki bilgelik, dinle yakından alakalı gibi gözükmemektedir. Önal (2009), Hint, Çin, Türk ve İslam kültürleri de dahil olmak üzere doğu kültürlerinde bilgelik kavramına tekabül eden "hikma" yı anlatmıştır: Türklerde ortaya çıkan bilgelik anlayışının İslamda kendisine kolektif bir değer sistemi olarak uyumlu bir yer bulduğunu söylemiştir. Dahası, bu ilişkiye spiritüellik de dahildir. Genellikle, bu durum Mevlana gibi Sufist bilge figürlerin bilgeliği için de geçerlidir (Berkmen). Özetlemek gerekirse, Türk kültüründeki bilgelik din ve spiritüelliği içermektedir.

Bilgeliğin anlamı kültüre çok bağlı olduğundan, bilge bir figür olarak gösterilen biri de kültürler arası değişiklik gösterir. Bu noktada, Türk kültürüne dayalı bilgelik anlamından da bahsedilebilir. Alanyazın, Türk bilgeliğini içeren çalışmalardan yoksundur. Yine de Özdemir (2010) Türk bilgeliğini incelemiş ve çalışmasında önemli bilge bir Türk figürden bahsetmiştir. Türk kültüründe mizah ve eleştirel düşünce özelliklerine sahip bir bilge kişi olarak bilinen Nasrettin Hoca'dan bahsetmektedir. Yine de alanyazında özellikle Türk insanı için geliştirilmiş herhangi bir bilgelik ölçeği bulunmamaktadır.

Bilgelik için yaygın kullanılan ölçeklerden biri Ardelt (2003) tarafından yaşlı nüfusu için geliştirilmiş *Üç Boyutlu Bilgelik Ölçeği'dir (3D-WS)*. Diğer bilgelik ölçekleri Kendi Kendine Değerlendirilen Bilgelik Ölçeği (SAW-S; Webster,2003), Bilgelik Gelişim Ölçeği (WDS; Brown & Greene, 2006), Temel Değer Ölçeği (FVS; Jason vd., 2001) ve Yetişkin Öz Aşknlık Envanteri'dir (ASTI, Levenson, Jennings, Aldwin, & Shiraishi, 2005).

1.3.2. Bilgelik, İçsel Dindarlık, Spiritüellik ve Yaşlı Bireylerde Psikolojik İyi Oluş

Bilgelğin yaşlı bireyler arasında daha yüksek yaşam doyumu, daha iyi fiziksel sağlık, aile ilişkilerinde artan kalite (Ardelt, 1997; Ardelt, 2000), daha iyi duygusal iyi oluş (Etezadi & Pushkar, 2013), kişisel gelişim (deneyime açık olma, psikolojik düşüncelilik ve olgunlaşma, hayatın amacı ve özerklikten kaynaklanan iyi oluş hissiyatı), kişilik adaptasyonu (yaşam doyumu, yüksek uzlaşmacılık, vicdanlı olma, düşük duygusal dengesizlik, başkalarıyla olumlu ilişkilerle alakalı iyi oluş hissiyatı, kendini kabul etme ve çevresel hakimiyet), üretkenlik (Wink, & Staudinger, 2014), ve öznel iyi oluş (Ardelt & Edwards, 2015; Ardelt & Jeste, 2016) ile alakalı olduğu tespit edilmiştir. Türk bilgeligi ile psikolojik refah arasındaki ilişkiyi gösteren herhangi bir çalışma bulunmamaktadır. Yine de, Yunus Emre, Rumi ve Farabi gibi Türk kültüründeki tanınmış bilge bireylerin özelliklerini inceleyerek bu ikisi arasında olumlu bir bağlantı bulunduğu söylenebilir. Muhtemelen bu gibi bilge kimseler mutludurlar ve daha yüksek iç barış ve psikolojik iyilik haline sahiptirler.

Alanyazında din ve psikolojik iyi oluş arasında olumsuz bir ilişki olduğunu gösteren çok az çalışma vardır (örn. Brown & Tierney, 2007). Dini törenlere katılma (Aranda, 2008) ya da sinagog (Levin, 2013) ya da kiliseye gitme, inanç belirginliği (Dezutter, Soenens, & Hutsebaut, 2006; Leondari & Gialamas, 2009), kişisel ibadet (Levin, 2013; Maltby, Lewis, & Day, 1999), dini bağlılığın kurumsal, kurumsal olmayan ve öznel bileşenleri (Frazier, Mintz, & Mobley, 2005), Tanrı tarafından

