

**IBN HALDUN UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
DEPARTMENT OF PSYCHOLOGY**

**MASTER THESIS**

**CONNECTIONS OF MENTAL DISORDERS AND  
PSYCHOLOGICAL WELLBEING WITH RELIGIOUS  
ATTITUDE AND RELIGIOUS STRUGGLE**

**HATİCE KÜBRA BOLAT**

**THESIS SUPERVISOR: PROF. ÜZYEYİR OK**

**ISTANBUL, 2020**

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**by**

**HATİCE KÜBRA BOLAT**

**A thesis submitted to the School of Graduate Studies in partial  
fulfillment of the requirements for the degree of Master of Arts in  
Clinical Psychology**

**THESIS SUPERVISOR: PROF. ÜZEYİR OK**

**ISTANBUL, 2020**

## APPROVAL PAGE

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts Clinical Psychology.

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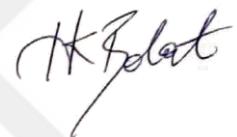
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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material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

Name Surname: Hatice Kübra Bolat

Signature:



## ÖZ

# PSİKOPATOLOJİ VE PSİKOLOJİK İYİ OLUŞ İLE DİNİ/MANEVİ TUTUM VE ÇELİŞKİ ARASINDAKİ İLİŞKİLER

Yazar Bolat, Hatice Kübra

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Din insan yaşamını dini inanış, değerler, uygulamalar, ve deneyimler yoluyla etkileyen temel unsurdur. Son yıllarda dindarlık ile ruhsağılılığı arasındaki muhtemel ilişki üzerinde artan bir ilgi görülmektedir. Bu çalışmanın amacı Üniversite toplumundaki 18 ile 40 yaşları arasında olanlarla psikolojik bozukluk belirtileri ve psikolojik iyi oluş ile dini tutum ve dini çelişki arasındaki ilişkinin incelenmesidir. Bu amaçla, 269 örneklemin içinde bulunan 174 kadın (%65) ve 91 erkeklerden (%34) oluşan katılımcılara PERMA Ölçeği, DSM-5 Klinik Semptom Tarama Ölçeği, DSM-5 Kişilik Envanteri kısa formu, Ok-Dini Tutum Ölçeği ve Dini Çelişki Ölçeği uygulanmıştır.

Analiz sonuçlarına göre, yaşlı insanlar dini tutumla; düşük eğitim seviyesi dini çelişki ile ilişkili; yüksek gelir ve eğitim düzeyi psikolojik iyi oluşla; ve psikolojik bozukluklar genç yaşta olan insanlar ve düşük gelir ve eğitim seviyesi ile ilişkili bulunmuştur. Dini tutum öfke, mani, anksiyete, somatik, psikoz, hafiza sorunu, disosiyasyon ve olumsuz duygulanım hariç diğer psikolojik bozukluklarla negatif yönde ilişkili olduğu, ve başarı ile olumsuz duygular hariç psikolojik iyi oluşla pozitif yönde ilişkili olduğu bulunmuştur. Buna karşılık, dini çelişkinin mani ve madde kullanımı hariç diğer psikolojik bozuklarla pozitif yönde ilişkili, ve psikolojik iyi oluşla negatif yönde ilişkili olduğu bulunmuştur.

Dindar insanların şeytani çelişki ve ahlaki çelişki hariç az dini çelişki yaşadığı, ve psikolojik iyi oluşun mani ve madde kullanımı hariç düşük seviyeli psikolojik bozukluk semptomlarıyla ilişkili olduğu bulunmuştur. Önceki literatür araştırmalarınla büyük oranda tutarlılık gösteren bu araştırmadaki bulgulara göre şu sonuca varılabilir; dindarlığın hayatı dair temel yapılandırma sağladığı ve ruh sağlığını olumlu yönde

etkilediği ancak dine bağlı çelişki içinde olmak ruhsağlığını olumsuz yönde etkilediği şeklindeki görüş desteklenmektedir. Araştırma bulgularına dayalı olası açıklamalar ve doğurgular sunulmuş ve araştırmanın sınırlılıkları tartışma bölümünde ele alınmıştır.

**Anahtar Kelimeler:** Ruh sağlığı; Psikolojik bozukluk; Psikolojik iyi oluş; PERMA; Dini tutum; Dini çelişki



## ABSTRACT

### CONNECTIONS OF MENTAL DISORDERS AND PSYCHOLOGICAL WELLBEING WITH RELIGIOUS ATTITUDE AND RELIGIOUS STRUGGLE

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MA in Clinical Psychology

Thesis Supervisor: Prof. Üzeyir Ok

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Religiosity is a fundamental element in human lives that influences behavior, emotions and cognition, through religious beliefs, values, practices, and experience. Recently, it appears to gain an increasing attention for its potential relationship with mental health indicators. The aim of this study was to investigate the relationship between mental disorder symptomatology and psychological wellbeing of University samples aged from 18 to 40 years in terms of religious attitude and religious struggle. To address this issue PERMA Profiler Scale, DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure, the brief form of Personality Inventory for DSM-5 Measure, Ok-Religious Attitude Scale, and Religious Struggle Scale was administered to 269 participants, which consisted of 174 (65%) female and 91 (34%) male.

According to results, old age was related with religious attitude; low education level with high religious experience; high income and education level with high psychological wellbeing, and high mental disorders were associated with young age, low income and education level. Religious attitude was associated with low mental disorder symptoms except for anger, mania, anxiety, somatic, psychosis, memory problem, dissociation and negative affectivity, and with high psychological wellbeing except for accomplishment and negative emotions. In addition to this, religious struggle was associated with high mental disorder symptoms except for mania and substance use, and with low psychological wellbeing.

Religious people were associated with low religious struggle except for demonic and moral struggles, and psychological wellbeing was associated with low mental disorder symptoms except for mania and substance use. Implication from the findings, which

are mainly consistent with previous studies, that religiosity provides a sense of structure in life and promotes mental health yet conflict in religion may reflect negatively on mental health.

**Keywords:** Mental Health; Mental disorders; Psychological wellbeing; PERMA; Religious attitude; Religious struggle





*To my beloved family...*

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August, 2020

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## LISTS OF ABBREVIATIONS

APA	American Psychological Association
DSM	Diagnostic and Statistical Manual of Mental Disorders
PERMA	Positive, Engagement, Relationship, Meaning and Accomplishment
WHO	World Health Organization
OCD	Obsessive-Compulsive Disorder
SS	Supernatural Struggle
DS	Divine Struggle
IS	Intrapersonal Struggle
SPSS	Statistical Package for the Social Sciences
KMO	Kaiser-Meyer-Olkin
SD	Standard Deviation
n	Number of participants
$\alpha$	Cronbach's alpha Coefficient
$r$	Pearson Correlation score
$p$	Significance level
$\chi^2$	Chi-square
RS	Religious Struggle
RA	Religious Attitude
MD	Mental Disorders
PD	Personality Disorders

# CHAPTER I

## INTRODUCTION

Psychological illnesses affects an individual through a variety of ranged experiences and phenomena that alters thought, behavior, feelings, perception, and the conscious of self, others and the world. This state of condition leads to interference with the individual's ability to hold social relationships, occupation and activities, and to be an efficient society member. Throughout the years, research on human mental health has focused on terms of the medical model that health is absence of dysfunction and symptoms of illnesses. It was operated with the general assumption that research on psychological disorders would supply input on how to sustain effective mental functioning (Huppert, 2005). Hence, attention predominantly focused on identification of risk factors for psychological dysfunctioning and treatment by decreasing symptoms and negative effects rather than on defining, understanding and supporting human flourishing.

Mental health concept is now seen relative to the absence of mental disease, normality of behavior, adjustment to environment, integration of personality, and accurate perception of reality. The World Health Organization (2005) defined mental health as being in a state of wellbeing where one realizes self-potential, coping with stress, work effectively, and contribute to own community.

In recent years, a new paradigm shift occurred as Positive Psychology where a growing interest in positive mental health indicators such as wellbeing, optimizing, gratitude, happiness, life satisfaction, and flourishing constituted a major reorientation within the psychology field. Positive Psychology concerns on one's fulfilling and meaningful life with factors such as flourishing, wellbeing, well-functioning, strengths and characteristics that thrive ones potential (Seligman and Csikszentmihaly, 2000). Seligman defined a model of wellbeing by five different domains, which are Positive emotions, Engagement, Relationships, Meaning, and Accomplishment (PERMA).

Research on the impact of wellbeing on mental health and mental disorders has shown that wellbeing is associated with a longer and healthier life (Diener & Chan, 2011);

serving as a protective factor for mental disorders (Lamers, Westerhof, Bohlmeijer, ten Klooster, & Keyes, 2011), burnout (Bakker, Demerouti & Euwema, 2005), daily struggles, and stressful events (Cohn, Fredrickson, Brown, Mikels & Conway, 2009). Decrease of psychological wellbeing effects many human fundamentals as reduced life satisfaction and meaning, self-esteem, self-worth, and increased feelings of loneliness, hopelessness, which eventually results in poor mental health (Ismail & Desmukh, 2012).

Psychological wellbeing contributes overcoming challenges and stress, adaptation of environments, maintaining relationships and continual of optimal level of development and functioning (Ryff, Keyes, & Hughes, 2003). Therefore, it is important to all age individuals especially young and middle adults (18-40 age) who are a risk group due to their transitional life period (Bowman, 2010). Developmentally this period is when exposure of new concepts, beliefs, environment, responsibilities, instability, and identity decisions challenge identity formation (Wood, Crapnell, Lau, Bennett, Lotstein, Ferris, & Kuo, 2018). Insufficient resolution of the challenges and psychological problems may have critical and lasting consequences that may lead to debilitating social, emotional and academic development therefore positive life experiences may be resources to cope adequately such as social activities and support, meditation, psychotherapy, group interventions, and religion.

To Koenig, McCullough, and Larson (2001) religion an organized system that facilitates positive feelings towards the sacred, gives understanding in relationships and responsibilities one has towards own community with beliefs, practices, and rituals. Being a universal human pursuit, religion influences norms, ideals, thoughts and behavior with answers on the meaning of existence (Pollack, 1995). It is a fundamental element in human life since the beginning of time. For centuries, religion has been a part of human endeavor as being the subject of culture, art, music, inspiration, devotion, medicine, warfare, and morality. Historically, religion and medicine as a unity had an effective role in the treatment and reduction of human suffering. There is evidence in the literature of philosophy, medicine, theology, and psychology that religion has an effect on human mental health (Hackney & Sanders, 2003).

Al-Kind (801-866), Ibn Sina (980-1037), and Al-Ghazali (1058-1111) wrote extensively on issues related to psyche, personality, psychospiritual wellbeing, and mental disorders (Abu-Raiya, 2012). With the development of scientific paradigm and methodology religion and medicine were degraded due to the difficulty of defining, measuring and testing religion and its concepts. Thus, for years the effect of religion on mental health was ignored in the field of science (Levin, 1994; Koenig, McCullough, & Larson, 2001). Even though Freud (1927/1961) and Jung (1938) demonstrated a profound interest in religion and its impact on human behavior, feeling, and thought, the first scientific inquiries were made within the new field of psychology of religion by James H. Leuba (1896) studying the phenomena of religious conversion (Strunk, pp.13). However, after the development of behaviorism (John B. Watson, a pioneering figure), occurrence of World War I and economic crises (Shafranske, pp.45) the research on psychology of religion decreased dramatically until the 20th century (Johnson, pp.31).

The increase research on religion and mental health have unraveled various concepts, theories, and relationship. With scientific evidence and the demands of the patients in psychotherapy as they are dissatisfied of mental health services to deliver the highest quality of treatment regarding all domains of life, the integration of religion and mental health care became inevitable (Hufford, 2005). Motivation of the study was to bring some perspective to the lack of empirical evidence of religious dimensions and its effect on mental health indicators.

### **1.1. Statement of the Problem**

In the recent years in the field of science, the interest on mental health has shifted from examining mental disorders and its effect on human life to psychological wellbeing and promoting mental health (Keyes, 2002). Religiosity is another subject that has gained interest in relationship with mental health and studies have contributed to the literature by contradicting findings, yet religious dimensions are still unknown in many aspect on human life (Koeing et al., 2001). This study was conceptualized to investigate the connection of religiosity in terms of religious attitude and religious struggle on mental health disorders and positive mental health indicators; that is psychological wellbeing.

## **1.2. Purpose of the Study**

The main purpose of this research is to explore the connection of religiosity with attitude and struggle dimensions and mental health, particularly mental disorders and psychological wellbeing. The second purpose is to contribute the concept of religious attitude and religious struggle to literature. The third purpose is to address religion and mental health relationship in terms of sociodemographic factors. The long-term benefit of the research is to improve and enlighten the understanding of religion's relation to human life and understand the components of religion that could be intergraded to health care and preventions more effectively.

## **1.3. Importance of the Study**

The current study contributes to the literature by examining 13 different mental disorders symptomatology and its relation with religiosity, and by examining psychological wellbeing in terms of PERMA with relation to religiosity taking into account demographic and socioeconomic factors. Previous studies mainly focused on the relationship with mental disorders and religiosity with clinical samples that limitated for generalizability, thus this study is important for examining symptoms instead of diagnostics disorders and on non-clinical population, which enhance the possibility to generalize the results (Zimmer, Rojo, Ofstedal, Chiu, Saito, & Jagger, 2019). The results of the present study can be useful to better understand the connection of religiosity on mental health and provide implications on mental health services. The adaptation of Religious Struggle Scale is another importance of the study in terms of religious dimensions.

# **CHAPTER II**

## **LITREATURE REVIEW**

### **2.1. Mental Health**

The view of mental health throughout the years has changed in the field of science and medicine. The medical model and the psychological model are two different paradigms emphasizing on mental health (Keyes, 2002; Keyes, 2012). Mental health and wellbeing in the medical model operationalizes with measurement of mental disorders whereas the psychological model operationalizes in terms of self-evaluated satisfaction and the presence of positive affect (Keyes, 2002). Taking only the absence of mental illnesses or positive indicators into consideration may not represent a sufficient criterion for overall mental health.

Mental health is the combination of the absence of mental disorders, presence of wellbeing and positive functioning. Having positive relationships, achieving self-potential, coping with life, and employed in work and activities establish good mental health (The Mental Health Foundation, 2016). Considering other definitions, the following was seen appropriate. Mental health is a state of physical, emotional, psychological and social wellbeing, optimism, harmony and mastery; where an individual realizes own cognitive and social abilities and actualize their potential; empathize with others; express and modulate one's own emotions; cope with stress and deal with adverse life events; and to be able to form and maintain meaningful relationships.

Research has examined mental health in mental disorders perspective to find its causes and influence to human life, how to prevent its effect, its risk and protective factors. The pathway to mental illnesses is complex and involves a range of factors with varying levels of causality. The development of disorders, increased symptoms and vulnerability to relapse are relatively effects of risk factors, whereas in face of adversity, stress, and illness protective factors give resilience and enhance wellbeing (Monograph, 2000). Collective measurement of sociological and economic position of a person or family compared to others regarding income, education and occupation status is defined as socioeconomic status (Manstead, 2018). Litureature on the effect

of socioeconomic status in developing countries on mental disorders and psychological wellbeing is evident (Howell & Howell, 2008).

Risk and protective factors of mental health can occur through gender, socioeconomic status, physical health and activities, home, social and work environment, family members, biogenetics, coping skills, opportunities available, and access to health services (Heim, & Nemeroff, 2001; Cirulli, Laviola, & Ricceri, 2009; Kinderman, 2014). Stress and conflict, malnutrition, psychological deprivation, trauma, abuse, isolation, and poverty are such risk factors that influence psychological illnesses especially in young and mid adulthood (Malla, Joober, & Garcia, 2015; Paykel, Hayhurst, Abbott, Wadsworth, 2001).

Social relationship and activities, social and family support, hope and optimism, good physical health, meditation, psychotherapy, and religion are protective factors that contribute to wellbeing and reduce the likelihood of mental disorders. When compared to general population, studies have shown younger people to have higher possibilities of mental problems. (Lewinsohn, Hops, Robert, Selley, & Anderws, 1993; Wittchen, Nelson & Lachner, 1998). Payne, Hahn and Mauer (2005) revealed vulnerability in experiencing negative emotions in face of rejection and failure that potentially effected advancement in their education within university students. Another study when compared to their peers in general population, have found university students more prone in developing mental problems (Hamdan-Mansour, Halabi, & Dawani, 2009).

Among university students, The WHO (2012) reported poor mental health linked with lower academic achievement, higher mood disorder symptoms, substance abuse, and violent behavior. Keyes (2002) found flourishing as a positive mental health indicator on individuals, as it predicted low levels of depressive symptoms and conduct problems, high self-determination, closeness to others and integration within school environment. Brim, Ryff, and Kessler (2004) and Ryff, Leyes, and Shmotkin (2002) have found psychological wellbeing associated with sex, age, race, ethnicity, level of educational attainment and income. As they found young female of minor ethnic group of the society with low levels of income and education linked to low psychological wellbeing.

Gender and socioeconomic background have been found influencing factors of mental health as women was found to have poor mental health than men (Rothi & Leavey,

2006). McConnell, Pargament, Ellison, and Flannelly (2006) found that younger age was a predictor of mental disorders as depression, anxiety, obsessive-compulsiveness, and paranoid ideation, and anxiety and somatization disorders were higher among women. Researches have also found that in psychological wellbeing dimensions such as positive relationship, purpose in life, environmental mastery, and personal growth women were found higher than men and men were found higher in self-acceptance and autonomy dimensions (Matud, Lopez-Curbelo, & Fortes, 2019; Ahrens, Ryff, 2006; Eaton, Keyes, Kruger, Balsis, Skodol, Markon, & Hasin, 2012). Evidence based on poverty and illiteracy conditions indicate people to be more vulnerable to psychological disorders, especially women more than men (Luni, Ansari, Jawad, Dawson, & Baig, 2009; Soomro, Riaz, Naved, & Soomro, 2012).

Among university students, Hudson (2005) found a direct influence of socioeconomic status on developing mental health problems. Steinmo, Hagger-Johnson, and Shahab (2014) have emphasized a bidirectional causal link between socioeconomic status with mental and physical health. Low physical and mental health can reduce earning potential and effecting education and employment opportunities (Case & Deaton, 2009). Due to social and environmental conditions regarding low income and education levels have been related with poor physical and high mental problems (Mulatu & Schooler, 2002; Warren, 2009).

### **2.1.1. Definition and Categorization of Mental Disorders**

Mental disorders are health problems significantly effecting feelings, thoughts, behaviors and interactions with other people by reflect distinct conditions of an individual causing impairment, distress and disability in emotional, psychological, spiritual and social processes. Mind (2014) defines mental illnesses as an experience that cause problem in the way of thinking, feeling and behaving that effect the individual's relationships, work and quality of life. Spitzer, Endicott, and Franchi (2018) argues mental disorders to be medical disorders with symptoms of psychological or behavioral nature, and physical symptoms can be interpreted by psychological concepts.

Mental disorders are assessed, classified and diagnosed by medical health professionals using the manual of the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition (American Psychiatric Association, 2013) and the ICD-10

(World Health Organization, 2010). The definition used by The American Psychiatric Association (APA) for mental disorder is considered suitable for this research. According to The Diagnostic and Statistical Manual of Mental Disorders V (DSM-5), mental disorder is defined as a clinically significant syndrome with disturbances in emotiona, behavior and cogniiton resulting in impairment of biological, developmental, psychological or functional processes.

Mental disorders in DSM-5 are categorized as Neurodevelopmental; Schizophrenia; Bipolar; Depressive; Anxiety; Obsessive-Compulsive; Trauma and Stressor Related; Dissociative; Somatic; Eating; Elimination; Sleep-Wake; Sexual Dysfunction; Gender Dysphoria; Disruptive, Impulse-Control and Conduct; Substance; Neurocognitive; Personality; Paraphilic; and Other Mental Disorders. In this study main clinical symptomology and related definitions were selected from DSM-5 such as; anxiety, depression, suicidal ideation, anger, mania, repetitive thoughts and behaviors (OCD), somatic, psychosis, sleep and memory problems, dissociation, personality functioning, and substance use.

*Depression* can be identified behavior and cognition. It is defined as disturbance of mood; low self-esteem; diminish interest or pleasure, problem with psychomotor, sleep, weight, appetite, energy, or concentration; having feelings of worthlessness, hopelessness or guilt; having thoughts or attempts of suicide.

*Anger* is an emotional reaction to frustration or problems in self control and regulation that intents to verbal, physical, or psychologically harm someone.

*Mania* is an episode of bipolar disorder that consists of being abnormally elevated, expansive, having irritable mood, increase in energy, inflated self-esteem or grandiosity, flight of ideas or distractibility for a distinct period.

*Sleep-Wake problem* consists of unsatisfaction regarding the quality, amount and time of sleep that may cause stress, functional impairment, and physical health problems.

*Anxiety* is defined as emotional, cognitive and physical response such as having excessive feelings of constriction, fear, panic, worry, uneasiness; associated with avoidant behaviors, dizziness, nausea, muscle tension; thoughts of fight or flight, danger difficulty concentrating and decision making.

*Somatic symptom* is characterized with abnormal focus, thoughts and feelings on physical symptoms and health concerns such as pain, weakness, fatigue that cause significant emotional distress and functioning problems in response to these symptoms with lack of medically explained physical illnesses.

*Suicide ideation* is defined as an individual's contemplation on ending one's life with feelings, ideas or belief of being trapped, hopeless or worthless.

*Psychosis* is defined by impairment of reality that leads to experiencing external influences on thought and behavior, which are delusions or hallucinations, feelings of suspicion or paranoid.

*Neurocognitive Disorder (memory problem)* is defined as having impairment in one's cognition, which is a decreased level of functioning not attained since birth.

*Obsessions* are irrational, unwanted, intrusive, and persistent thoughts, images, and urges that are out of control of the individual's autonomy. *Compulsions* are repetitive behaviors, impulses or mental acts that is performed in response to an obsession.

*Dissociation* is the disruption of integrated psychological and sensory information such as alterations in consciousness, memory, sense of identity, emotion, perception, and body representation.

*Personality* is expression of oneself in one's own unique style of behavior, thoughts, and feelings (Schacter, Gilbert & Wegner, 2009). *Personality Disorders* are enduring pattern of inflexible experience and behavior that deviates from the expectations of an individual's culture and social norms occurring in adolescent and early adulthood and is persistent over time leading to distress and impairment in life functioning.

Personality disorders are manifested under five domains of pathological personality traits that are negative affect, disinhibition, detachment, antagonism, and psychotism. *Negative affect* is a feeling of frequent and intense emotional distress, unpleasant feelings such as sadness, anxiety, shame, guilt, fear, anger, or irritability. *Detachment* is avoidance of social and emotional experience that is the unwillingness of interactions with people and restricting affect and expressions. *Disinhibition* is impulsivity by current behavior, feelings, thoughts, and external stimuli toward immediate gratification without regarding consequences. *Psychotism* consists of behaviors, cognitions and beliefs that are considered culturally unusual, odd, and

eccentric. *Antagonism* are behaviors caused by exaggerating self-importance and expecting special treatment, being antipathy to others, using others for self-enhancement, and being unaware of others needs and feelings that creates an odd situation with people.

*Substance and Addictive Disorders* are defined by one's inability to control substance use regarding its affect on cognitive, behavioral and physiological symptoms.

### **2.1.2. Definition of Psychological Wellbeing: PERMA**

The term wellbeing is being capable to live (Carlson, 2003); feeling content, enjoyment and having social relationships (Breslow, 1999); having optimist expectations (Neilson, 1988); and being in an optimal state mentally and physically to live a creative life and live life to the fullest (Goldsmith, 1972). The definition of mental health and wellbeing for Pender, Murdaugh and Parsons (2002) is achieving human potential and self-actualization, being in content relationships, and having self-care while adjusting oneself to sustain integration and harmony with surroundings. Having meaning and purpose in life, being in caring relationships, security of physical health and finance, having political appreciation, access to sports, art, and culture all encompasses as factors of wellbeing according to Kinderman (2014).

Wellbeing can be distinct to two components; subjective wellbeing and psychological wellbeing (White, Utzl, & Holder, 2019). Being the emotional and cognitive interpretation of quality of life and subjective wellbeing consists of happiness and satisfaction of life and affect (Diener, 2000). Personal maturity, growth, positive relations and independence of oneself are included in psychological wellbeing (Ryff, 1989). Keyes (2002) identifies emotion, psychology and social as three components of wellbeing that compose the continuity of health. Emotional wellbeing includes being interested in life, happiness, and feeling satisfied. Psychological wellbeing includes acceptance of personality, managing daily life responsibilities, maintaining good relationships and satisfaction of life. Social wellbeing refers to positive functioning in society, contributing to society, socially integrating oneself, beliefement of a better society (social actualization), and being in coherence with society (social coherence).

Ryff (1989) suggested a six-dimension model of psychological wellbeing that emphasize on wellbeing not just as feeling good but as living an optimally functional life in the face of different challenges. Self-acceptance refers to feeling positive and

having an acceptant attitude of the past and oneself even when being aware of one's shortcomings. Positive Relations is development and maintainance of a satisfying, warm, and trusting interpersonal relationships (Lee & Taniguchi, 2015). Environmental mastery refers to a sense of mastery and competence in organizing and handling the environment in an effective manner that meets self needs, values and desires. Autonomy, a sense of self-determination, involves being able to think and act autonomously with a guide of socially accepted internal standards and resisting social pressure. Purpose in life refers to have aim, goals and belief in life that affirm a sense of direction and meaning. Personal growth is having insight of one's own potential, talent, and capacities for progress and development in self over time.

Overall, psychological wellbeing has characteristics as positive self appreciation; effective management of surroundings and life; positive relationships; purpose and meaning in life; evolving throughout life and self determination that can influence individuals' in the presence of mental disorder symptoms (Contreras, de Leon, Martinez, Pena, Marques, & Gallegos, 2017).

Wellbeing is currently a fundamental element of and investigated under the new emerging field called Positive Psychology. Positive Psychology concerns on one's fulfilling and meaningful life with factors such as flourishing, wellbeing, well-functioning, strengths and characteristics that thrive ones potential. Seligman (2002) emphasized in the authentic happiness theory that to attain happiness and life satisfaction one must inquire at least of the pathways, which are pleasure, engagement and meaning. The pleasure pathway focused on positive emotions, engagement consisted of using character strengths to achieve a state of flow, and a sense of purpose is the pathway of meaning (Csikszentmihalyi, 1990). These there pathways enable a route to achieve happiness. Recently the model pathways were improved and named (Seligman, 2011) as wellbeing theory; the additional pathways are positive relationships, and accomplishments. Seligman's (2011) model of flourishing was seen fit to explain psychological wellbeing. The wellbeing theory is considered as individuals pursue for themselves and having positive feeling and functioning (Forgeard, Jayawickreme, Kern, & Seligman, 2011). Seligman defined wellbeing by five different domains which are Positive and negative emotions, Engagement, Relationships, Meaning, and Accomplishment (PERMA).

Theoretically, wellbeing is an abstract construct of dealing with happiness and actualization of human potential that leads to functioning well. However, wellbeing isn't just lack of negative functioning but also is lack of negative affect, loneliness, insecurity, and illness with the existence of wellness, positive affect, happiness, social connection, and trust. Thus, wellbeing cannot be defined just by single measures of positive but should also have various aspects of both positive and negative measures. Butler and Kern (2016), integrated mental health's negative aspects such as negative emotions, physical health and loneliness measurements to a short instrument based on PERMA model.