aracılık edilen kontrol duygusu (Krause, 2005), olumlu dini başa çıkma (Lee, Nezu, & Nezu, 2014; Lewis, Maltby, & Day, 2005), dini inanç ve ibadetler (Gull & Dawood, 2013; Maheshwari & Singh, 2009), ve güçlü bir dini kimlik (Greene & Elliot, 2010) ya daha iyi bir psikolojik iyi oluş ile ya da mutluluk, yaşam doyumu, olumlu duygular, yüksek iyimserlik, kendine değer verme, düşük depresif belirtiler ve düşük ölüm korkusu gibi psikolojik iyi oluş ile alakalı çıktılar ile ilişkilendirilmiştir. Yine de *içsel (kişisel) ve dışsal (sosyal) dindarlık* arasında bir ayırım yapmak, din ve psikolojik iyi oluş arasında olumlu bir ilişkiyi aşırı genelleme yapmamak adına gerekli olabilir. Aslında, yaşlı bireylerde hem dışsal hem de içsel dindarlığın psikolojik iyi oluş üzerinde olumlu etkilerinin olduğunu ortaya koyan çalışmalar olsa da (örn., Momtaz, Ibrahim, Hamid, Yahaya, & Abdullah, 2012) yaşlı bireylerde içsel dindarlık ve psikolojik iyi oluş arasındaki olumlu ilişki ya da dışsal dindarlık ile psikolojik iyi oluş arasındaki olumsuz ilişki birçok çalışmada belirgindir (Dezutter, Soenens, & Hutsebaut, 2006; García-Alandete & Bernabé Valero, 2013; Göcen, 2013; Maltby, Lewis, & Day, 1999).

Spiritüelliği daha açık bir şekilde tanımlamak ve anlamak için birçok çalışmanın ilgi alanı olan dindarlık ve spiritüellik arasındaki bulanık sınıra bakmak gerekebilir. Hatta bazı çalışmalarda din spiritüelliğin boyutlarından biri olarak kabul edilmiştir (örn. Vosloo, Wissing, & Temane, 2009). Spiritüellik ya da spiritüel iyi oluşun daha iyi bir psikolojik iyi oluş (Greenfield, Vaillant, & Marks, 2009; Kirby, Coleman, & Daley, 2004), daha az depresif belirtiler (Mills vd., 2014), ve daha yüksek yaşam doyumu (Cowlshaw, Niele, Teshuva, Browning, & Kendig, 2013) ile alakalı olduğu saptanmıştır. Spiritüellik ya da spiritüel iyi oluşun dindarlık ile birlikte daha az depresif belirtiler (Lawler-Row & Elliot, 2009; Lucette, Ironson, Pargament, & Krause, 2016; Yoon & Lee, 2006), daha fazla öznel iyi oluş, yüksek hayat amacı, başkalarıyla daha olumlu ilişkiler (Lawler-Row & Elliot, 2009), sosyal desteğe daha az ihtiyaç ve daha yüksek yaşam doyumu (Yoon & Lee, 2006) ile alakalı olduğu saptanmıştır.

1.4. Çalışmanın Amacı

Mevcut çalışmanın temel amacı içsel dindarlık ve spiritüel iyi oluşun bilgelik ve psikolojik iyi oluş arasındaki ilişkiyi nasıl etkilediğini araştırmaktır (bkz. Figür 1.1 ve Figür 1.2). Aşağıdaki hipotezler bu çalışmaya aittir:

2. Bilgelik-psikolojik iyi oluş ilişkisi daha yüksek düzeylerde spiritüel iyi oluşa sahip bireylerde daha güçlü olacaktır.
3. Bilgelik-psikolojik iyi oluş ilişkisi daha yüksek düzeylerde içsel dindarlığa sahip bireylerde daha güçlü olacaktır.

Bu iki hipotezi test etmek için, herhangi bir Türkçe bilgelik ölçeği olmadığı için Üç Boyutlu Bilgelik Ölçeği Türkçe'ye çevrilecek ve psikometrik özellikleri incelenecektir. Bu nedenle, bu çalışmanın ikincil amacı bu ölçeğin Türkçe'ye çevirisi ve psikometrik özelliklerinin incelenmesidir.

YÖNTEM

2.1. Katılımcılar

Çalışmaya 165 kişi katılmıştır. 68 katılımcı (% 41.2) erkek ve 97 katılımcı (% 58.8) kadındır. Yaş aralığı 65 ila 88 arasındadır (Ort = 70.30, S = 5.26). Katılımcıların 72 si (% 43.6) okur-yazar ya da okur-yazar değildir ya da ilkokul mezunudur; Katılımcıların 47 si (% 28.5) ya ortaokul mezunu ya da lise mezunudur; Katılımcıların 45 i (% 27.3) Lisans, Yüksek Lisans ya da Doktora mezunudur. Ayrıca 26 katılımcı (% 15.8) hala çalışırken, 139 katılımcı (% 84.2) ya emekli ya da artık çalışmıyordur. Emekli maaşı konusunda, 36 katılımcının (% 21.8) emekli maaşı yokken, 129 katılımcının (% 78.2) emekli maaşı vardır. Katılımcıların 32 si (% 19.4) düşük gelir, 119 u (% 72.1) orta düzey gelir ve 11 i (% 6.7) yüksek gelir bildirmiştir. Katılımcıların 55 i (% 32.1) bekâr (bekâr, boşanmış ve dullar dâhil), 111 i (% 67.3) ise evlidir. Yalnız ya da bir bakıcı ile yaşayan katılımcı sayısı 27 (% 16.4), kocası ya da karısı ile yaşayan katılımcı sayısı 63 (% 38.2), aileleri ile yaşayan (sadece karı ve koca değil, çocukları da içermektedir) katılımcı sayısı 74'tür (% 44.8). Aynı zamanda 73 katılımcı (% 44.2) fiziksel hastalık bildirmiş, 92 katılımcı

ise (% 55.8) herhangi bir fiziksel hastalığının olmadığını belirtmiştir. 155 katılımcı (% 93.9) herhangi bir psikolojik rahatsızlığının olmadığını bildirirken, yalnızca 9 katılımcı (% 5.5) psikolojik rahatsızlığının olduğunu belirtmiştir. Fiziksel ve psikolojik hastalığı yüzünden tedavi gören katılımcı sayısı 46 (% 27.9), herhangi bir tedavi görmeyen katılımcı sayısı ise 119'dur (% 72.1).

2.2. Ölçümler

Katılımcılara, Üç Boyutlu Bilgelik Ölçeği, Dini Oryantasyon Ölçeği, Ruhsal, Fiziksel ve Spiritüel İyi Oluş Ölçeğinin Spiritüel İyi Oluş Alt Ölçeği, Psikolojik İyi Oluş Ölçeği uygulanmıştır. Ayrıca, Üç Boyutlu Bilgelik Ölçeğinin geçerliliğini ölçmek adına, Geriatrik Depresyon Ölçeği, Hayat Amacı Ölçeği ve Heartland Affetme Ölçeği verilmiştir.

2.2.1. Üç Boyutlu Bilgelik Ölçeği

Üç Boyutlu Bilgelik Ölçeği, Ardelt (2003) tarafından bilgeliğin bilişsel, duygusal ve yansıtıcı boyutlarını ölçmek için geliştirilmiştir. Ölçeğin 39 maddesi arasından 14'ü bilgeliğin bilişsel bileşenine, 12'si yansıtıcı bileşenine ve 13'ü ise duygusal bileşenine aittir. *Ben, bana, benim* şeklinde başlayan maddeler 1'den (*benim için kesinlikle doğru*) 5'e (*benim için doğru değil*) kadar olan bir ölçekte değerlendirilmiştir. Diğer maddeler ise 1'den (*kesinlikle katılıyorum*) 5'e (*kesinlikle katılmıyorum*) Likert türü bir ölçek versiyonudur. Ardelt (2003) ilk ölçümde ölçeğin bilişsel bileşeninin Cronbach's alfa değerini .78, yansıtıcı bileşeninin değerini .75 ve duygusal bileşeninin değeri ise .74 bulmuştur. Ölçek Türkçe'ye, mevcut yazar tarafından çevrilmiştir.

2.2.2. Dini Oryantasyon Ölçeği

Dini Oryantasyon Ölçeği, Allport ve Ross (1967) tarafından bireylerin dışsal mı yoksa içsel mi dini oryantasyona sahip olduklarını ölçmek için geliştirilmiştir. Ölçekte 5 puan en çok dışsal cevaba işaret ederken 1 puan en çok içsel cevaba işaret etmektedir. Ölçeğin Türkçe'ye adaptasyonu Kayıklık (2000) tarafından yapılmıştır.

Kayıklık, Türkçe versiyonunun iç tutarlılığını .78 bulmuştur. Bu sonuç, bu ölçeğin dini oryantasyonun ölçümü için güvenilir bir araç olduğunu göstermektedir.

2.2.3. Ruhsal, Fiziksel ve Spiritüel İyi Oluş Ölçeği

Ruhsal, Fiziksel ve Spiritüel Oluş Ölçeği, Vella-Brodrick ve Allen (1995) tarafından geliştirilmiştir. Her biri 10 maddeden oluşan Ruhsal, Fiziksel ve Spiritüel iyi oluş alt ölçeklerini birleştirerek iyi oluşluğun ruhsal, fiziksel ve spiritüel boyutlarını ölçmektedir. Türkçe'ye Bozo (yayınlanmamış) tarafından çevrilmiştir ve Türkçe versiyonunun iç tutarlılığı .60'tır.