*Positive emotions* are subjective feelings of happiness with respect to past, present and future, other emotions such as pleasure, comfort, compassion, gratitude, hopefulness, love and peacefulness. This domain is considered as a marker for flourishing.

*Engagement* comes from the feeling of undivided focus, being absorbed, connected and fully involved in activities, concentrating on an intrinsically motivating task while awareness of time, environment and feelings are faded. A complete level of engagement is considered a state of flow, which requires all power of cognition, though, emotion, and effort on a task that is challenging and ones skill to solve are adequate. Engagement is an interaction that improves power, devotion and commitment.

*Relationship* is feeling integration with community or society, connected, being cared for and caring for others, being social beings and satisfied with one's social network, forming positive meaningful and positive relationships that contribute to our wellbeing. It includes having social ties and network, receiving and perceiving support, being satisfied with support and giving support to others.

*Meaning* is having a direction in life, feeling life is valuable and worthwhile, connecting with a supreme being, and belief of a purpose in one's life actions.

*Accomplishment* is achievement of or a driving force for accomplishing personal goal involving the capability of competence and efficacy. It is the desire to pursue achievement not because to feel good, pleasure, sense of engagement or meaning but purely for the sense of accomplishment on a goal itself.

*Physical health* consists of the body being not only free from illness and injury but also being in a fitness level of functioning that includes relaxation, strength, flexibility and endurance of the body when compared to one's peers and own contentment.

*Negative emotion* is a natural human experience of feeling negative emotions that can cause misery, distress or harm in different context, which emotions are categorized as anger, frustration, guilt, nervousness, boredom, shame, hopelessness, embarrassment, jealousy and fear. These subjective experiences of emotional reaction motivates, elicits and coordinates changes of the human physiology, behavior, cognition, and subjective experience the longer these emotions effect the greater the consequences they impose.

Three main negative emotions, which are sadness, anger and anxiety, are of focus in this research. Sadness is a transient unhappy feeling of subjective experience evoked by specific situations or appraisals of loss is occurred. Anger is a negative activation to resolve tension, frustration, or distress through active behaviors. Expression of anger is a reaction to fear; support achievement, goal, plans or behavior when faced obstacles; establish a sense of personal control; defense of personal integrity (Modell, 1993). Thus, to reestablish a feeling of personal autonomy and consistency an optimal level of expression of anger is a necessary. Anxiety is characterized as feeling tension fear, and having worried thoughts that result in distress physically, mentally, and emotionally when faced with alarmed situations, potentially harmful or worrying triggers.

*Loneliness* is a distressing negative emotional reaction to being isolated and losing sense of connection to the environment culturally, socially, emotionally, and mentally. Loneliness is a universal phenomenon and a subjective human experience caused by life circumstances such as loss of a person or relationship; being excluded or rejected by a group or peers; feeling not belonging within a different culture; being intellectually or educationally out of sync with peers, family or social group; or feeling separated because of experienced trauma.

### **2.1.3. Relationships between Mental Disorders and Psychological Wellbeing**

Mental illness resulting in personal suffering and excessive socioeconomic costs, accounts for about one-third of the world's disability (Anderson, Jane-Llopis, & Hosman, 2011). Studies have shown that greater existence of mental disorder

symptoms were associated with lower levels of psychological wellbeing (Winefield, Gill, Taylor, & Pilkington, 2012).

Contreras et al. (2017) examined 516 college students' (78 women, 138 men) psychopathological symptoms and psychological wellbeing with exploring gender differences. The study found a negative association between psychopathological symptoms (paranoid ideation, obsessive-compulsive, somatization, depression, anxiety, aggression, phobic anxiety, psychoticism, and interpersonal sensitivity) and psychological wellbeing (environmental mastery, self-acceptance, purpose in life, positive relationships, autonomy, and personal growth.). In mental disorder dimensions somatization, anxiety, depression, phobic anxiety, and internal sensitivity women scored greater and in psychological wellbeing dimensions autonomy reported statistically significant difference where men scored higher.

### *Depression and Anxiety*

Depression, depressive symptoms and anxiety are the most common of all mental disorders. Worldwide with estimates from 2%-3% for men and 5%-12% for women, about 350 million people suffer from depression (APA, 2000). Studies on depression and anxiety around the world have exemplified greater costs on both individual and the communities in countries (Murray, Vos, Lozano, Naghavi, Flaxman, & Michaud Lopez, 2012).

Both depression and anxiety have been found to negatively impact on individual's perceived wellbeing, satisfaction in relationships (Stein & Heimberg, 2004), reduced productivity (Simon, Revicki, Heiligenstein, Grothaus, VonKorff, Katon, & Hylan, 2000), and social isolation (Malone & Wachholtz, 2018). Anxiety was found positively associated with worry, rumination (Olatunji, Naragon-Gainey, & Wolitzky-Taylor, 2013), stress, negatively associated with mindfulness, emotional intelligent (Iani, Quinto, Lauriola, Crosta, & Pozzi, 2019) such as attention and repair skills, and decrease of wellbeing, positive affect and functioning (Ciarrochi & Scott, 2006), and life satisfaction (Fakouri & Lyon, 2005)

Studies found higher symptoms of depression to be linked with female gender, low income and education levels, poor physical health and social isolation (Cole & Dendukuri, 2003; Koster, Bosma, Kempen, Penninx, Beekman, Deeg, & van Eijk, 2006; Akhtar-Danesh & Landeen, 2007). Similar findings were found that major

depression or higher levels of depressive symptoms were associated with household and financial difficulties, social irritability, limited occupational functioning, and poor physical health than non-depressive people (Johnson, Weissman, & Klerman, 1992; Judd, Paulus, Wells, & Rapaport, 1996).

Weissman, Prusoff, and Thompson (1978) found women with major depression disorder have more dysfunction in marital, family, and employment than non-depressed women. Fredman, Weissman, and Leaf (1988) found low levels of intimate relationships and satisfaction in social interactions among patients with major depressive disorder than non-depressive community sample. Tiwari and Tripathi (2015) found negative association between depression and wellbeing dimension such as; autonomy, positive relations and self-acceptance.

### *Anger*

Anger is an universal emotion that can motivate a person to a goal-directed action or have a protective use however, when anger predominates and persists it can become morbid or pathological that lead to harm rather than being useful (WHO, 2006; Cenkseven, 2003; Köknel, 2012). Keinan, Ben-Zur, Zilka & Carel (1992) found that expressed anger reduce the possibility to suffer a mental or physical complaints. Expressing anger in a positive way can be considered a healthy function to wellbeing anger presented by outrage, aggression, hostility, and violence can damage individual and its surroundings, interpersonal and social relationships, achievement, and adaptation (Ozyeshil, 2012; Kemp & Strongman, 1995; Beshkar, 2009).

Possible factors to contribute anger are identified as negative affect, intentionally mistreated, aversive environment situations such as poverty, and frustration (Bushman, Baumeister, & Phillips, 2001; Berkowitz, 1990). Studies have found experiencing personal failures and criticism people with increased self-esteem levels show greater aggression than those with decreased self-esteem because they respond differently in these situations (Baumeister, Smart, & Boden, 1996; Kirkpatrick, Waugh, Valencia, & Webster, 2002).

Riley, Treiber and Woods (1989) found serious depressive symptoms were linked with increased levels of anger among patients suffering from post-traumatic stress disorder. Restrained anger is also a strong predictor of emotional distress (Vitaliano, Maiuro, Russo & Mitchell, 1988). Diong and Bishop (1999) found that increased levels of

expressing anger were associated with greater stress levels, poor psychological and physical wellbeing and lower use of active coping.

### *Mania*

Bipolar disorder negatively influences individual's social (Zhang, Wisniewski, Bauer, Sachs, & Thase, 2006; Vojta, Kinoshian, Glick, Altshuler, & Bauer, 2001), occupational (Simon, Ludman, Unützer, Operksalski, & Bauer, 2008; Elinson, Houck, & Pincus, 2007) and physical wellbeing (Kilbourne, Rofey, McCarty, Post, Welsh, & Blow, 2007). Vojta, Kinoshian, Glick, Altshuler, and Bauer (2001) found negative association within manic group of patients with physical and emotional health, social functioning, sense of wellbeing and quality of life.

Mania (an episode of bipolar disorder) is related with elevated levels of positive affect (Meyer & Hofmann, 2005) however this period of mood is associated with features so positive that it causes severe clinical problems (Johnson, Gruber, & Eisner, 2007; Gruber, Johnson, Oveis, & Keltner, 2008; Gruber, 2011; Giovanelli, Hoerger, Johnson, & Gruber, 2013). Mansel and Pedley (2008) have studied manic symptoms and found that in manic episode negative effective state such as aggression, panic, anxiety, and irritability can also be experienced. Meyer, Jonson, and Winters (2001) found that people at greater risk for mania reported more positive emotional responding such as excitement and joy at earning rewards than healthy controls.

In addition, people with high risk mania demonstrated increased self-confidence (Johnson, Ruggero & Carver, 2005), and irritability (Gruber, Johnson, Oveis, & Keltner, 2008). Compared to depressed patients of bipolar disorder manic patients were reported to have better quality of life and life satisfaction levels (Russo, Roy-Byrne, Reeder, Alexander, Dwyer-O'Connor, Dagadakis, Ries, & Patrick, 1997; Ritsner, Kurs, Kostizky, Ponizovsky, & Modai, 2002; Chand, Mattoo, & Sharan, 2004).

### *Sleep Problems*

Sleep is seen as a resource in managing stress (Drake, Roehrs, & Roth, 2003; Hamilton, Catley & Karlson, 2007) and self-regulation (Zohar, Tzischinsky, Epstein & Lavie, 2005). Hamilton et al. (2007) found duration and quality of sleep to be a protective factor with pain and stress related to emotional disruption in chronic pain

patients. Zohar et al. (2005) suggested sleep to have a direct link with achievement and wellbeing according to their findings regarding quality of sleep ensures cognitive energy in face with stressfull and challenging situations.

One of the most common symptoms of depression is sleep disturbance; research also suggested that sleep might be an early symptom of depression or a risk factor for developing depression (Breslau, Roth, Rosenthal, & Andreski, 1996; Ford & Kamerow, 1989; Chang, Ford, Mead, Cooper-Patrick, & Klag, 1997). Other studies have found a link between sleep disturbance and mental disorders especially with increased depression and anxiety levels (Reynolds, Taska, Sewitch, Restifo, Coble, & Kupfer, 1984). Mellman (2003) found some impairment in duration and quality of sleep in patients with anxiety disorders. Allgower, Wardle, and Steptoe (2001) found that excessive or insufficient sleep was related with an increased depression and mortality risk (Kripke, Garfinkel, Wingard, Klauber & Marler, 2002) and social isolation.

Ryff, Singer, and Dienberg Love (2004) found that psychological wellbeing dimensions related to objective measures of sleep. Duration of sleep was related with environmental mastery; sleep quality with purpose in life and positive relations; onset and duration of REM sleep with positive relations and environmental mastery. Hamilton, Nelson, Stevens, and Kitzman (2007) have found that optimal level of sleep were associated with less symptoms of depression and anxiety, and reported greater psychological wellbeing levels such as purpose in life, environmental mastery, positive relations, personal growth, and self-acceptance.

### *Somatic*

Somatic symptoms are clinically relevant to depression, suicide ideation (Wiborg, Gieseler, Fabisch, Voigt, Lautenbach, & Lowe, 2013) and anxiety disorders (Löwe, Spitzer, Williams, Mussell, Schellberg, & Kroenke, 2008) and a lower health related quality of life (de Waal, Arnold, Eekhof, & Van Hemert, 2004). Higher levels of disability and psychiatric morbidity are seen in somatization symptoms (Roelen, Koopmans, & Groothoff, 2010).

Emotional expression (Alexander, 1950), negative affectivity (Watson & Pennebaker, 1989), inhibition (Pennebaker, 1989), and repressive coping style (Weinberger, Schwartz, & Davidson, 1979) has been linked with psychosomatic symptoms. De

Gucht and Heiser (2003) found connection between affect regulation and somatoform disorders. Somatization was positively associated with depression, psychosocial distress, and emotional problems (Kleinman, 1977), and negatively associated with psychological wellbeing, life satisfaction (Ali, Deuri, Deuri, Jahan, Singh, & Verma, 2010), and health related quality of life (Keyes & Ryff, 2003).

### *Suicide Ideation*

Suicide leading cause of death especially in 15 to 29 year olds result in enormous social disruption and loss in productivity (Lake, & Turner, 2017). Suicide ideation is closely associated with negative social comparison (Sturman, 2011), perfectionism (Wetherall, Robb, & O'Connor, 2019), severity of depression, substance abuse, anxiety, and temper control problems (Howard-Pitney, LaFromboise, & Basil, 1992; de Man & Leduc, 1995; Izadinia, Amiri, Jahromi, & Hamidi, 2010). Studies have associated suicide ideation with high levels of stress (Cole, Protinsky, & Cross, 1992), poor perceived health and quality friendships, reduced self-esteem and internal locus of control (Shagle & Barber, 1995; Jin & Zhang, 1998; de Man, Labreche-Gauthier, & Leduc, 1993), low purpose in life (Lewinsohn, Rohde, & Seeley 1994; Kel, Raveis, & Davis, 1991).

Feeling such as defeat, entrapment, burdensomeness, helplessness, negative affectivity (Isacsson, 2000; Guillaume Courtet, & Samalin, 2011), aggression, impulsivity (Beautrais, 2003), and hopelessness (Gooding, Tarrier, Dunn, Shaw, Awenat, & Ulph, 2015) were found associated with high levels of suicide ideation. Positive affect, social closeness (Fredrickson, 2013), resilience (Johnson, Wood, Gooding, Taylor, & Tarrier, 2011), effective coping skills (Joiner, Pettit, Perez, Burns, Gencoz, Gencoz, & Rudd, 2011) are found to be protective factors against suicide ideation, behavior and attempt.

### *Psychosis*

Weintraub and Weisman de Maman, (2015) found that sub-clinical psychotic symptoms were linked with low psychological wellbeing, quality of life (MacBeth & Gumley, 2008), social functioning (Lysaker, Bryson, Marks, Greig, & Bell, 2004), and life satisfaction (Huppert, Weiss, Lim, Pratt, & Smitt, 2001), having also cognitive insight showed worse levels of psychological wellbeing. Psychosis was also linked with poor coping skills, social rejection (Magallares, Perez-Garin, & Molero, 2013),

emotional and function distress (Layard, 2010), risk of suicide, and depression (Buckley, Miller, Lehrer, & Castle, 2009).

Uzenoff, Brewer, Perkins, Johnson, Mueser, and Penn (2010) examined wellbeing by comparing individuals who had their first episode of psychosis and non-clinical college participants. The study found that psychological wellbeing, positive affect, and quality of life were significantly lower in individuals who had their first episode of psychosis. In addition, significant predictors of psychological wellbeing were found to be decreased depression levels and perceived social support.

Other studies has revealed that hallucinatory experiences can be seen not only in patients but also occur in other situations and common in nonclinical population. Sidgewick (1894) interviewed a total of 7599 women and 7717 men and found 7.8% of men and 12% of women reported at least one hallucinative experience in their lives. In a sample of 18,572 individuals, Tien (1991) found that 10% of the men and 15% of the women had hallucination without presenting other pathological symptoms. Research has also found participants successfully adapt to hallucinations (Romme & Escher, 1989), and positive effects of hallucinations such as relaxation, company, and distraction (Miller, O'Connor, & DiPasquale, 1993).

### *Memory Problems*

Memory is normally considered an issue in elder people however, mental disorders can also effect cognitive functioning and cause memory problems. Depression, anxiety, trauma, age, stress, negative affect (Buckley, Saling, Ames, Rowe, Lanutenschlager, & Macaulay, 2013), psychological distress, disability, decrease in life quality (St John & Montgomery, 2010), and physical health are found associated with memory problems (Llewellyn, Lang, Langa, & Huppert, 2008). Individuals in late adulthood shown decline in cognitive functioning associated with poor physical health, depression, low education, and socioeconomic status (Mungas, Harvey, & Reed, 2005; Hendrie, Albert, & Butters, 2006).

Enhancing psychological resource, psychological wellbeing (Depp & Jeste, 2006) and positive mood states are associated with decreased stress and increase of neural efficiency and cognitive performance (Ashby, Isen, & Turken, 1999; Scarmeas & Stern, 2003; Steptoe, Wardle, & Marmot, 2005). Gates, Valenzuela, Sachdev, and Singh (2014) have found that men had lower memory function than women; also,

younger participants had greater memory complaints than older participants. Memory complaints were significantly linked to cognitive difficulty, worse memory, high depressive symptoms, anxiety and stress. High satisfaction of social support, psychological wellbeing (Toffalini, Borella, Cornoldi, & De Beni, 2016) and life satisfaction (Hill, Mogle, Wion, Munoz, DePasquale, & Yevchak, 2016) were associated with better self-reported memory function, less cognitive difficulty, and better verbal fluency.

#### *Repetitive thought and behavior (OCD)*

Repetitive thought and behavior is pathologically characterized as obsessive-compulsive disorder (OCD). Obsessions are thoughts can be about contamination, pathological doubt and symmetry or order. Compulsions can be checking, washing, counting, needing to confess, and ensuring symmetry, precision, and hoarding. OCD is found associated with depression, anxiety (Subramaniam, Abdin, Vaingankar, & Chong, 2012), negative affect, aggression, irritability (Gandaharizadeh, Aghamohammadian Sharbaf, & Bagheri, 2019), emotional distress (Lavoie, Sauvé, Morand-Beaulieu, & Charron, 2014), vitality (Eisen, Mancebo, & Pinto, 2006), hostility, and maladjustment (Moore & Howell, 2017). Kendall and Watson (1990) examined negative affectivity and OCD and found that negative affects such as anger, fear, sadness, hostility, nervousness, loneliness, guilt, self-criticism, and self-dissatisfaction were positively associated with higher OCD levels.

OCD disables individual's functioning and wellbeing that eventually influence their lives and surrounding. Researchers have found association between OCD and low levels of mental and physical health (Stengler-Wenzke, Kroll, Matschinger, & Angermeyer, 2006), role and social functioning, relationships (Subramaniam et al., 2012), fitness, life satisfaction (Rapaprt, Clary, Fayyad, & Endicott, 2005), psychological wellbeing (Angst, Gamma, & Endrass, 2004), and quality of life (Grabe, Meyer, & Hapke, 2000; Kumar, Sharma, Kandavel, & Janardhan Reddy, 2012).

In the association between OCD and quality of life studies have shown that age (Fontenelle, Fontenelle, & Borges, 2010; Kugler, Lewin, & Phares, 2013), low social status and support (Hou, Yen, & Huang, 2010) have a negative impact, whereas education (Hauschmidt, Jelinek, Randjbar, Hottenrott, & Moritz, 2010) and

employment (Rodriguez-Salgado, Dolengevich-Segal, & Arrojo-Romero, 2006) have a positive impact.

Cognitive impairments such as negative self-cognitions were found associated with OCD (Moritz, Kloss, & Jelinek, 2010). Impairments of negative cognitive errors and hopelessness (Ostrander, Nay, Anderson, & Jensen, 1995), disturbed cognitive processing, distorted cognitions (Steketee, 1993), irrational beliefs, overestimating risk of negative results of action, experiencing elaborated guilt, increased perception of threat (Salkovskis, 1989), lack of confidence in memory, over generalizations, and intolerance of uncertainty (Taylor, Kyrois, Thordarson, Steketee, & Frost, 2002) were also found associated with OCD.

### *Dissociation*

Dissociation is a mental process that enables the individual to tolerate or cope with distressing events, people, or environment, and trauma by splitting off overwhelming or incoherent thoughts, feelings and memories (Schore, 2009; Dell & O'Neil, 2009; Schimmenti, 2017). Dissociation may become a psychological organizer of entire personality of the individual (Chefetz, 2015; Schimmenti & Caretti, 2016). With multiple disconnected mental states and exclusion of mental contents from awareness (Bromberg, 1998 & 1995; Schimmenti, 2016), excessive activation can jeopardize mental and behavioral functioning thus resulting in pathological symptoms (Schimmenti, 2018).

Dissociative reactions are considered as emotional numbness, detachment of self, lack of awareness of surroundings and events, distortion of reality (derealization) and time, experience fragmentation of self (depersonalization), and amnesia (Murray, Ehlers, & Mayou, 2002; Sierra, Baker, Medford, & David, 2005). Pathological disorders are associated with dissociative symptoms depression, anxiety, somatoform, borderline personality disorder (APA, 1994) and emotions such as anger and hostility (Spindler & Elklit, 2003), absorption and irrational thinking (Norton, Ross, & Novotny, 1990).

Research have found a positive association between the severity of dissociation and emotional, physical and sexual trauma (Amos, Furber, & Segal, 2011; Schalinski & Teicher, 2015). Granieri, Guglielmucci, Costanzo, Caretti, and Schimmenti (2018) found positive association between dissociation and maladaptive personality with traumatic experiences. Briere (2006) found that violence, pain and emotional neglect

(Byrant, 2007), trauma exposure, posttraumatic stress and deficits in regulating affect are significantly associated with dissociation.

Oathes and Ray (2008) found that emotional process is facilitated in dissociation due to avoid further elaboration of upsetting emotion by being sensitive to emotional material. Difficulty identifying and describing feelings (Irwin & Melbin-Helberg, 1997), affective fluency, stress levels (Elzinga, Bermond, & van Dyck, 2002), and sleep disturbances (van der Kloet, Merckelbach, Giesbrecht, & Lynn, 2012) were also found associated with dissociative symptoms.

Putman (1997) has found disturbances in several dimensions of functioning in dissociative identity disorder such as problems in affect tolerance, state and mood instability, dissociative, interpersonal problems, impaired self-functions, somatization, cognitive distortions. Decrement in explicit memory of emotional material and negative words were associated with dissociation (Elzinga, Phaf, Ardon, & Van Dyck, 2003). Latalova, Prasko, Diveky, Kamaradova, and Velartova (2010) found a negatively association with dissociation and quality of life, satisfaction, enjoyment, and social activity.

### *Personality Functioning*

Personality disorders are impairments in core personality functioning and traits including deficits in affect regulation, self-worth, dysfunctional beliefs and interpersonal functioning (Hopwood, Schade, Krueger, Wright, & Markon, 2013). Pathology in personality traits dimensions are found associated with personality disorders. Anderson, Sellborn, and Salekin (2018) found schizotypal personality associated with detachment, psychoticism, and negative affectivity. Antisocial personality was associated with antagonism and disinhibition; borderline was associated with all personality trait domains; narcissistic was associated with antagonism and psychoticism. Avoidant was associated with detachment, psychoticism, and negative affectivity; obsessive-compulsive personality was associated with negative affectivity, and disinhibition.

Comorbidity related to personality disorders were found such as psychosis was associated with Cluster A; paranoid, schizoid, and schizotypal personality disorders (Berenbaum & Fujita, 1994; Kendler, McGuire, Gruenberg, & Walsh, 1995). Substance misuse, Post-traumatic stress disorder was associated with Cluster B;

antisocial, borderline, histrionic, and narcissistic personality disorders (Zannarini, Frankenburg, & Dubo, 1998; Pagano, Skodol, & Stout, 2004). Cluster C; avoidant, dependent, and obsessive-compulsive personality disorders were associated with depression, anxiety, phobia, somatoform and eating disorders (Tyrer, Seivewright, Ferguson, & Tyrer, 1992; Rettew, 2000; Dolan-Sewell, Kreuger, & Shea, 2001). In addition, suicide risk, neuroticism, and violence were found associated with personality disorders (Schneider, Schnabel, & Wetterling, 2008; Yen, Shea, & Sanislow, 2009).

Psychological wellbeing, social functioning, and quality of life were found negatively correlated with personality dysfunction (Soeteman, Verheul, & Busschbach, 2008; Yang, Coid, Tyrer, 2010) and disorders (Rafanelli, Park, Ruini, Ottolini, Cazzaro, & Fava, 2000). Noren, Lindgren, Hallstrom, Thormahlen, Vinnars, Wennberg, and Barber (2007) compared patients without personality disorder with personality disorder patients. They found significance in personality disorder patients with vulnerability, disturbance in interpersonal relationships, subjective distress, suffering from symptoms, low wellbeing, and higher comorbidity. In addition, there was no difference in male or female impairment or distress.

Researchers have found that co-occurrence of other mental disorders with personality disorders have severe impact on health. Skodol, Grilo, Pagano, Bender, Gunderson, Shea, and McGlashan (2005) found that patients with major depression disorder and personality disorder significantly more impaired on emotional problems, social functioning, general health, wellbeing and role limitations compared to patients with major depressive disorder without personality disorders.

Pathological personality traits associated with mobility, problems with self-care, controlling impulsivity, impairment in work, deficient in functioning, and low life satisfaction (Wright, Calabrese, Rudick, Yam, Zelazny, Williams, & Simms, 2015; Chmielewski, Ruggero, Kotov, Liu, & Krueger, 2016). Hentschel and Pukrop (2014) found identity and self-direction, interpersonal functioning as empathy and intimacy were associated with five domains of pathological personality trait. Gongora and Castro Solano (2017) found association between severe personality trait levels and decreased mental health, and high health risk factors. Although the connection of personality and psychological and social wellbeing were found less significant,

Emotional wellbeing was associated with detachment and negative affectivity; Psychological wellbeing domain was associated with detachment and disinhibition; Social wellbeing domain was associated with detachment, negative affectivity, disinhibition, and antagonism.

Researchers also examined pathological personality traits with Five Factor personality model and clinical construct. Five Factor personality model studies found association between Detachment and Extraversion, Antagonism and Agreeableness, Disinhibition and Consciousness; and a positive association between Negative Affectivity and Neuroticism (Griffin & Samuel, 2014). Psychoticism was associated with construct such as absorption, unconventionality, experiential permeability, or intelligence (DeYoung, Grazioplene, & Peterson, 2012). Clinical construct studies found association between antagonism with behavioral deviance (Fossati, Krueger, Markon, Borroni, & Maffei, 2013) and drug consumption; Detachment and Antagonism with psychopathy (Strickland, Drislane, Lucy, Krueger, & Patrick, 2013); Negative affectivity with anxiety; Detachment and negative affectivity with depressive symptoms (Few, Miller, Rothbaum, Meller, Maples, Terry, & MacKillop, 2013).

### *Substance use*

Substance use affects physical and mental health and wellbeing negatively thus; it is a public health issue. Substance use are considered as alcohol, tobacco, and drugs use such as marijuana, cocaine, and hallucinogens. Substance use has been linked with excessive stress, depression, anxiety, suicidal behavior, hopelessness, aggression, personal conflict and failure, increased responsibility, low self-esteem, social and peer pressure, social and interpersonal impairment, functional problems, violence, inability to cope, and emotional difficulties (Cottrell, 1992; Sax, 1997; Aristeiguieta, 1998; Chan, Dennis, & Funk, 2008; Torrens, Rossi, Martinez-Riera, Martinez-Sanvisens, & Bulbena, 2012; Ahrnsbrak, Bose, Hedden, Lipari, & Park-Lee, 2017).

Substance use enhances pleasure activity that makes individual feel good for a short period. Aan Het Rot, Russell, Moskowitz, and Young (2008) and Battista, Stewart, and Ham (2010) found that substance use had improved sociability and reducing social anxiety during the effect of pleasure activity of the substance. Ayala, Roseman, Winsemani and Mason (2017) found that suicide ideation, cognitive deficits, impairment in academic performance and social activities were associated with

substance use among university students. Visser and Routledge (2007) found substance abuse increased with age, also a negative association between substance use and psychological wellbeing and life satisfaction. Lanier, Nicholson, and Duncan (2001) found that students who consume 0-1 or 3-4 drinks a week have lower general wellbeing than students who drink two drinks per week.

Family relationships are found to be a protective factor for substance use whereas peer relationships were found to be both risk and protective factor. Moore, Rothwell, and Segrott (2010) found that positive relationship with family associated with positive subjective wellbeing and reduced substance use, whereas support from friends was linked with increased use of substance and poor mental health, better subjective wellbeing and mental health was associated with peer connectedness.

Research has also found negative association between substance use and psychological wellbeing, life satisfaction and meaning (Harlow & Newcomb, 1990; Ryff & Keyes, 1995; De la Flor, 1997). It negatively affects subjective wellbeing by impairing psychological, physical and cognitive functions (Gonzalez, Reynolds, & Skewes, 2011). Aiyappan, Abraham, & Mary (2018) found that psychological wellbeing were better in those who were not under influence than those who consumed alcohol. Psychological wellbeing were significantly better in males than females. Psychological wellbeing can also be considered as a protective factor from substance use. Fontan (2009) found that psychological wellbeing dimensions autonomy, environmental mastery, self-acceptance and positive relations were predicted to contribute in the recovery of substance abuse.

### *Psychological Wellbeing*

Happier people have reported outcomes as better physical health, higher education, social assurance, life security, and governance (Inglehart & Klingemann, 2000; Tay, Kuykendall, & Diener, 2014; Xu & Roberts, 2010). Studies have shown individuals with higher happiness levels are more likely to be prudent (Guven, 2012), show empathy and compassion to one in distress (Nelson, 2009); donate and volunteer for causes (Priller & Schupp, 2011; Aknin, Barrington-Leigh, Dunn, Helliwell, Burns, Biswas-Diener & Norton 2013); be productive, satisfied and committed to their careers (Erdogan, 2012); implement in trafik rules (Goudie, Mukherjee, De Neve, Oswald, & Wu, 2012); engage in physical activity (Huang & Humphreys, 2012). In organizational

environment studies found that happiness at work was linked to job satisfaction, commitment, and engagement (Fisher, 2010).

Research studies found negative association with depression and psychological wellbeing in adolescents (Ruini, Belaise, Brombin, Caffo, & Fava, 2006; Ruini, Ottolini, & Tomba, 2009; Ruini, Vescovelli, Carpi, & Masoni, 2017), adults (Ryff & Singer, 1996; Moeenizadeh & Salagame, 2010), and older adults (Ryff & Keyes, 1995; Cesetti, Vescovelli, & Ruini, 2017). After controlling personality, negative functioning, previous depression, sociodemographic and physical health variables, a longitudinal study found that individuals who scored lower in psychological wellbeing were twice as likely to be depressed ten years later than those who scored greater wellbeing levels (Wood & Joseph, 2010). Ruini, Ottolini, Rafanelli, Tossani, Ryff, and Fava (2003) found from a 450 sample of participants psychological wellbeing related with relaxation, decreased hostility, depression, anxiety, and less physical symptoms.

Keyes (2017) has reported that mentally healthy adults, that is individuals free of a 12-month mental health and flourishing had the healthiest psychosocial functioning such as decreased helplessness and clear goals in life levels, increased resilience and intimacy levels. Chow (2017) found that psychological wellbeing related to family income, physical health, and positive relationships with others. Research studies found that people who report greater social support levels have highest level of wellbeing, improved physical health, low level of depression and loneliness (Cohen & Wills, 1985; Cutrona & Russell, 1987; Pierce, Sarason, & Sarason, 1996; Roberts & Gotlib, 1997).

People who experience relatedness, belonging, have positive relationships, feel self-acceptance, and have a sense of meaning and purpose report higher happiness and life satisfaction (Emmons, 1991; Baumeister & Leary, 1995; Lucas, Diener, & Suh, 1996; Ryff & Singer, 1998; Myers, 2000). Research also suggested that to pursue and accomplish intrinsic goals that is connected to self, values, and aspiration or to achieve autonomy, competence, and relatedness contribute more to wellbeing than other goal-oriented activities (Kasser & Ryan, 1993; Oishi, Diener, Suh, & Lucas, 1999; Sheldon & Elliot, 1999; Sheldon, Ryan, Deci, & Kasser, 2004).

Research studies based on Seligman's theory of wellbeing found meaning and engagement dimensions significantly linked with greater life satisfaction while

pleasure showed low correlation (Park, Peterson, & Ruch, 2009; Schueller & Seligman, 2010). Engagement was the highest to increase positive affect and contribute to satisfaction of life, motivation, activity, and meaning (Peterson, Park, & Seligman, 2005; Vella-Brodrick, Park, & Peterson, 2009; Ruch, Harzer, Poyer, Park, & Peterson, 2010). Kern, Waters, Adler, and White (2015) found that high PERMA factors are associated with greater physical health, life and job satisfaction, and organizational commitment.

Studies examining PERMA model have found that positive emotions experienced over the past few weeks were linked with positive outcomes such as life satisfaction, meaning of life, hope, gratitude, school engagement, physical vitality and activity, good relationships, and job success (Howell, Kern, & Lyubomirsky, 2007). Lyubomirsky, King, and Diener (2005) found positive affect effect success and health outcomes, while lowering incidence of morbidity, symptoms and pain (Pressman & Cohen, 2005). Studies have shown loneliness to be a risk factor for poor health and impaired function, in addition evidence also shown that people who receive support from close relationships and family members associated with higher wellbeing scores, and are less likely to become sick and to die early in their lifespan (Hawley & Cacioppo, 2010; Perissinotto, Cenzer, & Covinsky, 2012).

Social relationships especially social support has been related to decreased depression and mental disorders, greater physical health, decreased mortality risk, and healthier behaviors (Tay, Tan, Diener, & Gonzalez, 2012; Taylor, 2011). High engagement enhances efficacy, performance (Page & Vella-Brodrick, 2008), and reduces work burnout. Hamdan-Mansour, Hamaideh, Arabi, and Azzeghaiby (2014) found that academic accomplishment was positively associated with perceived positive wellbeing (Presteasa, Axante, Cristea, & Presoteasa, 2016), social support, self-esteem (Duru & Balkis, 2017), motivation, life satisfaction, and optimism.

## **2.2. Religion**

Religion is a multidimensional and a complex system that has been a part of human lives since the beginning of time. The diversity of religions and confusion of what constitutes a religion it is hardly impossible to develop a universal theory or definition that encompasses all religions (Cohen & Johnson, 2009). The general agreed definition is considered to be religion is related to the sacred with beliefs, practices, and rituals.

Beit-Hallahmi and Argyle (1975) refer to religion as systems that hold belief in a divine, act of worship, and practice rituals towards divine, while Dollahite (1998) describe religion as a search of the sacred enhanced with teachings and narratives one attains from a covenant faith community.

To Hill, Pargament, Hood, McCullough, Swyers, Larson, and Zinnbauer (2000) religion is a process starting from the search of the sacred, attempt of identifying it, maintaining it within religious experience, and to modify the sacred through this process. McCullough and Willoughby (2009) describes religion as cognitive recognition, affect and behavior, or noncognitive supernatural interaction, which plays a part in human affairs.

Considering numerous definitions the following was seen fit to describe religion and its characteristics; Religion is awareness, commitment, devotion, and belief of the divine and sacred, a search of ultimate meaning of existence, and an expression faith through practice of rituals and behavior. Religion supplies rationale of order and purpose with a framework for determining norms, values, ethics and morality. It provides an understanding of life beyond the human limits that give harmony to the mundane and extraordinary.

Religion effects individual's feelings, thoughts, and behaviors from the search of the sacred, the need of social identity, affiliation, and wellness (McCullough, Kilpatrick, Emmons, & Larson, 2001). Religion is a predictor of altruism and volunteering, also is associated with the capacity to forgive, kindness, compassion, involvement in religious attendance (Smith, Fabricatore, & Peyrot, 1999). Religion helps people cope with illness, major stress and life concerns offering hope, comfort, support, strength, and guidance by belief in God and prayer (Yinger, 1970; Narayanasamy, 2002).

Researchers found that beliefs and religious practice contribute in self-care and avoid depression, rationalize suffering, and reduce stress (Pargament, 1997; Rye, Pargament, Ali, Beck, Dorff, & Hallisey, 2000; Sánchez, 2009). Pargament (2001) identifies five functions of religion that serves purpose in daily crises. Religion (1) offers an understanding and interpretation in the face of difficulty that gives a significance or sense, (2) gives the feeling of control and power by offering methods beyond the individual's resources, (3) offers comfort by reducing anxiety of the unknown, (4) facilitates social cohesion to grow social solidarity and identity, and (5) plays a

conservative role by help seek meaning in life and maintain sense, control, comfort, intimacy, and closeness to God.

The empirical evidence of religion was faced with a period of duration due to the nature of the field, the contradictions of scholars and environmental situations. Religion's effect can date back to the early scholar of the 12<sup>th</sup> century; Al-Ghazali (1058-1111) described self as the centered nature of human being the cause of misery and happiness. He viewed integration of spirituality and body contributed personality, believed that equivalent of normality was being close to God, whereas abnormality was led by distancing yourself from God (Abu-Raiya, 2012). Thus, the integration of body and spirit is personality.

In the beginnings of psychology, religion was an interest despite contradictory views on religion such as, Freud (1927/1961) associated religious beliefs and practices with repressed instincts, intrapsychic conflicts and helplessness thus denied the existence of religious sentiment in the psyche, expressing a negative role of religion in psychological wellness (Abu-Raiya, 2012). Jung (1938) on the other hand suggested that religion , in an uncertain world, is a source of meaning and stability thus; can have a positive effect on health of human psychological behavior (Abu-Raiya, 2012). In the 21<sup>st</sup> century, after a gap in the field of psychology of religion, research on the effect between the two concepts has increased (McSherry & Cash, 2004; Paley, 2008; Peteet, Lu, and Narrow, 2011).

Even though there is still some rejection toward religion in the field of science, there is various evidence associating religion with mental disorders and psychological wellbeing (Levin 2010; Hefti 2011; Abdel-Khalek, 2010). Scholars have established multiple instruments to measure religiosity such as affiliation, commitment, practice, belief, intrinsic and extrinsic religious orientation (Allport and Ross, 1967) and religious attitude (Francis and Stubbs, 1987). The potential benefit of religion as a resource was pointed out however; there is another part to consider that effect mental health negatively, which are religious fundamentalism and religious struggle (Exline, Pargamnet, Grubbs, & Yali, 2014).

### **2.2.1. Definition of Religious Attitude**

Pargament (1997) defined religiosity as values, beliefs, behaviors, and identity of an individual that focuses on the sacred or religion aspects that are functional. Iannello,

Hardy, Musso, Lo Coco, and Inguglia (2019) operationalized religiosity as a particular worldview and community associated with beliefs and practices. Being a multidimensional concept religiosity consists of belief, practice, rituals, value and affect that are part of cognitive, emotional, behavioral, and relation process (Hackney & Sanders, 2003). These processes form an attitude toward religion, which is a mental state of readiness, organized through experience, exerting a direct influence on responses with which it is related.

Evaluation as positive or negative on humans, objects or thoughts are regarded as attitudes (Aronson, Wilson, & Akert, 2010). Heidari Rafat and Enayati Novin far (2010) defined religious attitude as being integrated in the monotheistic faith and beliefs that considers God as the center and it regulates values, ethics, customs and human behavior towards each other, nature and himself. The following approach of religious attitude by Francis (1978) was seen appropriate for the current study. Francis adapted the attitude theory in social psychology and applied it to measure religiosity by how individuals feel toward or against religion throughout the lifespan. Taking into account the attitude theory, behavior could be predicted by knowing an individual's attitude toward religion.

The attitudinal dimension of religiosity, distinguishes from cognitive and behavioral dimensions, and personal and contextual factors (Francis & Stubbs, 1987). Attitude thus, is a result of positive or negative evaluation formed by thoughts, beliefs, emotional reaction, and behavioral patterns appointed from religion (Myers, 1990). Meyer states three conditions to occur for an attitude to predict behavior: (1) decreasing external factor effect on attitude and behavior, (2) observed behavior linked with attitude, (3) predicted behavior by salience of attitude.

### **2.2.2. Definition of Religious Struggle**

Puffer (2018) defined religious struggle as a cognitive phenomenon; as being in a state of hesitation, uncertain and questioning religious tenants, religious commitment being suspended, self-disputing, or separating options. McConnell, Pargament, Ellison, and Flannelly (2006) states expressing conflict, questions and doubt regarding matters of faith, God and religious relations is termed as religious struggle. Ano and Vasconcelles (2005) defined religious struggle as reflecting negative attitudes toward God and having a strained meaning system. Pargament, Murray-Swank, Magyar, and Ano

(2005) stated religious struggle as feeling abandoned by or angry at God, experiencing conflict with others regarding religious beliefs or practices, or struggle with doubts regarding beliefs. The following definition of religious struggle was appropriate for the study.

Struggle is a conundrum of one's belief, practice, or experience cause or perpetuate distress. This distress occur as experiencing a negative emotion, or represent an internal conflict experienced by thought of feelings that cannot be reconcile. Exline (2013) defines religious struggle as religious beliefs, practice or experience becoming a focus or a source of negative thoughts, emotions, concern, tension or internal conflict. Exline and Rose (2013), characterize religious struggle as three main domains that are supernatural struggles, interpersonal struggles, and intrapersonal struggles. Supernatural Struggle (SS) focuses on beliefs about supernatural agents. SS has two subtypes that are Divine Struggle, which is centered on beliefs about God or perceived relationships with God and the second one is Demonic Struggle, which focuses on concern of the devil or evil spirits attacking individual and causing negative events.

The second religious struggle domain is Interpersonal Struggle, which focuses on negative experiences involving religious people or institutions and conflict with others on religious issues. The third religious struggle domain is Intrapersonal Struggle (IS) which focuses on one's own thoughts and actions, as Moral Struggle, Doubt related Struggle, and Ultimate-Meaning Struggle are three subtypes of IS. Moral Struggle focus on people's experience of conflict to follow moral principles or excessive feeling of guilt in response to perceived transgressions. Doubt-related struggle focus on people who are troubled by doubts or questions about their beliefs. Ultimate-meaning struggle consists of people who feel a lack of deeper meaning in life.

### **2.3. Relationships between Mental Health and Religion**

Mental health effects human being functions in major life domains thus discovering and managing factors that can protect and enhance mental health is important. Religion is a factor that affects health in many aspects by; creating positive attitude in face of adversity, giving meaning and purpose in life, enhancing ability to do things, creating hope that lead to motivation, giving sense of control, enhancing decision making by offering certain useful pattern, and offering religious social support (Koeing, McCullough, & Larson, 2001; Marashi, 2004; Exline & Rose, 2013). Especially for

young and middle adults in their transient period, religion is an important support system by offering comfort, coping and strength (Hsien-Chuan, Krgeloh, Shepherd, & Billington, 2009).

Evidence on the connection between religion and mental health have increased, outcomes showed positive link between religion and psychological wellbeing and negative link with mental disorders. Religious involvement is related with physical and mental wellbeing, hope, optimism, purpose and meaning of life, adjustment, positive social attitudes, and with mental disorders such as depression, anxiety, fear, suicide, delinquency, and substance abuse (Burris, Brechting, Salsman, & Carlson, 2009; Koenig, McCullough, & Larson, 2001; Larson & Larson, 2003; Baetz, Griffin, Bowen, Koenig, & Marcoux, 2004). In the meantime, there is also empirical evidence on negative association between religiosity and wellbeing (Schaefer, 1997; Shreve-Neiger & Edelstein, 2004), and no association between the two variables (Lewis, Lanigan, Joseph, & de Fockert, 1997; O'Conner, Cobb, & O'Connar, 2003).

### **2.3.1. Mental Disorders and Religiosity**

A growing body of research has explored association between religious involvement and various aspects of religiosity and clinical diagnoses of mental disorders. The findings suggested connection between religiosity and low level of depression, anxiety, suicide, substance use, psychotic, and other psychiatric disorders (George, Ellison, & Larson, 2002; Koenig, 2009; Hefti 2011). Galek, Krause, Ellison, Kudler, and Flannelly (2007) examined religious doubt and mental health from an online survey, and found positive association between religious doubt and mental health problems such as depression, anxiety, phobia, paranoia, obsessive-compulsive symptoms, and hostility.

#### *Depression and Anxiety*

There has been controversial findings between depression and religiosity. Pérez, Sandino, and Gómez (2005) found actively belonging to a religious group and participating in religious activities were associated with low depression in both adult males and females. Amrai, Zalani, Arfai, and Sharifian (2011) found depression and anxiety levels negatively associate with religiosity. Gupta, Avasthi, and Kumar (2011) examined 60 depressed patients with level of religious faith and belief. Findings

indicated that greater religiosity had a significant effect on depression levels especially hopelessness and suicide intent domains.

Other studies on religious affiliation, church attendance, intrinsic religiosity and positive religious coping were associated with lower depression and anxiety levels, whereas extrinsic religiosity and negative religious coping were associated with higher depressive and anxiety symptoms (Moreira-Almeida, Neto, & Koenig, 2006; Smith, McCullough, & Poll, 2003; Koenig, King, Carson, 2012). On the other hand, a prospective cohort study by Leurent, Nazareth, Bellón-Saameño, Geerlings, Maaroos, Saldivia and King (2013) on adult participants from seven countries (United Kingdom, Spain, Slovenia, Estonia, Netherlands, Portugal, and Chile) were followed at 6 and 12 months. They found that higher levels of religious belief had increased incidence of depression than those who did not. Park, Hong, and Cho (2012) examined religious values with depression, anxiety, and substance use in all belief systems in Korea. Strong religious values among Protestants were positively associated with greater anxiety symptoms and decreased substance use levels, and Catholics with greater depression symptoms.

At the same time, Hertsgaard and Light (1984) have found positive association between religiosity as in church attendance and greater depression and anxiety symptoms when compared with Catholic and non-religious girls, and Krause and Van Tran (1989) have not been able to find any association between religious involvement with low depression and anxiety levels.

Studies have documented connections between religious struggle and emotional distress (Ellison, Chistopher, & Lee 2010), depression (Ano & Vasconcelles 2005; Park, Brooks, and Sussman 2009; Pirutinsky et al. 2011), higher mortality rates (Pargament, Kenneth, Harold, Koenig, Tarakeshwar, & Hahn, 2001) and greater anxiety (McConnell, Kelly, Kenneth, Pargament, Christopher, Ellison, & Flannelly, 2006). Rosmarin, Pargament, and Flannelly (2009) with adult Jews sample have found religious struggle related with worry, anxiety, and depression, poorer physical and mental health. Braam and Koenig (2019) religiosity was associated with better course of depression whereas religious struggle was significantly associated with more depression.

### *Anger*

Religiosity provides the ability to cope with stressors, thus helps regulate emotions in adverse situations. Research found significant higher religiosity, strong religious backgrounds and consoled by church choose non-aggressive paths more likely. (Brinkerhoff, Grandin, & Lupri, 1992). In addition, studies have found religious doubt to be correlated positively with negative feelings such as anger, confusion (Gall & Grant, 2005), tension, distress, conflict (Hood, Spilka, Hunsberger, & Gorsuch, 1996), shame and guilt. Watkins (2003) reported religious commitment and church attendance on a regular basis was linked with lower levels of violence. Evans, Cullen, Dunaway, and Burton (1995) found religiosity and private religious activity had negative relationship with criminality. Pearce, Jones, Schwab-Stone, and Ruchkin (2003) found that having religious social networks significant associated with inhibited aggressive behavior.

At the same time, Ellis and Thompson (1989) positive views about church were associated with higher adherence to religious ideas and view religion favorable than people who had negative views about church. People who had negative views about church and low levels of religiosity reported higher rates of criminal activity. When negative and positive views of church was not accounted for no relationship was found between religiosity and criminal behavior. On the other hand, Hertsgaard and Light (1984) have found positive association between religiosity as in church attendance and high levels of hostility when compared with Catholic and non-religious girls.

### *Mania*

Mania includes elevated mood that progresses to a general sense of wellbeing (Mitchell & Romans, 2003). During this period, research has been observed that religion is a high cognitive theme (Winokur, Clayton, & Reich, 1969) as well as religious delusions. Findings have reported that bipolar disorder patients had high levels of conversion and experience of salvation, higher use of religious coping, presence of mystical symptoms, and religious involvement as in church attendance, private practice, and influence of belief (Kirov, Kemp, Kirov, & David, 1998; Mitchell & Romans, 2003; Stroppa & Moreira-Almeida, 2009). Cruz, Pincus, Welsh, Greenwald, Lasky, and Kilbourne (2010) assessed 335 bipolar patients on the relationship between frequency of religious activity such as church attendance, private

religious practice and religious belief with different states of bipolar disorder. They found that bipolar patients in mixed state held strong religious beliefs and attended private religious functions such as meditation and prayer, than those in euthymic state. Many of them self-reported that religious beliefs helped them manage the symptoms in the mixed state, others reported having feelings of conflict and distress, however they found that depression and mania states were not related with church attendance and influence of beliefs.

### *Sleep Problem*

Sleep is a critical component of health that can cause dysfunction in human life if disrupted. There has been few studies on the association between religion and sleep. Hoch, Reynolds, Kupfer, Houck, Berman, and Stack (1987) compared Catholic nuns with community women and reported that nuns had prolonged and higher quality of sleep than other women. Hill, Burdette, Ellison, and Musick (2006) found that regular attendance to religious activities was positively linked with sleep quality and healthy behaviors in adults. Ellison, Bradshaw, Storch, Marcum, and Hill (2011) explored the connection between religious doubt and sleep, and found a negative association between doubt and self-rated sleep quality and a positive association with sleep problems and psychological distress.

### *Somatic*

Little research has investigated the connection between religion and somatic symptoms and somatization. Religiosity has been linked negatively with low psychosomatic symptoms and somatization is positively associated with high religious struggle (Ellison, Fang, Flannelly, & Steckler, 2013; Krause & Wulff, 2004). Pargament, Smith, Koenig, and Perez (1998) found that among college students experiencing religious struggle was related with greater emotional distress and psychosomatic symptomatology. McConnell et al. (2006) found high levels of religious praying was significantly associated with low anxiety and somatization and also negative religious coping strategies (religious struggle) was linked with higher obsessive-compulsiveness, anxiety, depression, paranoid ideation, and somatization symptoms.

Oti-Boadi and Asante (2017) found significant relation between positive religious coping with low anxiety and somatization levels, and negative religious coping

strategies with high anxiety and somatization levels among women participants. In addition, Krok (2014) reported association between religiousness and social support with mental health. Religious intrinsic orientation, prayer, experience and cognitive interest were associated with low somatic symptoms whereas extrinsic orientation and support seeking was associated with high somatic symptoms. Thus, Krok argued that religious intrinsic orientation, praying more and having religious experience predict less exposure to somatization and negative somatic feelings.

### *Suicide Ideations*

Religion has a protective factor against mental disorders, suicide behavior and ideation is one of them. Research has shown that religious belief and commitment, prayer, and activities reduce suicide ideations and attempt (McCullough & Larson, 1999; Dervic, Oquendo, Grunebaum, Ellis, Burke, & Mann, 2004; Hatami, Razavi, Eftekhar, & Majlesi, 2006; Rasic, Robinson, Bolton, Bienvenu, & Sareen, 2011). Beigzade and Pilevarzadeh (2016) found religious intrinsic orientation and belief to be associated with high suicidal ideation and no significant difference between genders.

Other documented findings show positive association between religious struggle and high suicide ideation. Rosmarin, David H., Bigda-Peyton, Ongur, Pargament, and Björgvinsson (2013) examined religious coping and suicide among psychotic patients and found that negative religious coping related with greater frequency and intensity of suicide ideations and affective symptoms. In addition, Exline, Julie, Yali, and Sanderson (2000) found religious strain, religious interpersonal conflict, and religious fear and guilt was associated with greater levels of suicidality.

### *Psychosis*

Religiosity and psychosis connection has been verified since the early times of psychiatry. Observing his psychotic patients, Emil Kraepelin found a frequent appearance of mystical and religious content. Freud and G. Stanley Hall believed that religious belief caused neurosis (Koenig, 2007). Religious experiences may involve beliefs in delusional and hallucination characteristics, external influences on thought and behavior hence may be confused with psychotic symptoms (APA, 1994). Religious content may be a present symptomatology in psychotic patients and may occur in nonclinical populations too (Ohayon, 2000; Van & Kapur, 2009).

There are contradicting evidence involving religion's effect with psychotic patients of symptoms, evidence have found religion to be a source of hope and others found it to lead to desperation (Mohr, Brandt, & Borras, 2006; Menezes & Moreira-Almeida, 2010). Verghese, John, and Rajkumar (1989) have found association between low religiosity with high psychosis symptoms. Mohr and Huguelet (2004) found association between religious beliefs and psychotic symptoms as a protective factor and a risk factor for distress. They found out of 115 schizophrenic patients, some patients (71%) were strengthened and felt help by religious belief, whereas others (14%) felt burdened and demoralized by religious activities.

Mohr, Borras, Rieben, Betrisey, Gillieron, Brandt, and Huguelet (2010) examined religiosity as in religious history, belief, activites, support from community and the salience of religion with schizophrenic outpatients in 3-year follow up study. They found 63 % of the patients' religion was stable over time, 20% of them had positive changes such as increase in religiosity, and 17% had negative changes as reduction in religiosity levels. The study also found that patients whose religiosity levels changed over time was related with reduced levels of subjective quality of life, social functioning and self-esteem. Those whom religiosity levels were stable were linked with greater life satisfaction and satisfied social activities. Having religious practice, activitites and support by religious community was related with meaning in life, meaning to illness, help cope with and gain control to illness. Thus concluded that religion influenced the content of thoughts and consequently behavior and the outcome of the patients.

### *Memory Problem*

Memory problems and cognitive dysfunctions may result in functional impairments and behavioral disorders. Dementia, Alzheimer's syndrome is one of neurocognitive disorders that result in decline in social, behavioral, and cognitive functions (APA, 2013). Religiosity is a benefactor in cognitive disorders, studies have shown with Alzheimer's disease that greater religiosity and private religious practice such as prayer, Bible study, and meditation was related with slower progress in cognitive and behavioral decline (Kaufman, Anaki, Binns, & Freedman, 2007; Jung, Lee, Shin, Roh, Lee, Moon, & Kim, 2019).

Coin, Perissinotto, Najjar, Girardi, Inelmen, Enzi, and Sergi (2010) examined caregivers and 68 outpatients of Alzheimer disease and grouped them in high religiosity and low religiosity groups by the measures of religious attendance, prayer, study of religious literature, and observe religious programs on electronics in a one year follow up. They found that high religiosity was related with higher levels of religious attendance, behavior and practice. All patients showed decline in functional abilities in one year follow up, cognitive, function and neuropsychiatric scores of high religiosity group showed no significant decline however low religiosity group associated with worse cognitive functioning and behavioral disturbances. High religiosity group showed improved recall ability, and low religiosity group deteriorated in attention, calculation, registration, and orientation in cognitive functions.