2.2.4. Hayat Amacı Ölçeği

Hayat Amacı Ölçeği, Crumbaugh ve Maholick (1964) tarafından birey tarafından aranan hayattaki amaç düzeyini ölçmek üzere geliştirilmiştir. Bütün maddelerin cevap seçenekleri 7-puanlık bir ölçek olarak oluşturulmuştur. Türkçe'ye, Kıracı (2015) tarafından çevrilmiştir. Cronbach's alfa katsayısı ise .91'dir ve yüksek düzeyde güvenilirlik göstermektedir.

2.2.5. Geriatrik Depresyon Ölçeği

Geriatrik Depresyon Ölçeği Yesavage vd. (1983) tarafından yaşlı bireylerdeki depresyonu değerlendirmek üzere geliştirilen bir tarama ölçeğidir. Cevaplama seçenekleri evet/hayır formatındadır. Türkçe'ye, Ertan ve Eker (2000) tarafından çevrilmiştir. Türkçe versiyonunun bir haftalık test-tekrar test güvenilirliği .74 ve Cronbach's alfa düzeyi ise .91'dir.

2.2.6. Heartland Affetme Ölçeği

Heartland Affetme Ölçeği, Thompson vd. (2005) tarafından bağışlama eğilimini ölçmek üzere tasarlanmış 18 maddelik bir öz bildirim ölçeğidir. 1'den 6'ya kadar olan maddeler *kendini* bağışlamayı, 7'den 12'ye kadar olan maddeler *başkalarını* bağışlamayı ve 13'ten 18'e kadar olan maddeler ise *durumları* bağışlamayı

ölçmektedir. Bireyler, 7 puanlık bir ölçek üzerindeki her bir maddenin kendileri için ne kadar doğru ya da yanlış olduğunu belirlemektedir. Türkçe'ye Bugay ve Demir (2010) tarafından çevrilmiştir. Bugay ve Demir, ölçek toplamı, kendini bağışlama alt ölçeği, başkalarını bağışlama alt ölçeği için Cronbach's alfa değerlerini sırasıyla .81, .64 ve .79 bulmuştur.

2.2.7. Psikolojik İyi Oluş Ölçeği

Psikolojik İyi Oluş Ölçeği, Diener vd. (2009) tarafından bireylerin ideal insan işlevi gösteren psikolojik iyi oluşlarını ölçmek üzere geliştirilmiştir. Ölçeğin 8 maddesi vardır ve “kesinlikle katılmıyorum” ile “kesinlikle katılıyorum” arasında değişen cevap seçenekleri vardır. Telef (2001) ölçeği Türkçe'ye çevirmiş ve ölçeğin Cronbach's alfa değerini .80 olarak bulmuştur.

2.3. Prosedür

Verilerin toplanması öncesinde, Orta Doğu Teknik Üniversitesi İnsan Araştırmaları Etik Komitesi'nden etik onayı alınmıştır.

2.4. İstatistiksel Analizler

İstatistiksel analizler, Sosyal Bilimler için İstatistik Paketi'nin (SPSS) Windows için 23. sürümü kullanılarak yapılmıştır. Üç Boyutlu Bilgelik Ölçeğinin Türkçe versiyonu için doğrulayıcı faktör analizi EQS 6.1 yazılımı kullanılarak yapılmıştır. Ölçeğin yakınsak ve uzaksak geçerlilikleri sıfır sıralı korelasyon ile analiz edilmiştir. Kriter geçerliliğini test etmek üzere Bağımsız Grup T-Testi ve Tek Yönlü Örnekler Arası Varyans Analizi (ANOVA) kullanılmıştır. Bir takım ANOVA ise çalışmanın diğer ölçeklerinin sosyo-demografik değişkenlerin düzeylerine dayalı olarak değişip değişmediğini araştırmak üzere kullanılmıştır. Sürekli değişkenler arasındaki korelasyon, sıfır sıralı korelasyonlar ile test edilmiştir. Son olarak, içsel dindarlığın ve spiritüel iyi oluşun bilgelik-psikolojik iyi oluş ilişkisi üzerindeki moderatör rollerinin araştırılması için moderasyon analizleri yapılmıştır.

BULGULAR

Değişkenlere ait ortalama skorlar, standart sapma değerleri, minimum ve maksimum değerler ve Cronbach alpha puanları hesaplanmıştır. İlgili değerler Tablo 3.1’de görülebilir.