Research on religious struggle suggest positive relationship with cognitive impairment. Pargament, Koenig, Tarakeshwar, and Hahn (2004) examined religious coping, psychological and physical functioning among medically ill elderly inpatients. They found that negative religious coping subscales; passive religious deferral and pleading for direct intercession, reappraisal of God's power, and punishing God reappraisal were significantly associated with lower levels of cognitive function. Poor quality of life and cognitive functioning, and depression were linked with spiritual discontent and feeling of being punished by God. Seeking support from religious people and religious activities predicted improved cognitive status.

#### *Repetitive thought and behavior (OCD)*

Religion and OCD are intertwined that religion concept is seen common in OCD symptoms. Intrusive religious or sinful thoughts, compulsive praying, excessive morality, cleaning and washing rituals, and repetitive reassurance seeking in religious aspects. Nelson, Abramowitz, Whiteside, and Deacon (2006) found that intrusive negative religious thoughts were higher in Protestant OCD patients than OCD patients without religious affiliation. Yorulmaz, Gençöz, and Woody (2009) found that more OCD cognitions and symptoms were reported from people who scored higher religiosity (e.g. religious affiliation and commitment) than people who had low levels of religiosity. Previous studies have found that OCD patients and nonclinical participants with high religiosity were at risk of meeting criteria or having severe

symptoms for OCD (Koenig, Ford, George, Blazer, & Meador, 1993; Abramowitz, Huppert, Cohen, Tolin, & Cahill, 2002), and endorsing religion themed OCD symptoms (Nelson et al., 2006).

High devotion of religion does not necessarily develop OCD, the association between increased religiosity and OCD may indicate that OCD may lead to more devotion that response in OCD symptoms (Himle, Chatters, Taylor, & Nguyen, 2011). Other studies found no association between religiosity and OCD, as Hermesh, Masser-Kavitzky, and Gross-Isseroff (2003) examined Jewish religiosity in OCD patients, panic disorder patients and a control group of surgical inpatients and found that OCD patients didn't differ in religiosity when compared with other patients. In the association of OCD, experiencing religious struggle/doubt appears to deteriorate symptoms. Higgins, Pollard, and Merkel (1992) found that higher religious conflict were associated with OCD patients than compared to other psychiatric disorders. Galek, Krause, Ellison, Kudler, and Flannelly (2007) found that doubt about religious faith was associated with high symptoms of OCD and sense of unease.

### *Dissociation*

Schumaker (1995) argued that being a unique human dissociation is an ability to manipulate reality by self-deception and automatic acceptance of suggestion, considering religious context religious rituals facilitates dissociation to occur. Thus, ritualistic religious behavior allows participants to enter an overt or implicit dissociative mental state (Price & Snow, 1998). Research has found positive relationship between religious dimensions such as; religious experience, prayer, attitude, ritual with high dissociation symptoms (Thalbourne, 2007; Breslin & Lewis, 2015). Simpson (1996) found that religious practice and rigid religious belief systems influenced the experience of dissociation. Dorahy, Schumaker, Krishnamurthy, and Kumar (1997) examined Indian and Australian students' religiosity by religious rituals, attendance, and attitudes with dissociation. They found that Indian students had greater religious rituality and dissociative score due to the belief that religious rituals are more in Hinduism.

Dorahy and Lewis (2001) found positive association between religious rituals, beliefs, and attitudes (e.g. church attendance, Bible reading, prayer) with dissociative levels; they concluded that individuals with less religious commitment and conviction were

not associated with dissociation. Binks and Ferguson (2013) found no connection between nonpathological dissociation with intrinsic and extrinsic religious orientation, however religious prayer was found to be linked with high levels of nonpathological dissociation, and religious beliefs were related with decreased nonpathological dissociation.

Research on association of religious struggle and dissociation is limited. Mungadze (2000) found association between patients with dissociative identity disorder and occurrence of negative religious coping strategies. Bell, Jacobson, Zeligman, Fox, and Hundley (2015) found negative religious coping strategies were associated with less education, lack of social support, and old age in trauma survivors with dissociative identity disorder. However, positive and negative religious coping orientation was both associated with coping dissociative identity disorder.

### *Personality Functioning*

On intrinsic religious orientation, Wulff (1997) found positive association with psychological adjustment, self-control, better personality functioning, and self-esteem. Rajaeei, Bayazi, and Habibipour (2010) found that religious beliefs linked with decreased identity crises, and with greater wellbeing of health. Religious involvement was related with personality characteristics; such as high levels of religious involvement was associated with lower levels of psychotism, and greater agreeableness, conscientiousness, and cooperativeness levels (Koenig, King, & Carson, 2012).

There is limited studies on the connection of religion dimensions and personality disorders. Research have found negative association between personality disorders (Power & McKinney, 2013) especially; borderline (Bennett, Shepherd, & Janca, 2013), schizotypal (Abbott, Do, & Byrne, 2012; Hanel, Demmrich, & Wolfradt, 2019), narcissism (Ghorbani, Watson, Krauss, Bing, & Davison, 2004), and antisocial personality disorder (Laird, Marks, & Matthew, 2011) and religiosity. Sansone, Kelley, and Forbis (2012) found negative relationship between borderline personality disorder patients with high religiosity and religious faith. Religious struggle has been associated with neuroticism, pessimism, negative affectivity (Ano & Pargament 2013), narcissistic qualities, and high levels of sense of entitlement (Grubbs, Exline, & Campbell 2013).

### *Substance use*

Religious beliefs and values are sources that give meaning, fill a void of existence, and help cope with stress thus are protective against development of substance abuse (Hodge, Cardenas, & Montoya, 2001). Religious involvement, coping and practice have been found associate with reduced risk of substance use (Grover, Davuluri, & Chakrabarti, 2014; Mohr, Brandt, Borras, Gillieron, & Huguelet, 2006; Huguelet, Borras, Gillieron, Brandt, & Mohr, 2009). Sinha, Cnaan, and Gelles (2007) found religiosity as in religious practice, attendance and importance associated with low substance abuse and risk behaviors (Barry & Nelson, 2005). Kendler, Liu, Gardner, McCullough, Larson, and Prescott (2003) found that religion domains such as; overall religiosity, involved with God, forgiveness, God as judge, social religiosity, and thankfulness were associated with reduced risk of substance use. At the same time, Herman-Stahl, Krebs, Kroutil, and Heller (2007) have found association between religiosity as in religious belief with substance abuse and Fallot and Heckman (2005) found no association between religious coping with substance use among women of trauma survivor as childhood abuse. It indicates that applying and maintaining religious belief and practice, one experience anxiety and distress that lead to increase in substance intact to overcome the stress and anxiety.

In opposed to religiosity, religious struggle can cause significant distress, experience a void, and conflict that may lead to destructive behaviors such as substance abuse to escape suffering. Thus, studies have found association between religiosity and low substance abuse, and association between religious struggle and high substance abuse (Kendler, Gardner & Prescott, 1997). Astin and Astin (2004) and Faigin (2012) found feeling distant from God, questioning their religious belief, and unsettlement of religious values are associated with high substance abuse in college students. Johnson, Sheets, and Kristeller (2006) examined college students, and found negative religious coping and feeling as Gods punishment were associated with low spiritual wellbeing and high levels of substance use, especially alcohol abuse.

#### **2.3.2. Psychological Wellbeing and Religiosity**

Worldwide, various religious dimensions' effect on wellbeing, quality of life, interpersonal relationships, prosocial behavior, tolerance, physical and mental health, and happiness has been accepted and is a relevant construct for Positive Psychology

(Pavot & Diener, 2008; Tsang & McCullough, 2003). Research has found an association between religiosity and psychological wellbeing, life satisfaction (Yoon & Lee, 2004), sense of existential achievement (Salgado, 2014), quality of life (Sawatzky, Ratner, & Chiu, 2005), happiness (Ferris, 2002), purpose in life and self-actualization (French & Joseph, 1999), and sense of life (Byrd, Lear & Schwenka, 2000).

Stroppa and Moreira-Almeida (2013) found positive link between intrinsic religiosity and positive religious coping strategies with quality of life especially psychological and environmental domains. Ismail and Desmukh (2012) found a significant negative link between religiosity and loneliness, suggesting that religious attendance and being in a religious community builds up social network and decreases the feeling of being lonely. The study also found negative religious coping strategies were related with low quality of life scores. Research on religious struggle found significant negative association with self-esteem, life satisfaction, adjustment and optimism (Hunsberger, Pratt, & Pancer, 2002; Krause, 2006).

Research on the dimensions' of PERMA was found positively associated with religiosity and positive emotions (Frederickson & Joiner, 2002), work engagement (Iddagoda & Opatha, 2017), job performance (Osman-Gani, Hashim, & Ismail, 2013), job satisfaction (King & Williamson, 2005), organizational commitment (Jamal & Badawi, 1993), interpersonal relationship and relationship quality (Perry, 2015), meaning of life, achievement and accomplishment (Mayrl & Oeur, 2009). Tennakoon and Wjajm (2018) found positive association between religiosity and employee engagement. Allgood, Harris, Skogrand, and Lee (2009) found significant association between high religiosity levels and high dedication to partners and moral obligation to relationship, which led to greater relationship commitment.

Steger and Frazier (2005) found positive link between religiosity with life satisfaction and wellbeing, and meaning of life was a mediating factor in the relationship. Suggesting that religious activities and feelings derive meaning of life that lead to wellbeing in religious individuals. Li and Murphy (2017) examined religiosity and academic performance in college students; they found that higher religiosity was associated with improved academic performance. Other studies have found association between religiosity and religious participation with increased level of academic

success and achievement, collage satisfaction, and overall wellbeing (Petts, 2009; Smith & Denton, 2005; Bowman, Felix, & Ortis, 2014).

There are limited studies on religious struggle and PERMA dimensions; nevertheless, findings showed negative association between religious struggle with distress, loneliness, negative emotions and decreased psychological wellbeing. Negative religious coping was positively linked with high loneliness and negative emotions (Park, Holt, Le, Christie, & Williams, 2018) and negatively associated with meaning in life (Krok, 2015), academic achievement (Turan & Çekiç, 2018), positive emotions, work engagement and autonomy (Rothmann & Buys, 2011), and social relationships (Ano & Vasconcelles, 2005).

The connection between religiosity and religious struggle researches has found religious involvement and belief negatively associate with divine, ultimate meaning and interpersonal struggles whereas moral and demonic struggles were positively associated with religious involvement, eventually influencing wellbeing (Exline et al., 2014; Novotni & Petersen, 2001). Zarzycka and Puchalska-Wasyl (2019) found religious struggle was negatively associated with life satisfaction, dimensions such as demonic, moral and interpersonal struggle was associated with religious decline.

In the light of the discussions in the literature review, the questions and related hypothesis of the study were put as follows:

#### **2.4. Research Questions and Hypothesizes**

What is the connection between mental health indicators and religiosity?

1. What are the connections of demographic variables with mental health indicators and religiosity?
2. What are the connections between main clinical symptoms (such as depression, anger, mania, anxiety, somatic symptoms, suicidal ideation, psychosis, sleep problems, memory, repetitive thoughts and behaviors, dissociation, personality functioning, substance use, and personality disorders) and religiosity (e.g. religious attitude and religious struggle)?
3. What are the connections between psychological wellbeing (such as positive emotions, engagement, relationships, meaning of life, accomplishment, physical health, negative emotions, and overall wellbeing) and religiosity (e.g. religious attitude and religious struggle)?

4. What is the relationship between religious attitude and religious struggle?
5. What is the relationship between psychological wellbeing with symptoms of mental-health disorders?

### *Hypothesis*

Considering the results of previous studies mentioned in the literature section, the hypothesis of this study, in connection with questions above, were worded (Creswell, 2013, pg.189-193) as follows:

*Hypothesis 1.* There is a relationship between demographic (age, gender, income, education) variables with mental health indicators (e.g. mental disorders and psychological wellbeing) and religiosity (e.g. religious attitude and religious struggle).

*Hypothesis 1a.* There is a positive relationship between age variable with psychological wellbeing and religious attitude, and a negative relationship between age variable with clinical symptoms and religious struggle.

*Hypothesis 1b.* There is a positive relationship between gender variable with clinical symptoms, psychological wellbeing, religious attitude, and religious struggle.

*Hypothesis 1c.* There is a positive relationship between income level with psychological wellbeing and religious attitude, and a negative relationship between income level with clinical symptoms and religious struggle.

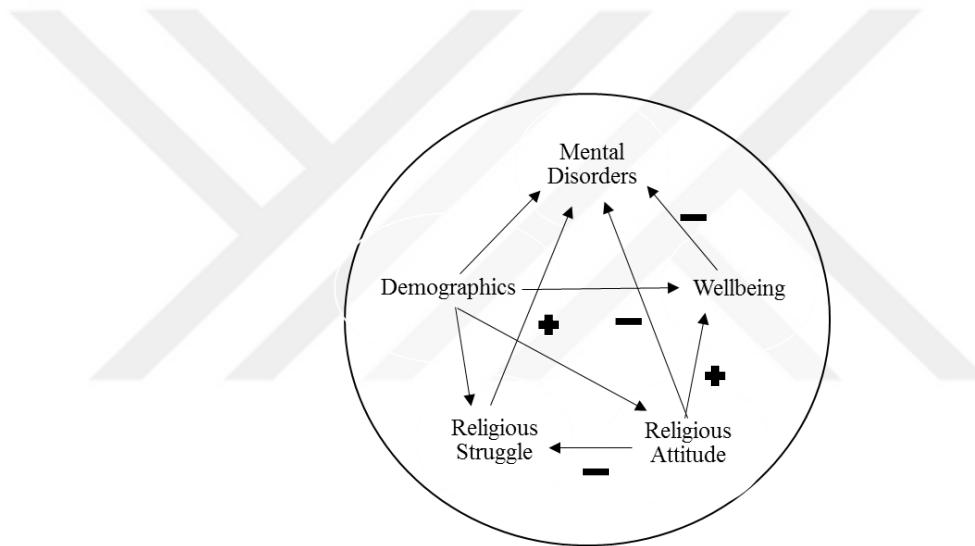
*Hypothesis 1d.* There is a positive relationship between education level with psychological wellbeing and religious attitude, and a negative relationship between education level with clinical symptoms and religious struggle.

*Hypothesis 2.* There is a negative connection between religious attitude and clinical symptoms as the following; depression, anger, anxiety, somatic symptoms, suicidal ideation, sleep problems, memory, personality functioning, substance use, and personality disorders, and there is a positive connection with religious attitude and clinical symptoms as the following; mania, psychosis, repetitive thoughts and behaviors, and dissociation. There is a positive connection between religious struggle and clinical symptoms.

*Hypothesis 3.* There is a positive connection between religious attitude and psychological wellbeing (positive emotions, engagement, meaning of life, relationships, and accomplishment, physical health, and overall wellbeing), and a negative relationship with negative emotions. There is a negative connection between religious struggle and psychological wellbeing and positive connection with negative emotions.

*Hypothesis 4.* There is a negative connection between religious attitude and religious struggle.

*Hypothesis 5.* There is a negative connection between psychological wellbeing and symptoms of mental-health disorders.



**Figure 2.1 Variables and Their Interconnections in the Present Study**

## CHAPTER III

### METHODS

The purpose of this study is to explore the relationships between religious dimensions (religious attitude and religious struggle) and mental health aspects (symptoms of mental health disorders and the aspects of wellbeing) among adults.

#### **3.1. Research Design**

With a quantitative approach, a cross-sectional correlational research design was chosen for the present study. It is known that cross-sectional correlational designs is used to compare different groups obtained in a single point in time and to examine relationships on psychological and religious construct used in the study (Coolican, 2014, pg.231-238). This design was chosen due to obtain large number of data in a diverse population to examine the relationship of variables in an efficient method and time. This study examined mental health indicators and religious dimensions with the use of a self-reported survey questionnaire to identify, analyze and describe the factors and relationship of mental disorders, psychological wellbeing, religious attitude, and religious struggle. The variables that will be used in this study can be seen in figure 2.1. above.

#### **3.2. Participants:**

The sample criteria was Turkish Muslims, ranged from 18 to 40 years of age in university population. Conventional convenience sampling method was used to collect data more efficiently, considering the accessibility and diversity of participants in a low cost and less time-consuming way (Lavrakas, 2008, pg.148-149; Jager, Putnick, Bornstein, 2017). Among 300 surveys that were distributed 279 people took part in the study (98 male and 177 female). Due to age criteria and missing data, 10 of them were excluded leaving a total number of 269 participants that consisted of 174 (65%) female, 91 (34%) male and 4 (1%) unidentified gender.

The age range of the participants were from 18 to 40 years and the mean age of 25.22 years ( $SD= 4.65$ ). Age criteria was used because of those age range are proven as a

transient and critical period in lifespan in aspects of religion and mental health (Jurewicz, 2015). Nationality and specific religion was a criteria to minimize disparity in university population because of the diversity. For descriptive and other characteristics, see Table 4.3. Only voluntary participants completed the questionnaire independently with pen and pencil. Participants were instructed to read the consent form carefully and were confident in confidentiality and anonymity. The questionnaire was completed and then given to the constructor.

### **3.3. Data Collection Instruments:**

The survey instrument consisted of six sections, total of 109 items, were used to assess demographics, psychological wellbeing, mental disorders and, religious attitude and struggle. Participants received a consent form stating anonymity and consent to participate in the research with demographic questionnaire; PERMA Scale to measure psychological wellbeing; DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure and The Personality Inventory for DSM-5—Brief Form (PID-5-BF) to measure mental disorders; Ok-Religious Attitude Scale to measure religious attitude; and Religious Struggle Scale to measure different sub-dimensions of struggle.

#### **3.3.1. Demographic Form**

Demographic questions included gender, age, income level, and education level. The questions were developed by Ok and Bolat, gender options were 1-male, 2-female, and 3-other; age was self-written as year; the options of income level was 1-very poor, 2-poor, 3-neither poor nor rich, 4-rich, and 5-very rich. Education level was optioned as 1-not schooled but literate, 2-elementary school graduate, 3-high school graduate, 4-undergraduate student, 5-university graduate, 6-masters student, 7-masters graduate, 8-doctoral student, 9-doctoral graduate, and 10-other. Each variable had one item consisting of a total four items, gender, income, and education items using a scoring of categorical scale, and age item self-written as year. For items and other descriptive characteristics, see Table 4.3.

#### **3.3.2. Measuring Wellbeing: The PERMA Profiler Scale**

Developed by Butler and Kern (2016), PERMA Scale assess 8 different dimensions, 6 of them having 3 items and two dimensions having one item, consisting a total of 23 items using a scoring interval Likert scale from 0 (not at all/never) to 10 (all the

time/completely). The scale aims to measure five dimensions of wellbeing, which in overall measures the optimal state of psychosocial functioning that occurs from well-functioning of several psychosocial domains. *P: Positive emotions* (3 items) measures the tendencies toward feeling contentment and joy; *E: Engagement* (3 items), measures being absorbed, interested, and involved in an activity; *R: Relationships* (3 items), measures subjective feeling of being loved, supported, and valued by others; *M: Meaning* (3 items), measures sense of purpose and direction in life, and feeling that life is worth living; and *A: Accomplishment* (3 items) measures the subjective feelings of working toward and reaching goals, and staying on and completing tasks and daily responsibilities.

The overall wellbeing (16 items) measures wellbeing with positive emotions, engagement, meaning, relationship, and accomplishment dimensions by adding 1 item of happiness. Butler and Kern added additional 3 dimensions consisting of 7 items to assess wellbeing, which are *N: Negative Emotion* (3 items) measures the tendencies toward feeling sad, anxious and angry; *H: Physical Health* (3 items) measures subjective sense of health, and feeling good and healthy; and *L: Loneliness* (1 item) measures subjective feeling of being lonely. Negative emotions and loneliness items were reverse-coded and added to prevent bias in the answers. For items and other descriptive characteristics, see Table 4.4.

Butler and Kern (2015, 2016) found the total inter consistency coefficient score of the scale ranged from .92 to .95, and the test retest correlation scores were .75 to .88. Subscale scores of inter consistency coefficient ranged from .71 to .88 for positive emotions, .60 to .81 for engagement, .75 to .85 for relationship, .85 to .92 for meaning, .70 to .86 for accomplishment, .70 to .77 for negative emotions, and .85 to .94 for physical health dimensions. The scale was translated in to Turkish by the author and supervisor of this thesis. The participants responded to the statement of “to what extent do you agree to following items”. Each of the items had five options in Likert scaling (not at all, a little, half the time, mainly, and completely).

### **3.3.3. Measuring Symptoms of Mental Health Disorders (I): DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult**

The DSM-5 Level 1 Cross-Cutting Symptom Measure developed by APA and translated to Turkish by OK, Yücekaya, and Yavuz, assesses symptoms of mental

health domains to identify psychiatric diagnosis using a self-rated measure (Ok, 2018). The scale consists of 23 items and 13 different psychiatric domains as the following: *Depression* (2 item) measures depressed mood and pleasure in activities; *Anger* (1 item) measures feelings of anger, and irritation; *Mania* (2 items) measures impulsivity and hyperactivity; *Anxiety* (3 items) measures feelings of worry, anxiousness, panic, and avoidance of anxious situations; *Somatic symptoms* (2 items) measures feelings of pain and being ill without medically explanation; *Suicide ideation* (1 item) measures ideation of self-mutilation.

*Psychosis* domain (2 items) measures delusions of sound and thoughts; *Sleep problem* (1 item) measures disturbance of sleep quality; *Memory problem* (1 item) measures cognitive disturbances; *Repetitive thoughts and behaviors* (2 items) measures unwanted thoughts or urges, and repeated actions of those thoughts; *Dissociation* (1 item) measures detachment of self and surroundings; *Personality functioning* (2 items) measures knowing self and aim of life, and feelings of attachment to others; and *Substance use* (3 items) measures alcohol, nicotine, and drug usage. For items and other descriptive characteristics, see Table 4.4. Each item on the measure is rated on a 5-point Likert scale over the past two weeks (not at all, slight or rare/less than a day or two, mild or several days, moderate or more than half the days, and severe or nearly every day).

### **3.3.4. Measuring Symptoms of Mental Health Disorders (II): The Personality Inventory for DSM-5—Brief Form (PID-5-BF)—Adult**

The Personality Inventory for DSM Brief Form (PID-5-BF) is developed by Krueger, Derringer, Markon, Watson, & Skodol (2012), and translated to Turkish by OK in collaboration with his research assistants, Yücekaya, and Yavuz (Ok, 2018). The scale assesses maladaptive personality traits that represent personality disorders in DSM-5, with a 25 self-rated items for adults of ages 18 and older. The sub-domains of the scale include; *Disinhibition* (5 items) that measures impulsive behavior toward immediate gratification without considering consequences; *Detachment* (5 items) measures avoidance of social and emotional interactions and restricted affectivity; *Psychoticism* (5 items) measures eccentric or unusual behaviors and thoughts regarding culture.

*Negative affect* (5 items) sub-domain measures intense experiences of negative emotions and its effect on behavior; and *Antagonism* (5 items) measures excessive

self-importance that expect special treatment, unaware of others feeling and needs, and using others for self-enhancement. For items and other descriptive characteristics, see Table 4.4. The scoring was modified to a 5 point Likert scale ranging from; agree not at all, agree a little, agree half the time, agree mainly, and agree completely. Krueger et al., (2012) found the inter consistency coefficient score for the scale ranged from .72 to .96.

### **3.3.5. Measuring Religiosity (I): Ok- Religious Attitude Scale**

Developed by Ok (2011), the scale assesses the degree of Islamic religiosity and consists of 8 items and 4 subscales on a 5-point Likert scale ranging from; agree not at all, agree a little, agree half the time, agree mainly, and agree completely. Subscales include; *Cognitive* domain (2 items) measures negative views about religion; *Emotional* (2 items) measures positive feeling in religious participations, *Behavioral* (2 items) measures religious practice; and *Relation to God* (2 items) measures feeling closeness and presence of God. Cognitive items are reverse coded. For items and other descriptive characteristics, see Table 4.4. The internal consistency score was found in ranging between .81 and .91 (Ok, 2011).

### **3.3.6. Measuring Religiosity (II): Religious Struggle Scale (RRS)**

Religious Struggle Scale developed by Exline, Pargament, Grubbs, and Yali (2014), consists of 26 items and measures experience of conflict or concern when the aspects of religious belief, practice and experience is centered on negative thoughts and emotions. The scale assess six different dimensions using a 5-point scale ranging from “Not at all” to “agree completely”. The dimensions include Divine struggle which measures negative emotions of conflict centered on beliefs about deity; Demonic dimension measures feeling of concern that the devil or evil spirits are attacking or causing negative events to the individual; Interpersonal struggle measures negative experiences and conflict with religious people or organizations.

Moral struggle measures personal conflict with attempts to follow moral principle or feeling intensive guilt in response to perceived transgression; Ultimate meaning measures concerns on a lack of perceived deep meaning in life; Doubt struggle measures concern and conflict by the doubts or questions on one’s own religious belief. Higher score on each dimension indicates greater struggle of that type (For items and other descriptive characteristics, see Table 4.4.). Exline et al., (2014) have found good

internal consistency scores as the following; divine  $\alpha = .93$ ; demonic  $\alpha = .93$ ; interpersonal  $\alpha = .85$ ; moral  $\alpha = .88$ ; ultimate meaning  $\alpha = .89$ ; doubt  $\alpha = .90$ . The scale was translated in to Turkish by a panel of four people including the author and supervisor of this thesis.

### **3.4. Ethical Issues and Application Procedure:**

A brief research information form and application letter with questionnaires and consent form was submitted to the college ethics committee for approval. After approval, a few people from different universities were contacted through phone and face-to-face meetings according to accessibility and were requested to conduct the survey. With regard to procedure, the survey was introduced to the conductors and qualifications for participation in the study were stated as 18 to 40 of age and Turkish citizens. The conductors after ending the lecture handed out the consent form and information about the study attached to each survey.

The conductors reminded anonymity, free of withdrawal and independent completion to the participants verbally. After reading and signing the consent form the completion of the questionnaire with pen and pencil approximately took 20 minutes with the supervisor of the conductors. After completion of the questionnaires, the conductors collected and submitted the data to the researcher. The raw data was then sorted out accordingly to age criteria and missing data and then numbered in an excel file. The data was then imputed by Statistical Package for the Social Sciences (SPSS) for analysis and result section. The whole study lasted about three years from March 2018, with the development of research ideas to August 2020 with the final submission.

### **3.5. Data Analysis**

After clearing data and removing unfilled or inconsistent fillings, the statistical analysis on the data involved descriptive results, reliability analysis, explanatory factor analysis, and pearson correlation. In addition the significance level of all tests were determined as  $p < .05$ . Descriptive and reliability statistics were used to describe mean, standard deviation, and Cronbach's alpha of demographic, mental disorders, wellbeing, and religion variables of the participants. Explanatory factor analysis was used to test PERMA, and Religious Struggle scale construct validity of the translated versions. Analysis of correlation was performed to test the relationship between religion, mental health indicators, and demographic variables.

## CHAPTER IV

### RESULTS

#### 4.1 Explanatory Factor and Reliability Analyzes

##### 4.1.1. Psychological Wellbeing: PERMA Profiler Scale

To explore the factorial structure of PERMA scale, loneliness and happiness items were excluded and a total of 21 items were subjected to an explanatory factor analysis with varimax rotation. The results of the factor analysis can be seen in Table 4.1. below.

**Table 4.1. Exploratory Factor Analysis Showing PERMA 21 Items and Factor Loadings From Rotated Component Matrix**

Items	Label	Factor Loadings						
		1 <b>P</b>	2 <b>E</b>	3 <b>R</b>	4 <b>M</b>	5 <b>A</b>	6 <b>PH</b>	7 <b>NE</b>
<b>Positive Emotion (3)</b>								
In general, how often do you feel joyful?	P1	.80						
In general, how often do you feel positive?	P2	.75						
In general, to what extent do you feel contented?	P3	.62						
<b>Engagement (3)</b>								
How often do you become absorbed in what you are doing?	E1		.78					
In general, to what extent do you feel excited and interested in things?	E2		.60			.41		
How often do you lose track of time while doing something you enjoy?	E3			.65				
<b>Relationship (3)</b>								
To what extent do you receive help and support from others when you need it?	R1			.76				
To what extent do you feel loved?	R2		.50		.50			
How satisfied are you with your personal relationships?	R3				.60			
<b>Meaning (3)</b>								
In general, to what extent do you lead a purposeful and meaningful life?	M1				.82			
In general, to what extent do you feel that what you do in your life is valuable and worthwhile?	M2					.64		
To what extent do you generally feel you have a sense of direction in your life?	M3					.77		
<b>Accomplishment (3)</b>								
How much of the time do you feel you are making progress towards accomplishing your goals?	A1					.83		
How often do you achieve the important goals you have set for yourself?	A2					.76		
How often are you able to handle your responsibilities?	A3					.78		
<b>Physical Health (3)</b>								
In general, how would you say your health is?	PH1						.84	
How satisfied are you with your current physical health?	PH2						.86	
Compared to others of your same age and sex, how is your health?	PH3						.84	
<b>Negative Emotions (3)</b>								
In general, how often do you feel anxious?	N1	.51						.45
In general, how often do you feel angry?	N2							.89
In general, how often do you feel sad?	N3	.41						.53
	Eigenvalue	7.18	.90	.96	1.60	1.39	1.83	.93
	% of var.	34.18%	4.31%	4.58%	7.60%	6.60%	8.71%	4.45%

Note: The scores below .30 were removed from the table to make it easier for readers to follow the content. To see the Turkish version of the items above see Appendix A.

As it can be seen in Table 4.1, the Kaiser-Meyer-Olkin measure of PERMA scale verified the sampling adequacy for the analysis,  $KMO = .90$ . Bartlett's test of sphericity  $\chi^2(210) = 2124.07$ ,  $p < .001$ , indicating that correlation structure is adequate for factor analyses. The maximum likelihood factor analysis with a cut-off point of .40 and the Kaiser's criterion of eigenvalues was forced into a seven-factor solution as the best fit for the data, accounting for 70.42% of the variance. Seven factor loadings

provided correspond to each domain of the PERMA scale. Positive Emotion's factor loadings of item one was .80, item two was .75, and item three was .62, the factor had an eigenvalue of 7.18 and accounted for 34.18% of the variance. Engagement factor loadings of item one was .78, item two was found .60 under Positive Emotions factor and .41 under Meaning Factor, item three was .65, the factor had an eigenvalue of .90 and accounted for 4.31% of the variance.

Relationship factor loadings of item one was .76, item two was .50, item three was .60, the factor had an eigenvalue of .96 and accounted for 4.58% of the variance. Item two showed double loadings one was in Relationship factor, and the other was in the Positive Emotions factor with a .50 factor loading. Meaning factor loadings of item one was .82, item two was .64, item three was .77, and the factor had an eigenvalue of .1.60 and accounted for 7.60% of the variance. Accomplishment factor loadings of item one was .83, item two was .76, item three was .78, the factor had an eigenvalue of 1.39 and accounted for 6.60% of the variance.

Physical health factor loadings of item one was .84, item two was .86, item three was .84, the factor had an eigenvalue of 1.83 and accounted for 8.71% of the variance. Negative emotions factor loadings of item one was .45, item two was .89, item three was .53, the factor had an eigenvalue of .93 and accounted for 4.45% of the variance. Item one with .51 and item three with .41 was also shown under the factor of Positive Emotions.

#### **4.1.2. Religious Struggle Scale**

The factorial structure of Religious Struggle Scale, all 26 items were subjected to an explanatory factor analysis with varimax rotation. The results of this factor analysis matrix is presented in Table 4.2. below.

**Table 4.2. Exploratory Factor Analysis Showing Religious Struggle 26 Items and Factor Loadings From Rotated Component Matrix**

Items	Label	Factor loadings						
		1 Di	2 De	3 I	4 Mo	5 Me	6 Do	
<b>Divine Struggle (5)</b>								
Felt as though God had let me down.	Di1	.88						
Felt angry at God.	Di2	.77						
Felt as though God had abandoned me.	Di3	.85						
Felt as though God was punishing me.	Di4	.60						
Questioned God's love for me.	Di5	.68						
<b>Demonic Struggle (4)</b>								
Felt tormented by the devil or evil spirits.	De1	.88						
Worried that the problems I was facing were the work of the devil or evil spirits.	De2	.77						
Felt attacked by the devil or by evil spirits.	De3	.83						
Felt as though the devil (or an evil spirit) was trying to turn me away from what was good.	De4	.58		.43				
<b>Interpersonal Struggle (5)</b>								
Felt hurt, mistreated, or offended by religious/spiritual people.	I1			.81				
Felt rejected or misunderstood by religious/spiritual people.	I2			.84				
Felt as though others were looking down on me because of my religious/spiritual beliefs.	I3			.73				
Had conflicts with other people about religious/spiritual matters.	I4			.69				
Felt angry at organized religion	I5			.43				
<b>Moral Struggle (4)</b>								
Wrestled with attempts to follow my moral principles	Mo1			.64	.38			
Worried that my actions were morally or spiritually wrong	Mo2				.76			
Felt torn between what I wanted and what I knew was morally right	Mo3				.68			
Felt guilty for not living up to my moral standards	Mo4				.79			
<b>Ultimate Meaning Struggle(4)</b>								
Questioned whether life really matters	Me1					.87		
Felt as though my life had no deeper meaning	Me2					.69		
Questioned whether my life will really make any difference in the world	Me3					.82		
Had concerns about whether there is any ultimate purpose to life or existence	Me4					.68		
<b>Doubt Struggle (4)</b>								
Struggled to figure out what I really believe about religion/spirituality	Do1						.77	
Felt confused about my religious/spiritual beliefs	Do2						.82	
Felt troubled by doubts or questions about religion or spirituality	Do3						.75	
Worried about whether my beliefs about religion/spirituality were correct	Do4						.81	
		Eigenvalue	2.60	1.39	9.64	1.09	1.81	2.06
		% of var.	10.00%	5.35%	37.06%	4.19%	6.96%	7.92%

Note: Di=Divine, De=Demonic, I=Interpersonal, Mo=Moral, Do=Doubt. The scores below .30 were removed from the table to make it easier for readers to follow the content. To see the Turkish version of the items above see Appendix B.

The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, KMO = .89. Bartlett's test of sphericity  $\chi^2(325) = 4493.38$ ,  $p < .001$ , indicating that correlation structure is adequate for factor analyses. The maximum likelihood factor analysis with a cut-off point of .40 and the Kaiser's criterion of eigenvalues greater than 1 yielded a six-factor solution as the best fit for the data, accounting for 71.49%

of the variance. Six factor loadings provided correspond to each domain of the Religious Struggle scale. Divine struggle factor loadings of item one was .88, item two was .77, item three was .85, item four was .60, and item five was .68, the factor had an eigenvalue of 2.60 and accounted for 10% of the variance. Demonic struggle factor loadings of item one was .88, item two was .77, item three was .83, and item four was .58, the factor had an eigenvalue of 1.39 and accounted for 5.35% of the variance. Item four with .43 was shown under the factor of Moral Struggle.

Interpersonal struggle factor loadings of item one was .81, item two was .84, item three was .73, item four was .69, and item five was .43, the factor had an eigenvalue of .9.64 and accounted for 37.06% of the variance. Moral struggle factor loadings of item one was .38, item two was .76, item three was .68, and item four was .79, the factor had an eigenvalue of .1.09 and accounted for 4.19% of the variance. The item one with .64 was shown under the factor of Interpersonal Struggle. Ultimate meaning struggle factor loadings of item one was .87, item two was .69, item three was .82, and item four was .68, the factor had an eigenvalue of 1.81 and accounted for 6.96% of the variance. Doubt struggle factor loadings of item one was .77, item two was .82, item three was .75, and item four was .81, the factor had an eigenvalue of 2.06 and accounted for 7.92% of the variance.

#### **4.2. Descriptive Results of Variables**

Variables related to participants' demographic backgrounds were analyzed and their descriptive results (i.e. frequency and mean etc. ) were presented in Table 4.3. below.

**Table 4.3. Descriptive and Frequency of Demographic Variables**

	<i>N</i>	<i>%</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>
<b>Gender</b>	265		1	2	1.66	.48
Male	91	34%				
Female	174	65%				
Unidentified	4	1%				
<b>Age</b>	265		20	41	25.22	4.65
18-29	222	83%				
30-40	43	16%				
<b>Income</b>	264		1	3	2.13	.42
Poor	8	3%				
Average	213	79%				
High	43	16%				
<b>Education</b>	266		1	3	2.24	.48
High School	6	2%				
University	190	71%				
Graduate	70	26%				
<b>University</b>	269					
Ibn Haldun	53	20%				
Istanbul Aydin	28	10%				
Medipol	27	10%				
Yeditepe	37	14%				
Istanbul	9	3%				
Beykent	12	4%				
Biruni	8	3%				
Kültür	15	6%				
Istanbul Ticaret	19	7%				
Yıldız Teknik	9	3%				
Üsküdar	26	10%				
Bahçeşehir	16	6%				

*Demographic Variables.* Data was gathered from surveys handed out to twelve different Universities as the following Ibn Haldun (n=53, 20%), Istanbul Aydin (n=28, 10%), Medipol (n=27, 10%), Yeditepe (n=37, 14%), Istanbul (n=9, 3%), Beykent (n=12, 4%), Biruni (n=8, 3%), Kültür (n=15, 6%), Istanbul Ticaret (n=19, 7%), Yıldız Teknik (n=9, 3%), Üsküdar (n=26, 10%), and Bahçeşehir (n=16, 6%) University. Among the 269 participants, a larger proportion of them were women (n=174, 65%) than male (n=91, 34%). A majority of the sample were young adults who had university degree with average income.

Age was grouped as young adult ages being 18 to 29 years (n=222, 83%) and middle adulthood ages being 30 to 40 years (n=43, 16%), mean age of 25.22 (SD=4.65). Education variable mean score was 2.24 (SD=.48), and was grouped as high school graduate (n=6, 2%), university students or graduate (n=190, 71%), and postgraduate

students or graduate (n=70, 26%). Income mean score was 2.13 (SD=.42) and was grouped as poor (n=8, 3%), average (n=213, 79%) and high (n=43, 16%) income.

The descriptive analyzes results of mental health-disorder indicators and religiosity are presented in the Table 4.4. below.

**Table 4.4. Descriptive Statistics of the Variables**

	<i>N</i>	<i>Alpha</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Deviation</i>
<b>PERMA Total (23)</b>	244	.91			3.40	.92
Positive Emotion (3)	263	.76	1	5	3.46	.91
Engagement (3)	266	.53	1	5	3.48	.89
Relationships (3)	268	.65	1	5	3.50	.86
Meaning (3)	256	.81	1	5	3.53	1.02
Accomplishment (3)	263	.80	1	5	3.59	.80
Negative Emotions (3)	263	.63	1	5	3.00	.87
Loneliness (1)	267		1	5	3.22	.97
Physical Health (3)	265	.85	1	5	3.47	.86
Happiness (1)	267		1	5	3.42	.83
Overall Wellbeing (16)	250	.90	1	5	3.50	.90
<b>Mental Disorders Total (23)</b>	252	.89			2.06	1.21
Depression (2)	265	.85	1	5	2.85	1.11
Anger (1)	264		1	5	2.61	1.10
Mania (2)	266	.51	1	5	2.35	1.19
Anxiety (3)	267	.65	1	5	2.42	1.11
Somatic (2)	267	.58	1	5	2.00	1.18
Suicide Ideation (1)	264		1	5	1.53	.95
Psychosis (2)	267	.68	1	5	1.39	.84
Sleep (1)	264		1	5	2.31	1.33
Memory (1)	264		1	5	1.86	1.16
OCD (2)	266	.74	1	5	2.07	1.24
Dissociation (1)	264		1	5	1.97	1.26
Personality Functioning (2)	266	.82	1	5	2.15	1.27
Substance (3)	268	.53	1	5	1.44	.98
<b>Personality Total (25)</b>	253	.87			1.97	1.15
Disinhibition (5)	266	.68	1	5	2.17	1.17
Detachment (5)	266	.70	1	5	2.14	1.17
Psychoticism (5)	267	.68	1	5	1.79	1.10
Negative Affectivity (5)	263	.67	1	5	2.15	1.20
Antagonism (5)	261	.75	1	5	1.63	.97
<b>Religious Attitude Total (8)</b>	262	.93			3.01	1.54
Cognitive (2)	268	.88	1	5	1.46	.97
Emotional (2)	265	.85	1	5	3.19	1.34
Behavioural (2)	267	.91	1	5	3.33	1.27
Relation (2)	266	.90	1	5	4.06	1.25
<b>Religious Struggle Total (26)</b>	258	.93			1.76	1.16
Divine Struggle (5)	267	.86	1	5	1.40	.86
Demonic Struggle (4)	265	.78	1	5	1.27	.76
Interpersonal Struggle (5)	264	.85	1	5	1.77	1.15
Moral Struggle (4)	262	.80	1	5	2.06	1.19
Ultimate Meaning Struggle (4)	265	.87	1	5	2.38	1.43
Doubt Struggle (4)	265	.92	1	5	1.74	1.16
Valid N (listwise)	210					

*Psychological Wellbeing.* Descriptive analysis of PERMA Profiler Scale consists of a total mean score of 3.40 out of 5.00, standard deviation (SD) of .92 and Cronbach's alpha coefficient being .91, which shows high reliability of the scale (Table 4.4.). Positive emotions' mean score is 3.46 (SD=.91) and  $\alpha=.76$ , Engagement's mean score

is 3.48 (SD=.89) and  $\alpha=.53$ , Relationship's mean score is 3.50 (SD=.86) and  $\alpha=.65$ . Meaning's mean score is 3.53 (SD=1.02) and  $\alpha=.81$ , and Accomplishment's mean score is 3.59 (SD=.80) and  $\alpha=.80$ . Physical health mean score is 3.47 (SD=.86) and  $\alpha=.85$ , Negative emotions' mean score is 3.00 (SD=.87) and  $\alpha=.63$ , Loneliness's mean score is 3.22 (SD=.97), and happiness's mean score is 3.42 (SD=.93). Overall wellbeing consists of a mean score being 3.50 (SD=.90) and  $\alpha=.90$ .

*Mental Disorder Symptoms.* Descriptive analysis of Mental Disorders scale's alpha coefficient proved to be .89 showing the scale to be highly reliable, total mean score being 2.06 out of 5.00, and a standard deviation of 1.21 (Table 4.4.). Descriptive results of the mental disorder subscales are as the following; Depression mean score is 2.85 (SD=1.11) and  $\alpha=.85$ , Anger mean score is 2.61 (SD=2.03), Mania mean score is 2.35 (SD=1.19) and  $\alpha=.51$ , Anxiety mean score 2.42 (SD=1.11) and  $\alpha=.65$ , Somatic symptoms mean score is 2.00 (SD=1.18) and  $\alpha=.58$ ; and Suicide ideation mean score is 1.53 (SD=.95). Psychosis subscale means score is 1.39 (SD=.84) and  $\alpha=.68$ , Sleep problem mean score is 2.31 (SD=1.33), Memory problem mean score is 1.86 (SD=1.16), Repetitive thoughts and behaviors mean score is 2.07 (SD=1.24) and  $\alpha=.74$ , and Dissociation consists of one item mean score of 1.97 (SD=1.26), Personality functioning mean score is 2.15 (SD=1.27) and  $\alpha=.82$ , and Substance mean score is 1.44 (SD=.98) and  $\alpha=.53$ .

Descriptive analysis of Personality Disorders scale consists with a total mean score of 1.97 out of 5.00, standard deviation of 1.15, and the Cronbach's alpha score being .87 that shows the scale to be highly reliable (Table 4.4.). Disinhibition subscale mean score is 2.17 (SD=1.17) and  $\alpha=.68$ , Detachment mean score is 2.14 (SD=1.17) and  $\alpha=.70$ , Psychoticism subscale mean score is 1.79 (SD=1.10) and  $\alpha=.68$ , Negative affectivity mean score is 2.15 (SD=1.20) and  $\alpha=.67$ , Antagonism mean score is 1.63 (SD=.97) and  $\alpha=.75$ .

*Religious Attitude.* Descriptive analysis of Religious Attitude scale consists with a mean score of 3.01 out of 5.00, standard deviation score of 1.54, and the Cronbach's alpha coefficient score being .93 shows high reliability of the scale (Table 4.4.). The cognitive subscale mean score is 1.46 (SD=.97) and  $\alpha=.88$ , Emotion subscale mean score is 3.19 (SD=1.34) and  $\alpha=.85$ , Behavioral domain mean score is 3.33 (SD=1.27) and  $\alpha=.91$ , Relation to God mean score is 4.06 (SD=1.25) and  $\alpha=.90$ .

*Religious Struggle.* Descriptive analysis of Religious Struggle scale consists with a mean score of 1.76 out of 5.00, standard deviation of 1.16, and the Cronbach's alpha coefficient score being .93, which shows high reliability of the scale (Table 4.4.). Sub-dimensions of struggle scores are; Divine Struggle mean score is 1.40 (SD=.86) and  $\alpha=.86$ , Demonic Struggle mean score is 1.27 (SD=.76) and  $\alpha=.78$ , Interpersonal Struggle mean score is 1.77 (SD=1.15) and  $\alpha=.85$ . Moral Struggle mean score is 2.06 (SD=1.19) and  $\alpha=.80$ , Ultimate Meaning Struggle subscale mean score is 2.38 (SD=1.43) and  $\alpha=.87$ , and Doubt Struggle mean score is 1.74 (SD=1.16) and  $\alpha=.92$ .

### 4.3. Connections between Religiosity and Mental Health Indicators

#### 4.3.1. Demographic Variables with Religiosity and Mental Health Indicators

To investigate Hypothesis 1, Pearson correlation coefficient was used to conduct the connection of demographic variables with religiosity and mental health indicators. The results are shown in Table 4.5. below.

**Table 4.5. Correlations between Demographic variables with Religiosity and Mental Health Indicators**

	Gender	Age	Income	Education
Religious Attitude	.15*	.00	.08	.03
Religious Struggle	-.02	-.12	-.06	-.23**
PERMA Total	-.05	.11	.22**	.15*
Mental Disorder Total	.02	-.25**	-.12*	-.26**
Personality Disorder Total	-.02	-.18**	-.04	-.22**

\*\*\* p < .001; \*\* p < .01; \*p < .05;

*Demographic variables and Religious Attitude.* Significant positive link was found between religious attitude scale and gender variable ( $r=.15$ ,  $n=262$ ,  $p<.05$ ). No significance was found between religious attitude with age, income level and education level. To this, women tend to be more religious than men are in general.

*Demographic variables and Religious Struggle.* Religious Struggle was found to be negatively related with education level variable ( $r=-.23$ ,  $n=258$ ,  $p<.01$ ). No significance was found between religious struggle with gender, age, and income level. Generally, people with low education level tend to display high religious struggle.

*Demographic variables and Psychological Wellbeing.* PERMA-total was positively linked with income level ( $r=.22$ ,  $n=244$ ,  $p<.01$ ) and education level ( $r=.15$ ,  $n=244$ ,  $p<.05$ ) variables. No significance was found between PERMA with age and gender. To this, the well-off strata of participants have higher level of income and education.

*Demographic variables and Mental Disorders.* Significant negative correlation was found between mental disorder symptoms with age ( $r=-.25$ ,  $n=252$ ,  $p<.01$ ), income level ( $r=-.12$ ,  $n=252$ ,  $p<.05$ ), and education level ( $r=-.26$ ,  $n=252$ ,  $p<.01$ ) variables. No significant correlation was found between mental disorder symptoms and gender. Personality Disorder Traits were found negatively correlated with age ( $r=-.18$ ,  $n=253$ ,  $p<.01$ ) and education level ( $r=-.22$ ,  $n=253$ ,  $p<.01$ ) variables. No significant correlation was found between personality disorder traits with gender and income level. Generally, older people with high income and education levels tend to report less symptoms of mental disorders

#### **4.3.2. Religious Attitude and Mental Disorder Symptoms**

A Pearson correlation coefficient was conducted to investigate the connection between Religious Attitude and Religious Struggle with Mental Disorder Symptoms (Hypothesis 2.), and the results are shown in Table 4.6. below.

**Table 4.6. Correlations between Religiosity and Mental Disorder Symptom variables**

Mental Disorder Total	Depression	Anger	Mania	Anxiety	Somatic	Suicide	Psychosis	Sleep	Memory	OCD	Dissociation	Personality	Substance	
Religious Attitude	-.17**	-.21**	-.07	.08	.00	-.09	-.17**	-.05	-.19**	-.06	-.13*	-.02	-.21**	-.27**
Religious Struggle	.46**	.37**	.24**	.01	.26**	.30**	.37**	.21**	.35**	.29**	.41**	.35**	.53**	-.00
Divine Struggle	.42**	.31**	.24**	-.03	.25**	.25**	.25**	.22**	.32**	.28**	.36**	.36**	.46**	.07
Demonic Struggle	.21**	.07	.01	-.00	.09	.19**	.25**	.20**	.14*	.18**	.25**	.17**	.18**	.04
Interpersonal Struggle	.30**	.22**	.16**	.09	.14*	.20**	.22**	.11	.25**	.20**	.23**	.19**	.36**	.02
Moral Struggle	.32**	.27**	.15*	.05	.23**	.15*	.22**	.11	.30**	.22**	.32**	.28**	.36**	-.09
Meaning Struggle	.39**	.41**	.26**	-.11	.21**	.31**	.33**	.13*	.24**	.20**	.35**	.32**	.52**	-.02
Doubt Struggle	.35**	.26**	.17**	.06	.19**	.22**	.33**	.20**	.29**	.23**	.30**	.21**	.38**	.01

\*\*\* p < .001; \*\* p < .01; \*p < .05;

The findings showed a significant negative link between Religious Attitude and Mental Disorder Symptoms total ( $r=-.17$ ,  $n=262$ ,  $p <.01$ ). Religious people tend to have less depressive ( $r=-.21$ ,  $p <.01$ ), suicide ideation ( $r=-.17$ ,  $p <.01$ ), sleep problem ( $r=-.19$ ,  $p <.01$ ), OCD ( $r=-.13$ ,  $p <.05$ ), personality functioning ( $r=-.21$ ,  $p <.01$ ), and substance use ( $r=-.27$ ,  $p <.01$ ) symptoms. No relationship was found between religiosity and anger, mania, anxiety, somatic, psychosis, memory problem, and dissociation.

The results of religious attitude and personality disorder traits are shown in Table 4.7. below.

**Table 4.7. Correlations between Religiosity and Personality Disorder Trait variables**

	Personality Disorder Total	Disinhibition	Detachment	Psychoticism	Negative Affect	Antagonism
Religious Attitude	-.20**	-.17**	-.19**	-.13*	-.07	-.19**
Religious Struggle	.55**	.33**	.46**	.50**	.37**	.39**
Divine Struggle	.43**	.22**	.38**	.37**	.31**	.34**
Demonic Struggle	.25**	.07	.20**	.30**	.18**	.18**
Interpersonal Struggle	.38**	.25**	.30**	.36**	.19**	.32**
Moral Struggle	.40**	.26**	.29**	.35**	.30**	.28**
Meaning Struggle	.49**	.29**	.47**	.40**	.32**	.32**
Doubt Struggle	.42**	.27**	.34**	.39**	.29**	.27**

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ ;

Religious Attitude was found significantly correlated with Personality Disorders-total in general ( $r=-.20$ ,  $p <.01$ ), especially with personality disorder trait subscales of disinhibition ( $r=-.17$ ,  $p <.01$ ), detachment ( $r=-.19$ ,  $p <.01$ ), psychotism ( $r=-.13$ ,  $p <.05$ ), and antagonism ( $r=-.19$ ,  $p <.01$ ). To this, religious people display less personality disorder traits as in disinhibition, detachment, psychotism and antagonism.

#### 4.3.3. Religious Struggle and Mental Disorder Symptoms

Religious Struggle showed a significant positive correlation with Mental Disorder Symptoms total ( $r=.46$ ,  $n=258$ ,  $p <.01$ ), and with Personality Disorder Traits total ( $r=.55$ ,  $p <.01$ ) the results are shown in Table 4.6. and Table 4.7. above. People who experience high religious struggle reported high depression ( $r=.37$ ), anger ( $r=.24$ ), anxiety ( $r=.26$ ), somatic ( $r=.30$ ), suicide ideation ( $r=.37$ ), psychosis ( $r=.21$ ), sleep ( $r=.35$ ), memory ( $r=.29$ ), OCD ( $r=.41$ ), dissociation ( $r=.35$ ), personality functioning

( $r=.53$ ) symptoms, and high personality disorder traits as disinhibition ( $r=.33$ ), detachment ( $r=.46$ ), psychoticism ( $r=.50$ ), negative affectivity ( $r=.37$ ), and antagonism ( $r=.39$ ). No relationship was found between religious struggle with mania and substance use symptoms. To see the results in detail each relationship were shown in an independent paragraph below.

People experiencing divine struggle tend to have high depression ( $r=.31, p<.01$ ), anger ( $r=.24, p<.01$ ), anxiety ( $r=.25, p<.01$ ), somatic ( $r=.25, p<.01$ ), suicide ( $r=.25, p<.01$ ), psychosis ( $r=.22, p<.01$ ), sleep ( $r=.32, p<.01$ ), memory ( $r=.28, p<.01$ ), OCD ( $r=.36, p<.01$ ), dissociation ( $r=.36, p<.01$ ), and personality functioning ( $r=.46, p<.01$ ). In addition with high levels of personality disorder traits ( $r=.43, p<.01$ ), especially disinhibition ( $r=.22$ ), detachment ( $r=.38$ ), psychoticism ( $r=.37$ ), negative affectivity ( $r=.31$ ), and antagonism ( $r=.34$ ).

Experiencing demonic struggle related with having high somatic ( $r=.19, p<.01$ ), suicide ( $r=.25, p<.01$ ), psychosis ( $r=.20, p<.01$ ), sleep ( $r=.14, p<.05$ ), memory ( $r=.18, p<.01$ ), OCD ( $r=.25, p<.01$ ), dissociation ( $r=.17, p<.01$ ), and personality functioning ( $r=.18, p<.01$ ) symptoms. Also with high levels of personality disorder traits ( $r=.25, p<.01$ ); as detachment ( $r=.20$ ), psychoticism ( $r=.30$ ), negative affectivity ( $r=.18$ ), and antagonism ( $r=.18$ ).

High interpersonal struggle was related with high depression ( $r=.22, p<.01$ ), anger ( $r=.16, p<.01$ ), anxiety ( $r=.14, p<.05$ ), somatic ( $r=.20, p<.01$ ), suicide ( $r=.22, p<.01$ ), sleep ( $r=.25, p<.01$ ), memory ( $r=.20, p<.01$ ), OCD ( $r=.23, p<.01$ ), dissociation ( $r=.19, p<.01$ ), and personality functioning ( $r=.36, p<.01$ ) symptoms. In addition with high personality disorder traits ( $r=.38, p<.01$ ), especially disinhibition ( $r=.25$ ), detachment ( $r=.30$ ), psychoticism ( $r=.36$ ), negative affectivity ( $r=.19$ ), and antagonism ( $r=.32$ ).