3.2. Üç Boyutlu Bilgelik Ölçeğinin Psikometrik Özellikleri

3.2.1. Doğrulayıcı Faktör Analizi

Üç boyutlu bilgelik ölçeğinin faktör yapısını test etmek için doğrulayıcı faktör analizi uygulanmıştır. İlk modelin verilere yeterince uyum sağlayamadığı ve ölçeğin 13 maddesinin faktör yüklemelerinin anlamsız olduğu bulunmuştur. Bu maddeler çıkarıldıktan sonra analiz tekrarlanmıştır. Modifiye edilen bu model de verilere iyi uyum sağlayamadığı için, Lagrange çarpanı testi tarafından önerilen değişiklikler (Maddeler B5 ile B17, B5 ile B1 ve B1 ile B20 nin hataları arasına kovaryans eklemek) yapılmıştır. İkinci model de verilere daha iyi uyum sağlamak açısından iyileştirmeye ihtiyaç duyduğundan, Lagrange çarpanı testinin bu model için önerdiği değişiklikler (Maddeler B14 ile B19, A15 ile A13, ve B3 ile B20 nin hataları arasına kovaryans eklemek) yapılmıştır. Son model verilere iyi uyum sağlayabilmiştir. Modellerin uygunluk göstergeleri olan değerler Tablo 3.2.’ de, başlangıç modeli Figür 3.1’ de, faktör ve hata kovaryansları Tablo 3.3’ te, standart ve standart olmayan faktör yüklemeleri ile standart hatalar Tablo 3.4.’te görülebilir.

3.2.2. İç Tutarlılık Güvenirliği

Standart olmayan faktör yüklemeleri anlamsız çıkan maddeler üç boyutlu bilgelik ölçeğinden çıkarıldıktan sonra, ölçeğin iç tutarlılık güvenirlilik katsayısı hesaplanmıştır. Yansıtıcı ve bilişsel bilgelik alt ölçeklerinin Cronbach’s Alpha değerleri kabul edilebilir düzeyde iç tutarlılık güvenirliliğini gösterirken, genel bilgeliliğin değeri iyi bir iç tutarlılık güvenirliliğini göstermektedir.

Üç boyutlu bilgelik ölçeğinin alt boyutları arasındaki ilişkiyi görmek için Pearson korelasyon katsayısı hesaplanmıştır. Bu analizin sonuçları Tablo 3.7 de görülebilir.

3.2.3 Yakınsak ve İraksak Geçerlilikler

Türkçe Üç Boyutlu Bilgelik Ölçeği'nin yakınsak ve ıraksak geçerliliklerini test etmek için Heartland Affetme Ölçeği, Hayat Amacı Ölçeği, ve Geriatrik Depresyon Ölçeği verilmiştir. Sonuçlar Tablo 3.5 te mevcuttur. Bu sonuçlara göre, ölçeğin yakınsak ve ıraksak geçerliliklerinin olduğu belirtilebilir.

3.2.4. Kriter Geçerliliği

Üç Boyutlu Bilgelik Ölçeği'nin kriter geçerliliğini test etmek için bağımsız örneklem t-test analizi ve tek yönlü varyans analizi (ANOVA) yapılmıştır. İlgili sonuçlar Figür 3.2, Figür 3.3 ve Tablo 3.6 da görülebilir.

3.3 Demografik Değişken Düzeylerinin Araştırmanın Ölçekleri Üzerindeki Farklılıkları

Demografik değişken düzeylerinin araştırmanın ölçekleri üzerindeki farklılıkları bağımsız örneklem t-testi ve tek yönlü varyans analizi (ANOVA) ile hesaplanmıştır. Anlamlı çıkan sonuçlar Figür 3.4, Figür 3.5. ve Figür 3.6 da görülebilir.

3.4 Çalışmanın Ölçekleri Arasındaki Korelasyon Değerleri

Çalışmanın ölçekleri arasındaki korelasyon değerleri Pearson korelasyon değerlerinin hesaplanmasıyla bulunmuştur. Sonuçlar Tablo 3.7 de mevcuttur.

3.7 Bilgelik ve Psikolojik İyi oluş için Moderasyon Analizleri

İçsel dini yönelim ve spiritüel iyi oluşun genel bilgelik ve psikolojik iyi oluş ilişkisi üzerindeki moderatör rolleri Hayes ve Matthes (2009) tarafından yazılan makro ile hesaplanmıştır. Sonuçlar Tablo 3.8, Figür 3.7, Tablo 3.9 ve Figür 3.8 de mevcuttur. İlk olarak, içsel dini yönelimin moderatör rolü incelenmiştir. Sonuçlar, içsel dini yönelimin bu ilişkide moderatör rolüne sahip olmadığını göstermiştir. İkinci olarak, spiritüel iyi oluşun bu ilişki için moderatör rolü incelenmiştir. Sonuçlara göre, bilgelik ve spiritüel iyi oluş etkileşimi anlamlı çıkmasına rağmen, Johnson ve

Neyman (1936) tekniđi kullanıldığında, bilgelik ve psikolojik iyi oluş ilişkisinin anlamlılıđını etkileyen herhangi bir kritik deđer bulunamamıştır. Bu sebeple, çalışmanın iki hipotezi de desteklenememiştir.