Experiencing high moral struggle related with high depression ( $r=.27, p<.01$ ), anger ( $r=.15, p<.05$ ), anxiety ( $r=.23, p<.05$ ), somatic ( $r=.15, p<.05$ ), suicide ( $r=.22, p<.01$ ), sleep ( $r=.30, p<.01$ ), memory ( $r=.22, p<.01$ ), OCD ( $r=.22, p<.01$ ), dissociation ( $r=.28, p<.01$ ), and personality functioning ( $r=.36, p<.01$ ) symptoms. In addition with high levels of personality disorder traits ( $r=.40, p<.01$ ); as disinhibition ( $r=.26$ ), detachment ( $r=.39$ ), psychoticism ( $r=.35$ ), negative affectivity ( $r=.30$ ), and antagonism ( $r=.28$ ).

People experiencing high meaning struggle was related with high depression ( $r=.41, p<.01$ ), anger ( $r=.26, p<.01$ ), anxiety ( $r=.21, p<.01$ ), somatic ( $r=.31, p<.01$ ), suicide

( $r=.33, p<.01$ ), psychosis ( $r=.13, p<.05$ ), sleep ( $r=.24, p<.01$ ), memory ( $r=.20, p<.01$ ), OCD ( $r=.20, p<.01$ ), dissociation ( $r=.32, p<.01$ ), and personality functioning ( $r=.52, p<.01$ ) symptoms. In addition with high levels personality disorder traits ( $r=.49, p<.01$ ), especially disinhibition ( $r=.29$ ), detachment ( $r=.47$ ), psychoticism ( $r=.40$ ), negative affectivity ( $r=.32$ ), and antagonism ( $r=.32$ ).

High doubt struggle was related with high depression ( $r=.26, p<.01$ ), anger ( $r=.17, p<.01$ ), anxiety ( $r=.19, p<.01$ ), somatic ( $r=.22, p<.01$ ), suicide ( $r=.33, p<.01$ ), psychosis ( $r=.20, p<.01$ ), sleep ( $r=.29, p<.01$ ), memory ( $r=.23, p<.01$ ), OCD ( $r=.23, p<.01$ ), dissociation ( $r=.21, p<.01$ ), and personality functioning ( $r=.38, p<.01$ ) symptoms. Experiencing doubt struggle related with high personality disorder traits ( $r=.42, p<.01$ ); as disinhibition ( $r=.27$ ), detachment ( $r=.34$ ), psychoticism ( $r=.39$ ), negative affectivity ( $r=.29$ ), and antagonism ( $r=.27$ ).

#### 4.3.4. Religious Attitude and Psychological Wellbeing

To investigate Hypothesis 3, the relationship between Religious Attitude and Religious Struggle with PERMA variables were conducted with Pearson correlation and the results are shown in Table 4.8. below.

**Table 4.8. Correlations between Religiosity and Psychological Wellbeing variables**

	PERMA	P	E	R	M	A	PH	NE	OW
Religious Attitude	.26**	.18**	.25**	.13*	.37**	.08	.17**	.09	.27**
Religious Struggle	-.45**	-.34**	-.16**	-.35**	-.37**	-.24**	-.21**	-.36**	-.41**
Divine Struggle	-.42**	-.31**	-.18**	-.27**	-.33**	-.19**	-.15*	-.32**	-.39**
Demonic Struggle	-.11	-.04	.00	-.13*	-.08	-.14*	-.02	-.12	-.10
Interpersonal Struggle	-.27**	-.19**	-.11	-.21**	-.22**	-.08	-.17**	-.22**	-.23**
Moral Struggle	-.34**	-.22**	-.13*	-.29**	-.23**	-.23**	-.12*	-.24**	-.31**
Meaning Struggle	-.48**	-.43**	-.20**	-.37**	-.42**	-.25**	-.20**	-.36**	-.47**
Doubt Struggle	-.28**	-.23**	-.06	-.24**	-.27**	-.14*	-.18**	-.31**	-.24**

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \* $p < .05$ ;

Note: From left to right; P= Positive Emotions, E= Engagement, R= Relationship, M= Meaning, A=Accomplishment, PH=Physical Health, NE= Negative Emotions, OW= Overall Wellbeing

Religious Attitude was found positively linked with PERMA scale ( $r=.26, n=262, p<.01$ ). Religious people tend to have high levels of positive emotions ( $r=.18, p<.01$ ), engagement ( $r=.25, p<.01$ ), relationship ( $r=.13, p<.05$ ), meaning ( $r=.37, p<.01$ ),

physical health ( $r=.17, p<.01$ ), and overall wellbeing ( $r=.27, p<.01$ ). No significance was found between religious attitude with accomplishment and negative emotions.

#### **4.3.5. Religious Struggle and Psychological Wellbeing**

Significant negative relation was found between Religious Struggle and total of PERMA scale ( $r=-.45, n=258, p<.01$ ), see results in Table 4.8. above. Experiencing religious struggle related with less positive emotions ( $r=-.34$ ), engagement ( $r=-.16$ ), relationship ( $r=-.35$ ), meaning ( $r=-.37$ ), accomplishment ( $r=-.24$ ), physical health ( $r=-.21$ ), negative emotions ( $r=-.36$ ), and overall wellbeing ( $r=-.41$ ). High divine struggle was related with low levels positive emotions ( $r=-.31, p<.01$ ), engagement ( $r=-.18, p<.01$ ), relationship ( $r=-.27, p<.01$ ), meaning ( $r=-.33, p<.01$ ), accomplishment ( $r=-.19, p<.01$ ), physical health ( $r=-.15, p<.05$ ), negative emotions ( $r=-.32, p<.01$ ), and overall wellbeing ( $r=-.39, p<.01$ ). People experiencing demonic struggle displayed low levels of relationship ( $r=-.13, p<.05$ ), and accomplishment ( $r=-.14, p<.05$ ).

Interpersonal Struggle related with low positive emotions ( $r=-.19, p<.01$ ), relationship ( $r=-.21, p<.01$ ), meaning ( $r=-.22, p<.01$ ), physical health ( $r=-.17, p<.01$ ), negative emotions ( $r=-.22, p<.01$ ), and overall wellbeing ( $r=-.23, p<.01$ ). Experiencing moral struggle related with having low positive emotions ( $r=-.22, p<.01$ ), engagement ( $r=-.13, p<.05$ ), relationship ( $r=-.29, p<.01$ ), meaning ( $r=-.23, p<.01$ ), accomplishment ( $r=-.23, p<.01$ ), physical health ( $r=-.12, p<.05$ ), negative emotions ( $r=-.24, p<.01$ ), and overall wellbeing ( $r=-.31, p<.01$ ).

People who experience meaning struggle tend to have low positive emotions ( $r=-.43, p<.01$ ), engagement ( $r=-.20, p<.01$ ), relationship ( $r=-.37, p<.01$ ), meaning ( $r=-.42, p<.01$ ), accomplishment ( $r=-.25, p<.01$ ), physical health ( $r=-.20, p<.01$ ), negative emotions ( $r=-.36, p<.01$ ), and overall wellbeing ( $r=-.47, p<.01$ ). Experiencing doubt struggle related with having low positive emotions ( $r=-.23, p<.01$ ), relationship ( $r=-.24, p<.01$ ), meaning ( $r=-.27, p<.01$ ), accomplishment ( $r=-.14, p<.05$ ), physical health ( $r=-.18, p<.01$ ), negative emotions ( $r=-.31, p<.01$ ), and overall wellbeing ( $r=-.24, p<.01$ ).

#### 4.3.6. Religious Attitude and Religious Struggle

To examine Hypothesis 4, the relationship between Religious Attitude and Religious Struggle was conducted with Pearson correlation and the results are shown in Table 4.9. below.

**Table 4.9. Correlations between Religious Attitude and Religious Struggle**

	Religious Struggle	Divine	Demonic	Interpersonal	Moral	Meaning	Doubt
Religious Attitude	-.26**	-.21**	.20	-.29**	.01	-.30**	-.35**
Cognitive	-.25**	-.14*	.02	-.32**	.05	-.28**	-.33**
Emotion	-.22**	-.20**	.13*	-.25**	-.05	-.24**	-.28**
Behaviour	-.19**	-.16**	.13*	-.23**	.02	-.22**	-.29**
Relation	-.15*	-.15*	.08	-.16**	.07	-.22**	-.22**

\*\*\* p < .001; \*\* p < .01; \*p < .05;

Significant negative connection was found between Religious Attitude and Religious Struggle scale ( $r=-.26$ ,  $n=262$ ,  $p<.01$ ), especially with divine ( $r=-.21$ ,  $p<.01$ ), interpersonal ( $r=-.29$ ,  $p<.01$ ), meaning ( $r=-.30$ ,  $p<.01$ ), and doubt struggle ( $r=-.35$ ,  $p<.01$ ). Religious people tend to display less struggle regarding their religiosity.

Cognitive domain of religious attitude was found related to low levels of religious struggle ( $r=-.25$ ,  $p<.01$ ), especially with divine ( $r=-.14$ ,  $p<.05$ ), interpersonal ( $r=-.32$ ,  $p<.01$ ), meaning ( $r=-.28$ ,  $p<.01$ ), and doubt struggle ( $r=-.33$ ,  $p<.01$ ). No significance was found between cognitive domain with demonic and moral struggle. Emotional domain of religious attitude was found related with low religious struggle ( $r=-.22$ ,  $p<.01$ ), especially with divine ( $r=-.20$ ,  $p<.01$ ), demonic ( $r=-.13$ ,  $p<.05$ ), interpersonal ( $r=-.25$ ,  $p<.01$ ), meaning ( $r=-.24$ ,  $p<.01$ ), and doubt struggle ( $r=-.28$ ,  $p<.01$ ) dimensions. No significance was found between emotional domain and moral struggle.

Behavioral domain was found associated with low religious struggle ( $r=-.19$ ,  $p<.01$ ), especially with divine ( $r=-.16$ ,  $p<.01$ ), demonic ( $r=-.13$ ,  $p<.05$ ), interpersonal ( $r=-.23$ ,  $p<.01$ ), meaning ( $r=-.22$ ,  $p<.01$ ), and doubt struggle ( $r=-.29$ ,  $p<.01$ ). No significance was found between behavioral domain and moral struggle dimension. Relation to God was found correlated with low levels of religious struggle ( $r=-.15$ ,  $p<.05$ ), especially with divine ( $r=-.15$ ,  $p<.05$ ), interpersonal ( $r=-.16$ ,  $p<.01$ ), meaning ( $r=-.22$ ,  $p<.01$ ), and doubt struggle ( $r=-.22$ ,  $p<.01$ ). No relationship was found between Relation to God domain with demonic and moral struggle.

#### **4.3.7. Psychological Wellbeing and Mental Disorder Symptoms**

To investigate Hypothesis 5, the correlation between psychological wellbeing (PERMA) and Mental Disorder Symptoms was conducted with Pearson correlation and the results are shown in Table 4.10. below.



**Table 4.10. Correlations between Psychological Wellbeing and Mental Disorder Symptoms variables**

	Mental Disorder Total	Depression	Anger	Mania	Anxiety	Somatic	Suicide	Psychosis	Sleep	Memory	OCD	Dissociation	Personality	Substance
PERMA	-.57**	-.60**	-.47**	.11	-.40**	-.37**	-.45**	-.23**	-.35**	-.25**	-.45**	-.45**	-.61**	-.03
Positive Emotions	-.40**	-.51**	-.36**	.20**	-.28**	-.26**	-.33**	-.10	-.28**	-.15*	-.32**	-.36**	-.47**	.03
Engagement	-.26**	-.29**	-.19**	.19**	-.15*	-.18**	-.27**	-.16**	-.13*	-.11	-.21**	-.27**	-.32**	-.06
Relationship	-.41**	-.39**	-.30**	-.03	-.31**	-.23**	-.28**	-.17**	-.26**	-.16**	-.33**	-.37**	-.50**	.04
Meaning	-.47**	-.47**	-.39**	-.01	-.27**	-.28**	-.37**	-.25**	-.25**	-.16*	-.31**	-.36**	-.51**	-.10
Accomplishment	-.37**	-.30**	-.22**	-.06	-.20**	-.17**	-.22**	-.22**	-.17**	-.24**	-.34**	-.28**	-.38**	-.13*
Physical Health	-.32**	-.27**	-.21**	.10	-.17**	-.32**	-.26**	-.15*	-.21**	-.24**	-.25**	-.26**	-.27**	-.10
Negative Emotion	-.44**	-.42**	-.53**	.08	-.50**	-.39**	-.35**	-.10	-.22**	-.19**	-.36**	-.25**	-.38**	.07
Overall Wellbeing	-.53**	-.59**	-.43**	.11	-.34**	-.30**	-.42**	-.21**	-.30**	-.22**	-.42**	-.45**	-.61**	-.02

\*\*\* p < .001; \*\* p < .01; \*p < .05

The findings showed a significant negative relation between total of PERMA scale and total of Mental disorder symptoms ( $r=-.57, n=244, p<.01$ ). Especially with low levels of depression ( $r=-.60$ ), anger ( $r=-.47$ ), anxiety ( $r=-.40$ ), somatic ( $r=-.37$ ), suicide ideation ( $r=-.37$ ), psychosis ( $r=-.23$ ), sleep ( $r=-.35$ ), memory ( $r=-.25$ ), OCD ( $r=-.45$ ), dissociation ( $r=-.45$ ), and personality functioning ( $r=-.61$ ). No significance was found with mania and substance use. To see the results in detail each relationship were shown in an independent paragraph below.

High positive emotions were related with high mania symptoms ( $r=.20, p<.01$ ) and less depression ( $r=-.51, p<.01$ ), anger ( $r=-.36, p<.01$ ), anxiety ( $r=-.28, p<.01$ ), somatic ( $r=-.26, p<.01$ ), suicide ( $r=-.33, p<.01$ ), sleep ( $r=-.28, p<.01$ ), memory ( $r=-.15, p<.05$ ), OCD ( $r=-.32, p<.01$ ), dissociation ( $r=-.36, p<.01$ ), and personality functioning ( $r=-.47, p<.01$ ) symptoms. No relationship was found with psychosis and substance use. Engagement was related with high levels of mania ( $r=.19, p<.01$ ) and low depression ( $r=-.29, p<.01$ ), anger ( $r=-.19, p<.01$ ), anxiety ( $r=-.15, p<.05$ ), somatic ( $r=-.18, p<.01$ ), suicide ( $r=-.27, p<.01$ ), psychosis ( $r=-.16, p<.01$ ), sleep ( $r=-.13, p<.05$ ), OCD ( $r=-.21, p<.01$ ), dissociation ( $r=-.27, p<.01$ ), and personality functioning ( $r=-.32, p<.01$ ) symptoms. No significant correlation was found with memory and substance use.

High relationship levels was found related with low depression ( $r=-.39, p<.01$ ), anger ( $r=-.30, p<.01$ ), anxiety ( $r=-.31, p<.01$ ), somatic ( $r=-.23, p<.01$ ), suicide ( $r=-.28, p<.01$ ), psychosis ( $r=-.17, p<.01$ ), sleep ( $r=-.26, p<.01$ ), memory ( $r=-.16, p<.01$ ), OCD ( $r=-.33, p<.01$ ), dissociation ( $r=-.37, p<.01$ ), and personality functioning ( $r=-.50, p<.01$ ) symptoms. No significance was found with mania and substance use. Meaning was found related with less depression ( $r=-.47, p<.01$ ), anger ( $r=-.39, p<.01$ ), anxiety ( $r=-.27, p<.01$ ), somatic ( $r=-.28, p<.01$ ), suicide ( $r=-.37, p<.01$ ), psychosis ( $r=-.25, p<.01$ ), sleep ( $r=-.25, p<.01$ ), memory ( $r=-.16, p<.05$ ), OCD ( $r=-.31, p<.01$ ), dissociation ( $r=-.36, p<.01$ ), and personality functioning ( $r=-.51, p<.01$ ) symptoms. No significance was found with mania and substance use subscales.

Accomplishment was found associated with low depression ( $r=-.30, p<.01$ ), anger ( $r=-.22, p<.01$ ), anxiety ( $r=-.20, p<.01$ ), somatic ( $r=-.17, p<.01$ ), suicide ( $r=-.22, p<.01$ ), psychosis ( $r=-.22, p<.01$ ), sleep ( $r=-.17, p<.01$ ), memory ( $r=-.24, p<.01$ ), OCD ( $r=-.34, p<.01$ ), dissociation ( $r=-.28, p<.01$ ), personality functioning ( $r=-.38, p<.01$ ), and substance use ( $r=-.13, p<.05$ ) symptoms. No significance was found with mania. High

physical health was related with less depression ( $r=-.27, p<.01$ ), anger ( $r=-.21, p<.01$ ), anxiety ( $r=-.17, p<.01$ ), somatic ( $r=-.32, p<.01$ ), suicide ( $r=-.26, p<.01$ ), psychosis ( $r=-.15, p<.05$ ), sleep ( $r=-.21, p<.01$ ), memory ( $r=-.24, p<.01$ ), OCD ( $r=-.25, p<.01$ ), dissociation ( $r=-.26, p<.01$ ), and personality functioning ( $r=-.27, p<.01$ ) symptoms. Mania and substance use symptoms were not associated.

Negative emotions was found related with low levels of depression ( $r=-.42, p<.01$ ), anger ( $r=-.53, p<.01$ ), anxiety ( $r=-.50, p<.01$ ), somatic ( $r=-.39, p<.01$ ), suicide ( $r=-.35, p<.01$ ), sleep ( $r=-.22, p<.01$ ), memory ( $r=-.19, p<.01$ ), OCD ( $r=-.36, p<.01$ ), dissociation ( $r=-.25, p<.01$ ), and personality functioning ( $r=-.38, p<.01$ ) symptoms. No significance was found with mania, psychosis, and substance use. Overall wellbeing was related with having less symptoms of depression ( $r=-.59, p<.01$ ), anger ( $r=-.43, p<.01$ ), anxiety ( $r=-.34, p<.01$ ), somatic ( $r=-.30, p<.01$ ), suicide ( $r=-.42, p<.01$ ), psychosis ( $r=-.21, p<.01$ ), sleep ( $r=-.30, p<.01$ ), memory ( $r=-.22, p<.01$ ), OCD ( $r=-.42, p<.01$ ), dissociation ( $r=-.45, p<.01$ ), and personality functioning ( $r=-.61, p<.01$ ). Mania and substance use symptoms were not associated with overall wellbeing.

The results found between psychological wellbeing (PERMA) and personality disorder traits are shown in Table 4.11. below.

**Table 4.11. Correlations between Psychological Wellbeing and Personality Disorder Trait variables**

	Personality Disorder Total	Disinhibition	Detachment	Psychoticism	Negative Affectivity	Antagonism
PERMA Total	-.53**	-.26**	-.56**	-.45**	-.40**	-.28**
Positive Emotion	-.36**	-.14*	-.45**	-.27**	-.26**	-.19**
Engagement	-.28**	-.12	-.38**	-.21**	-.18**	-.15*
Relationship	-.36**	-.14*	-.46**	-.31**	-.23**	-.19**
Meaning	-.48**	-.31**	-.48**	-.39**	-.29**	-.32**
Accomplishment	-.39**	-.27**	-.32**	-.36**	-.31**	-.18**
Physical Health	-.30**	-.27**	-.24**	-.29**	-.18**	-.14*
Negative Emotions	-.37**	-.15*	-.29**	-.24**	-.55**	-.10
Overall Wellbeing	-.50**	-.23**	-.57**	-.41**	-.32**	-.30**

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \* $p < .05$ ;

High psychological wellbeing was significantly associated with total of Personality Disorder Traits ( $r=-.53$ ,  $n=244$ ,  $p<.01$ ) especially with disinhibition ( $r=-.26$ ), detachment ( $r=-.56$ ), psychoticism ( $r=-.45$ ), negative affectivity ( $r=-.40$ ), and antagonism ( $r=-.28$ ). To see the results in detail each relationship were shown in an independent paragraph below.

High positive emotions were related with less personality disorder trait levels ( $r=-.36$ ,  $p<.01$ ), with disinhibition ( $r=-.14$ ,  $p<.05$ ), detachment ( $r=-.45$ ,  $p<.01$ ), psychoticism ( $r=-.27$ ,  $p<.01$ ), negative affectivity ( $r=-.26$ ,  $p<.01$ ), and antagonism ( $r=-.19$ ,  $p<.01$ ). People with high engagement levels tend to show low personality disorder traits ( $r=-.28$ ,  $p<.01$ ). Especially with detachment ( $r=-.38$ ,  $p<.01$ ), psychoticism ( $r=-.21$ ,  $p<.01$ ), negative affectivity ( $r=-.18$ ,  $p<.01$ ), and antagonism ( $r=-.15$ ,  $p<.05$ ). No significance with disinhibition trait. Relationship levels showed association with low levels of personality disorder traits ( $r=-.36$ ,  $p<.01$ ), especially with disinhibition ( $r=-.14$ ,  $p<.05$ ), detachment ( $r=-.46$ ,  $p<.01$ ), psychoticism ( $r=-.31$ ,  $p<.01$ ), negative affectivity ( $r=-.23$ ,  $p<.01$ ), and antagonism ( $r=-.19$ ,  $p<.01$ ).

Meaning was found related with low levels of personality disorder traits ( $r=-.48$ ,  $p<.01$ ). Especially disinhibition ( $r=-.31$ ,  $p<.01$ ), detachment ( $r=-.48$ ,  $p<.01$ ), psychoticism ( $r=-.39$ ,  $p<.01$ ), negative affectivity ( $r=-.29$ ,  $p<.01$ ), and antagonism ( $r=-.32$ ,  $p<.01$ ). High accomplishment levels was related with low personality disorder traits ( $r=-.39$ ,  $p<.01$ ), especially with disinhibition ( $r=-.27$ ,  $p<.01$ ), detachment ( $r=-.32$ ,  $p<.01$ ), psychoticism ( $r=-.36$ ,  $p<.01$ ), negative affectivity ( $r=-.31$ ,  $p<.01$ ), and antagonism ( $r=-.18$ ,  $p<.01$ ). People with high physical health reported less personality disorder trait levels ( $r=-.30$ ,  $p<.01$ ), especially disinhibition ( $r=-.27$ ,  $p<.01$ ), detachment ( $r=-.24$ ,  $p<.01$ ), psychoticism ( $r=-.29$ ,  $p<.01$ ), negative affectivity ( $r=-.18$ ,  $p<.01$ ), and antagonism ( $r=-.14$ ,  $p<.05$ ).

Negative emotions were related with low levels of personality disorder traits ( $r=-.37$ ,  $p<.01$ ), especially disinhibition ( $r=-.15$ ,  $p<.05$ ), detachment ( $r=-.29$ ,  $p<.01$ ), psychoticism ( $r=-.24$ ,  $p<.01$ ), and negative affectivity ( $r=-.55$ ,  $p<.01$ ). No significance was found with antagonism. High levels of overall wellbeing were related with low personality disorder traits ( $r=-.50$ ,  $p<.01$ ), as in disinhibition ( $r=-.23$ ,  $p<.01$ ), detachment ( $r=-.57$ ,  $p<.01$ ), psychoticism ( $r=-.41$ ,  $p<.01$ ), negative affectivity ( $r=-.32$ ,  $p<.01$ ), and antagonism ( $r=-.30$ ,  $p<.01$ ).

## **CHAPTER V**

### **DISCUSSION AND CONCLUSION**

The purpose of this study was to measure and analyze religious attitude and religious struggle to see if the relationship of religion statistically associated with individual's mental health regarding psychological wellbeing and clinical symptoms of mental disorders, based on existing literature. The study also aimed to contribute the validation and reliability of the Turkish version of PERMA and Religious Struggle Scale. The summary and implications of the findings of the study are presented below in reference to previous research and literature.

#### *Findings of Demographic variables with Mental Health Indicators and Religiosity*

The first research question investigated the association between demographic variables in relation to mental health indicators and religiosity. Findings partially supported our hypothesis 1. as a weak yet significant positive connection was found between religious attitude and gender, and a significant negative association was found between religious struggle and education level. Psychological wellbeing was found positively associated with income and education level. Mental disorder symptoms were negatively associated with age, income, and education levels whereas personality disorder traits were negatively associated with age and education level. No relation was found between gender with religious struggle, psychological wellbeing, and mental disorders; age with religiosity and psychological wellbeing; income level with religiosity and personality disorder traits; and education level with religious attitude. This result may be due to unsufficient amount of diverse sampling gathered in the study.

#### *Comparison with other studies and Implications of the findings on Demographic variables and Religious Attitude*

Supporting previous studies that found association (McFarland, 2010), our findings can be indicated as religious attitude is differentiated among male and female participants, for female participants religious attitude was found higher. This finding may be explained by various assumptions one of them is that religion consists of values

that can be considered as feminine traits such as obedienace to God and nurturing others, another assumption made is that genetically men have tendencies to innate risk behaviors that resonates with religious values (Miller and Shark, 2002). Another assumption is that cultural and social norms restrict women to some extent that religious participation and religious community offers socialization, additionally women are more prone to seek support when faced with obstacles thus having support and empathy from religious community or praying to God for support and help thus explain high religiosity in women (Krause, Ellison, & Marcum, 2002).

Gender specific roles may also effect the relationship between religiosity and gender as men are believed to be strong and the leader of the household thus seeking support from religion may be seem inferior and as a weakness, participation in religious activities may seem useless and waste of time (Miller and Shark, 2002). Previous studies have found positive association between religious attitude with age, income level and education level which contradicts with our findings. Studies have found older women with increased income and education levels were found related with religiosity especially religious involvement (Koeing et. al., 2001; McFarland, 2010). No association found may be explained by unsufficient amount of diverse sampling gathered in the study.

#### *Comparison with other studies and Implications of the findings on Demographic variables and Religious Struggle*

Findings on religious struggle can be indicated as high levels of struggle is in relation to low levels of education level or it can be explained as higher levels of education is associated with low religious struggle, which is supported by previous studies (Bryant and Astin, 2008). It can be explained as having high education may aid to resolve issues regarding religiosity; one may tend to be more prone to seek support or be more open-minded and less prejudice in experiencing religious conflict. Previous studies have found positive association between religious struggle with gender, and negative association between religious struggle with age and income level which contradicts with our findings (Exline et. al., 2014). No association found in our results may be due to unsufficient amount of diverse sampling gathered in the study.

#### *Comparison with other studies and Implications of the findings on Demographic variables and Mental Health Incidators*

Supported with previous studies on psychological wellbeing Chow (2017) found positive association with income and education level. Other studies have found mental disorders negatively associated with age, income, and education levels whereas personality disorders negatively associated with age and education (Mulatu & Schooler, 2002; Warren, 2009). It can be interpreted based on our results and previous findings that high socioeconomic status is related with better mental health outcome (Kinderman, 2014). High income and education may be a protecting factor from mental disorders that may increase the probability to access mental health-promoting resources, receive social support, and establish a nutritious environment that may also effect psychological wellbeing. Having low income, being unemployed and uneducated are seen as risk factors that lead to distress and other negative outcomes such as effect the process of an existing mental disorder and deteriorate psychological wellbeing.

The absence of diverse sampling may explain the findings of no association found between psychological wellbeing with gender and age, and mental disorders with gender, and personality disorders with income level. Previous studies have found positive association between psychological wellbeing with gender, age, income level and education level and negative association between mental disorders with age, income level and education level. Older women with greater income and education levels was found linked with higher psychological wellbeing and lower distress levels (Paykel et al., 2001; Malla et al., 2015). Young adult women with low levels of income and education was associated with mental disorders (Hamdan-Mansour et al., 2009). The period of young adulthood is a delicate process of development that makes it vulnerable for crisis, stress and other psychological problems that eventually effect mental health.

#### *Findings of Mental Disorder Symptoms and Religiosity*

Research question two examined the relationship between clinical symptoms of 14 different mental disorders and religiosity regarding religious attitude and religious struggle. The findings showed that religious attitude was negatively related with mental disorder symptoms, and religious struggle was positively related with mental disorder symptoms. Religious attitude was negatively associated with depression, suicide ideation, sleep problem, OCD, personality functioning, substance use, and

personality disorder as in disinhibition, detachment, psychoticism and antagonism. No association were found between religious attitude with anger, mania, anxiety, somatic, psychosis, memory, dissociation and negative affectivity.

In regard to religious struggle we hypothesized that there is a positive connection between religious struggle and mental disorder symptoms. Findings showed positive link between religious struggle and mental disorder symptoms except for mania and substance use. Divine, demonic, interpersonal, moral, meaning and doubt struggle dimensions were positively related with somatic, suicide, sleep and memory problem, OCD, dissociation, personality functioning, and personality disorders as in detachment, psychoticism, negative affectivity, and antagonism. Divine, interpersonal, moral, meaning, and doubt struggle dimensions were positively associated with depression, anger, anxiety, and disinhibition personality trait. Divine, demonic, meaning and doubt struggle dimensions were positively associated with psychosis. The findings on religious attitude and religious struggle on mental disorder symptoms partially support hypothesis 2.

#### *Comparison with other studies on Mental Disorder Symptoms and Religious Attitude*

The findings related to previous literature regarding the negative connection of religiosity with depression (Gupta, Avasthi, & Kumar, 2011), suicide ideation (Cirhinlioğlu & Ok, 2010), sleep (Hill et al., 2006), OCD, personality functioning (Wulff, 1997), substance use (Park, Hong, & Cho, 2012), and personality disorder traits (Koenig et al., 2012; Power & McKinney, 2014) were confirmed by our results. In relation to previous studies regarding no association found between religious attitude with anger (Abbeelen, Boer, Harteveld, & Rijpkema, 2015); mania (Cruz et al., 2010); anxiety (Krause & Van Tran, 1989); somatic (Koenig et al., 1993); psychosis (Kovess-Masfety, Saha, Lim, Aguilar-Gaxiola, Hamzawi, Alonso, & Florescu, 2018); memory (Ritchie, Gow, & Deary, 2014); dissociation (Binks & Ferguson, 2013); and negative affectivity, were confirmed yet the results did not support our Hypothesis 2 in regard to these mental disorder symptoms.

Previous studies indicated a relationship between greater religiosity and decreased mental disorders (Hefti, 2011; King, Marston, McManus, Brugha, Meltzer, & Bebbington, 2013), which is consisted with our findings. Evidence in the literature on religiosity and mental disorders, majority of them found negative relationship on

depression, anxiety, substance and suicide, and insufficient evidence on bipolar, schizophrenia, personality, and dissociation disorders due to methodological differences of the studies and conflicting results. Diverse dimensions of religiosity such as intrinsic and extrinsic religious orientation and positive and negative religious coping can be another reason for different results than other studies (Himle et al., 2011).

However literature on mental disorders such as OCD (Abramowitz et al, 2002), mania (Cruz et al., 2010), psychosis (Mohr et al., 2006), dissociation (Dorahy & Lewis, 2001), and somatic (Oti-Boadi & Asante, 2017) have been positively associated with religiosity. Differences found in the results regarding mental disorders may be due to the sample being a university population, lack of clinical symptomatology diagnosis, and diverse measurements used for religiosity in other studies. For instance, studies that found positive association with religiosity and OCD may be due to the sample being OCD diagnosed patients and religiosity was examined on religious obsessions, rituals and practices (Abramowitz et al, 2002; Yorulmaz, Gençöz, Woody, 2009).

The negative connection found between religious attitude and OCD may be interpreted as having insight on symptoms of OCD, one can overcome the urges of obsessions and compulsions by being aware their religious values and beliefs. Studies on psychosis and dissociation symptoms were also considered in religious context (Menezes & Moreira-Almeida, 2010), and studies on memory problem were conducted on elder people and participants who had neurocognitive deficiency (Jung et al., 2019) which may be the reason our findings differed from previous studies.

#### *Comparison with other studies on Mental Disorder Symptoms and Religious Struggle*

Religious struggle was found positively associated with all mental disorders except for mania and substance use. Supporting both hypothesis 2. and previous studies that found high religious struggle related with high mental disorders symptoms especially with depression, anger, anxiety, paranoid ideation, OCD, somatization, loneliness, substance use and suicide ideation in college and adult samples (Exline, Yali, & Sanderson, 2000; Ano & Vasconcelles, 2005; McConnell et al., 2006). For instance, Stroppa, Colugnati, Koenig, & Moreira-Almeida (2018) found positive religious coping predicted better quality of life in physical, mental, social and environmental domains, whereas negative association was found between negative religious coping

and mental health, and negative religious coping predicted manic symptoms among bipolar patients in a 2-year follow-up study.

Differences found with previous studies in the results regarding no relationship found between religious struggle with mania and substance use may be due to the sample being a nonclinical population, and diverse measurements used for religious struggle. Previous studies were conducted on bipolar patients and clinical diagnosed substance abusers and measurements used for religious struggle were negative religious coping or extrinsic religious orientation. In addition different results may be explained by other factors that may play a role in the connection between religious struggle and mental health such as self-control, self-esteem or social support (Ashouri, Hamadiyan, Nafisi, Parvizpanah, & Rasekhi, 2016). These psychosocial factors may provide help to the individual during the period of conflict, when ones' religious life is in crises as a defense mechanism.

Regarding the interconnection of religious struggle dimensions and mental disorders, our results not only confirms the findings of previous studies but also contributes to the literature about the relationship between religious struggle dimensions with psychosis, sleep, memory, dissociation, and personality disorder traits. Exline et al., (2014); Dworsky & Pargament, (2016); and Abu-Raiya et al., (2015) have found all dimensions of religious struggle to be associated with depression, anxiety, anger, somatic, and impulsivity. Contradicting with these studies our findings found no association between demonic struggle with depression, anger, and anxiety.

#### *Implications of the findings on Mental Disorder Symptoms and Religiosity*

The relationship of religiosity on mental health suggests a complex heterogeneity that can not be specified to one answer. However, one can indicate that religious belief, values, and practice may have a protecting effect on mental health. Religion can help find meaning and hope in suffering, cope with illnesses, motivate oneself to tolerate the effects of illnesses or the procedures of the process and recover more quickly, eventually effecting the course and outcome of the illnesses (Kelly & Gamble, 2005). In addition, it can be interpreted that high levels of mental disorder symptoms may trigger religious struggle. Having an illness may challenge ones' religious view and their relationship with God by feeling abandoned or punished by God, or by being angry toward God for the suffering, which may result in a turmoil within oneself in

religious matters. Another interpretation to the findings of religious struggle may be that religious struggle may trigger high levels of symptoms of mental disorders. Being in conflict with religious matters reflects tension, struggle and even crises with one's most fundamental values, beliefs, and practices that can cause distress, anxiety, depression, worry, anger and other dysfunctional psychological reactions (Ellison & Lee, 2010).

#### *Findings of Psychological Wellbeing and Religiosity*

The third research question sought to examine the connection of religious attitude and religious struggle with psychological wellbeing. The findings showed that religious attitude was positively associated with psychological wellbeing, and no association was found with accomplishment and negative emotions domains. The findings on religious struggle showed negative relationship with psychological wellbeing. Dimensions of religious struggle as the following; Divine, moral, and meaning struggle were negatively associated with all domains of psychological wellbeing. Demonic struggle was found negatively associated only with accomplishment domain. Interpersonal struggle was negatively associated with all psychological wellbeing domains except for engagement and accomplishment, and doubt struggle was negatively associated with all psychological wellbeing domains except for engagement.

In regard to the interconnection of religiosity and psychological wellbeing, our results confirms the findings of previous studies done by Pargament (2001) Frazier, Mintz, and Mobley (2005); and Ano and Pargament (2013) and partially supports Hypothesis 3. The results also contributes to the literature on the relation of religious attitude and religious struggle with PERMA dimensions.

#### *Comparison with other studies on Psychological Wellbeing and Religiosity*

Previous studies found positive relationship between religiosity and psychological wellbeing (Frazier et al., 2005; Ano and Vasconcelles, 2005; Dezutter, Soenens, & Hutsebaut, 2006), which is confirmed by our findings. However, having high or low religiosity was not related to accomplishment and negative emotions, which contradicts with previous studies done by Mayrl and Oeur, (2009) and Park et al., (2018). This may be due to possibilities such as different instrumentations used to measure psychological wellbeing and religious attitude. Another possibility is that

individual's view and belief toward achievement and accomplishment of a work may not be influenced by religious doctrines, values or beliefs.

Previous studies have found a negative link on religious struggle and psychological wellbeing (Krause, 2006; Wilt et al., 2018). Studies have shown a negative connection between divine and meaning struggle dimensions with psychological wellbeing (Exline et al., 2015), and a positive association with moral and demonic struggle dimension (Abu-Raiya, Exline, Pargament, & Agbaria, 2016). Results indicating that moral and demonic religious struggle may be accompanied with a mediating factor as religious support thus foster psychological wellbeing by being a source of positive change and lead to spiritual growth. Regarding the findings found between religious struggle dimensions and psychological wellbeing domains; having conflict and negative experiences with religious people or organizations, feeling troubled by questioning belief, doubt about religious aspects, and feeling concerned by evil forces negatively effecting events do not associate with achieving goals or responsibilities. Being absorbed in activities yet effect the wellbeing of an individual as in emotions, meaning in life, relationship with others, and health.

Differences in dimensions of religious struggle on the relationship with psychological wellbeing domains may be explained from different instruments used to measure psychological wellbeing, terms such as being engaged, being absorbed, and flow are relatively new and abstract to understand and state in different cultures. Another explanation for the difference in the findings may be due to mediating factors such as personality traits, and different cultural norms and religion compared to other studies. Findings of Demonic struggle only associating with accomplishment may be based on how cultural and religious beliefs of supernatural haunting is reflected on events, activities, and dreams and these hauntings are not observed physically or have a direct psychological effect. It can be explained as in the contemporary world supernatural forces are active and the individual assign the wrong going of an achievement or accomplishment on external factors; as having supernatural elements torment the outcome of a performance (Zarzycka & Zietek, 2019). Assigning negative events to evil forces may help oneself keep faith by the positive image of self and God, thus protect religious belief and avoid inner turmoil.

*Implications of the findings on Psychological Wellbeing and Religiosity*

Overall, Religiosity enhance meaning in life, increase life expectancy, promote optimism, and can be a mean of compensation of decreased self-control. Religious belief, values and practices promotes to live a healthier lifestyle that positively influence mental health, and include a set of positive social norms that lead to acceptance by others which provoke social support, thus eventually influencing psychological wellbeing (Moreira-Almedia et al., 2006; Exline & Ross, 2013). In addition, people who have difficulty with emotions, relationships, achievements, and meaning in life they may look for external factors to blame such as God or evil forces and relieve from the psychological distress and experience religious struggle. Religiosity being a meaning system, influences ones' beliefs about self, the world and their interactions, providing a framework through knowledge and experience thus having religious struggle negatively reflects on this framework and threatens one's values, commitments, and worldviews that eventually effects wellbeing and mental health (Abu-Raiya et al., 2016).

#### *Findings of Religious Attitude and Religious Struggle*

The fourth research question investigated the possible association between religious attitude and religious struggle. Results revealed a significant negative relation between religious attitude and religious struggle except for demonic and moral struggle dimensions. Cognitive and relation to God domains of religious attitude was associated with all religious struggle dimensions except for demonic and moral struggle. Behavior and Emotional domains were negatively associated with all religious struggle dimensions except for moral struggle and were positively associated with demonic struggle. The results support Hypothesis 4. and contributes to the literature in regard of the relationship between religious attitude and religious struggle dimensions.

#### *Comparison with other studies on Religious Attitude and Religious Struggle*

These findings are supported by previous studies, where Exline et al., (2015) and Zarzycka and Zietek, (2019) found religiosity (involvement and belief) negatively associated with divine, meaning and interpersonal struggle, and found positive association between moral and demonic struggle. Differences found between religiosity with moral and demonic struggle may be due to different instrumentation used to measure religiosity, and supernatural forces are relatively approached differently based on culture and religion. A positive relationship between demonic

struggle and religious attitude domains may be interpreted as; experiencing torment by supernatural forces one may still want to feel support from God and relieve from the distress of struggle thus, turn themselves to religious practice and feeling positive in religious participations. A mediator factor such as religious support may be another possibility to explain the positive relationship between demonic struggle with behavioral and emotional domains of religious attitude, as a defensive mechanism by helping one preserve positive image of God and maintaining faith.

#### *Implications of the findings on Religiosity*

The findings overall, can be interpreted as having high religious attitude as in positive views about religion, religious practice, having positive feelings in religious participations, feeling closeness and the presence of God can be effective as a protective force in face of religious struggle and help cope with the turmoil it brings. Religiosity in the means of struggle can provide a sense of purpose and significance in one's life (Ward and King, 2018).

Having religious struggle is not the opposite of faith; it is an important part of believing. In this process, it can result in one's deconversion or strengthen their religious beliefs if one turns to faith building responses and embrace the questioning (Pargament, 2007). It seems reasonable to assume that when faith is tested it would become stronger and lead to the maturity of religious sentiment (Allport and Ross, 1967; Hunsberger et al., 2002). Religious struggle process can be beneficial for one's religiosity, as a transition point in lifespan suffering and crisis can lead to spiritual growth (Zarzycka and Zietek, 2019). Research has shown that spiritual growth, open-mindedness, and self-actualization can be positive outcomes occurring with religious struggle and be a mediating factor in the connection between religiosity, religious struggle and mental health (Hill and Pargament 2003; Zarzycka and Puchalska-Wasyl 2019).

#### *Findings of Mental Disorder Symptoms and Psychological Wellbeing*

Fifth question examined the relationship between mental disorder symptoms and psychological wellbeing. Findings showed significant negative association between psychological wellbeing and mental disorder symptoms except for mania and substance use supporting Hypothesis 5. Negative association was found between positive emotions and all mental disorder symptoms except for psychosis and

substance use, and positive association was found with mania. Engagement was negatively associated with all mental disorder symptoms except for memory problem, disinhibition and substance use, and was positively associated with mania. Negative association was found between relationship, meaning, and physical health with all mental disorder symptoms except for mania and substance use, accomplishment was negatively associated with all mental disorder symptoms except for mania. Negative emotions was negatively associated with all mental disorder symptoms except for psychosis, mania, substance use and antagonism.

#### *Comparsion with other studies on Mental Disorder Symptoms and Psychological Wellbeing*

In relation to previous studies regarding a negative relationship between psychological wellbeing and mental disorders was confirmed by the results (Catalino, Algoe, & Fredrickson, 2014; Lamers, Westerhof, Glas, & Bohlmeijer, 2015; Trompetter, Lamers, Westerhof, Fledderus, & Bohlmeijer, 2017). A positive association found between positive emotions and engagement dimensions with mania consists with previous studies (Meyer et al., 2001; Gruber et al., 2008). This can be explained as positive emotions are joy and contentment, and engagement consists of being absorbed and involved in an activity that are similar terms seen in mania symptoms, which consists of elevated mood and activity. Gongora and Castro Solano (2017) have examined pathological personality traits with wellbeing and found weak association between emotional wellbeing with detachment and negative affectivity; psychological wellbeing with detachment and disinhibition; and social wellbeing with detachment, negative affectivity, disinhibition, and antagonism. Differences found with previous studies in regard to the relationship between psychological wellbeing dimensions and mental disorder symptoms can be explained by the sample being a nonclinical population, and diverse measurments used in other studies. In addition, the measurement used for mental disorders is unsufficient in relation to clinically diagnose a mental disorder.

#### *Implications of the findings on Mental Disorder Symptoms and Psychological Wellbeing*

It can be interpreted that experiencing symptoms of mental disorders an individual is more likely to experience low psychological wellbeing. Although findings show that

wellbeing and mental disorders are related, their relationship have been formulated in a two-continuum model that states having wellbeing doesn't imply not having mental disorders or the opposite, hence they are not the opposite ends of a single continuum (Keyes, 2005). One may suffer from mental disorders and yet still experience wellbeing at the same time, thus emphasizing on other factors effecting the relationship such as character strengths (Lee Duckworth, Steen, & Seligman, 2005), humor (Bos, Snippe, de Jonge, Jeronimus, 2016), religiosity and altruism (Southwick, Vythilingam, & Charney, 2005), support (McConnell, Brown, Shoda, Stayton, & Martin, 2011), self-esteem and self-acceptance (Ellison, 1993; MacInnes, 2006), self-efficacy and sense of mastery (Palmer, Martin, Depp, Glorioso, & Jeste, 2014), autonomy and locus of control (Keyes, 2005; Hoge, Austin, & Pollack, 2007), and personal growth (Frazier et al., 2005). Overall, wellbeing does not guarantee the absence of symptoms and the presence of symptoms does not preclude wellbeing, which make wellbeing counteract or buffer against the negative impact of mental disorders (Bos et al., 2016).

### *Limitations*

The limitations of this study is that the study being a cross-sectional research design prevents to establish a cause-effect relation between religiosity and mental health indicators, thus the interpretations of the results on the relationship of religion and mental health are based on theoretical assumptions. Another limitation of this study is the lack of identifying life changing events such as marriage, divorce, death, stress, trauma, migration, and physical disability, which are factors that can effect religiosity, mental health indicators and their relationship. In terms of methodology, convenience sampling technique and lack of randomization of choice raise the possibility of bias, and sampling error that effects to generalize the results (Creswell, 2013). Samples drawn from nonclinical and university sample is another limitation that effects generalizability. Social desirability bias was prevented by anonymity however, questionnaires being self-reported and the conductors being supervisors of the participants reflects the possibility of bias in results (Creswell, 2013).

Another obstacle of social desirability is from the sensitivity people have toward subjects regarding religion, as the measurements used may evoke people to appear more religious or feel guilty and ashamed for having conflict with religion thus may lead to falsification of results. Unsubstantial number of diverse participants is another

limitation that unable the study to compare differences among demographic variables. The mental disorder measurement used is based on basic symptoms of disorders that simplifies diagnosis and makes it difficult to generalize results to clinical population is another potential limitation.

### *Conclusions*

The main objective of this study was to better understand the relationship of religiosity with mental health indicators. Based on the evidence, it can be concluded that there is a significant relationship between religious attitude and religious struggle with mental disorder symptoms and psychological wellbeing. This study also uncovered the connection between religious attitude and religious struggle and the relationship between mental disorder symptoms and psychological wellbeing. Having positive feelings and meaning in life, being engaged in activities and satisfied with social relationships may be indications to protect against the effects from mental disorders.

In regard to religiosity, having religious belief and practice, positive participation in religious activities, and feeling the presence of God may benefit to mental health and buffer against religious conflict whereas having struggles in religious beliefs, feeling abandoned by God, tormented by supernatural forces, having conflict with religious people and organizations may decrease mental health and religious attitude. Including religious belief, practice, and values in interventions regarding mental health care may provide some means of enhancement and motivation to people who are suffering.

### *Recommendations for Future Research*

Future research should include detailed measurement on specified mental disorders and use clinical and non-clinical sample in order to increase precision and accuracy of diagnostics and generalize results. In addition, detailed religious practice and values that people see effective in their life may improve the chances of a yielding valuable data that could be meaningful to inform prevention and intervention efforts. To identify the cause and effect relationship of religiosity and mental health it is worth to implicate the study in terms of longitudinal design. Expanding the diversity of sample, size, age variance and taking into account factors such as different ethnic groups and marital status can be insightful in regarding the relation of demographic variables with religiosity and mental health. Future research in this area could also examine mediating and moderating variables such as biological, social and psychological factors that can

influence the relationship between religion and mental health such as stress, self-esteem, autonomy, and humor.



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## APPENDIX

### APPENDIX A PERMA Scale Turkish Items

#### PERMA Ölçeği Maddeleri

Items	Label
<b>Positive Emotion (3)</b>	
Genel olarak ne sıklıkla neşelisinizdir?	P1
Genel olarak kendinizi ne sıklıkta iyi hissedersiniz?	P2
Genel olarak iç dünyinizde ne düzeyde huzurlusunuzdur?	P3
<b>Engagement (3)</b>	
İşlerinizi ne düzeyde kendinizi ona kaptırarak (kendinizden geçercesine) yaparsınız?	E1
Genel olarak, ne düzeyde hayatı karşı içinizde bir coşkunluk ve merak duyarsınız?	E2
Mutlu olduğunuz bir şeyi yaparken ne sıklıkla zamanın nasıl geçtiğini anlamadığınız anlar yaşarsınız?	E3
<b>Relationship (3)</b>	
Yardıma ihtiyacınız olsa başkalarından ne düzeyde yardım ve destek göreceğinizi düşünüyorsunuz?	R1
Genel olarak, ne düzeyde sevdiğiniz hissediyorsunuz?	R2
Genel olarak, kişisel ilişkilerinizden ne düzeyde memnunsunuz?	R3
<b>Meaning (3)</b>	
Genel olarak, hayatınızın ne düzeyde bir anlamı ve amacı var?	M1
Genel olarak, hayatınızda yapıp ettiklerinizin ne kadar değerli ve yapmaya değer olduğunu düşünürsünüz?	M2
Genel olarak hayatınızın ne düzeyde bilinçli bir amacı olduğunu düşünüyorsunuz?	M3
<b>Accomplishment (3)</b>	
Koyduğunuz önemli hedeflere ulaşmayı ne düzeyde başarısınız?	A1
Hedeflerinize ulaşmada ne sıklıkta ilerleme kaydettiğinizi düşünürsünüz?	A2
Görevlerinizi ne sıklıkta başarıyla sonlandırırsınız?	A3
<b>Physical Health (3)</b>	
Genel olarak sağlık durumunuzu nasıl değerlendirirsiniz?	PH1
Beden sağlığınızın mevcut durumundan ne düzeyde memnunsunuz?	PH2
Kendi yaşı ve cinsiyet grubunuzdakilerle karşılaşlığınızda, sağlığını nasıl değerlendirirsiniz?	PH3
<b>Negative Emotions (3)</b>	
Genel olarak, ne sıklıkta kaygı yaşarsınız? (-)	N1
Genel olarak ne sıklıkta öfke yaşarsınız? (-)	N2
Genel olarak ne sıklıkta üzüntü yaşarsınız? (-)	N3

**APPENDIX B**  
**Religious Struggle Scale Turkish Items**

**Dini Çelişki Ölçeği Maddeleri**

Items	Label
<b>Divine Struggle (5)</b>	
Allah beni yüzüstü bırakmış gibi hissettim.	Di1
Allah'a karşı kızgınlık hissettim.	Di2
Sanki Allah beni terk etmiş gibi hissettim.	Di3
Sanki Allah beni cezalandırırmış gibi hissettim.	Di4
Allah'ın beni sevüp sevmediğini sorguladım.	Di5
<b>Demonic Struggle (4)</b>	
Şeytan ya da kötü ruhlar tarafından bana işkence edildiği hissini yaşadım.	De1
Başında gelen sıkıntıların şeytandan veya kötü ruhlardan kaynaklandığı hissine kapıldım.	De2
Şeytan veya kötü ruhlar tarafından saldırıyla uğradığımı hissettim.	De3
Şeytanın (veya kötü ruhların) beni doğru yoldan saptırmaya çalıştığını hissettim.	De4
<b>Interpersonal Struggle (5)</b>	
Dindar insanlar tarafından incitilmiş, mağdur edilmiş veya rencide edilmiş hissettim.	I1
Dindar insanlar tarafından reddedildiğimi ya da yanlış anlaşıldığımı hissettim.	I2
Sanki başkalarının beni dini veya manevi inançlarından dolayı hor gördüğünü hissettim.	I3
Dini veya manevi konularda diğer insanlarla anlaşmazlıklar yaşadım.	I4
Toplumda kabul görmüş yaygın yerleşik dine karşı kızgınlık yaşadım.	I5
<b>Moral Struggle (4)</b>	
Ahlaki prensiplerime göre yaşama çabalarım beni çok yordu.	Mo1
Davranışlarımın ahlaki ya da manevi açıdan yanlış mı doğru mu olduğu konusunda endişeler yaşadım.	Mo2
Kendi arzuladıklarım ile ahlaki olarak doğru bildiklerim arasında iç çatışmalar yaşadım.	Mo3
Ahlaki olarak doğruluğuna inandıklarına göre yaşamadığım için suçluluk hissettim.	Mo4
<b>Ultimate Meaning Struggle(4)</b>	
Yaşamın gerçekten bir önemi olup olmadığını sorguladım.	Me1
Sanki hayatımın derin bir anlamı yokmuş gibi hissettim.	Me2
Bu dünyada var olmanın bir fark yaratıp yaratmayacağı sorguladım.	Me3
Varoluşun ya da hayatın ulvî bir amacının olup olmadığını irdeledim.	Me4
<b>Doubt Struggle (4)</b>	
Din veya maneviyat konusunda gerçekten neye inandığımıla ilgili kafamda çelişkiler yaşadım.	Do1
Dini veya manevi inançlarım konusunda kafa karışıklıkları yaşadım.	Do2
Din veya maneviyat konularında yaşadığım şüphe ve sorgulamalardan dolayı rahatsızlıklar yaşadım.	Do3
Din veya maneviyatla ilgili inançlarımın doğru olup olmadığı konusunda endişeler yaşadım.	Do4

## APPENDIX C

### Consent Form

#### **Ruh Sağlığı ile Farklı Dini/Manevi Deneyimler Arasındaki İlişkiler Araştırması**

Değerli katılımcılar,

Bu çalışmanın amacı ruh sağlığı ile dine/maneviyata yönelik tutum ve çelişkiler arasında bir ilişki olup olmadığını incelemektir. Sizden **GÖNÜLLÜ** olarak bu çalışmaya katılmanızı arzu ediyoruz. Yaklaşık **25-30 DAKİKA** sürecek ankete vereceğiniz cevaplar **SADECE BİLİMSEL ÇALIŞMA İÇİN KULLANILACAKTIR**. Anketler topluca değerlendirileceğinden **İSMİNİZİ BELİRTMENİZDE GEREK YOKTUR**. Bu güvencelerle araştırmanın kalitesini yüksek tutmak adına **CEVAPLARINIZDA İCTEN VE SAMİMİ OLMANIZI** umuyoruz. Tüm maddelere cevap vermeniz idealdir ancak herhangi bir nedenden dolayı herhangi bir soruya cevap vermek istemezseniz lütfen cevap vermemede özgür hissedin. Çalışmadan herhangi bir nedenden ötürü çekilmek isterseniz çalışmaya katıldıkten sonra 15 gün içerisinde araştırmadan çekilebilirsiniz. Çalışmamıza göstereceğiniz özenden dolayı şimdiden çok teşekkür ediyoruz.

Saygılarımla,

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#### **KATILIMCI ONAM FORMU**

Bu çalışmanın amacının ruh sağlığı ile dine/maneviyata yönelik tutum ve çelişkiler arasındaki ilişkiyi incelemek olduğunu, çalışmaya katılımın gönüllülük esasına göre yapıldığını, çalışmada kimlik bilgilerinin gizli tutulduğunu, çalışmanın bilimsel çalışma amacıyla kullanılacağını, eğer istersem çalışmadan 15 gün içinde çekilme hakkımın bulunduğu anlamış bulunmaktayım.

Bu koşullarda çalışmaya katılmayı kabul ediyorum.

**Katılımcı kodu:** \_\_\_\_\_

(Katılımdan vazgeçme durumunda anketten çıkarılmaya yardımcı olacaktır.)

Tarih: \_\_\_\_/\_\_\_\_/20\_\_\_\_

İmza: \_\_\_\_\_

#### **Araştırmacının**

Adı - Soyadı: Hatice Kübra Bolat

İmza: \_\_\_\_\_

,

APPENDIX D  
Demographic Form

DEMOGRAFİK BİLGİLER								
1.	Cinsiyetiniz?			Erkek	Kadın	Diğer		
2.	Hangi <u>yıl</u> doğdunuz? Lütfen yazarak belirtiniz.			.....				
3.	<b>Ekonomik Durum:</b> Bir aile olarak ekonomik durumunuz nasıl değerlendiriyorsunuz?							
	Çok Fakir	Fakir	Ne zengin ne fakir (orta halli)	Zengin	Çok zengin			
4.	<b>Eğitim Durumu:</b> Eğitim düzeyiniz?							
	Okur-Yazarım	İlkokul mezun	Lise Mezun	Üniversite Öğrenci	Üniversite Mezun	Lisansüstü Öğrenci	Lisansüstü Mezun	Diğer .....

**APPENDIX E**  
**The PERMA Profiler Scale**

<b>PSİKOLOJİK İYİLİK DÜZEYİNİZ</b>						
	Lütfen aşağıda yer alan ifadelere <b>ne düzeyde</b> katıldığınızı belirtiniz.					
1.	Genel olarak, hayatınızın ne düzeyde bir anlamı ve amacı var?	Hiç yok %0	Az var %25	Biraz var %50	Fazla var %75	Çok fazla var %100
2.	Koyduğunuz önemli hedeflere ulaşmayı ne düzeyde başarısınız?	Hiç	Nadiren	Bazen	Çoğunlukla	Her zaman
3.	İşlerinizi ne düzeyde kendinizi ona kaptırarak (kendinizden geçercesine) yaparsınız?	Hiçbir zaman	Nadiren	Bazen	Çoğunlukla	Her zaman
4.	Genel olarak sağlık durumunuzu nasıl değerlendirdirsiniz?	Hiç iyi değil	Az iyi	Orta düzeyde iyi	Oldukça iyi	Çok iyi
5.	Genel olarak ne sıklıkla neşelisinizdir?	Hiç	Nadiren	Bazen	Çoğunlukla	Her zaman
6.	Yardıma ihtiyacınız olsa başkalarından ne düzeyde yardım ve destek göreceğinizi düşünüyorsunuz?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
7.	Genel olarak, ne sıklıkta kaygı yaşarsınız?	Hiç	Nadiren	Bazen	Çoğunlukla	Her zaman
8.	Hedeflerinize ulaşmada ne sıklıkta ilerleme kaydettiğinizi düşünürsünüz?	Hiç	Nadiren	Bazen	Çoğunlukla	Her zaman
9.	Genel olarak, hayatınızda yapıp ettiklerinizin ne kadar değerli ve yapmaya değer olduğunu düşünürsünüz?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
10.	Genel olarak kendinizi ne sıklıkta iyi hissedersiniz?	Hiç	Nadiren	Bazen	Çoğunlukla	Her zaman
11.	Genel olarak, ne düzeyde hayatı karşıınızda bir coşkunluk ve merak duyarsınız?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
12.	Hayatınızda ne düzeyde yalnızlık yaşarsınız?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
13.	Beden sağlığınızın mevcut durumundan ne düzeyde memnunsunuz?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
14.	Genel olarak ne sıklıkta öfke yaşarsınız?	Hiç	Nadiren	Bazen	Çoğunlukla	Her zaman
15.	Genel olarak, ne düzeyde sevildiğinizi hissediyorsunuz?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
16.	Görevlerinizi ne sıklıkta başarıyla sonlandırırsınız?	Hiçbir zaman	Nadiren	Bazen	Çoğunlukla	Her zaman
17.	Genel olarak hayatınızın ne düzeyde bilinçli bir amacı olduğunu düşünüyorsunuz?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
18.	Kendi yaş ve cinsiyet grubunuzdakilerle karşılaşmadığınızda, sağlığınıza nasıl değerlendirdirsiniz?	Hiç iyi değil	Az iyi	Orta düzeyde iyi	Fazla iyi	Çok fazla iyi

19.	Genel olarak, kişisel ilişkilerinizden ne düzeyde memnunsunuz?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
20.	Genel olarak ne sıklıkta üzüntü yaşarsınız?	Hiçbir zaman	Nadiren	Bazen	Çoğunlukla	Her zaman
21.	Mutlu olduğunuz bir şeyi yaparken ne sıklıkla zamanın nasıl geçtiğini anlamadığınız anlar yaşarsınız?	Hiçbir zaman	Nadiren	Bazen	Çoğunlukla	Her zaman
22.	Genel olarak iç dünyanızda ne düzeyde huzurlusunuzdur?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla
23.	Her şeyiyle yaşamınızda genel olarak ne kadar mutlusunuz?	Hiç	Az	Orta düzeyde	Fazla	Çok fazla



**APPENDIX F**  
**DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure**

<b>RUH SAĞLIĞINIZ</b>						
<p><b>Yönergeler:</b> Aşağıdaki sorular size rahatsız edebilecek şeyleri sormaktadır. Her soru için, <b>son İKİ (2) HAFTA</b> boyunca her bir sorunun sizi ne kadar (veya ne sıklıkta) rahatsız ettiğinizi en iyi açıklayan sayınızı daire içine alın.</p>						
	<b>Son İKİ (2) HAFTA</b> boyunca, aşağıdaki sorunlardan ne kadar (veya ne sıklıkta) <b> rahatsız</b> oldunuz?					
1.	Bir şeyler yaparken ilgi veya istekte azalma?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
2.	Keyifsiz, çökkün veya umutsuz hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
3.	Her zamankinden daha sinirli, huysuz veya öfkeli hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
4.	Her zamankinden daha az uyuma fakat hala çok enerjiye sahip olma?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
5.	Her zamankinden daha fazla işler yapmaya kalkışma veya daha riskli işler yapma?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
6.	Sinirli, kaygılı, korkmuş, endişeli veya gergin hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
7.	Paniklemiş veya ürkmüş hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
8.	Kaygı veren durumlardan kaçınma?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
9.	Nedeni bilinmeyen ağrılar ve acılar hissetme (örn., baş, bel, eklem, karın, bacaklar)?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
10.	Hastalığınızın yeterince ciddiye alınmadığını hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
11.	Sanki gerçekten kendinize bir zarara vereceğiniz gibi düşünme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
12.	Başkalarının duyamayacağı şeyler duyma; Örneğin çevrede kimse olmadığı anlarda bile sesler duyma?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün
13.	Düşüncelerinizin başkaları tarafından duyulabileceğini veya sizin başkalarının düşüncelerini duyabileceğinizi hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından an fazla	Çok fazla Nerede yse her gün

14.	Genel uykú kalitenizi etkileyen uykú sorunları yaşamanız?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
15.	Unutkanlıkla ilgili (örn., yeni bilgiler öğrenme) veya yer bulma (örn., evin yolunu bulamama) konusunda sorunlar yaşama?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
16.	Tekrar tekrar aklınıza takılan rahatsız edici düşünceler, dürtüler veya görüntüler olması?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
17.	Belli davranışları veya zihinsel faaliyetleri tekrar tekrar yapmak zorunda hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
18.	Kendinizi, kendinizden, bedeninizden, fiziksel çevrenizden veya anılarınızdan ayrı ve uzak hissetme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
19.	Aslında kim olduğunuzu veya hayattan ne istediginizi bilemememe?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
20.	Kendinizi başka insanlara yakın hissedememe veya onlarla olan ilişkilerinizde zevk alamama?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
21.	Herhangi bir alkol türünden günde en az 4 kap (kadeh şışe vb.) içki içme?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
22.	Sigara, puro, pipo, enfiye çekme veya tütün çiğneme alışkanlıklarından herhangi birine sahip olma?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün
23.	Doktor reçetesi olmadan veya doktor tarafından önerilen dozun üzerinde ya da önerilenden daha uzun sürede <b>KENDİ KAFANIZA GÖRE</b> aşağıdaki ilaçlardan herhangi birini kullanma [örn., ağrı kesiciler (morphin, dolantin), uyarıcılar (ritalin, concerta), sakinleştiriciler ve yatıştırıcılar (uyku hapları, diazem), esrar, kokain, bonsai, gece kulubü hapları (ecstasy), halusinojenler (LSD), eroin, uçucular (bali) ya da metamfetamin (kristal)]?	Hiç	Nadiren Bir veya iki günden az	Biraz Bir kaç gün	Fazla Her günün yarısından fazla	Çok fazla Nerede yse her gün

**APPENDIX G**  
**The Personality Inventory for DSM-5—Brief Form**

<b>KİŞİLİK ÖZELLİKLERİNİZ</b>						
Aşağıdaki sizi tanımlayabilecek ifadelere <b>ne düzeyde</b> katılsınız?						
1.	İnsanlar genellikle beni pervasız (gözü kara) biri olarak tanır.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
2.	Sanki tamamen aklına eseni yapan biri gibiyim.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
3.	Daha iyisini bilmeme rağmen, acele kararlar almaktan kurtulamıyorum.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
4.	Çoğu kez yaptığım hiçbir şey sanki gerçekten bir işe yaramamış gibi hissediyorum.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
5.	Diğer insanlar beni sorumsuz biri olarak görüyor.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
6.	Gelecekle ilgili planlar yapmakta iyi değilim.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
7.	Benim düşüncelerim genellikle diğer insanlar için bir anlam ifade etmez.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
8.	Neredeyse her şeyle ilgili kaygı yaşıyorum.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
9.	(Genellikle çok küçük bir nedenden dolayı olmak üzere) Kolay duyugulan biriyim.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
10.	Yalnız kalmaktan, hayatı hiçbir şeyden olmadığı kadar korkarım.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
11.	Bir şeyi yapmanın bir yoluna takılıp kalırm, o yolun işe yaramayacağını bilsen bile.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
12.	Gerçekte mevcut olmayan şeyler görüyorum.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
13.	Romantik ilişkilerden özellikle uzak dururum.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
14.	Arkadaşlar edinmek ilgimi çekmiyor.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
15.	Her türlü şey beni kolayca öfkelendirebilir.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
16.	İnsanlara çok fazla yaklaşmayı sevmem.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
17.	Eğer insanların duygularını incitmışsem bu bir sorun olarak görülmemeli.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
18.	Her hangi bir şeye karşı nadiren heyecan duyarım.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum
19.	Dikkat çekmeyi çok arzularım.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamina Katılıyorum

	Genellikle benden daha degersiz insanlarla uğraşmak durumunda kalıyorum.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamına Katılıyorum
20.	Genellikle benden daha degersiz insanlarla uğraşmak durumunda kalıyorum.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamına Katılıyorum
21.	Diğer insanların garip bulduğu ama genellikle bana anlamlı gelen düşüncelerim var.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamına Katılıyorum
22.	İstediklerimi elde etmek için insanları kullanırıım.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamına Katılıyorum
23.	Sıklıkla dalarım ve kendime geldiğimde bir de bakmışım ki epey zaman geçmiş.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamına Katılıyorum
24.	Çoğu kez, etrafındaki şeyler ya gerçek değil ya da olduğundan daha gerçekmiş gibi	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamına Katılıyorum
25.	Benim için başkalarını kullanmak kolaydır.	Hiç Katılmıyorum	Az Katılıyorum	Yarı yarıya Katılıyorum	Çoguna Katılıyorum	Tamamına Katılıyorum



**APPENDIX H**  
**Ok- Religious Attitude Scale**

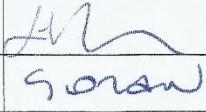
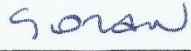
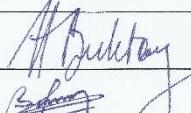
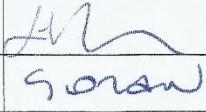
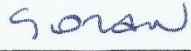
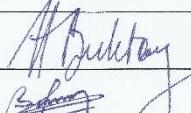
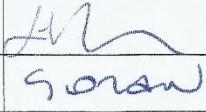
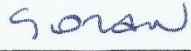
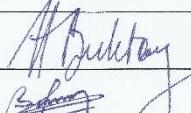
<b>MANEVİYATA VE DİNE YÖNELİK TUTUMUNUZ</b>						
Lütfen aşağıda yer alan ifadelere <b>ne düzeyde</b> katıldığınızı belirtiniz.						
1.	Dinin gereksiz olduğunu düşünüyorum.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
2.	Dinî inancın insanlara yararından çok zararı olduğunu düşünüyorum.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
3.	Ezan, dua veya ayet gibi dinî okumaları dinlediğimde duygulanırıım.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
4.	Dinî etkinliklere katıldığında gerçekten zevk alırmı.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
5.	Yaşantımın dini değerlere uygun olup olmadığına dikkat ederim.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
6.	İnandığım dinin gereklerini yerine getirmeye çalışırıım.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
7.	Zor zamanlarda Allah'ın bana yardım ettiğini düşünüyorum.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
8.	Allah'ın bana çok yakın olduğunu hissediyorum.	Hiç katılmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum

**APPENDIX I**  
**Religious Struggle Scale (RRS)**

<b>MANEVİ VE DİNİ KONULARDA ÇELİŞKİ YAŞAMA DURUMUNUZ</b>						
	Lütfen aşağıda yer alan ifadelere <b>son birkaç ayda</b> ne düzeyde deneyimlediğinizi belirtiniz.					
1.	Allah beni yüzüstü bırakmış gibi hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
2.	Allah'a karşı kızgınlık hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
3.	Sanki Allah beni terk etmiş gibi hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
4.	Sanki Allah beni cezalandırılmış gibi hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
5.	Allah'ın beni sevip sevmediğini sorguladım.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
6.	Şeytan ya da kötü ruhlar tarafından bana işkence edildiği hissini yaşadım.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
7.	Başında gelen sıkıntıların şeytandan veya kötü ruhlar tarafından kaynaklandığı hissine kapıldım.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
8.	Şeytan veya kötü ruhlar tarafından saldırıyla uğradığımı hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
9.	Şeytanın (veya kötü ruhların) beni doğru yoldan saptırmaya çalıştığını hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
10.	Dindar insanlar tarafından incitilmiş, mağdur edilmiş veya rencide edilmiş hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
11.	Dindar insanlar tarafından reddedildiğimi ya da yanlış anlaşıldığımı hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
12.	Sanki başkalarının beni dini veya manevi inançlarımın dolayı hor gördüğünü hissettim.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
13.	Dini veya manevi konularda diğer insanlarla anlaşmazlıklar yaşadım.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
14.	Toplumda kabul görmüş yaygın yerlesik dine karşı kızgınlık yaşadım.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
15.	Ahlaki prensiplerime göre yaşama çabalarım beni çok yordu.	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
16.	Davranışlarının ahlaki ya da manevi açıdan yanlış mı	Hiç katulmüyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum

	doğru mu olduğu konusunda endişeler yaşadım.					
17.	Kendi arzuladıklarım ile ahlaki olarak doğru bildiklerim arasında iç çatışmalar yaşadım.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
18.	Ahlaki olarak doğruluğuna inandıklarına göre yaşamadığım için suçluluk hissettim.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
19.	Yaşamın gerçekten bir önemi olup olmadığını sorguladım.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
20.	Sanki hayatımın derin bir anlamı yokmuş gibi hissettim.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
21.	Bu dünyada var olmamın bir fark yaratıp yaratmayacağını sorguladım.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
22.	Varoluşun ya da hayatın ulvi bir amacının olup olmadığını irdeledim.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
23.	Din veya maneviyat konusunda gerçekten neye inandığımla ilgili kafamda çelişkiler yaşadım.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
24.	Dini veya manevi inançlarım konusunda kafa karışıklıkları yaşadım.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
25.	Din veya maneviyat konularında yaşadığım şüphe ve sorgulamalardan dolayı rahatsızlıklar yaşadım.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum
26.	Din veya maneviyatla ilgili inançlarımın doğru olup olmadığı konusunda endişeler yaşadım.	Hiç katulmıyorum	Az katılıyorum	Yarı yarıya katılıyorum	Çoguna katılıyorum	Tamamına katılıyorum

**APPENDIX J**  
**Ethics Committee Approval Form**

<b>T.C.</b> <b>İBN HALDUN ÜNİVERSİTESİ</b> <b>SOSYAL VE BEŞERİ BİLİMLER BİLİMSEL ARAŞTIRMALAR VE YAYIN ETİĞİ KURULU</b> <b>BAŞKANLIĞI KARAR FORMU</b>																												
<b>BASVURU BİLGİLERİ</b>	ARAŞTIRMANIN AÇIK ADI	Psikopatoloji ve Psikolojik İyi Oluş ile Dini/Manevi Tutum ve Çelişki Arasındaki İlişkiler																										
	KOORDİNATÖR/SORUMLU ARAŞTIRMACI UNVANI/ADI/SOYADI	Hatice Kübra Bolat/Psikolog																										
	KOORDİNATÖR/SORUMLU ARAŞTIRMACININ UZMANLIK ALANI	Klinik Psikoloji																										
	KOORDİNATÖR/SORUMLU ARAŞTIRMACININ BULUNDUĞU MERKEZ	İstanbul																										
	ARAŞTIRMAYA KATILAN MERKEZLER	<b>TEK MERKEZ</b> <input type="checkbox"/>	<b>ÇOK MERKEZLİ</b> <input checked="" type="checkbox"/>	<b>ULUSAL</b> <input type="checkbox"/>	<b>ULUSLARARASI</b> <input type="checkbox"/>																							
<b>Değerlendirilen Belgeler</b>	Belge Adı	Tarihi	Versiyon Numarası	Dili																								
	ETİK KURUL BAŞVURU FORMU	14.02.2019		Türkçe <input checked="" type="checkbox"/> İngilizce <input type="checkbox"/> Diğer <input type="checkbox"/>																								
	BİLGİLENDİRİLMİŞ GÖNÜLLÜ OLUR FORMU	14.02.2019		Türkçe <input checked="" type="checkbox"/> İngilizce <input type="checkbox"/> Diğer <input type="checkbox"/>																								
<b>Karar Bilgileri</b>	SOSYODEMOGRAFİK FORM	14.02.2019		Türkçe <input checked="" type="checkbox"/> İngilizce <input type="checkbox"/> Diğer <input type="checkbox"/>																								
	KARAR NO: 2019/12-1	TARİH: 20.02.2019																										
<p><b>KARAR:</b> Kurulumuza başvuran Sn. Hatice Kübra Bolat'ın "Psikopatoloji ve Psikolojik İyi Oluş ile Dini/Manevi Tutum ve Çelişki Arasındaki İlişkiler" isimli proje; amaç, araştırma türü ve örneklem, veri toplama araçları, süreç ve işlemler, veri analizleri dikkate alınmak suretiyle değerlendirilirlerken aşağıdaki sonuca ulaşılmıştır:</p> <p>Proje etik açıdan uygun bulunmuştur <input checked="" type="checkbox"/></p> <p>Projenin etik açıdan geliştirilmesi gerekmektedir <input type="checkbox"/></p> <p>Proje etik açıdan uygun bulunmamıştır <input type="checkbox"/></p>																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; padding: 5px;">ETİK KURULDAKİ GÖREVİ</th> <th style="width: 30%; padding: 5px;">ADI SOYADI</th> <th style="width: 40%; text-align: center; padding: 5px;">İMZA</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Etik Kurul Başkanı</td> <td style="padding: 5px;">Prof. Dr. Ekrem Tatoğlu</td> <td style="padding: 5px; text-align: center;"></td> </tr> <tr> <td style="padding: 5px;">Üye</td> <td style="padding: 5px;">Prof. Dr. Yüksel Özden</td> <td style="padding: 5px; text-align: center;"></td> </tr> <tr> <td style="padding: 5px;">Üye</td> <td style="padding: 5px;">Prof. Dr. Fuat Erdal</td> <td style="padding: 5px; text-align: center;"><b>İZİNLİ</b></td> </tr> <tr> <td style="padding: 5px;">Üye</td> <td style="padding: 5px;">Prof. Dr. Halil Berkay</td> <td style="padding: 5px; text-align: center;"></td> </tr> <tr> <td style="padding: 5px;">Üye</td> <td style="padding: 5px;">Prof. Dr. Bilal Aybakan</td> <td style="padding: 5px; text-align: center;"></td> </tr> <tr> <td style="padding: 5px;">Üye</td> <td style="padding: 5px;">Prof. Dr. Yusuf Çalışkan</td> <td style="padding: 5px; text-align: center;">Katılmadı</td> </tr> <tr> <td style="padding: 5px;">Üye</td> <td style="padding: 5px;">Prof. Dr. Üzeyir Ok</td> <td style="padding: 5px; text-align: center;">Katılmadı</td> </tr> </tbody> </table> <div style="text-align: center; margin-top: 10px;">  </div>					ETİK KURULDAKİ GÖREVİ	ADI SOYADI	İMZA	Etik Kurul Başkanı	Prof. Dr. Ekrem Tatoğlu		Üye	Prof. Dr. Yüksel Özden		Üye	Prof. Dr. Fuat Erdal	<b>İZİNLİ</b>	Üye	Prof. Dr. Halil Berkay		Üye	Prof. Dr. Bilal Aybakan		Üye	Prof. Dr. Yusuf Çalışkan	Katılmadı	Üye	Prof. Dr. Üzeyir Ok	Katılmadı
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## CURRICULUM VITAE

### Personal Information:

Name - Surname: Hatice Kübra Bolat

E-mail (1): hatice.bolat@ihu.edu.tr

E-mail (2): haticekbolat@gmail.com

### Education:

2012-2014 BA in Psychology, Fatih University, Turkey

2014-2016 BA in Psychology, İstanbul Şehir University, Turkey

2017-2020 MA in Clinical Psychology, Ibn Haldun University, Turkey

### Experience:

August, 2015.....İstanbul Bakırköy Prof. Dr. Mazhar Osman Ruh Sağlığı ve Sinir Hastalıkları Eğitim ve Araştırma Hastanesi, as an observer with Bipolar and Schizophrenic adult patients

February, 2016.....Project Lift, Psychosocial Workshop and Community Day, with Syrian refugee children

August, 2018 - October, 2019.....Ibn Haldun University Psychotherapy Application and Research Center (IPAM), as a psychologist with children and adolescence

### Certifications, Workshops, and Other Educations:

December, 2013.....Case Study: Narcissistic Personality Disorder, from Fatih University, SevDa Eğitim & Aile Danışmanlık Merkezi

May, 2014.....4.Psychology Days, from Beykent University

May, 2014..... Effective Communication Techniques with Cem Öğretir (Cem Öğretir ile Etkili İletişim Teknikleri), from Cem Öğretir, Communication Academy (İletişim Akademisi)

September, 2016.....Objective Psychological Tests (*Bender Gestalt Visual Motor Perception Test, Benton Visual Memory Test, Kent EGY, Porteus Labyrinths, Gessel Developmental Figures Test, Peabody Receptive Language Age Test, Frostig Developmental Visual Perception Test, SCL-90-R, Short Symptom Screening Inventory, Catell 2- A Intelligence Test, Metropolitan School Readiness Test, Mini*

*Mental State Examination Test), Certificate of Practitioner, from Istanbul Psychology Institution*

September, 2016.....Projective Psychological Measures (*Lousia Düss Psychoanalytic Stories Test, Beier Sentence Completion Test, Trafik Sentence Completion Test, Goodenough - Harris Draw A Person Test, Kinetic Family Drawing Test, House - Tree - Human Drawing Test*), Certificate of Practitioner, from Istanbul Psychology Institution

September, 2016.....MMPI, WISC-R, and TAT&CAT, Certificate of Practitioner, from Istanbul Psychology Institution

September, 2016.....Play Therapy, Beginners level, from Istanbul Psychology Institution

October, 2016.....Short-term Solution Focused Therapy, from Yrd. Doç. Dr. Nevin Dölek, Türk Psikolojik Danışma ve Rehberlik Derneği (PDR)

April, 2017.....Child Development Training (*Nutrition and Toilet Training, Developmental Assessment, and Ways of Coping with Problem Behaviors in Children*), from İstanbul Şehir University Life Long Learning Center

April, 2017.....Sign Language Training, Beginners level, from İstanbul Şehir University, Kerem Erkan

September, 2017 – June, 2018.....Cognitive Behavioral Therapy, from Prof. Dr. Hakan Türkçapar

September, 2018 – June, 2019.....Child and Adolescence Psychopathology, from Prof. Dr. Mücahit Öztürk

August, 2018 – June, 2019.....Dissociative Personality Disorder, practitioner training, from Prof. Dr. Medaim Yanık

August, 2018 – June, 2019.....Cognitive Behavioral Therapy Adult Supervision, from Specialist Clinical Psychologist Müge Sargin

August, 2018 – October, 2019.....Child and Adolescence Psychotherapy and Play Therapy Supervision, from Asst. Prof. Dr. Belkıs Nilgün Öcal, Specialist Psychologist Belkıs Ertürk and Psychologist Pınar Koç Yıldırım

February, 2019 – June, 2019.....Psychological Testing for Adult and Children, from Kamile Tombul and Hatice Oral Şen

March, 2019.....II.PDR Zirvesi (*Addiction, Self-Compassion, Impulsivity in Children, Play Therapy, Assessment of Child Pictures*), from Türk Psikolojik Danışma ve Rehberlik Derneği

March, 2019.....Workshop of Approach to Asperger Disorder with Case Studies (Olgu Örnekleriyle Asperger Bozukluğu Yaklaşımı Atölyesi), from Prof. Dr. Mücahit Öztürk

March, 2019.....Worshop of Living in the Future, Discovery, and Preparation in Psychodrama (Psikodramada Geleceği Yaşama, Keşif, ve Hazırlık Atölyesi), from Specialist Psychologist Deniz Altınay

March, 2019.....II. Türkiye Psikoterapi Zirvesi (*Basic theoretical background on Positive Psychotherapy, Cognitive Behavioral Therapy, Psychotherapy, Medical Treatment and Psychotherapy, Problem Solving Therapy, Dissociative Disorder Therapy, Phenomenological Dream Self Model, Psychotherapy of Trauma, Schema Therapy, Motivational Interview Technique, Gestalt Therapy, Acceptance and Commitment Therapy, Conscious Therapy, Awareness Therapy Behavioral Therapy, Family Therapy, CBT with Children and Adolescents, Emotion-Focused Therapy, Existential Therapy, Play Therapy, Psychoanalysis and Psychoanalytic Psychotherapy, Theraplay Game Therapy, Psychodrama, EMDR, Narrative Therapy, Metacognitive Therapy, Self-Compassionate Awareness*), from POEM Psychological Counseling and Psychotherapy

April, 2019 – July, 2019.....Adult Psychotherapy Supervision, from Specialist Psychologist Sümeyye Yaşar