TARTIŞMA

Bu çalışmada öncelikle, Üç Boyutlu Bilgelik Ölçeđi Türkçe'ye çevrilerek doğrulayıcı faktör analizi yapılmış ve ölçeđin psikometrik özellikleri incelenmiştir. Faktör yüklemeleri zayıf olan 13 madde ölçekten çıkarılarak gerekli deđişiklikler yapıldıktan sonra ölçek orijinal üç faktör yapısına yeterli uyum gösterebilmiştir. Yine de, ölçeđin Türk örneğine çok uygun olmadığı görülmüştür. Bunun bir sebebi, katılımcıların düşük eğitim seviyeleri olabilir. Nitekim, Ardelt (2003), ölçeđin yapısal geçerliliđini eğitim seviyesi yüksek bir örneklem ile incelemiştir. Bu yüzden, bu çalışmanın katılımcıları ölçeđin maddelerini anlamakta güçlük çekmiş olabilirler. Ayrıca, ölçek Türkçe'ye çevrildiđi ancak uyarlanmamıştır. Üç Boyutlu Bilgelik Ölçeđi daha çok batı kültürüne uygun olduđundan, Türk insanına ve kültürüne uygun olmayabilir. Dahası, duygusal bilgelik alt ölçeđinin faktör analizinden sonra yalnızca iki maddesi kalmıştır. Bu da, Türk bilgeliđinin daha çok yansıtıcı ve bilişsel bilgelikten oluştuđunu gösteriyor olabilir. Örneđin, Özdemir'in (2010) bahsettiđi Türk bilge figürü Nasreddin Hoca daha çok bilişsel ve yansıtıcı bilgeliđi yansıtmaktadır. Diđer bir ihtimal ise, Türk bilgeliđinin duygusal bileşeninin Üç Boyutlu Bilgelik Ölçeđinin tanımladıđı duygusal bilgelikten farklı bir içeriđi olabileceđidir. Bu yüzden, Türk bilgeliđi ve bileşenleri araştırılmalı, Türk kültürüne uygun bir bilgelik ölçeđi geliştirilmelidir.

Ölçeđin ve alt ölçekler yansıtıcı ve bilişsel bilgeliđin iç tutarlılık güvenilirlikleri yüksek bulunmuştur. Ardelt (2003) alt ölçekler arasında orta korelasyonlar olması gerektiđini belirtmiştir ancak bu çalışmada alt ölçekler arasındaki korelasyon deđerleri beklenenden daha düşük çıkmıştır. Duygusal ve bilişsel bilgelik arasındaki korelasyon anlamsız ve negatif yönde bulunmuştur. Duygusal bilgeliđin yalnızca iki maddeden oluşması bu durumu açıklayabilir.

Üç boyutlu Bilgelik Ölçeğinin yakınsak, ıraksak ve kriter geçerlilikleri de hesaplanmıştır. Taylor ve Bates'in (2011) çalışmasıyla tutarlı olacak şekilde affetme ile genel, bilişsel, yansıtıcı ve duygusal bilgelik arasında anlamlı pozitif korelasyonlar bulunmuştur. Benzer şekilde, hayat amacı ile bilgelik ve alt ölçekler arasında anlamlı pozitif korelasyonlar bulunmuştur. Bu sonuç da Ardelt'in (2003) bulgularına paraleldir. Cinsiyet konusunda ölçeğin ve alt ölçeklerin farklılık göstermediği bulunmuştur. Literatürdeki bazı çalışmalar genel ve yansıtıcı bilgelikte kadın-erkek farkı olmadığını (Ardelt, 2003), duygusal bilgeliğin kadınlarda daha yüksek olduğunu (Ardelt, 2003; Cheragri et al., 2015), bilişsel bilgeliğince erkeklerde yüksek olduğunu (Ardelt, 2009) belirtirken, erkeklerin duygusal, yansıtıcı ve genel bilgeliklerinin daha yüksek olduğunu (Maroof, Khan, Anwar, & Anwar, 2015), kadın ve erkeğin bilişsel bilgeliklerinin benzer olduğunu (Cheragri et al., 2015; Maroof, Khan, Anwar, & Anwar, 2015) belirten çalışmalar da mevcuttur. Bu yüzden bu çalışma, kadın ve erkeğin genel, yansıtıcı ve bilişsel bilgelikte benzer olduğunu gösteren çalışmaları desteklemektedir.

Kriter geçerliliği olarak, ölçeğin fiziksel hastalığı olduğunu bildiren ve fiziksel hastalığı olmadığını bildiren katılımcıları ayırt edip etmediği de araştırılmıştır. Literatürde bilgelik genel iyi oluş, subjektif sağlık ya da kişinin kendisini sağlıklı olarak düşünmesiyle ilişkili olduğunu göstermiştir (Ardelt, 2003; Krause & Hayward, 2014). Öte yandan, bu çalışmada ölçeğin ve alt ölçeklerin fiziksel hastalığı olduğunu bildiren ve fiziksel hastalığı olmadığını bildiren katılımcılar arasında farklılaşmadığı bulunmuştur. Bunun sebebi, bu çalışmada katılımcılardan genel sağlıklarını değerlendirmelerinin istenmemesi olabilir. Onun yerine, katılımcılardan sadece herhangi bir fiziksel ya da psikolojik hastalıkları olup olmadığını belirtmeleri istenmiştir. Herhangi bir fiziksel hastalığa sahip olmak kişinin sağlığını kötü olarak değerlendireceği anlamına gelmeyebilir. Ayrıca bu çalışmada, yansıtıcı bilgeliğin fiziksel hastalığı olan ve olmayan katılımcıları ayırt ettiği, fiziksel hastalığı olanların daha düşük yansıtıcı bilgelik rapor ettiği gözlemlenmiştir. Ardelt'in (2003) belirttiği gibi, yansıtıcı bilgelik, olaylara, durumlara ya da fikirlere farklı açılardan bakabilmekle ilgilidir. Bunu yapamayan bir

kimse, dünyayı olduğu gibi algılamakta zorlanabilir ve bu yanlış algı yüzünden, depresyon, nefret gibi istenmeyen olumsuz duygular bu kişide belirebilir. Bu durum bu çalışmada neden fiziksel hastalığı olan kişilerin daha düşük psikolojik iyi oluşa sahip olduklarını açıklayabilir. Son olarak, genel, yansıtıcı ve bilişsel bilgeliğin üniversite mezunu ya da lisansüstü derecesi olanlarda daha yüksek olduğu bulunmuştur. Bu sonuçlar Ardelt (2009) ve Glück'ün (2013) çalışmalarıyla tutarlıdır. Sonuç olarak, Türkçe Üç Boyutlu Bilgelik Ölçeği'nin yakınsak, iraksak, ve kriter geçerliliği olduğu söylenebilir.

Çalışmanın diğer ayağı olaraksa, içsel dini yönelimin ve spiritüel iyi oluşun bilgelik ve psikolojik iyi oluş ilişkisi üzerindeki moderatör rolleri araştırılmıştır. Bulunan anlamsız sonuçların birkaç nedeni olabilir. Bilgelik ve psikolojik iyi oluş ilişkisi başka moderatör ya da aracı değişkenlerle açıklanabilir. Örneğin, Etezadi ve Puskar (2013) tarafından yapılan çalışmada, problem odaklı ve olumlu yeniden değerlendirme başa çıkma yöntemlerinin, algılanan kontrolün ve hayata bağlılığın bilgelik ve psikolojik iyi oluş ilişkisinde aracı olduğu bulunmuştur. Buna ek olarak, bilgeliği değerlendirmek için hangi ölçüm aracının kullanıldığı, bu ölçüm aracında bilgeliğin nasıl tanımlandığı önemlidir. Bilgelik, tanımlaması ve ölçmesi zor olan karmaşık, derin ve kapsamlı bir kavramdır (Walsh, 2015). Bu yüzden, alanyazında bilgeliğin birçok tanımı yer almaktadır (örn, Choi & Landeros, 2011; Glück & Bluck, 2011; Krause, 2016). Kaçınılmaz olarak, bilgeliğin nasıl tanımlandığı onun nasıl ölçüldüğünü de etkileyecektir. Belki de başka bir bilgelik ölçeğinin kullanılması analiz sonuçlarının farklı çıkmasına sebep olabilir. İçsel dini yönelim daha sınırlı bir şekilde tanımlansa da, benzer problem spiritüel iyi oluş için de geçerlidir. Ayrıca, duygusal bilgeliğin yalnızca iki maddeli olması genel bilgelik puanlarını etkilemiş olabilir. Tüm bu durumlar neden moderasyon analizlerinin anlamsız çıktığını açıklıyor olabilir.

4.1 Çalışmanın Sınırlılıkları

Bu çalışmanın bazı sınırlılıkları mevcuttur. Öncelikle, çalışmanın katılımcıları düşük eğitim seviyesine sahip orta sosyal sınıftan gelen yaşlı insanlardan oluşmaktadır. Bu

yüzden bu örneklem Türk popülasyonunu çok yansıtmıyor olabilir ve katılımcılar anketleri doldururken zorlanmış olabilirler çünkü bu çalışmada kullanılan bilgelik ölçeği daha çok eğitimli insanlar için geliştirilmiştir. Ardelt (2003) çalışmasında ölçeğin güçlü psikometrik özellikleri olduğunu bulmuştur ancak çalışmasındaki katılımcılar emekli profesör ve eğitimcilerdir. Dahası, bu ölçek Türk kültürüne adapte edilmediğinden ve batı kültürüne daha uygun olduğundan, katılımcılar fazladan zorluk yaşamış olabilirler. Ayrıca, ölçeğin psikometrik özellikleri tatmin ediciydi ancak çok güvenilir değildi. Bu yüzden bu ölçek Türkiye'deki yaşlılara çok uygun görünmemektedir. Ölçeğin görece zayıf psikometrik özellikleri diğer analizlerin sonuçlarını da etkilemiş olabileceğinden, bu çalışmanın sonuçlarına temkinli yaklaşılmalıdır. Özellikle, duygusal bilgeliği içeren analizlerin sonuçlarına daha çok şüpheyle yaklaşılmalıdır.

4.2 Çalışmanın Güçlü Yönleri

Bu çalışmanın bazı güçlü tarafları mevcuttur. Bu çalışma, bir bilgelik ölçeğini Türkçe'ye çeviren ilk çalışmadır. Dahası, bilgelik, alt boyutları, içsel dindarlık ve spiritüel iyilik hali birbirleriyle nasıl ilişkilidir ve bilgelik ile psikolojik iyi oluş arasındaki ilişkide içsel dindarlığın ve spiritüel iyilik halinin moderatör rolleri ilk kez bir Türk örneklem ile araştırılmıştır. Bu çalışma, Türk kültürel bağlamındaki bilgeliğin özellikle yaşlı nüfusta duygusal bilgelikten çok yansıtıcı ve bilişsel bilgelikten oluştuğuna işaret eden bir ön analiz niteliğindedir. Üstelik, bilgeliğin ve spiritüel iyi oluşun yaşlı insanların psikolojik sağlığı için olan önemini ortaya koymaktadır.

4.3 Çalışmanın Katkıları ve Gelecekteki Çalışmalar için Öneriler

Bu çalışma, 3D-WS'nin gözden geçirilmiş bir versiyonunun ya da Türk yaşlılar için çok daha uygun olan yeni bir bilgelik ölçeğinin gerekliliğini göstermiştir. Bu çalışmanın değişkenleri arasındaki ilişkiler ve mevcut araştırmanın moderasyon hipotezleri daha da test edilmelidir çünkü bulgularımız, 3D-WS'nin nispeten zayıf psikometrik özelliklerinden dolayı değişkenler arasındaki ilişkilerin gerçek doğasını

yansıtmayabilir. Ayrıca, bilgelik ve psikolojik iyi oluş ilişkisi için diğer potansiyel arabulucu ve moderatör değişkenler araştırılmalıdır. Mevcut araştırmanın hipotezleri daha temsili bir örnekle yeniden test edilmelidir.

Mevcut çalışma, yansıtıcı, duygusal, genel bilgelik ve spiritüel iyi oluşun yaşlı nüfusun daha iyi refah düzeyi ile ilişkili olduğunu gösterdi. Bilgelik, yaşlılar arasında başarılı bir yaşlanmanın bir parçası olarak bilinir ve bu nedenle, yaşlı nüfusla çalışan psikologlar ve sosyal hizmet uzmanları bu ilişkiyi düşünmelidir. Benzer şekilde, yaşlı nüfusun refahını düşünürken, spiritüel/manevi refah göz ardı edilmemelidir. Bu çalışmada, fiziksel sağlık sorunu olan katılımcıların spiritüel iyilik halinin fiziksel olarak sağlıklı katılımcıların spiritüel iyilik halinden daha yüksek olduğu bulundu. Bu ilişki, fiziksel sağlık sorunu yaşlıların bu problemlerle maneviyat/spiritüellik yoluyla baş etmeye çalıştıklarını ima ediyor olabilir. Bu nedenle, spiritüellik, özellikle fiziksel sağlık problemi yaşayan yaşlı insanlar için desteklenmelidir.

APPENDIX E: TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü	<input type="checkbox"/>
Sosyal Bilimler Enstitüsü	<input checked="" type="checkbox"/>
Uygulamalı Matematik Enstitüsü	<input type="checkbox"/>
Enformatik Enstitüsü	<input type="checkbox"/>
Deniz Bilimleri Enstitüsü	<input type="checkbox"/>

YAZARIN

Soyadı: BORHAN

Adı : NİLSU

Bölümü: PSİKOLOJİ

TEZİN ADI (İngilizce): Intrinsic Religiosity and Spiritual Well-Being as Moderators of the Relation Between Wisdom and Psychological Well-Being in Elderly

TEZİN TÜRÜ: Yüksek Lisans Doktora

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz.

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: