THE INVESTIGATION OF MEANING IN LIFE IN TERMS OF SELF-CONSTRUAL, SELF-CONCEPT CLARITY AND GRATITUDE AMONG UNIVERSITY STUDENTS

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ABSTRACT

THE INVESTIGATION OF MEANING IN LIFE IN TERMS OF SELF-CONSTRUAL, SELF-CONCEPT CLARITY AND GRATITUDE AMONG UNIVERSITY STUDENTS

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The main purpose of the present study is to test a model that investigates the relationships between meaning in life (presence of meaning, search for meaning), self-construal (integration, differentiation), gratitude and self-concept clarity among university students based on the proposals of Steger’s theory of meaning (2009, 2012) and the BID model of İmamoğlu (1998, 2003). Additionally, it is aimed to examine the differences of four self construals of the BID (Balanced Integration Differentiation) model on presence of meaning, search for meaning, gratitude, self-concept clarity and to examine possible influences of demographic variables (gender, year of study, faculty, accommodation, relationship status) on the various measures of the study (presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity). The sample consists of 825 university students attending to a state university in Ankara. Demographic Information Form, Balanced Integration Differentiation Scale (BIDS), Meaning in Life Questionnaire (MIL), Gratitude Questionnaire (GQ) and Self-Concept Clarity Scale (SCCS) were utilized.
to collect data. Different significant direct and indirect effects were obtained through path analysis for each type of self-construal. MANOVAs also revealed some differences on the measures of the study in terms of demographic variables and self construals. Findings of the study were discussed in light of the related literature.

**Keywords:** meaning in life, self construal, gratitude, self-concept clarity, university students
ÖZ

YAŞAMDA ANLAMINÜNİVERSİTE ÖĞRENCİLERİNDE, BENLİK KURGUSU, BENLİK BELİRGINLİĞİ VE MİNNETTARLIK AÇISINDAN İNCELENMESİ

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**Anahtar kelimeler:** yaşamsal anlam, benlik kurgusu, minnettarlık, benlik belirginliği, üniversite öğrencileri
To my son, Murat Çebi
I came to one of the finish lines of my life. I am tired but also joyful. It was not a single player game. This thesis could not be possible without the support and encouragement I took. So, I want to thank people who provided these. Firstly, I owe my special thanks to my supervisor Prof. Dr. Ayhan Demir. He trusted my academic interests and guided me with patience. His autonomy support enabled me not only to complete this thesis but also to develop new research interests which I am curious about. I think this is the most important acquisition of a student from a supervision process.

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CHAPTER 1

INTRODUCTION

‘We are nothing within ourselves, nonexistent. To be is to mean something to someone else.’
Andras Angyal

1.1 Background to the Study

Young adulthood is the most vital part of one’s life that there is a Turkish saying as ‘it is the spring of life’. It is the time of experiencing independence in life decisions, satisfaction and enjoyment with having close relationships, following interests and dreaming a good future. Together with its vitality, according to a meta-analysis of ninety-two longitudinal studies, young adulthood is the time of the most personality change when compared to other periods of life course, including adolescence (Roberts, Walton, & Viechtbauer, 2006). Besides personality change, building a family and starting a work life, which are the main tasks of one’s life, are handled in these ages. So, psychosocial development theories mainly describe this period in terms of love and work. Erikson (1968) identified early adulthood (18-40 ages) as the critical time of building close friendships, relationships with the opposite sex. Levinson (1986) identified ages 17-33 as novice phase of adulthood in which one tries out possibilities in love and work to build a life structure. More recently, Arnett (2000) called ages 18-25 as emerging adulthood, which is characterized by prolonged exploration of possibilities and choices in love, work and worldviews due to industrialization. Consistent with the theories, several studies reported that young adults construct goals related to future education, family and they have

University is an important social setting in the development of the most of the young adults. Although it is mostly conceived as a way of obtaining a degree in labor force and earning high salaries through academic engagement and success, university experience holds more than that. Higher education experience forces individual to meet new people, ask new questions, learn to think, discuss new ideas. Exposure to varied campus climates, student interaction with college instructors and leaders, acquisition of new personal values and involvement in friendship groups influence the development of young adults' confidence and altruism, self and worldviews, and achievement of personal identities (Winston, Miller, & Cooper, 1999). By linking college experience to personal development, several theories have been proposed. Chickering and Reisser (1993) offered a theory of psychosocial development in which developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships help establishing identity, and then students develop purpose, and integrity. Parks (2011) addressed the distinctive role of higher education in the development of critical thinking and meaning-making by creating mentoring environments for students. Similarly, Learning Partnerships Model (Baxter Magolda, 2009) posits that educators guide and share authority with students in developing self-authorship which is internal capacity used for determining beliefs, identities and social relations. Research support the effectiveness of the model for students in areas of navigating life challenges, intercultural maturity, mature relationships and complex problem solving (Baxter Magolda, 2014). Taken together, university life has an influential role in the development of early adults.

Being a university student is a challenging process which requires students to overcome obstacles, seize opportunities, adapt to changes and pursue goals (Clark,
2005) and serves as a vehicle to prepare the individual for the rest of his life. While
some students do well, some have difficulties to cope with the demands of this period
(Nelson & Padilla-Walker, 2013; Piumatti & Rabaglietti, 2015). Understanding well-
functioning factors is critical for supporting students in their development. Meaning
in life is one of the reliable indicators of well-being so much so that Steger (2018a)
claimed that it is time to ask whether well-being is possible without meaning in life.
It is described as “the sense made of, and significance felt regarding, the nature of
one’s being and existence” (Steger, Frazier, Oishi, & Kaler, 2006, p. 81). In studies,
meaning is established as a mediator of well-being (Steger & Frazier, 2005), a
component of well-being (Waterman et al., 2010), a moderator of stress (Marcussen,
Ritter, & Safron, 2004), an orientation to happiness (Peterson, Park, & Seligman,
2005), a foundation of resilience (Wong & Wong, 2012), a motive for identity
construction (Vignoles, Regalia, Manzi, Golledge, & Scabini, 2006) or central focus
of therapies (Melton & Schulenberg, 2008). Studies show that lack of meaning in life
is associated with excessive alcohol consumption (Schnetzer, Schulenberg, &
Buchanan, 2013), self-injury (Kress, Newgent, Whitlock, & Mease, 2015),
depression (Mascaro & Rosen, 2005, 2008; Park & Jeong, 2016) among college
students. On the contrary, presence of meaning in life is positively related to college
students’ adjustment (academic, personal-emotional and social adjustment,
institutional attachment) (Trevisan, Bass, Powell, & Eckerd, 2017), enhanced
academic performance (Makola, 2014; Mason, 2017), well-being (Dezutter et al.,
2013; Guse & Shaw, 2018; To & Sung, 2017), thriving (Morgan Consoli, Unzueta,
Delucio, & Llmas, 2018), higher self-concept clarity and goal progress (Shin, 2013).
Unfortunately, among youth one of the largest declines in importance among life
goals was observed in life goal of ‘finding and developing meaning and purpose in
life’ compared to previous generations (Twenge, Campbell, & Freeman, 2012). Thus,
meaning in life should be further investigated in order to understand how it works
and how it can be used in interventions for supporting college students in their
academic and psychosocial development.
There are different theories related to meaning in life (Battista & Almond, 1973; Baumeister, 1991; Frankl, 1963; Reker & Wong, 1988; Yalom, 1980). Steger (2009, 2012) approached meaning from the cognitive sense-making nature of human beings that understanding meaning of our lives, is similar to other mental processes in which we make sense of stimuli. According to this view, meaning in life is described as “the extent to which people comprehend, make sense of, or see significance in their lives, accompanied by the degree to which they perceive themselves to have a purpose, mission, or overarching aim in life” (Steger, 2009, p. 682). There are two distinct dimensions of meaning in life; the presence of meaning which refers to availability of meaning in life. Secondly, search for meaning which is described as “the strength, intensity, and activity of people’s desire and efforts to establish and/or augment their understanding of the meaning, significance, and purpose of their lives” (Steger, Kashdan, Sullivan, & Lorentz, 2008a, p. 200). According to Steger (2009, 2012), people make sense and matter by understanding of who they are, how they fit in and interact with the world (comprehension) and this serves as a foundation or springboard for having goals, sense of purpose. Despite being indirect, Steger’s theory had research support (Costin & Vignoles, 2019; Kay, Laurin, Fitzsimons, & Landau, 2014; Landau, Khenfer, Keefer, Swanson, & Kay, 2018; McGregor & Little, 1998; van Tilburg, Sedikides, Wildschut, & Vingerhoets, 2019) and thought to be more informative and elucidatory compared to other theories. Therefore, Steger’s theory (2009, 2012) has been adopted to describe and investigate meaning in life of university students in the present study.

While discussing how to cultivate and sustain meaning in life, Steger, Beeby, Garrett and Kashdan (2013) mentioned about the necessity of establishing identity and connections with others for comprehension but it is not elaborated further. According to Steger (2009), people make sense and matter (comprehension) by understanding of who they are, how they fit in and interact with the world. The interactive nature of the comprehension of self and the world is inevitable since the capacity for social relationships and culture is what makes survival possible (Adams
& Marshall, 1996; Baumeister, 2005; Hagerty, Lynch-Sauer, Patusky, & Bouwsema, 1993). The close relationships between meaning in life and identity, which encompasses the relation between the person and the society (Johnson & Nozick, 2011; Vignoles, 2017), also point to this reality and there is research evidence which shows the close interplay between identity and meaning in life (Dezutter et al., 2013; Han, Liauw, & Kuntz, 2018; Negru-Subtirica, Pop, Luyckx, Dezutter, & Steger, 2016; Waterman, 2014). Thus, the existence of close links between identity and meaning in life await further investigation in order to understand how we form meaning in life judgments.

Two basic needs of individuation and relatedness are used to explain how individuals develop (Guisinger & Blatt, 1994). Among theories related to self-development (Ainsworth, 1972; İmamoğlu, 1998, 2003; Kağıtçıbaşı, 1990, 1996; Markus & Kitayama, 1991; Ryan, 1991; Ryan & Deci, 2000), the Balanced Integration–Differentiation (BID) model of İmamoğlu (1998, 2003) assumes that interdependent integration of differentiated components result in a balanced system which leads to the natural order. As parts of these natural systems, differentiation and integration are two propensities of human beings in all cultures. Self-developmental tendency, the intrapersonal differentiation orientation includes actualizing one's unique potentials (high end is *individuation*, differentiation with intrinsic referents such as one’s personal inclinations, capabilities; low end is becoming *patterned* in accordance with extrinsic referents such as social control). Tendency to be connected to others is the interpersonal integration orientation (high end is *relatedness*; low end is *separatedness*). According to BID, there are four self construals, which are derived from the combinations of high and low levels of the orientations; (1) separated individuation, (2) related patterning, (3) related individuation and, (4) separated patterning. A balanced state of self construal (related-individuated) as the most optimal psychological functioning (İmamoğlu, 2003) is established through satisfying the need for interpersonal integration and intrapersonal differentiation. Studies support the validity of the model in Turkish, American, and Canadian
samples (Gezici & Güvenç, 2003; Guler, 2004; İmamoğlu, 1998, 2003; İmamoğlu & Karakitapoğlu-Aygün, 2004; İmamoğlu, 2005; Kurt, 2002). Additionally, compared to other theories assuming a dialectic relationship between integration and differentiation, BID theory provides a distinct but complementary association, which is consistent with the research evidence of existing positive relationships between integration, differentiation and meaning in life. Relationships are consistently reported as being associated with meaning in life (Baum, 1988; Debats, Drost, & Hansen, 1995; DeBats, 1999; Martela, Ryan, & Steger, 2017; Stavrova & Luhmann, 2016; Wissing, Khumalo, & Chigeza, 2014; Yeniçeri, 2013). Meaning in life was also related to dimension of differentiation (Yeniçeri, 2013) and similar constructs such as individuation (Rosso, Dekas, & Wrzesniewski, 2010), autonomy (Martela et al., 2017; Steger & Samman, 2012); satisfaction with free choice and control over life (Steger & Samman, 2012); expression and reflection of self (Baumeister, Vohs, Aaker, & Garbinsky, 2013; Schlegel, Hicks, King, & Arndt, 2011); belief in free will (one form of autonomous actions) (Crescioni, Baumeister, Ainsworth, Ent, & Lambert, 2016; Moynihan, Igou, & van Tilburg, 2017). Taken in tandem, dimensions of self-development are thought to be influential in formation of meaning in life as processes through which comprehension takes place.

The making sense part of comprehension refers to coherence or clarity and fitting of the things (George & Park, 2016a) and in case of meaning in life, it corresponds well to coherence of self. Self-concept clarity (SCC) is related to structural aspect of self and defined as 'the extent to which the contents of an individual's self-concept (e.g., perceived personal attributes) are clearly and confidently defined, internally consistent, and temporally stable' (Campell, Trapnell, Heine, Katz, Lavallee, & Lehman, 1996, p. 141). Erikson also mentioned that to support an agentic, self-directed, and purposeful life, an internally consistent sense of self is required (1950) (as cited in Schwartz, Meca & Petrova, 2017, p.153). Supporting this conviction, studies show the association between meaning in life and SCC. Shin, Steger and Henry (2016) reported that college students who felt a greater sense of
SCC were also higher in meaning in life, a rapid increase in SCC is accompanied by a rapid increase in meaning in life and SCC predicts meaning in life. A recent study reported that SCC is positively related to perceived work meaningfulness (Oh & Roh, 2019). There are also indirect supportive findings. Intrinsic religious orientation, which is a source of meaning, leads to meaning in life among people with low SCC (Blazek & Besta, 2012). SCC was found to partially mediate the link between meaninglessness and life satisfaction (Ritchie, Sedikides, Wildschut, Arndt, & Gidron, 2011). Self-continuity, which is a close concept to SCC, was reported to boost meaning in life (van Tilburg et al., 2019). Studies also revealed that SCC was related to integration and differentiation. SCC was associated with relationship-related constructs; attachment avoidance and anxiety (Demidenko, Tasca, Kennedy, & Bissada, 2010; Emery, Gardner, Carswell, & Finkel, 2018; Wu, 2009), relationship satisfaction and commitment (Çürükvelioğlu, 2012; Lewandowski, Nardone, & Raines, 2010), role exists (Light & Visser, 2013; McIntyre, Mattingly, Lewandowski, & Simpson, 2014; Slotter, Gardner, & Finkel, 2010; Slotter, Winger, & Soto, 2015) and increased autonomy (Diehl & Hay, 2011). In sum, as supported by the related literatures, it seems that integration and differentiation might lead to meaning in life through self-concept clarity, which might serve as the indicator of the sense made.

The other part of comprehension is mattering. Steger (2012) mentioned the importance of the sense that one’s life is mattering, which encompasses the perception of one’s value and worth, for meaning in life. Mattering was firstly proposed in the literature by Rosenberg and McCullough in 1981 as a construct described as ‘the perception that, to some degree and in any of a variety of ways, we are a significant part of the world around us’. This felt significance is undoubtedly accompanied or included by some emotions. Among these emotions, gratitude has the strongest potential to be the indicator of this feeling of significance. Adler and Fagley (2005) described gratitude as ‘noticing and
acknowledging a benefit that has been received, whether from another person or a deity, and feeling thankful for the efforts, sacrifices, and actions of an “other” (p.83). People identified being seen, recognized, acknowledged, understood from another person while talking about their gratitude experience (Hlava & Elfers, 2014). This experience corresponds to genuine mattering in which others relate to us as an end in itself (Elliott, Kao, & Grant, 2004). So, it can be surmised that gratitude includes the sense of mattering.

Similar to meaning in life, gratitude is related to positive functioning and its conjoint effect with meaning in life has been studied for well-being (Datu & Mateo, 2015; Disabato, Kashdan, Short, & Jarden, 2016; Kleiman, Adams, Kashdan, & Riskind, 2013; Liao & Weng, 2018). Gratitude has also links to service communal interest (Bartlett & DeSteno, 2006) and religiousness/spirituality (McCullough, Emmons, & Tsang, 2002), which are two sources of meaning in life (Emmons, 2003; Schnell, 2009). Additionally, Simmel (1950), Schwartz (1967), Trivers (1971) all stressed the salience of experiencing and expressing gratitude in generating and maintaining positive social relationships (cited in McCullough, Kilpatrick, Emmons, & Larson, 2001, p. 250). Supporting their ideas, there is empirical evidence showing how gratitude builds and maintains relationships (Algoe, Haidt, & Gable, 2008; Jia, Tong, & Lee, 2014; Jia, Lee, & Tong, 2015; Ng, Tong, Sim, Teo, Loy, & Giesbrecht, 2017) which are another source of meaning in life. Thus, gratitude and meaning in life are thought to be associated more closely that gratitude might be a reliable indicator of one’s mattering or felt significance and is expected to lead to meaning in life directly and/or indirectly through integration.

Finally, since integration and differentiation orientations are complementary in nature (İmamoğlu, 2003), their predictive roles for presence of meaning in life, search for meaning, gratitude and self-concept clarity are expected to change according to self construal type. For example, healthy individuation requires being related to others and emotional ties (İmamoğlu, 2003). So, the experience of
individuation in separated-individuated and related-individuated self construal is not same and its predictive role for presence of meaning and search for meaning might change. Similarly, gratitude is not always a positive feeling for everyone and it is accompanied by embarrassment, guilt, indebtedness etc. (Morgan, Gulliford, & Kristjansson, 2014; Waters & Stokes, 2015). Autonomous interpersonal style, which resembles separated-individuated self construal, was found to be associated with less experience and valuing of gratitude (Parker, Majid, Stewart, & Ahrens, 2016). Additionally, due to the complementary nature of integration and differentiation orientations, it is also expected to see the varying characteristics of search for meaning since it does not derive only from meaninglessness (Steger et al., 2006) and people might search for meaning for different purposes like growth (Groudien, 2014).

In sum, the model was tested for each self construal type separately in order to see how integration and differentiation contribute to meaning in life.

Taken in tandem, in consideration of the obvious effect of meaning in life in well-being, there needs to be further understanding of how it develops. Although too many factors have been examined, there is lack of studies, which investigate how these factors are related to each other in the realm of a theoretical framework. The interplay between dimensions of self-development, gratitude, self-concept clarity and meaning in life are worth noticing but has not been studied yet. So, the current study mainly aims to test a model of meaning in life (presence of meaning, search for meaning), self construal (integration, differentiation), gratitude and self-concept clarity based on the Steger’s theory of meaning (2009, 2012) and the BID Model of İmamoğlu (1998, 2003). In addition to this, it is aimed to examine the differences of four self construal and to examine possible influences of demographic variables on the various measures of the study. By the way of a more refined understanding of factors, more effective policies and interventions might be proposed for university students.
1.2 Purpose of the Study

The aim of the present study is to test a model that investigates the relationships between meaning in life (presence of meaning, search for meaning), self construal (integration, differentiation), gratitude and self-concept clarity among university students. The hypothesized model is depicted in Figure 1.1.

![Figure 1.1 The Hypothesized Model](image)

In addition to the main purpose, the current study examined (1) the differences of four self-construals of the BID (Balanced Integration Differentiation) model on presence of meaning, search for meaning, gratitude, self-concept clarity and (2) possible influences of demographic variables (gender, year of study, faculty, accommodation, relationship status) on the various measures of the study (presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity).

1.3 Research Questions

1. How do the dimensions of self development (integration, differentiation), gratitude and self-concept clarity relate to meaning in life (presence of meaning in life, search for meaning) in each type of self construal?
2. What is the effect of self construal type (separated-individuated, separated patterning, related patterning and related-individuated) on gratitude, self-concept clarity, presence of meaning in life and search for meaning?
3. What are the effects of demographic variables (gender, year of study, faculty, accommodation, and relationship status) on gratitude, self-concept clarity, integration, differentiation, presence of meaning in life and search for meaning?

1.4 Significance of the Study

From its inception, the focus of counseling psychology has been the promotion of optimum human functioning which was stated by Super (1955) as “hygiology, with the normalities even of abnormal persons, with locating and developing personal and social resources and adaptive tendencies so that the individual can be assisted in making more effective use of them” (p. 5). So, as a guide, models of effective or optimal functioning are needed for counseling psychologists but the empirical and theoretical development are not at the desired level. Additionally, deficit and pathology-oriented models are more preferred than models of psychological health (Gelso & Fassinger, 1992; Lent, 2004). Lent (2004) claimed that the lack of theory-derived research and its connection to clinical practice about well-being are some of the reasons of this preference and the obstacle to the fulfillment of hygiological mission of the counseling psychology. Therefore, the current study will contribute to the literature by making a theory-based inquiry about meaning in life which can inform practise.

Based on the effects of meaning in life on psychosocial development and mental health, it can well be an effective way of supporting university students. Since, students face difficulties, try to cope with the demands of both their new environment and self-development during their education. Different interventions have been proposed however there are contradictory findings regarding to their effectiveness. Besides reports of positive impact of meaning interventions (Cheng,
Hasche, Huang, & Su, 2015), there are also null effects (Shin, 2013). Additionally, although there are promising effects of gratitude interventions (Howells, Stafford, Guijt, & Breadmore, 2017; Işık & Ergüner-Tekinalp, 2017; Oğuz-Duran & Tan, 2013), they are not free from problems (Carr, Morgan, & Gulliford, 2015; Davis et al., 2016; Morgan, Gulliford, & Carr, 2015). Available interventions are mainly based on increasing the meaning in life or gratitude as positive qualities of life. However, it is thought that a more refined understanding about the interplay between these variables is needed due to the existence of noteworthy associations between them. Therefore, testing the proposed model for meaning in life might provide a coherent understanding regarding to frequently studied factors, which are firstly investigated based on Steger’s theory of meaning (2009, 2012) in the current study.

The issue of meaning in life is not only important for remedial purposes but also for developmental purposes. Parks (2011) stated that none of the tasks or circumstances are important in emerging adulthood but the experience of awareness, dissolution and recomposition of the meaning of self, other, world and “God”. Young adults are motivated to gain self-understanding and grow by relating to others (ability to rely on people, willing to invest in), exploring/searching new current/future life options and developing self-confidence through adapting to a novel environment away from their home communities (Gottlieb, Still, & Newby-Clark, 2007; Padilla-Walker, Memmott-Elison, & Nelson, 2017). From the first year of college, students establish and clarify their purposes and advanced their development throughout their college experience (Foubert, Nixon, Sisson, & Barnes, 2005). In line with this finding, according to a recent phenomenological study by Robinson and Glanzer (2016), majority of the students (76.2%) have expectations about their college experience to develop their purpose in life. So, as a milestone in a young adult’s life, college attendance cannot be viewed as composed of only academic activities; students need space to grow, to achieve whole-person development and to gain wisdom in higher education (Robinson, Sterner, & Johnson, 2006). Supporting this idea, environmental and involvement activities of college students were
significantly related to their sense of purpose in life (Molasso, 2006) and college students’ perception of college environment (institution, professors, classmates, and culture and social atmosphere) as supportive resulted in higher presence of meaning in life and buffered the negative effect of searching for meaning in life (Shin & Steger, 2016). Some colleges in the United States have already apprehended this effect and have structured campus environments (culture, curriculum, cocurriculum, community) to help students achieve holistic development in which they find meaning and purpose in their lives, grow in their intellectual understanding (Braskamp, Trautwetter, & Ward, 2008; Thompson & Feldman, 2010). Thus, testing the proposed model might also provide valuable information for institutions of higher education in their decisions regarding to student affairs and educational activities.

Despite its widely accepted positive influence -similar to meaning in life- how gratitude contributes to well-being is not exactly known. Additionally, there are contradictory findings regarding the influence of gratitude (Morgan et al., 2014; Waters & Stokes, 2015). Interestingly, there is scarce literature about the association between meaning in life and gratitude. Focus is mostly about on their combined effects on well-being (Datu & Mateo, 2015; Disabato et al., 2016; Kleiman et al., 2013; Liao & Weng, 2018) and the effects of gratitude are interpreted mostly in terms of positive affect. Thus, together with its close links with meaning in life and integration, it is thought that gratitude might play a significant role in the formation of meaning in life. In this regard, the proposed model might provide compelling evidence about this role and offer a new avenue for research. Finally, research interest in gratitude and meaning in life in Turkey dates back to recent times. The first scale about meaning in life was translated into Turkish in 2010 by Demirbaş and the first scale adaptation of gratitude was done in 2011 by Akın and Yüksel. Thus, testing the proposed model will also contribute to existing knowledge about gratitude and meaning in life of Turkish university students.
1.5 Definition of Terms

The definitions of terms which were used in the present study are presented below.

**Differentiation** is an intraorganismic process which is defined as a basic psychological need or self-developmental tendency of human beings to actualize their unique potentials. The high end of this orientation is individuation (being a unique person with intrinsic referents) and the low end is normative patterning (behaving with extrinsic referents) (İmamoğlu, 2003).

**Integration** involves an interorganismic process, which is defined as a natural inclination of human beings to be connected to others. The high end is relatedness (feeling integrated with others) and the low end is separatedness (becoming detached, away from others) (İmamoğlu, 2003).

**Meaning in life** is described as “the sense made of, and significance felt regarding, the nature of one’s being and existence (Steger et al., 2006, p. 81).” There are two distinct dimensions of meaning in life. **Presence of meaning** is “concerned with the extent to which people feel their life matters, makes sense, or has purpose” (Steger & Kashdan, 2007, p.166). **Search for meaning** is described as “the strength, intensity, and activity of people’s desire and efforts to establish and/or augment their understanding of the meaning, significance, and purpose of their lives” (Steger et al., 2008a, p. 200).

**Gratitude** is described gratitude as ‘noticing and acknowledging a benefit that has been received, whether from another person or a deity, and feeling thankful for the efforts, sacrifices, and actions of an ‘‘other’’ (Adler & Fagley, 2005, p.83).

**Self-concept clarity** is defined as 'the extent to which the contents of an individual's self-concept (e.g., perceived personal attributes) are clearly and confidently defined, internally consistent, and temporally stable' (Campbell et al., 1996, p. 141).
CHAPTER 2

LITERATURE REVIEW

In this chapter, literature review will be presented in relation to the aim of the current study. Firstly, studies about meaning in life (presence of meaning / search for meaning) conducted with university students and theories of meaning in life were explained. Second section includes the Balanced Integration and Differentiation (BID) Theory. Then, self-concept clarity and gratitude will be presented. In the last section, a summary of the literature review will be given.

2.1 Meaning in Life

Although life meaning is thought to be an area of inquiry of philosophers, theologists, sociologists; due to its important influence on mental health, it is frequently investigated in psychology. It is also an interdisciplinary topic that it is addressed in clinical psychology, health psychology, the psychology of religion, social psychology and developmental psychology (Auhagen, 2000). Researchers focus on meaning in life explicitly or implicitly in contexts of adversity (Park, 2010); in subjects of intellectual, identity, relational development in young adulthood (Baxter Magolda, 2009; Kegan, 1994; McAdams, 2011), in terms of existential concerns (Yalom, 1980) or self regulation (Wong, 2012). They proposed different processes, routes, necessities for meaning in life despite some commonalities.

Despite a wide variety of views about meaning in life, there is one reality that meaning in life is a positive experience and it is related to subjective well-being, psychological well-being and general quality of life indicators across different samples and cultures (Steger, 2018a). Studies conducted with college students also
show these links. Personal meaning discriminated patient and nonpatient young adults that patient young adults had less meaningfulness than nonpatient young adults (Debats, 1999). In a study with South African college students by Khumalo, Wissing and Schutte (2014), emotional well-being and purposeful personal expressiveness were predicted by both presence of meaning and search for meaning additionally presence of meaning significantly predicted satisfaction with life and social well-being. Another study showed the predictive roles of explicit and implicit meaning in hope and depressive symptoms two months later within a sample of American college students and the variance explained by them surpasses the variance explained by social desirability, personality and baseline levels of hope/depression (Mascaro & Rosen, 2005). In two samples of college students who experienced traumatic events within the past two and one half years, presence of meaning partially mediates the relationship between posttraumatic growth and life satisfaction. Additionally, intrusive ruminations and posttraumatic distress tend to be linked to lower levels of meaning in life (Triplett, Tedeschi, Cann, Calhoun, & Reeve, 2011). Steger and Kashdan (2013) reported positive relationships between daily levels of meaning in life and positive psychological and social functioning and the detrimental effect of instability of meaning in life on well-being in two studies with American college students. Having meaning in life was found to be negatively related to anxiety, depression, obsessive disorder, and paranoid ideation in a study conducted with Chinese college students (Xiao, Zhang, & Zhao, 2010). Another study with Chinese college students also revealed positive association of presence of meaning to life satisfaction and positive affect (To & Sung, 2017). In another study conducted with Mexican American College students, presence of meaning was positively associated with life satisfaction and search for meaning was related to higher levels of depressive symptoms (Vela, Lu, Lenz, Savage, & Guardiola, 2016). Presence of meaning was found to predict decreased suicidal ideation over time and lower lifetime odds of a suicide attempt and mediated the relationship between interpersonal psychological theory of suicide variables (perceived burdensomeness, thwarted belongingness) and suicidal ideation among college
students (Kleiman & Beaver, 2013). In a recent study, the effect of experimentally manipulated perceptions of meaningfulness (contributing to a charity) was tested on the persistence of 93 college students in the situation of perceived burdensomeness and thwarted belongingness (interpersonal adversity). It was reported that students who had high task-extrinsic meaning showed greater persistence in conditions of increased perceived burdensomeness and thwarted belongingness whereas no association was observed between perceived meaningfulness and persistence in conditions of low task-extrinsic meaning and low interpersonal adversity (Collins, Legendre, Stritzke, & Page, 2018). In sum, meaning in life was related to a wide variety of mental health indicators.

Studies conducted with Turkish college students also showed the impact of meaning in life on well-being. Dursun (2012) reported that presence of meaning positively and search for meaning negatively predicted life satisfaction. Yıkılmaz and Demir Gündül (2015) also reported the predictive role of finding meaning in life on life satisfaction. The contribution of existence of meaning and pursuit of meaning in life satisfaction was beyond anxiety, depression and stress (Cömert, Atalay-Özyeşil, & Özgülük, 2016). Similarly, existence of meaning and pursuit of meaning significantly predicted subjective well-being of university students (Şahin, Aydn, Sarı, Kaya, & Pala, 2012). In another study with Turkish university students, hope and forgiveness fully mediated the relationship between meaning in life and subjective well-being (Yalçın & Malkoç, 2015). Girgin (2018) reported a positive significant relationship between meaning in life and psychological well-being of university students. To sum up, across different samples and cultures, meaning in life was reported to be significantly related to well-being of college students.

Meaning in life is not only salient for well-being but also for academic life of college students. Trevisan et al. (2017) investigated the link between meaning in life and college adjustment in a sample of American college students and reported the positive correlation of presence of meaning and negative correlation of search for
meaning on college adjustment (academic, personal-emotional and social adjustment, institutional attachment). Mason (2017) found the predictive role of meaning in life on academic performance (semester marks) in a sample of South African university students. Similarly, Makola (2014) reported the effect of high sense of meaning on study perseverance and course completion in a sample of South African university students. Despite scarcity of research about the impact of meaning in life on academic life of university students, existing empirical evidence shows the positive influence of meaning in life.

Although the positive effect of presence of meaning is evident, the negative impact of search for meaning is not so straightforward. Search for meaning is distinct and independent from presence of meaning and it does not derive only from meaninglessness (Steger et al., 2006) and does not always result in presence of meaning (Steger & Kashdan, 2007; Steger et al., 2008a). Besides search for meaning was inversely related to presence of meaning and consistently found to be related to negative outcomes (Dursun, 2012; Steger et al., 2006; Vela et al., 2016), it was also associated with positive personal characteristics; openness to experience, plasticity, artistic and investigative interests, tender mindedness (Demirbaş, 2014; Kızılırmak, 2015; Steger et al., 2008a). Search for meaning predicted an increase in presence of meaning for individuals with high grit and high life satisfaction. In case of low presence of meaning, search for meaning exhibited stronger negative relationship with life satisfaction and happiness (Grouden, 2014). The inverse relationship between presence and search for meaning becomes stronger for individuals who have low autonomy, ruminate more, have less approach-oriented attitudes, openness and interestingly who have high relatedness (Steger et al., 2008a). High presence of meaning and self-actualization had positive moderating effects on the association between search for meaning and happiness (Cohen & Cairns, 2012). College students with a profile of low presence-high search for meaning showed worse well-being than students with a profile of high presence-high search for meaning (Dezutter et al., 2013). Additionally, presence of meaning was more strongly associated with life
satisfaction for college students who were actively searching for meaning (Steger, Oishi, & Kesebir, 2011). Both presence of meaning (large effect) and search for meaning (minor effect) was found to predict decreased suicidal ideation over time among college students (Kleiman & Beaver, 2013). Both presence of and search for meaning were reported to be positively associated with psychological well-being of university students (Girgin, 2018). In sum, though the inverse relation between presence and search for meaning shows that decreases in presence of meaning leads to increases in search for meaning (Dezutter et al., 2013; Kashdan & Steger, 2007), search for meaning does not always imply absence of meaning so its influence on well-being is not necessarily negative all the time and depends on presence of meaning and some individual characteristics.

2.1.1 Theories of Meaning in Life

One of the prominent ideas in meaning studies belongs to Viktor Frankl. After his experience in a Nazi concentration camp during World War II, suffering and torture led him to decide “will to meaning” as a primary motivation. He observed that if people viewed their existence as meaningless, they became ill or even died in the camp. One day giving a lecture to a specialist audience was his vision which kept him alive. According to Frankl (1963), meaning derives from three sources; creative (accomplishment in art, work), experiential (experience of beauty, love) and attitudinal (reflections on negative experiences; pain, suffering). Additionally, each life situation has meaning which has to be discovered not constructed by the individual. He described “noogenic neuroses” as an illness derived from feeling of meaninglessness and existential frustration (as cited in Auhagen, 2000). Serving something or somebody bigger than oneself is the search for meaning according to Frankl. He developed logotherapy for treatment in which people are made aware of their spiritual potential of meaning fulfillment. His theory still inspires new therapy approaches like Meaning Therapy (MT) of Wong (2015).
Maddi (1967) offered a model for the understanding of psychopathology by making connections with the writings of existentialists. He defined existential neurosis as a state which has three components; cognitive (meaninglessness, chronic inability to believe in usefulness, interest, importance in actions), affective (blandness, boredom) and behavioral (low to moderate amount, decreased selectivity). It is characterized by alienation from both self and society. He asserted that a concrete and fragmentary premorbid personality, which leads the person to think ‘be nothing more than a player of social roles and embodiment of biological needs’ (p. 315), causes existential neurosis through the precipitating stressors of death, disruption of social order such as war, and confrontation with the accumulated sense of failure in living deeply and committed. He also discussed ideal personality and development of premorbid personality by referring to existential literature. Later, Maddi (1998) elaborated on the psychological needs of imagination, judgment, and symbolization, which form the side that is most human. He posited that through these needs individuals construe their interactions with the world and make decisions which lead to special meaning of life for each individual.

Yalom (1980) viewed question of meaning as the most perplexing and insoluble of the fundamental questions, which had to be accepted and examined in therapy. He claimed that meaning is required by human beings and lack of it causes considerable distress even threatens survival. He added that no design or guidelines for living exist in the universe so meaning is created by the individual. He differentiated cosmic meaning and terrestrial meaning. Cosmic meaning refers to the coherent pattern of general life or meaning of life. Terrestrial meaning is meaning of one’s life, experience of having some purpose or function. One might have a terrestrial meaning independent from a cosmic meaning or has both of them. He also mentioned altruism, dedication to a cause, creativity, hedonistic living, self-actualization, self-transcendence as sources of meaning. Yalom (1980) explained the reason of the increasing complaints about meaning deficiency in terms of societal changes resulted from industrialization such as increased free time, lack of intrinsic
value and creativity in work. He discussed the ubiquity of concerns about lack of sense of life meaning in clinical practice and emphasized the importance of handling them due to its close associations with psychopathology.

Battista and Almond (1973) denied one fundamental meaning or "ultimate" meaning of life, and rather than the content of beliefs they emphasized the process of an individual's believing. Meaning in life was defined in terms of positive life regard which "an individual's belief that he is fulfilling a life-framework or life-goal that provides him with a highly valued understanding of his life (Battista & Almond, 1973, p. 410). Moving from this definition, they claim that a meaningful life includes (1) commitment to some concept of the meaning of life, (2) framework or goal which this concept of the meaning of life provides, (3) perception of fulfillment of this concept of life and (4) feeling of integration, significance derived from this fulfillment. Based on their view, they developed a scale called Life Regard Index (LFI) which has been widely used to measure meaning in life but criticized due to psychometric problems in the scale (Kallay & Rus, 2015; Steger, 2007).

Baumeister (1991) approaches meaning in life from a different point of view. According to this view meaning is not hidden inside the individual, human beings acquire it from society and culture. Meaning is described as ‘shared mental representations of possible relationships among things, events and relationships’ (p. 15). It has two functions; learning and self-control. It is social and can be superimposed on life. For example, marriage provides meaning to changing emotions and sexual desires. There are four needs (purpose, value, efficacy, and self-worth) which have to be satisfied to experience meaning in life. Purpose provides meaning by connecting future to the present via goals and fulfillments. Self-worth refers to believing that one is good and worthy. Sense of efficacy is the belief that one can make a difference. Finally, values enable people to decide what is right and wrong. They prevent people from moral distress. Baumeister argued that the most common and pervasive problem in the modern search for meaning in life is
the lack of firm, consensually recognized values-the value gap. To fill this gap, he claimed that self is emphasized and self-serving tendencies are promoted (Baumeister, 1991; Baumeister & Vohs, 2002). So, to find the sources of value and the answers to moral dilemmas, people should look inside themselves. It is claimed that this selfhood has adverse implications for work, family, and perception of death (Baumeister & Muraven, 1996).

Reker and Wong (1988) proposed a theory of top-down and bottom-up model of personal (global) meaning with respect to aging. According to their view, successful aging is not too different from optimal psychological functioning which is thought to be promoted and enhanced by personal meaning (Reker & Wong, 2012). They claim that seeking and finding personal meaning in existence is a motivation of every individual and define personal meaning as ‘the cognizance of order, coherence and purpose in one’s existence, the pursuit and attainment of worth-while goals, and accompanying sense of fulfillment’ (Reker & Wong, 1988, p. 221). Another concept of their theory is situational meaning which is meaning of experience. It serves for constructing personal meaning and changes according to developmental stage and points of transition (Reker, 1991; Reker & Wong, 2012). According to the theory, it is one’s belief system, world view (cognitive component) that give rise to personal meaning both directly and indirectly by the way of values (motivational component). Satisfaction, fulfillment, happiness (affective component) are the results of the personal meaning. These structural components were confirmed by O’Connor and Chamberlain (1996). In addition, they proposed that personal meaning system of an individual was highly differentiated and integrated to the extent that a variety of sources of meaning and higher levels of personal meaning orientations exist. The levels of personal meaning orientations are as follows: at the lowest level, there is self-preoccupation with hedonistic pleasures (self-preoccupied); at the second level, there are efforts for realization of potential (individualistic); at the third level, service to others/society emerges (collectivistic) and at the fourth/highest level (self-transcendent), person has transcendent values which lead to cosmic/ultimate
meaning. Empirical studies provided support that individuals at the highest level reported more meaning, fulfillment, satisfaction than individuals at the lowest level (Reker, 1991; Reker & Woo, 2011; Reker & Wong, 2012). O’Connor and Chamberlain (1996) also confirmed four levels but failed to show the ordinal structure of levels.

Wong (2012) proposed a dual-systems model, which is based on Frankl’s work and so on basic tenets of logotherapy. His framework conceptualizes meaning from a self-regulatory perspective. According to the model, two fundamental biological needs of individuals are preserving and expanding themselves and these are better managed through two meaning-based self-regulation systems. First one is PURE (Purpose, Understanding, Responsible Action, Enjoyment/Evaluation). It works when the approach system predominates (conditions are positive, suitable for self-expansion, growth). Second one is ABCDE (Accept, Believe, Commit, Discover, Evaluate) which works when the avoidance system predominates (negative conditions, avoiding pain, overcoming adversities). It is maladaptive to emphasize only one of the systems of approach and avoidance since people expose to both positive and negative life events in their lives and optimal outcomes depend on the interaction of them. By the way of meaning-based self-regulation systems, people make sense of their situations, make decisions about their experiences and can achieve both survival and flourishing.

Emmons (2003) suggested a four taxonomy of sources of personal meaning. The four major categories of personal meaning are; life work/achievement, relationship/intimacy, religion/spirituality and service/self-transcendence. Relationships are consistently found to be related to meaning in life (Baum, 1988; DeBats, 1999; Wissing et al., 2014) so much so that Wong (2015) declares the motto of meaning therapy as: ‘Meaning is all we have, relationship is all we need,’ (p. 155). Relating self (integratedness), others (relatedness) and the world (transcendence) were found to be associated with meaningfulness and alienation from them was
associated with meaninglessness (Debats et al., 1995). Moreover, Stavrova and Luhmann (2016) have also shown that social connectedness is both a source and consequence of meaning in life. Attachment orientations have predictive power in presence of meaning (Bodner, Bergman, & Cohen-Fridel, 2014; Reizer, Dahan, & Shaver, 2013). Self-transcendence includes religious/spiritual beliefs, beyond ego orientation, higher consciousness, unifying interconnectedness resulting in love and concern for others (Garcia-Romeu, 2012). According to Viktor Frankl, self-transcendence (stepping beyond oneself to serve greater good) is the end state of actualized self and the only way of experiencing meaningfulness (Wong, 2015). Generativity which is a self-transcending commitment was reported to be the strongest predictor of meaningfulness (Damasio & Koller, 2014; Schnell, 2011). People who help others and describe themselves being as givers have more meaningful lives (Baumeister et al., 2013). Youngsters who help, support, work for the benefit of others report more meaningful positive experiences (Magen, Birenbaum, & Illovich, 1992; Magen, 1996). Another source of meaning is religion/spirituality (Furrow, King, & White, 2004; Reizer et al., 2013; Showalter & Wagener, 2000; Trent & King, 2010; Wissing et al., 2014). Meaning in life mediated the relationship between religiousness and well-being (Steger & Frazier, 2005) and the association between spirituality and well-being (Khumalo et al., 2014). Work/achievement is also a source of meaning (Emmons, 2003; Schnell, 2009). Baum (1988) interpreted the meaning of work as derived from co-working of goals and attachment of fellow workers. Recent studies also provided similar factors for meaningful work (Lips-Wiersma & Wright, 2012; Martela & Pessi, 2018; Rosso et al., 2010).

More recent approaches focus on the integration of broader meaning literature and achievement of conceptual clarity. Tripartite view of meaning in life, which consists of coherence/comprehension, purpose and mattering/significance, were proposed to encompass the different perspectives of meaning in life. It was expected that by the tripartite view, broader meaning literature might provide a theoretical context to
study meaning in life (George & Park, 2016a; Martela & Steger, 2016). Compared to other facets, coherence/comprehension is more frequently studied one which is about ‘making sense of one’s experiences in life’ (Reker & Wong, 1988, p. 220). Coherence was treated as an inherent need by the Meaning Maintenance Model (MMM; Heine, Proulx, & Vohs, 2006), and as an adaptive trait called ‘feeling of meaning’ (Heintzelman & King, 2014a). Purpose is ‘a sense of core goals, direction in life, and enthusiasm regarding the future’ (George & Park, 2013, p. 371). It shows the degree of valued, higher order goals which are central to one’s identity (George & Park, 2016a). Mattering is defined as ‘the worthwhileness and value of one’s life' (Martela & Steger, 2016, p. 535). It has been recently given attention in the study of meaning in life. A new study found that meaning in life judgments were predicted by mattering (Costin & Vignoles, 2019). Indirect evidence regarding to mattering comes from the Terror Management Theory (TMT) that anxiety and fear derived from death is dealt by humans by the feeling of significance in the world. Cultural worldviews provide standards which make an individual significant, worthy (self-esteem) and people strive to live up to these standards to cope with death anxiety (Greenberg, Pyszczynski, & Solomon, 1986). George and Park (2016b) developed the Multidimensional Existential Meaning Scale (MEMS), which is based on the tripartite view. They reported theoretically consistent, distinctive relationships between facets and several variables (dogmatism, well-being etc.). To sum up, several approaches exist and they focus on different aspects (content, function, source, etc.) of meaning in life. Some of the scholars such as Frankl (1963), Maddi (1967) and Yalom (1980) have more inspirational roles to further investigate the issue of meaning in life in psychology and some scholars like Emmons (2003), George and Park (2016a) try to develop a common understanding regarding to meaning in life. Among these approaches, Steger’s view (2009, 2012), which was described below and utilized in the current study, provides a comprehensive outlook for meaning in life.
2.1.1.1 Steger’s Theory of Meaning

Steger’s (2018a) classification of meaning at three levels (cosmic, personal and situational) provides a tool for understanding theories of meaning which are in a wide variety of scope. Cosmic meaning is the meaning about the universe might or might not have. Personal meaning (meaning in life) is the meaning that one’s life has. Situational meaning is the meaning derived from a particular life event such as a tragedy, loss etc. All theories of meaning emphasize these levels at different degrees and this situation makes investigation of meaning complicated. Steger (2018a) claimed that cosmic and situational meanings are relevant to personal meaning to the extent that they influence personal meaning. Therefore, for psychological empirical investigation of personal meaning, rather than asking what the meaning of life is or ‘What makes one’s life worth living?’ (Debats et al., 1995, p. 359), it is more suitable to ask ‘What is the nature of an individual's experience of his life as meaningful?’ or "What are the conditions under which an individual will experience his life as meaningful?" (Battista & Almond, 1973, p. 409). The efforts of Steger et al. (2006) are in line with this idea. They offered a definition of meaning in life as “the sense made of, and significance felt regarding, the nature of one's being and existence (p. 81)” which encompasses all previous major definitions and provides the opportunity to individuals to use their own criteria for meaning in life judgments. Additionally, they developed a subscale for search for meaning construct (the drive and orientation toward finding meaning in one’s life) based on the view of search for meaning as a basic human motivation of Frankl (1963) and Maddi (1970). Steger et al.'s (2006) new measure called Meaning in Life Questionnaire (MIL) enables to study meaning in life distinctly from other aspects of well-being constructs for which previous measures like the Purpose in Life Test (PIL; Crumbaugh & Maholick, 1964), the Life Regard Index (LRI; Battista & Almond, 1973), or the Sense of Coherence Scale (Antonovsky, 1987) are criticized to include. Moreover, this type of measurement is more appropriate since unconscious processes take part in judgments
of meaning through producing feeling of rightness, which people know better than they can explain (Heintzelman & King, 2013; Heintzelman & King, 2015).

Later, Steger (2009, 2012) proposed a theory of personal meaning. He claimed that the success of humanity is the ability to derive meaning from environment and experience. Like people harvest meaning from the events around them such as disasters, their marriages; they strive to grasp the meaning of their lives. Finding patterns, consistency and significance in life comprise comprehension (sense making, significance), which provides a firm ground to develop goals and sense of purpose. Steger (2018b) has recently revised his theory and added new parts such as orientations to meaning, sources of meaning and search for meaning. According to his recent theory, three dimensions of comprehension, significance and purpose equally contribute to meaning in life (with no reason) resulting in presence of meaning but it is not clear how they relate to each other. Moreover, despite newly added variables, his unified model of meaning in life does not shed light on how meaning in life judgments develop. Steger’s former theory (2009, 2012) had research support albeit indirect. A new study revealed that purpose was a significant outcome of meaning in life judgments and it was predicted by mattering (Costin & Vignoles, 2019). McGregor and Little (1998) found that personal projects promote meaning in life to the extent that they are consistent with core aspects of the self. They concluded that consistency among the varying elements of the self is the characteristic of personal meaning. Nostalgia, which was found to increase presence of meaning and decrease search of meaning (Routledge, Wildschut, Sedikides, Juhl, & Arndt, 2012; van Tilburg, Igou, & Sedikides, 2013), was reported to increase meaning in life through social-connectedness which heightens self-continuity (van Tilburg et al., 2019). Trait self-control was related to meaning in life through experience of structure in life (Stavrova, Pronk, & Kokkoris, 2020). In addition to these, structure in the environment increases willingness to engage in purposeful behavior even when the source of structure is not related to goal (Kay et al., 2014) and personal goal pursuit is motivated by belief in God by the way of God’s
imposing structure on the world (Landau et al., 2018). In sum, existing research evidence supports the proposals of Steger (2009, 2012) that coherence and significance might lead to purpose and meaning. Moreover, together with previous work about the definition and the measurement of meaning in life (Steger et al., 2006), this theoretical framework enables to scrutinize how meaning in life develops by offering plausible connections.

### 2.2 Balanced Integration–Differentiation Model

The understanding of who we are, how we fit in and interact with the world lead us to make sense and matter (comprehension) (Steger, 2009). Additionally, the necessity of establishing identity and connections with others for comprehension was also mentioned by Steger et al., (2013). Studies give support to these ideas by demonstrating that there are important parallels between identity development and meaning in life; sense of direction, sense of continuity, personally salient commitments and processes in which they are formed (Waterman, 2014). Concerns with personal identity were related to meaningfulness (Baumeister et al., 2013). Identity style and commitment accounted for 60 % of the variation in life purpose of 654 university students (Berzonsky & Cieciuch, 2014). College students, who score higher on identity formation (commitment making and identity synthesis), have higher meaning in life ($\alpha=.54$ and $\alpha=.67$ respectively). Controlling for identity formation, moral identity which is the centrality of traits, values like compassionate, generous, sensitive, friendly, helpful etc. to one’s identity, was predictive of meaning in life ($\alpha=.35$) (Hardy, Francis, Zamboanga, Kim, Anderson, & Forthun, 2013). Another study also reported the predictive validity of moral identity on presence of meaning in life during emerging adulthood (Han et al., 2018). Vignoles et al. (2006) identified six motives which guide the processes of identity construction; feelings of self-esteem, continuity, distinctiveness, belonging, efficacy, and meaning. They reported that across all individual, relational, and group levels of self-representation, elements of identity, which provide a greater sense of self-esteem, continuity,
distinctiveness, and meaning were perceived as central to identity. Meaning was rated as the most central, and the happiest one and moreover in all predictions of perceived centrality, it equaled or outshone the self-esteem motive which directly influences both perceived centrality and enactment of identity. A longitudinal study with adolescents provided empirical support for positive reciprocal associations between (a) identity commitment processes and presence of meaning and (b) identity exploration processes and search for meaning (Negru-Subirica et al., 2016). Dezutter et al. (2013) conducted a large study with emerging adults in order to examine meaning in life profiles. They reported five clusters of search for meaning and presence of meaning in life, which parallels with research on identity formation (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005). A participatory qualitative study with 24 young people reported five domains to attain positive identity and meaning; participation and contribution within their communities, caring relationships, achieving a sense of belonging, competence and hope (Noble-Carr, Barker, & McArthur, 2013). So, as the close association between meaning in life and identity implies, development of self is critical for understanding how we form meaning in life or in other words how we make sense and matter (comprehension).

According to life-span model of human development of Erikson (1959), “Individual and society are intricately woven, dynamically related in continual change” (as cited in Sokol, 2009, p. 2). Adams and Marshall (1996) elaborated the parallels between functions of socialization (differentiation & integration) and identity and they defined identity as “a social-psychological construct that reflects social influences through imitation and identification processes and active self-construction in the creation of what is important to the self and to others” (p. 433). Both content and formation, maintenance and change of identities are inescapably personal and social (Vignoles, Schwartz, & Luyckx, 2011). Therefore, 'self is both a social product and a social process' (Heine et al., 1999, p. 788). In various disciplines like evolutionary biology, developmental psychology, and social psychology, in order to delineate how human beings develop, human nature was examined by
different theorists in two dimensions; interpersonal relatedness and self-definition; Ainsworth (1972), Angyal (1951), Bakan, (1966), Bowlby (1969), Ryan (1991), Ryan and Deci (2000) (all cited in Guisinger & Blatt, 1994). Additionally, these two polarities models are so fundamental for mental health that they provide a comprehensive theoretical framework not only for normal development but also for understanding disrupted personality development, vulnerability for psychopathology, and responsiveness to psychosocial interventions (Luyten & Blatt, 2013). Similar to identity, both relatedness and individuation were reported to be related to meaning in life (Martela et al., 2017; Steger & Samman, 2012).

Some of the theorists view these two dimensions as opposites and claim dialectic synthesis or coexistence of them (Guisinger & Blatt, 1994; Kağıtçibaşı, 1990, 1996; Markus & Kitayama, 1991) and some of them accept them as complementary dimensions (Angyal, 1951; İmamoğlu, 1998; Ryan, 1991). Among the theories which viewed them as opposites, Markus and Kitayama, (1991) offered the idea of self construal in which two construals of the self occur depending on the role of other in self-definition; independent and interdependent. Independent self construal refers to complete, autonomous entity, without the others who are for reflected appraisal and social comparison. Interdependent self construal refers to self, which includes others in self definition since they provide defining features of the self through relations. Steger, Kawabata, Shimai and Otake (2008b) examined the influence of independence and interdependence on a cultural level (individualist-collectivist) in meaning in life and reported that Japanese college students (collectivist-interdependent) had greater search for meaning and American college students (individualist-independent) who are embedded in an individualist culture scored higher presence of meaning. They interpreted that individuals in independent cultures have positive self-regard and so more presence of meaning in life (Heine, Lehman, Markus, & Kitayama, 1999). There is a study with Filipino college students, which examined the association between independent-interdependent self construals and meaning in life. Results showed that independent self construal was
positively related to the presence of meaning and interdependent self construal was positively associated with search for meaning (Daep-Datu & Salanga, 2018). They also evaluated these findings in favor of an independent existence, which was inclined to realize one's self (Markus & Kitayama, 1991). These two studies examined self-other relationships from the view of cultural variations of individualism/collectivism and interpreted them as levels, correlates of meaning in life. However, these findings might not tell the whole story since as mentioned before being connected, relatedness are consistently found to be associated with meaning in life and all sources of meaning were claimed to be about relatedness and connectedness (Delle Fave & Soosai-Nathan, 2014). Additionally, Steger et al. (2008b) also found that there are Japanese students who reported presence of meaning in life similar to American students. So, together with showing the influence of context (culture) in self construals, independence-interdependence theory of Markus and Kitayama (1991) fell short to explain meaning in life at the individual level.

Among the theorists, who argued for the complementary nature of interpersonal relatedness and self-definition, İmamoğlu proposed a self construal theory of the Balanced Integration–Differentiation (BID) model (1998, 2003). According to the BID model, integration (interpersonal integration orientation) and differentiation (intrapersonal differentiation orientation) are distinct and complementary processes serving for a balanced system of human beings in all cultures. Integration involves an interorganismic process in which individuals are inclined to be connected to others. High end of this orientation is relatedness and low end of this orientation is separatedness. Differentiation involves an intraorganismic process in which individuals are inclined to actualize their unique potentials, to develop and act with intrinsic referents. High end of this orientation is individuation and low end of this orientation is normative patterning. There are four self construals, which are derived from the combinations of high and low levels of the orientations; (1) related individuation, (2) related patterning, (3) separated individuation, and (4) separated
patterning. Related individuation is the balanced state of self construal in which both needs of integration and differentiation are satisfied. Related patterning is the most integrated type in which only need of integration is satisfied. It corresponds to interdependent self construal of Markus and Kitayama (1991). Separated individuation is the most differentiated type in which only need of differentiation is met. It corresponds to independent self construal of Markus and Kitayama (1991). Finally, separated patterning is the most unbalanced type in which neither of the needs of integration and differentiation are satisfied (İmamoğlu, 2003). The BID model was supported in Turkish, American, and Canadian samples (Gezici & Güvenç, 2003; Güler, 2004; İmamoğlu, 1998, 2003; İmamoğlu & Karakitapoloğlu-Aygün, 2004; İmamoğlu, 2005; Kurt, 2002). The studies, which view integration and differentiation as complementary needs, also support the BID model (Li, 2002; Oyserman, Coon, & Kemmelmeier, 2002; Ryan & Lynch, 1989).

Similar to meaning in life, related-individuated self orientation was reported to be positively associated with several adjustment indices; basic need satisfaction at work (autonomy, relatedness, competence); psychological well-being (İmamoğlu & Beydoğan, 2011); higher ecosystem motivation and self-transcendence (Kantaş 2013); having both self and other-directed values (İmamoğlu & Karakitapoloğlu-Aygün, 2004); less anxious, positive, planned future orientation (İmamoğlu & Guler-Edwards, 2007); high positive affect and low levels of negative affect, depression, reassurance-seeking (Köse, 2009); general authenticity (İmamoğlu, Günaydın, & Selçuk, 2011) and secure attachment and exploration (İmamoğlu & İmamoğlu, 2007). Additionally, becoming socially integrated and developing a sense of autonomy and independence emerged as two other domains together with academic success while defining college success according to the results of focus group interviews with academically successful (GPA>2) college students (Yazedjian, Toews, Sevin, & Purswell, 2008). A close concept ‘quiet ego’, as a compassionate self-identity which focuses on transcending self-interest (to balance concerns of the self and others and foster the development of both of them), was significantly
associated with presence of meaning (α = .58) (Wayment, Bauer, & Sylaska, 2015). Moreover, individuals with high presence-low search profile were also reported to have the most optimal psychosocial functioning like related-individuated people (Battersby & Phillips, 2016; Dezutter et al., 2013). The premise of the BID model as the existence of a distinct and complementary association between integration and differentiation (İmamoğlu, 2003) is also congenial to the research results, which show the positive relationships between presence of meaning in life, integration and differentiation. There is one direct study utilizing the BID scale by Yeniçeri (2013) who reported that integration and differentiation were predictors of presence of meaning in life, which in turn predicted well-being. Additionally, integration (negatively) predicted search for meaning which in turn (negatively) predicted well-being. However, the study did not investigate meaning in life at the self construal level.

There are supportive empirical evidences regarding the roles of integration and differentiation in meaning in life. Autonomy and relatedness significantly predicted presence of meaning in life (Martela et al., 2017; Trent & King, 2010). As mentioned before, relationships are consistently reported as being associated with meaning in life (Baum, 1988; Debats et al., 1995; DeBats, 1999; Lambert, Stillman, Baumeister, Fincham, Hicks, & Graham, 2010a; Stavrova & Luhmann, 2016; Wissing et al., 2014). Similarly, constructs close to differentiation were reported to be associated with meaning in life. Doing activities that express and reflect the self (e.g. meditating, buying gifts for others) were reported to be related to meaningful life (Baumeister et al., 2013). Belief in free will (one form of autonomous actions) was found to strongly predict life meaningfulness, experimental manipulation of disbelief in free will resulted in decreased meaning in life and induction of stronger belief in free will led people to set more meaningful goals (Crescioni et al., 2016). Moynihan et al., (2017) also reported that free will beliefs cause increased meaning in life via belongingness. Self-constructivist assumptions (assumptions of having an active role in development of self and having self-chosen values, goals, and
commitments) were found to be related to life meaning (Berzonsky, 2016). The meaning of work theories incorporate integration and differentiation in varying degrees. For example, Rosso et al., (2010) offered a theoretical model containing four main pathways (individuation, contribution, self-connection, unification), which are based on two key dimensions of agency-communion (motive for the action) and self-others (target of the action) by which meaningful work is created or maintained. Similarly, Lips-Wiersma and Wright (2012) offered four dimensions of meaningful work as unity with others, developing the inner self, serving others and expressing full potential and the dynamic tensions between them through being vs. doing and self vs. others. Additionally, attachment security, which was associated with relatedness and individuation (in specific relationship contexts) (İmamoğlu, 2005), was a significant predictor of presence of and search for meaning (Bodner et al., 2014; Lopez, Ramos, Nisembaum, Thind, & Ortiz-Rodriguez, 2015).

There is a study, which implied the distinct effects of integration and differentiation on meaning in life. In a study conducted with 122 college students by Steger et al. (2008a), students who had more autonomy were less likely to search for meaning when they had low presence of meaning. There was no difference between low autonomy and high autonomy students in search for meaning when they had high presence of meaning. In contrast, students who had less relatedness were more likely to search for meaning when they had high presence of meaning and there is no difference between high related and low related students in search for meaning when they had low presence of meaning in life. To sum up, the associations between integration, differentiation and meaning in life are evident and as Steger et al.’s (2008a) study showed, there are different dynamics depending on the level of each of them. The proposals of the BID theory might provide more detailed explanations about meaning in life by taking into consideration the interplay between integration and differentiation by the way of self construals.
2.3 Self-Concept Clarity

The coherence or clarity and fitting of the things compose making sense (George & Park, 2016a) which is the first part of comprehension through which differentiation and integration are thought to lead to meaning in life (Steger, 2009, 2012). In the subject of meaning in life, it refers to coherence or consistency of self since meaning in life includes the sense made of one’s being and existence (Steger et al., 2006). Erikson taps this idea by asserting that to support an agentic, self-directed, and purposeful life, an internally consistent sense of self is required (1950) (as cited in Schwartz et al., 2017, p.153). According to McGregor and Little (1998), consistency among the varying elements of the self is the characteristic of personal meaning. The concept of self-concept clarity (SCC) corresponds well to this coherence. It is defined as 'the extent to which the contents of an individual's self-concept (e.g., perceived personal attributes) are clearly and confidently defined, internally consistent, and temporally stable' (Campbell et al., 1996, p. 141).

Similar to meaning in life, studies have linked SCC to psychological adjustment. Low SCC is related to high neuroticism, chronic self-analysis, a ruminative form of self-focused attention and low internal state awareness (Campbell et al., 1996); depression and anxiety symptoms (Bigler, Neimeyer, & Brown, 2001); symptoms of schizophrenia (Cicero, Martin, Becker, & Kerns, 2016); passive coping styles (Smith, Wethington, & Zhan, 1996) and social anxiety (Stopa, Brown, Luke, & Hirsch, 2010). On the contrary, high SCC is associated with greater psychological adjustment, better emotion regulation skills (Parise, Canzi, Olivari, & Ferrari, 2019b); positive affect about the self (Baumgardner, 1990); self-esteem (Campbell et al., 1996) and life satisfaction (Usborne & Taylor, 2010). Although the links between SCC and a wide variety of factors have been investigated, up to researcher’s knowledge, there are is only one study which directly examined the association between meaning in life and self-concept clarity. Shin et al. (2016) reported that college students who felt a greater sense of SCC were also higher in meaning in life,
a rapid increase in SCC was accompanied by a rapid increase in meaning in life and SCC predicted meaning in life. There are also indirect supportive findings. A recent study revealed that SCC was positively related to perceived work meaningfulness (Oh & Roh, 2019). SCC was reported to be related to psychological adjustment including greater purpose in life among college students (Bigler et al., 2001). SCC strongly predicted meaning in life and intrinsic religious orientation [seen as an end in itself and as central to one’s identity (Allport & Ross, 1967)] was found as a guidance for people with low self-concept clarity to achieve sense of meaning in life whereas extrinsic religious orientation (seeing religion as a means to other ends, to fulfill other needs) was not (Blazek & Besta, 2012). SCC partially mediated the link between meaninglessness and life satisfaction (Ritchie et al., 2011). Self-continuity, which is a close concept to SCC, was reported to boost meaning in life (van Tilburg et al., 2019).

Another construct, true self-alienation (the subjective feeling of not knowing or being detached from who one believes s/he truly is, p. 90), which is subsumed by SCC (α = .71) (Vess, Leal, Hoeldtke, Schlegel, & Hicks, 2016), was reported to be the only significant predictor of presence and search for meaning among other variables of attachment avoidance, attachment anxiety, and two dimensions of authenticity (authentic living, accepting external influence) (Lopez et al., 2015). Self-alienation was also reported by Debats et al. (1995) as related to meaninglessness. In another study, true self-concept accessibility related to enhanced meaning in life even when state self-esteem and self-reported authenticity were controlled and priming traits related to the true self resulted in increased meaning in life regardless of the valence of those traits (Schlegel, Hicks, Arndt, & King, 2009). Perceived true self-knowledge also predicted judgments of meaning in life even after controlling for self-esteem, positive and negative effect (Schlegel et al., 2011).

SCC was also associated with interpersonal relationships, which are the primary source of meaning in life (Baum, 1988; DeBats, 1999; Wissing et al., 2014). Lower
SCC mediated the relationship between loneliness and depression in three studies with dating and married couples and noncouples (Richman, Pond, Dewall, Kumashiro, Slotter, & Luches, 2016). Lower SCC clarity was also predicted by attachment avoidance -resistance to be close to others- in seven different samples. Moreover, this effect was also found longitudinally (nine months) (Emery et al., 2018). In another study, self-concept clarity was also negatively related to anxiety and avoidant attachment tendencies and positively related to secure attachment (Wu, 2009). Demidenko et al. (2010) showed the mediating role of self-concept clarity of attachment anxiety and avoidance on identity differentiation. Another possible link between SCC and meaning in life is their parallel associations with prosociality which is another source of meaning in life (Baumeister et al., 2013; Klein, 2017; Schnell & Hoof 2012). According to a longitudinal study with 244 Dutch emerging adults, SCC and prosociality were positively related over time and the impact of prosociality on SCC was stronger than the impact of SCC on prosociality (Crocetti, Moscatelli, Van der Graaff, Rubini, Meeus, & Branje, 2016).

Studies about grief also address a close connection between SCC and meaning in life. Within bereaved 21 college students, increased ability to find meaning was related to decreased intense in grief (Schwartzberg & Janoff- Bulman, 1991). Similarly, lower SCC predicted prolonged grief disorder severity six months later (Boelen, Keijsers, & van den Hout, 2012). Finally, Meaning Maintenance Model (Heine et al., 2006) asserts that meaning (seeking coherent relations) is an inherent need and the necessity of repairing threats to meaning is greater to the extent that it is related to the self. Some empirical evidence exists supporting this conviction that self-clarity threat was found to cause restoring a sense of meaning through fluid compensation (Boucher, Bloch, & Pelletier, 2015). In the same vein, threat of death, which shows that the world is not meaningful and stable and causes anxiety (TMT, Greenberg et al. 1986), was reported to lead people to seek and maintain structural organization in the self-concept to protect themselves in five different studies (Landau, Greenberg, Sullivan, Routledge, & Arndt, 2009). So, despite being largely
indirect there are empirical evidences regarding to the close link between SCC and meaning in life which warrants further exploration.

As mentioned before, self-concept clarity was positively related to integration-related variables. Lewandowski et al. (2010) conducted two studies with college students. They reported that SCC was positively correlated with relationship satisfaction and commitment (Study 1). In Study 2, SCC manipulation caused higher relationship satisfaction and commitment in students and the relationship between SCC and relationship quality measures were mediated by inclusion of other in the self and self-esteem. The influence of SCC on relationship satisfaction was investigated at the dyadic level in two samples of couples by Parise, Pagani, Donato and Sedikides (2019a). The studies revealed that people with high SCC had more relationship satisfaction and had more satisfied partners. SCC predicted both own and partner's couple identities, which mediate the relationship between couple members’ SCC and relationship quality. Moreover, SCC predicted longitudinal changes in both positive and negative forms of dyadic coping (Parise et al., 2019a). SCC was also reduced due to interpersonal rejection (Ayduk, Gyurak, & Luerssen, 2009), role exists (Light & Visser, 2013), loss of a romantic relationship (Slotter et al., 2010) and loss of a group membership (Slotter et al., 2015). McIntyre, Mattingly and Lewandowski (2017) offered three explanations, which link SCC to relationship outcomes; personal well-being, identity construction, and prototype matching. Additionally, they assert that SCC moderates the benefits and consequences of various relational processes (McIntyre et al., 2017). Although there are studies showing the link between SCC and integration, there is only one study, which showed a possible association between SCC and differentiation by Diehl and Hay (2011) who reported increased autonomy for high SCC. Legault (2016) mentioned that self-integration (self-concordance or self-coherence) is facilitated by dispositional autonomy, which drives individual to select goals or activities that are consistent with one’s needs and preferences. Therefore, it is expectable to have high SCC for individuated individuals since acting with intrinsic referents to actualize one’s unique potentials will serve to
define his/her self-concept (e.g., perceived personal attributes) clearly and confidently.

Supporting its links to integration and differentiation, SCC was a predictor of sense of identity (Pilarska, 2016), and an evaluative tool for identity development process for revisions such as exploration or reconsideration (Schwartz, Klimstra, Luyckx, Hale III & Meeus, 2012). Eryiğit and Kerpelman (2009) reported that information oriented identity style (the most adaptive style) was found to be related to greater self-concept clarity, higher relational and individual self-definitions among college students. Moreover, self-concept clarity is similar to Erikson’s notion of identity synthesis (clarity and depth of a person's identity) (Schwartz et al., 2017) which was found to be highly correlated to meaning in life (α= .67) (Hardy et al., 2013). Schwartz et al. (2017) also discussed about the parallels between self-authorship, self-determination (autonomy, relatedness, competence) and self-concept clarity that one’s self-concept is likely to be well organized and coherent to the extent that identity is constructed in an active and agentic way. Taken together, as supported by the related literatures, there are close links between SCC, integration, differentiation and meaning in life and it is thought that self-concept clarity might serve as sense making part of comprehension through which differentiation and integration lead to both presence of meaning and search for meaning in life in varying degrees depending on the self construal.

2.4 Gratitude

Another part of comprehension is mattering (Steger, 2009, 2012) which has been recently given attention as a part of meaning in life (George & Park, 2016a; Martela & Steger, 2016). So, little is known about mattering compared to coherence and purpose. Steger (2012) also did not expound this factor but claimed that we have to feel that our lives matter both in immediate circumstances such as being left a nice tip or in the bigger picture. In the literature, as a construct, mattering was described
as Steger (2012) used; ‘the perception that, to some degree and in any of a variety of ways, we are a significant part of the world around us’ (Elliott et al., 2004, p. 339). Elliott et al. (2004) discussed the salience of the construct for both self (personal motivator) and society (social cohesion) and developed a scale consisting of three components of it; awareness (other is aware of my presence), importance (other is attentive to my needs) and reliance (other seeks support from me). These components are similar to themes of affiliation, support, and recognition from others or objects, which Debats (1999) perceived in individuals’ description of their personal meanings. Mattering intertwines with emotions undoubtedly since their roles in relationships and social living are largely accepted (Keltner & Haidt, 1999; Mason & Capitanio, 2012). Mattering necessitates and is caused by the existence or act of an other agent and this is also what emotion of gratitude requires. Gratitude is an other-oriented emotion which can be described as ‘noticing and acknowledging a benefit that has been received, whether from another person or a deity, and feeling thankful for the efforts, sacrifices, and actions of an “other”’ (Adler & Fagley, 2005, p. 83). So one, who feels grateful, most probably feels to be mattered.

There are indirect supportive evidences showing how gratitude encompasses mattering. Scholossberg (1989) conducted interviews with twenty-four people about mattering and added appreciation (a very close concept to gratitude) as a new dimension. She pointed to the urgency of this addition by saying that ‘over and over our interviewees expressed the importance of feeling that their efforts were appreciated’ (p. 4). People identified being seen, recognized, acknowledged, understood from another person while talking about their gratitude experience (Hlava & Elfers, 2014) since perceived responsiveness of the benefactor to the recipient’s needs, sends the message of ‘I approve and care you’ (Reis, Clark, & Holmes, 2004). This experience corresponds to genuine mattering in which others relate to us as an end in itself (Elliott et al., 2004). Additionally, Steger (2012) mentioned that feeling that our lives matter causes us to perceive that ourselves hold value such as esteem and worth. Supporting this thought, gratitude was associated with self-acceptance.
(Wood, Joseph, & Maltby, 2009), increased self-esteem (Kong, Ding, & Zhao, 2015; Lin, 2015; Rash, Matsuba, & Prkachin, 2011), less critical, punishing and more compassionate relationship with the self (Petrocchi & Couyoumdjian, 2016) and gratitude intervention improved well-being of self-critics (feelings of unworthiness, incompetence, hopelessness) (Sergeant & Mongrain, 2011). Thus, it is thought that emotion of gratitude includes the feeling of mattering.

Similar to meaning in life, gratitude is related to positive functioning such as lower interpersonal aggression (DeWall, Lambert, Pond, Kashdan, & Fincham, 2012), patience (Dickens & DeSteno, 2016), higher levels of social support (Kong et al., 2015; Lin & Yeh, 2014; Wood, Joseph, & Linley, 2007; Wood, Maltby, Gillett, Linley, & Joseph, 2008), life satisfaction (Kong et al., 2015; Lin, 2015; McCullough et al., 2002), positive coping strategies (Lin & Yeh, 2014; Wood et al., 2007), and reduced stress, suicidal ideation, depression (Lin, 2015; Wood et al., 2008) among college students. So, conducted studies generally investigated their conjoint effects on well-being due to close associations of each of them with well-being. Datu and Mateo (2015) investigated the mediating role of meaning in life between gratitude and life satisfaction among Filipino college students and reported partial mediation effect. In another study with adults from 43 different countries, higher levels of meaning in life and gratitude (α=.49) each predicted decreases in depression over 3 months but not 6 months via increases in positive life events (Disabato et al., 2016). In a longitudinal study with college students, meaning in life was found to partially mediate the relationship between gratitude and grit and reduced suicidal ideation over time. Gratitude had also a medium to large correlation with meaning in life (.46) in this study (Kleiman et al., 2013). Liao and Weng (2018) conducted a study with college students and similarly they reported the mediating role of meaning in life together with social connectedness between gratitude and subjective well-being. Another study by Wood et al. (2009) reported that gratitude improved the prediction of purpose in life beyond the 30 facets of the big five among college students. Finally, writing notes of gratitude enhances meaning in life (Van Tongeren, Green, Davis, Hook, & Hulsey, 2015).
Gratitude is also closely associated with relationships, service\communal interest and religiousness/spirituality, which are three sources of meaning in life (Emmons, 2003; Schnell, 2009). Gratitude drives the recipient to act with feelings of appreciation and goodwill (Bartlett & DeSteno, 2006; Chang, Lin, & Chen, 2012; Fitzgerald, 1998; McCullough et al., 2002; Tsang, 2007; Watkins, Scheer, Ovnicek, & Kolts, 2006). Individuals with high gratitude reported more religiousness and spirituality than their less grateful counterparts (McCullough et al., 2002). Gratitude promotes relationship-building behaviors (Bartlett, Condon, Cruz, Baumann, & Desteno, 2012; Jia et al., 2014; Jia et al., 2015; Ng et al., 2017) and maintenance of interpersonal relationships by initiating a cycle between recipient and benefactor (Algoe et al., 2008; Williams & Bartlett, 2015). People who express gratitude benefit from it that their communal strength (Lambert et al., 2010b), relationship maintenance (Kubacka, Finkenauer, Rusbult, & Keijsers, 2011; Lambert & Fincham, 2011) increase and expression feeds upward spirals of mutual growth in dyads (Algoe, Fredrickson, & Gable, 2013). In parallel to these findings, Robustelli and Whisman (2016) found a unique and positive association between gratitude and relationship satisfaction even incremental to demographics, extraversion, neuroticism, and other measures of satisfaction. Another study from Algoe, Gable and Maisel (2010) examined gratitude in romantic relationships and showed its positive effect on relationship quality (connection, satisfaction). In sum, there are significant relationships between sources of meaning and gratitude.

There are also other important parallels between gratitude and meaning in life. Klein (1957) linked gratitude with trust and further claimed that it is available in the early bond -between the baby and the mother-, which lays the foundation for later relations with one loved person. She posited that baby experiences enjoyment and gratitude at breastfeeding and s/he wishes to return pleasure (Klein, 1957). Supporting her ideas, McAdams and Bauer (2004) evaluated early interactions in attachment as primitive forms of gratitude, which lays the foundation of hope and trust. In line with this interpretation, several measures of meaning in life strongly correlate with hope.
(α = .70 to .76) (Feldman & Snyder, 2005) and secure attachment was a predictor of both gratitude (Dinh, 2016; Dwiwardani et al., 2014) and meaning in life (Bodner et al., 2014; Lopez et al., 2015). Congenial to these findings, similar to people, who have higher levels of meaning in life are reported to be more likeable, better potential friends (Stillman, Lambert, Fincham, & Baumeister, 2011), grateful people are viewed by others as more trustworthy, outgoing, helpful (McCullough et al., 2002). Gratitude was also associated with nostalgic experience (Holak & Havlena, 1998) which was found to increase presence of meaning and decrease search of meaning (Routledge et al., 2012; van Tilburg et al., 2013). Finally, connectedness emerges as a common theme in both experience of gratitude and presence of meaning in life. Hlava and Elfers (2014) conducted semi structured interviews to explore the lived experience of gratitude and altered, enhanced feeling of connectedness (personal, interpersonal, transpersonal) appeared as the primary reported feature. Moreover, as the affect increases, connection becomes deeper and boundaries become more permeable. Emmons (2012) also reported increased feelings of closeness and connection to others in gratitude journaling. Delle Fave and Soosai-Nathan (2014) claimed that all sources of meaning were about relatedness and connectedness, which reports of people about sources of meaning also point. Bowlby (1980) told that most of the variance in meaningful experiences were explained by separation, attaching, detaching which were the raison d'etre of existence (cited in Baum, 1988, p. 12). In sum, in addition to significant relationship between gratitude and meaning in life, there are so many commonalities.

Studies also revealed associations between integration, differentiation and gratitude. In a study conducted with 190 college students; compared to males, females reported more gratitude, more benefits and fewer costs associated with the experience, more relatedness and more autonomy. Moreover, the effect of gratitude on relatedness and autonomy was not attributable to either positive or negative affect (Kashdan, Mishra, Breen, & Froh, 2009). Another study by Lee, Tong and Sim (2015) with university students revealed that gratitude predicted both relatedness and autonomy, which also
predicted gratitude over time. The association between gratitude and autonomy was interpreted in terms of autonomous prosociality (Lee et al., 2015). This idea was in line with the findings that belief in free will was a strong predictor of gratitude and people with stronger belief in free will expressed more gratitude toward others (Crescioni et al., 2016) and reduced belief in free will caused decreased gratefulness (MacKenzie, Vohs, & Baumeister, 2014). In line with these findings, Wood et al. (2009) reported that gratitude did not predict autonomy. In another study with adolescents, gratitude was not associated with autonomy needs at school but it was indirectly related to autonomy through relatedness and competence (Tian, Hi, Duebner, & Du, 2016). The connection between gratitude and autonomy seems to derive from belief in free will of the recipient and the benefactor. Gratitude drives the recipient to act with feelings of appreciation and goodwill (Fitzgerald, 1998; Tsang, 2007) which can be called as autonomous prosociality (Lee et al., 2015). This is why, no direct relationship was also found between gratitude and autonomy (Tian et al., 2016; Wood et al., 2009). Therefore, it is thought that gratitude was hypothesized to lead to integration but not differentiation for all self construal types in the current study. Additionally, while explaining the influence of gratitude on meaning in life, studies generally use the commonalities of gratitude and meaning in life such as generation of positive feelings (Datu & Mateo, 2015; Disabato et al., 2016; Liao & Weng, 2018), prosociality (Van Tongeren et al., 2015) or relatedness (Kleiman et al., 2013). Due to incorporation of mattering, gratitude is thought to lead to meaning in life directly. However, relatedness might also be responsible from their association. So, the effect of gratitude on meaning in life was investigated directly and indirectly via integration in the current study.

Finally, it was expected that according to type of self construal, the associations between integration, differentiation, meaning in life, gratitude and self-concept clarity might change. This is because orientations are complementary in nature (İmamoğlu, 2003) and the existence or non-existence of each of them influences the other one. For example, being related in related-individuated type and
related-patterned type is not the same experience since in one of them one’s needs for intrapersonal differentiation are thwarted (related-patterned). The individual acts with extrinsic expectations and might feel under pressure and his/her interpersonal relations are inevitably affected from this in terms of satisfaction. Being individuated is different in separated-individuated type and related-individuated type. The person individuates with positive feelings with others in related-individuated type but one might feel negative affectivity derived from isolation and his/her individuation might have a self-sufficient character in separated-individuated type (İmamoğlu, 2003). Similarly, gratitude might also be viewed differently by self construals that less experience and valuing of gratitude were reported by individuals with an autonomous interpersonal style (Parker et al., 2016). So, predictive roles of gratitude, integration and differentiation on self-concept clarity, presence and search for meaning might vary according to these influences and to see the exact contributions of each variable, the hypothesized model will be tested for each self construal.

2.5 Summary

University period is a challenging process in which new experiences are gathered. It is critical to support college students in this period for both personal growth and prevention of psychosocial problems. The influence of meaning in life on well-being is widely studied and consistently found to be positive. Despite its well accepted impact, there is lack of understanding about how judgments of meaning in life occur. So many factors have been investigated but there is lack of integrative theorizing, which can lead to interventions. Steger’s theory of meaning (2009, 2012) affirms that deriving meaning from life is similar to our other meaning making processes and by finding coherence and significance in our lives, we obtain a firm ground to have a sense of purpose and meaning in life and establishing identity and connections with others are necessary in this process (Steger et al., 2013). Based on this theory, a path model composing of gratitude, self-concept clarity and two dimensions of self-development (integration, differentiation) was constructed to predict meaning in life.
(presence of meaning, search for meaning) of university students. It is hypothesized that due to complementary relationship between integration and differentiation according to BID model (İmamoğlu, 2003), the predictive roles of variables are expected to change for each self construal. By the way of constructed model, valuable information might be obtained to develop and implement more effective interventions.
CHAPTER 3

METHOD

In this chapter, the methodological procedures were presented. Firstly, design of the study was described briefly. Then, sampling, data collection procedures and participant characteristics were introduced. Afterwards, information of the data collection instruments and data analysis plan were presented. Finally, limitations of the study were discussed.

3.1 Design of the Study

The present study mainly aimed to test a model which investigates the relationships between presence of meaning in life, search for meaning, self construal (integration, differentiation), gratitude and self-concept clarity among university students. Additionally, it is aimed to examine the differences of four self construals of BID (Balanced Integration Differentiation) Theory on presence of meaning, search for meaning, gratitude, self-concept clarity and to examine possible influences of demographic variables (gender, year of study, faculty, accommodation, relationship status) on the various measures of the study (presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity). Correlational research design was used to investigate the associations among variables. A correlational study describes the degree of relationship between two or more quantitative variables (Fraenkel, Wallen, & Hyun, 2012). In this study, to test research questions; MANOVA and Path Analysis techniques were used (Tabachnick & Fidell, 2013).
3.2 Sampling and Data Collection Procedure

Data were collected in the spring semester of the 2018-2019 academic year. First of all, the approval from Middle East Technical University Human Subjects Ethics Committee (see Appendix A) was received. The participants of the study were recruited through convenience sampling procedure. Data were collected from volunteered students in the library, canteens and classes where instructors gave permission for data collection. Informed consent forms (see Appendix B) were signed before fulfilling the questionnaires. It took 10-15 minutes to complete the questionnaires.

3.3 Participants

The questionnaires were distributed to 830 students in a state university. Listwise deletion was used for questionnaires which have missing pages and final number of students who participated to the study counted up to 825. Remaining missing values were handled by the procedure of the valid mean substitution (VMS) in which missing values of a case are replaced by its mean of all non-missing (valid) items (Raymond, 1986). As seen in Table 3.1, sample consisted of 437 (53 %) female and 388 (47 %) male students. The mean age for the sample is 21.90 (SD = 2.06) where the age of the participants ranged between 17 and 33. The participants were from five different faculties. As shown in the Table 3.1, 122 (14.8 %) of the sample were from Faculty of Education, 157 (19 %) were from Faculty of Economics and Administrative Sciences, 272 (33 %) were from Faculty of Engineering, 105 (12.7 %) from Faculty of Architecture, and 169 (20.5 %) were from Faculty of Art and Sciences. As can be seen in Table 3.1, 217 (26.3 %) of the students were freshmen, 223 (27 %) of the students were sophomores, 173 (21 %) of the students were juniors, and 212 (25.7 %) of the students were seniors. Accommodation of the students was as follows; 318 students lived in dormitory (38.5 %), 290 students lived with their families (35.2 %), 214 students lived without their families (25.9 %)
and 3 students specified their accommodation as other (.4 %). Among the participants, 352 students had a romantic relationship (42.7 %) and 472 students did not have a romantic relationship (57.2 %) (Table 3.1). The mean relationship satisfaction of students who had a romantic relationship was 4.40 (SD = .87).

Table 3.1

Demographic Information of the Participants

<table>
<thead>
<tr>
<th>Variables</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
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<td>53.0</td>
</tr>
<tr>
<td>Male</td>
<td>388</td>
<td>47.0</td>
</tr>
<tr>
<td>Year of study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshmen</td>
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<td>26.3</td>
</tr>
<tr>
<td>Sophomore</td>
<td>223</td>
<td>27.0</td>
</tr>
<tr>
<td>Junior</td>
<td>173</td>
<td>21.0</td>
</tr>
<tr>
<td>Senior</td>
<td>212</td>
<td>25.7</td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>122</td>
<td>14.8</td>
</tr>
<tr>
<td>Economics and Administrative Sciences</td>
<td>157</td>
<td>19.0</td>
</tr>
<tr>
<td>Engineering</td>
<td>272</td>
<td>33.0</td>
</tr>
<tr>
<td>Architecture</td>
<td>105</td>
<td>12.7</td>
</tr>
<tr>
<td>Art and Sciences</td>
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<td>20.5</td>
</tr>
<tr>
<td>Accommodation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dormitory</td>
<td>318</td>
<td>38.5</td>
</tr>
<tr>
<td>With parents</td>
<td>290</td>
<td>35.2</td>
</tr>
<tr>
<td>Without parents</td>
<td>214</td>
<td>25.9</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.40</td>
</tr>
<tr>
<td>Relationship Status*</td>
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<td></td>
</tr>
<tr>
<td>Yes</td>
<td>352</td>
<td>42.7</td>
</tr>
<tr>
<td>No</td>
<td>472</td>
<td>57.1</td>
</tr>
</tbody>
</table>

*There is one missing case.

3.4 Data Collection Instruments

In order to collect data, the demographic information form (see Appendix C) and four different instruments namely Integration-Differentiation Scale (BIDS) (see Appendix D), Meaning in Life Questionnaire (MLQ) (see Appendix E), Gratitude Questionnaire (GQ) (see Appendix F) and Self-Concept Clarity Scale (SCCS) (see
Appendix G) were utilized. Characteristics of each instrument and findings of the validity and reliability analyses of the scales were reported.

For reliability, Cronbach alpha coefficients were calculated. Cronbach alpha value of .60 is considered as the lowest acceptable value for social sciences (Hair, Black, Babin, Anderson, & Tatham, 2009). For construct validity, CFA analyses were conducted by IBM AMOS 23.0 software with Maximum Likelihood (ML) estimation which is “the statistical principle that underlies the deviation of parameter estimates; the estimates are the ones that maximize the likelihood (the continuous generalization) that the data (the observed covariances) were drawn from this population” (Kline, 2011, p. 154). The assumptions of confirmatory factor analyses were tested for each instrument before the analyses. The results of the confirmatory factor analyses were evaluated based on several fit indexes; the goodness of fit index (GFI) and the comparative fit index (CFI) .90 or above, the root mean square error of approximation (RMSEA) .08 or below, Chi-square/df ratio 5 or lower and Standardized Root Mean Square Residual (SRMR) .08 or below (Hu & Bentler, 1999; Kline, 2011b; Schumacker & Lomax, 2010).

3.4.1 Demographic Information Form

A demographic information form was constructed which included questions about age, gender, year of study, faculty, accommodation and relationship status and satisfaction (see Appendix C).

3.4.2 Balanced Integration-Differentiation Scale (BIDS)

Balanced Integration-Differentiation Scale (BIDS) was developed by İmamoğlu (1998, 2003) to assess the self construal types of the Balanced Integration Differentiation Model. It has 29 items and two subscales. Participants rated the subscale items on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly
First subscale is Interrelational Orientation subscale (16 items), which is about ties and relations with others, measures integration. Five items are reverse-coded. A high score represents feelings of relatedness. Cronbach’s alpha coefficients were reported between .80 and .91 in different studies (Gezici & Güvenç, 2003; İmamoğlu, 1998; 2003; İmamoğlu & Güler-Edwards, 2007; İmamoğlu & Karakitapoğlu-Aygün, 2004; Yeniçeri, 2013). Second subscale is Self-Developmental-Orientation subscale (13 items), which is about person’s differentiation from others as a unique person, measures differentiation (İmamoğlu, 1998). Seven items are reverse-coded. A high score indicates a self-developmental tendency toward individuation. Cronbach’s alpha coefficients were found to vary from .74 to .82 in different studies (Gezici & Güvenç, 2003; İmamoğlu, 1998; 2003; İmamoğlu & Güler-Edwards, 2007; İmamoğlu & Karakitapoğlu-Aygün, 2004; Yeniçeri, 2013).

3.4.2.1 Confirmatory Factor Analysis and Reliability of BIDS

The Balanced Integration-Differentiation Scale (BIDS) score data are most adequately represented by a hierarchical factor structure (İmamoğlu, 1998). Therefore, the CFA Model to be tested hypothesizes that responses to the BIDS can be explained by six first-order factors (Disconnectedness in Personal Relations, Attachment to Family, Approval of Disconnectedness in Personal Relations, Normative Frame of Reference, Being Intrigued by Oneself, Developing the Potential for Being Oneself) and two second-order factors (integration, differentiation). Integration includes Disconnectedness in Personal Relations (7 items), Attachment to Family (6 items) and Approval of Disconnectedness in Personal Relations (3 items). Differentiation includes Normative Frame of Reference (7 items), Being Intrigued by Oneself (3 items) and Developing the Potential for Being Oneself (3 items).
In order to test the proposed factor solution for the BIDS, Confirmatory Factor Analysis (CFA) was conducted. Assumptions of CFA were checked. There were no missing data and the sample size was 825 which was over 200 as Kline (2011) suggested. Skewness and kurtosis values were checked to test univariate normality. All values were between +3 and -3 which showed univariate normality (Kline, 2011). For the multivariate normality, Mardia’s test results showed that this assumption was not met as value was > 5 (Bentler, 2005). Therefore, bootstrapping which “is a computer-based method of resampling” was used as a remedy to eliminate the effects of non-normality (Kline, 2011, p. 42). Z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. There were univariate outliers which exceed the limits of -3.29 and +3.29 and multivariate outliers ($p < .001$) (Tabachnick & Fidell, 2013). CFA was conducted both with the data with outliers and without outliers. The results showed no significant difference so outliers were kept. Then, scatter plots were used to check linearity assumption which is accepted. Finally, bivariate correlation coefficients, VIF (variance inflation factor) and tolerance values were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be < .85 (Kline, 2011); VIF values must be < 10, and tolerance values must be > .20 (Tabachnick & Fidell, 2013).

Proposed model was tested via bootstrapping method (500 bootstrapped samples and 95% CI) to eliminate the potential effect of non-normality. Second-order model was tested for the BIDS through CFA. Some of the indexes showed a poor fit (CFI and GFI) of the model for the data. Some modifications between the error terms: item 2-item 6, item 10-item 13, item 25-item 29, item 22-item 28 and item 18-item 28 improved the model fit. There is theoretical justification for relating the covariance of errors of these items since they measured similar behavior. Conducted modification improved the model fit (Table 3.2). Standardized estimates ranged between .36 and .89.
Table 3.2  
Goodness of Fit Indexes for Second-Order Model of BIDS

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>1540.28***</td>
<td>373</td>
<td>4.13</td>
<td>.86</td>
<td>.88</td>
<td>.06</td>
<td>.07</td>
</tr>
<tr>
<td>Model 2</td>
<td>1284.15***</td>
<td>368</td>
<td>3.49</td>
<td>.89</td>
<td>.90</td>
<td>.06</td>
<td>.07</td>
</tr>
</tbody>
</table>

***p < .001

The Cronbach alpha coefficient for the Integration subscale is .87 and .72 for Differentiation subscale.

3.4.3 Gratitude Questionnaire (GQ)

Gratitude Questionnaire (GQ) was developed by (McCullough et al., 2002) to measure the extent to which people report gratitude. It has six items rated on a 7-point likert-type scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”) and two items are reverse-coded. Higher scores on GQ manifest higher levels of gratitude. Four facets of gratitude is assessed by GQ: intensity, frequency, span and density. Cronbach’s alpha for the six-item GQ have ranged from .76 to .84 and unidimensional model fit (i.e., CFIs range from .90 to .95, and SRMRs range from .05 to .10) was shown through confirmatory factor analyses (McCullough et al., 2002). Yüksel and Oğuz Duran (2012) adapted GQ into Turkish as ‘Minnettarlık Ölçeği’. Confirmatory Factor Analysis with a sample of 859 Turkish college students indicated a unidimensional model fit however with five items rather than the original six-item version, $[GFI = .97, CFI = .94, AGFI = .90, SRMR = .04, RMSEA = .10]$. The factor loadings varied from .38 to .89. Five-item version contains one reverse item. Cronbach’s alpha for the five-item Turkish version of the GQ was .77. The test-retest reliability of the GQ was .66 (Yüksel & Oğuz Duran, 2012).
In order to test the proposed one factor solution for the GQ, Confirmatory Factor Analysis (CFA) was conducted. Assumptions of CFA were checked. There were no missing data and the sample size was 825 which was over 200 as Kline (2011) suggested. Skewness and kurtosis values were checked to test univariate normality. All values were between +3 and -3 which show univariate normality (Kline, 2011). For the multivariate normality, Mardia’s test results showed that this assumption was not met as value was > 5 (Bentler, 2005). Therefore, bootstrapping which “is a computer-based method of resampling” was used as a remedy to eliminate the effects of non-normality (Kline, 2011, p. 42). Z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. There were univariate outliers which exceed the limits of -3.29 and +3.29 and multivariate outliers ($p < .001$) (Tabachnick & Fidell, 2013). CFA was conducted both with the data with outliers and without outliers. The results showed no significant difference so outliers were kept. Then, scatter plots were used to check linearity assumption which is accepted. Finally, bivariate correlation coefficients, VIF (variance inflation factor) and tolerance values were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be < .85 (Kline, 2011); VIF values must be < 10, and tolerance values must be > .20 (Tabachnick & Fidell, 2013).

Proposed model was tested via bootstrapping method (500 bootstrapped samples and 95% CI) to eliminate the potential effect of non-normality. One-factor solution was tested for the GQ through CFA. Results showed a poor fit of one-factor model for the data (Table 3.3). After the modification indexes were checked, the error covariance of item 4 and item 5 was freely estimated. There is theoretical justification for relating the covariance of errors of these items since they measured similar behavior. Conducted modification improved the model fit (Table 3.3). Standardized estimates ranged between .53 and .91.
Table 3.3

*Goodness of Fit Indexes for One Factor Model of GQ*

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>78.64***</td>
<td>5</td>
<td>15.7</td>
<td>.95</td>
<td>.96</td>
<td>.13</td>
<td>.04</td>
</tr>
<tr>
<td>Model 2</td>
<td>7.56 ($p = .11$)</td>
<td>4</td>
<td>1.89</td>
<td>.99</td>
<td>.99</td>
<td>.03</td>
<td>.01</td>
</tr>
</tbody>
</table>

***$p < .001$}

For reliability, the Cronbach alpha coefficient was calculated. It was found as .80.

3.4.4 Meaning in Life Questionnaire (MLQ)

Meaning in Life Questionnaire (MLQ) consists of two subscales (Steger et al., 2006). There are five items in presence subscale (MLQ-P) and measures the degree of subjective sense to which one’s life is meaningful or not. Higher scores represent higher degrees of one’s sense of meaningful life. Search for meaning subscale (MLQ-S) also consists of five items which measures the motivation of finding and deepening one’s meaning in life. Higher scores represent higher degrees of one’s search for meaningful life. Participants are asked to rate each item on a seven-point scale ranging from 1 (Absolutely Untrue) to 7 (Absolutely True) on each scale. The possible scores from each subscale range between 5 and 35. Confirmatory factor analysis yielded a goodness-of-fit index (GFI) ranging from .93 to .97. The internal consistency coefficients ranged between .82 and .86 for MLQ-P and .86 and .87 for MLQ-S (Steger et al., 2006). Dursun (2012) adapted the scale into Turkish. Confirmatory Factor Analysis with a sample of 317 Turkish college students indicated a good two factor model fit, [$GFI = .94$, $CFI = .98$, $AGFI = .94$, $RMSEA = .05$]. Internal consistency coefficients were .83 and .87; test-retest correlation coefficients were .84 and .81 for presence subscale and search for meaning respectively.
In order to test the proposed two factor solution for the MLQ, Confirmatory Factor Analysis (CFA) was conducted. Assumptions of CFA were checked. Firstly, there were no missing data and the sample size was 825 which was over 200 as Kline (2011) suggested. Also, skewness and kurtosis values were checked to test univariate normality. All values were between +3 and -3 which show univariate normality (Kline, 2011). For the multivariate normality, Mardia’s test results showed that this assumption was not met as value was > 5 (Bentler, 2005). Therefore, bootstrapping which “is a computer-based method of resampling” was used as a remedy to eliminate the effects of non-normality (Kline, 2011, p. 42). Z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. There were not any univariate outliers which exceed the limits of -3.29 and +3.29 but there are multivariate outliers ($p < .001$) (Tabachnick & Fidell, 2013).

CFA was conducted both with the data with outliers and without outliers. The results showed no significant difference so outliers were kept. Then, scatter plots were used to check linearity assumption which is accepted. Finally, bivariate correlation coefficients, VIF (variance inflation factor) and tolerance values were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be < .85 (Kline, 2011); VIF values must be < 10, and tolerance values must be > .20 (Tabachnick & Fidell, 2013).

Table 3.4

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
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<tr>
<td>Model 1</td>
<td>172.73***</td>
<td>34</td>
<td>5.08</td>
<td>.96</td>
<td>.96</td>
<td>.07</td>
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<td>Model 2</td>
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<td>33</td>
<td>4.42</td>
<td>.97</td>
<td>.96</td>
<td>.06</td>
<td>.05</td>
</tr>
</tbody>
</table>

***$p < .001$
Proposed model was tested via bootstrapping method (500 bootstrapped samples and 95% CI) to eliminate the potential effect of non-normality. Two factor solution was tested for the MLQ through CFA. Although other indexes did not show a poor fit of two factor model for the data, Chi-square/df ratio was slightly more than 5 (Table 3.4). After the modification indexes were checked, the error covariance of item 2 and item 3 was freely estimated. There was theoretical justification for relating the covariance of errors of these items since they measured similar behavior. Conducted modification improved the model fit (Table 3.4). Standardized estimates ranged between .63 and .90. The Cronbach alpha coefficients were .87 for presence subscale and .88 for search for meaning subscale.

### 3.4.5 Self-Concept Clarity Scale (SCCS)

Self-Concept Clarity Scale (SCCS) was developed to measure the clarity and the consistency of self beliefs by Campbell et al. (1996). It has 12 items (10 of items were reverse coded) rated on a 7 point Likert type rating scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). Higher scores indicate higher level of self-concept clarity. Self-concept clarity scores were calculated by averaging the ratings of 12 items, and the possible range was 1 to 7. The original scale has high average internal consistency reliability among three samples (.86), and test–retest reliability (.79 for 4 months and .70 for 5 months) (Campbell et al., 1996). Sümer and Güngör (1999) also reported high internal consistency (.89), and Çürükvelioğlu (2012) conducted Confirmatory Factor Analysis with a sample of 344 Turkish emerging adults and confirmed uni-dimensional model of the SCCS [$\chi^2 / df = 2.91; GFI = .94; CFI = .96; NFI = .93$ $RMSEA = .069$]. The factor loadings varied from .30 to .68.
3.4.5.1 Confirmatory Factor Analysis and Reliability of SCCS

In order to test the proposed one factor solution for the SCCS, Confirmatory Factor Analysis (CFA) was conducted. Assumptions of CFA were checked. There were no missing data and the sample size was 825 which was over 200 as Kline (2011) suggested. Skewness and kurtosis values were checked to test univariate normality. All values were between +3 and -3 which show univariate normality (Kline, 2011). For the multivariate normality, Mardia’s test results showed that this assumption was not met as value was > 5 (Bentler, 2005). Therefore, bootstrapping which “is a computer-based method of resampling” was used as a remedy to eliminate the effects of non-normality (Kline, 2011, p. 42). Z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. There were univariate outliers which exceed the limits of -3.29 and +3.29 and multivariate outliers ($p < .001$) (Tabachnick & Fidell, 2013). CFA was conducted both with the data with outliers and without outliers. The results showed no significant difference so outliers were kept. Then, scatter plots were used to check linearity assumption which is accepted. Finally, bivariate correlation coefficients, VIF (variance inflation factor) and tolerance values were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be < .85 (Kline, 2011); VIF values must be < 10, and tolerance values must be > .20 (Tabachnick & Fidell, 2013).

Proposed model was tested via bootstrapping method (500 bootstrapped samples and 95% CI) to eliminate the potential effect of non-normality. While conducting CFA with questionnaires having more than 5 items, item parceling was suggested (Kline, 2011). Rather than multidimensional scales, item parceling is commonly suggested method for unidimensional scales (Little, Cunningham, Shahar, & Widaman, 2002). So, four parcels were formed by using the ‘single-factor’ method, in which each parcel picks up items from the highest to the lowest factor loadings sequentially (Landis, Beal, & Tesluk, 2000). Results of CFA showed that although
CFI, GFI and SRMR showed good fit, Chi-square statistic and RMSEA showed poor fit. After the modification indexes were checked, the error covariance of parcel 2 and parcel 3 was freely estimated. Conducted modification improved the model fit (Table 3.5). Standardized estimates ranged between .73 and .87.

Table 3.5

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>43.43</td>
<td>2</td>
<td>21.71</td>
<td>.98</td>
<td>.97</td>
<td>.16</td>
<td>.03</td>
</tr>
<tr>
<td>Model 2</td>
<td>2.40</td>
<td>1</td>
<td>2.40</td>
<td>.99</td>
<td>.99</td>
<td>.04</td>
<td>.01</td>
</tr>
</tbody>
</table>

***$p < .001$

For reliability, the Cronbach alpha coefficient was calculated. It was found as .88.

3.5 Data Analysis Plan

The main purpose of the present study is to test a model which investigates the relationships between presence of meaning in life, search for meaning, self construal (integration, differentiation), gratitude and self-concept clarity among university. In order to test the model, Path Analysis, which uses simultaneous and sequential regression equations to solve direct and indirect complex relationships between observed variables, was used (Keith, 2014). The path model was tested for each type of self construal of BID theory (related-individuated, related-patterned, separated-individuated, separated-patterned) separately. Additionally, it is aimed to examine the differences of four self construals of BID (Balanced Integration Differentiation) Theory on presence of meaning, search for meaning, gratitude, self-concept clarity and to examine possible influences of demographic variables (gender, year of study, faculty, accommodation, relationship status) on the various measures of the study (presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity). For these purposes; multivariate analysis of variances (MANOVAs) were performed.
After data entry, missing data screening was done and descriptive statistics were reported for gender, age, year of study, faculty, accommodation, and relationship status. Then, confirmatory factor analyses (CFA) were conducted to confirm the factor structure of instruments within this sample. Prior to CFA, assumptions were checked. Finally, reliability of the instruments was computed. For the main analysis, descriptive statistics and bivariate correlations were reported. Prior to MANOVAs and Path Analysis, related assumptions were checked. All these analyses were conducted by using IBM SPSS Version 20 and IBM AMOS Version 23. Alpha was set at .05.

3.6 Limitations of the Study

There were possible limitations in the current study which should be taken into account during interpretations of the results. Firstly, the generalizability of the results was limited since convenience sampling strategy was utilized. Second shortcoming of the study was utilizing self-report measurement tools which may have been biased by social desirability. Final limitation was using cross-sectional design which did not allow for seeing time effects on variables.
CHAPTER 4

RESULTS

The results of the analyses of the current study were presented in this chapter. Firstly, missing data analysis was done. Secondly, descriptive statistics, assumptions and results of MANOVAs of differences of demographic variables and self construals of BID Theory on the measures of the study were reported. Then, descriptive statistics, tests of the required assumptions and the results of each Path Analysis were reported. Finally, summary of the results was presented.

4.1 Missing Data

Before analyses, data were examined in order to correct inaccurate data entries by using frequency tables and reversed items were recoded. Then, data were screened for missing data. Kline (2011) suggested that missing values less than 5% on a single variable in a large data set does not cause problems. According to missing data evaluation, on each variable, missing values do not exceed 5%. Moreover, the pattern of missing data is more important than the amount of missing (Tabachnick & Fidell, 2013). Therefore, before deciding the method (listwise deletion or imputing) of dealing with missing data (Kline, 2011; Tabachnick & Fidell, 2013), it should be analyzed if there is a pattern. Little’s MCAR test (Little & Rubin, 1987) was conducted and resulted in a significant value which indicates that missing data was not missing completely at random. However, chi-square may yield in a significant value with samples larger than 200 (Tabachnick & Fidell, 2013). Comparing cases with complete scores and cases with missing data in terms of critical variables was suggested by Allison (2002). A series of ANOVAs were conducted to compare cases with complete scores and cases with missing data and results showed no significant
difference except integration with a small to moderate effect size. Therefore, in order not to lose data and the non-significant differences between cases with complete scores and cases with missing data, imputation was done in the present study. Remaining missing values were handled by the procedure of the valid mean substitution (VMS) in which missing values of a case were replaced by its mean of all non-missing (valid) items (Raymond, 1986). In other words, each missing value of a case was imputed by the mean of the scale or subscale of that case. All conditions of VMS were checked namely; same maximum and the minimum scores for all items, equal theoretical means and standard deviations of items, no increase in difficulty over items, missing completely at random data, positively correlated items, unidimensional scale and linearity between missing data and the completed ones (Cool, 2000; Dodeen, 2003; Rubin, 1976).

4.2 Differences of Demographic Variables and Self Construals of the BID Theory on the Measures of the Study

4.2.1 Descriptive Statistics

Descriptive statistics namely means, standard deviations and bivariate correlations of the variables of the current study were reported in Table 4.1. As shown in Table 4.1, presence of meaning was reported with a mean of 22.62 ($SD = 6.80$); search for meaning with a mean of 21.81 ($SD = 7.06$); gratitude with a mean of 25.70 ($SD = 5.80$), integration with a mean of 58.44 ($SD = 10.42$); differentiation with a mean of 50.99 ($SD = 6.05$); and self-concept clarity with a mean of 50.81 ($SD = 14.19$). Presence of meaning was positively correlated with gratitude ($r = .35$, $p < .01$), integration ($r = .39$, $p < .01$), differentiation ($r = .12$, $p < .01$), self-concept clarity ($r = .46$, $p < .01$) and negatively correlated with search for meaning ($r = -.15$, $p < .01$). Search for meaning was negatively correlated with integration ($r = -.18$, $p < .01$) and self-concept clarity ($r = -.36$, $p < .01$). Gratitude was positively correlated with
integration \((r = .49, p < .01)\) and self-concept clarity \((r = .18, p < .01)\). Integration was positively correlated with self-concept clarity \((r = .41, p < .01)\) and differentiation was positively correlated with self-concept clarity \((r = .15, p < .01)\).

Table 4.1

Means, Standard Deviations, and Intercorrelations for Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of Meaning</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22.62</td>
<td>6.80</td>
</tr>
<tr>
<td>Search for Meaning</td>
<td>-.15</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21.81</td>
<td>7.06</td>
</tr>
<tr>
<td>Gratitude</td>
<td>.35*</td>
<td>-.01</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>25.70</td>
<td>5.80</td>
</tr>
<tr>
<td>Integration</td>
<td>.39*</td>
<td>-.18*</td>
<td>.49*</td>
<td>1</td>
<td></td>
<td></td>
<td>58.44</td>
<td>10.42</td>
</tr>
<tr>
<td>Differentiation</td>
<td>.12*</td>
<td>.03</td>
<td>.06</td>
<td>.03</td>
<td>1</td>
<td></td>
<td>50.99</td>
<td>6.05</td>
</tr>
<tr>
<td>Self-Concept Clarity</td>
<td>.46*</td>
<td>-.36*</td>
<td>.18*</td>
<td>.41*</td>
<td>.15*</td>
<td>1</td>
<td>50.81</td>
<td>14.19</td>
</tr>
</tbody>
</table>

*p < .01

4.2.2 Assumptions

In order to examine the differences of four self construals of BID (Balanced Integration Differentiation) Theory on presence of meaning, search for meaning, gratitude, self-concept clarity and to examine possible influences of demographic variables (gender, year of study, faculty, accommodation, relationship status) on the various measures of the study (presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity), separate multivariate analysis of variances (MANOVAs) were conducted. Prior to analyses, assumptions of MANOVA namely independence of observations, interval/ratio scale on DVs, adequate sample size, outliers, univariate and multivariate normality, homogeneity of variance-covariance matrices, linearity and absence of multicollinearity among DVs were checked (Tabachnick & Fidell, 2013).
First, there was no relationship between the observations in each group so independence of observations was assumed. Second, dependent variables were measured at the interval level. Third, sample size was adequate since there are more cases in each group than the number of dependent variables. Fourth, univariate outliers were checked by boxplots and Z scores in each group of the independent variables for all dependent variables. There were cases with Z scores exceeding +3.29 and lower than -3.29 (Tabachnick & Fidell, 2013). Boxplots also showed outliers. However, a few Z scores exceeding the given range with large sample sizes are possible (Tabachnick & Fidell, 2013). The cases out of the range were mostly in scales of gratitude, integration and differentiation from which it was expected to have outliers due to their nature. Thus, those cases were decided to keep in data set in order not to lose variation. Fifth, univariate normality was checked by skewness and kurtosis values, and histograms in each group of each analysis. Although some histograms showed nonnormal distribution due to nature of the variables, all skewness and kurtosis values were between +3 and -3, so univariate normality was assumed (Kline, 2011). Sixth, for the multivariate normality and to check multivariate outliers, Mahalonobis distance was calculated. There were cases out of the Chi-square distance ($p < .001$) in each group of the independent variables (Tabachnick & Fidell, 2013). Although, the sample size is large enough ($N = 825$), F test is robust to deviations from normality and violation of multivariate normality has small effect on Type I error (Tabachnick & Fidell, 2013), it was decided to do all MANOVAs with and without multivariate outliers. Since the results did not change for each MANOVA, they were decided to retain in the data. Seventh, scatterplot matrices were used to check linearity assumption (linear relationship between each pair of dependent variables for each group of the independent variable) which is accepted. Then, bivariate correlation coefficients were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be $< .85$ (Kline, 2011). Finally, homogeneity of variance-covariance matrices was checked by examining the results of Box’s M test of equality of covariance matrices and Levene’s Test and reported in each MANOVA.
4.2.3 Differences of Demographic Variables on the Measures of the Study

4.2.3.1 Influence of Gender on the Measures of the Study

A one-way MANOVA was conducted to test the effect of gender (independent variable) on six dependent variables: presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity. The means and standard deviations of the dependent variables with regard to gender were given in Table 4.2.

Table 4.2

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Pof M</th>
<th>SforM</th>
<th>Gra</th>
<th>Int</th>
<th>Dif</th>
<th>Scc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Female</td>
<td>22.27</td>
<td>6.59</td>
<td>22.38</td>
<td>6.85</td>
<td>26.54</td>
<td>5.28</td>
</tr>
<tr>
<td>Male</td>
<td>23.01</td>
<td>7.00</td>
<td>21.15</td>
<td>7.25</td>
<td>24.76</td>
<td>6.20</td>
</tr>
<tr>
<td>Total</td>
<td>22.62</td>
<td>6.80</td>
<td>21.80</td>
<td>7.06</td>
<td>25.70</td>
<td>5.80</td>
</tr>
</tbody>
</table>


Assumption of homogeneity of covariance matrices assumption was violated since Box’s Test of Equality of Covariance Matrices was significant ($p < .05$). Therefore, Pillai’s Trace would be reported. Homogeneity of variance assumption was checked by Levene’s Test and it revealed a non-significant value ($p > .05$) for presence of meaning, search for meaning, integration, differentiation, and self-concept clarity so homogeneity of variance assumption was accepted for these dependent variables. However, it was significant for gratitude, ($p < .05$). So, alpha level was decreased to .04 for this dependent variable. There was a statistically significant difference between female and male students on the combined dependent variables, Pillai’s
Trace = .06, $F(6, 818) = 9.55, p < .001, \eta^2 = .06$, small effect (Cohen, 1988). For univariate analyses, Bonferroni correction ($\alpha$/# of dependent variables) was applied, 0.008 (.05/ 6) for all dependent variables except gratitude which was tested at .006 (.04/ 6). These results showed significant differences between male and female students for integration, $F(1,823) = 15.95, p < .001, \eta^2 = .02$, small effect and for gratitude, $F(1,823) = 19.90, p < .001, \eta^2 = .02$, small effect (Table 4.3). Female students scored higher than male students on integration and gratitude but the effect sizes were small.

Table 4.3

Multivariate and Univariate Analyses of Variance

<table>
<thead>
<tr>
<th>Variable</th>
<th>MANOVA</th>
<th>Pof M</th>
<th>SforM</th>
<th>Gra</th>
<th>Int</th>
<th>Dif</th>
<th>Scc</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F(6,818)$</td>
<td>$F(1,823)$</td>
<td>$F(1,823)$</td>
<td>$F(1,823)$</td>
<td>$F(1,823)$</td>
<td>$F(1,823)$</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>9.5*</td>
<td>2.43</td>
<td>6.27</td>
<td>19.90*</td>
<td>15.95*</td>
<td>2.94</td>
<td>3.50</td>
</tr>
</tbody>
</table>


### 4.2.3.2 Influence of Year of Study on the Measures of the Study

A one-way MANOVA was conducted to test the effect of year of study (independent variable with four levels: freshmen, sophomore, junior, senior) on six dependent variables: presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity. The means and standard deviations of the dependent variables with regard to year of study were given in Table 4.4.

Assumption of homogeneity of covariance matrices assumption was assumed since Box’s Test of Equality of Covariance Matrices was not significant ($p > .05$). Homogeneity of variance assumption was checked by Levene’s Test.
Table 4.4

Means and Standard Deviations for Dependent Variables as a Function of Year of Study

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Pof M</th>
<th>SforM</th>
<th>Gra</th>
<th>Int</th>
<th>Dif</th>
<th>Scc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Freshmen</td>
<td>21.85</td>
<td>6.92</td>
<td>22.44</td>
<td>7.43</td>
<td>58.43</td>
<td>10.38</td>
</tr>
<tr>
<td>Sophomore</td>
<td>21.92</td>
<td>6.80</td>
<td>22.18</td>
<td>6.70</td>
<td>57.66</td>
<td>9.77</td>
</tr>
<tr>
<td>Junior</td>
<td>23.71</td>
<td>6.88</td>
<td>21.02</td>
<td>7.32</td>
<td>59.50</td>
<td>10.73</td>
</tr>
<tr>
<td>Senior</td>
<td>23.24</td>
<td>6.44</td>
<td>21.40</td>
<td>6.79</td>
<td>58.40</td>
<td>10.86</td>
</tr>
<tr>
<td>Total</td>
<td>22.62</td>
<td>6.79</td>
<td>21.80</td>
<td>7.06</td>
<td>58.44</td>
<td>10.43</td>
</tr>
</tbody>
</table>


Levene’s test is not significant ($p > .05$) for presence of meaning, search for meaning, integration, differentiation, and self-concept clarity so homogeneity of variance assumption was accepted for these dependent variables. However, it is significant for gratitude, ($p < .05$). So, alpha level was decreased to .04 for this dependent variable. There was not a statistically significant difference between years of study on the combined dependent variables, Wilks’s $\lambda = .97$, $F(18, 2308) = 1.35$, $p > .05$ so no univariate analyses were done (Table 4.5).

Table 4.5

Multivariate and Univariate Analyses of Variance

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>MANOVA</th>
<th>Pof M</th>
<th>SforM</th>
<th>Gra</th>
<th>Int</th>
<th>Dif</th>
<th>Scc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>$F(18,2308)$</td>
<td>$F(3,821)$</td>
<td>$F(3,821)$</td>
<td>$F(3,821)$</td>
<td>$F(3,821)$</td>
<td>$F(3,821)$</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>1.35</td>
<td>3.81</td>
<td>1.75</td>
<td>0.57</td>
<td>1.00</td>
<td>1.92</td>
<td>1.63</td>
</tr>
</tbody>
</table>

4.2.3.3 Influence of Faculty on the Measures of the Study

A one-way MANOVA was conducted to test the effect of faculty (independent variable with five levels: education, art and sciences, engineering, economics and administrative sciences, architecture) on six dependent variables: presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity. The means and standard deviations of the dependent variables with regard to faculty were given in Table 4.6.

Table 4.6

Means and Standard Deviations for Dependent Variables as a Function of Faculty

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Pof M</th>
<th>SforM</th>
<th>Gra</th>
<th>Int</th>
<th>Dif</th>
<th>Scc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
</tr>
<tr>
<td>Engineering</td>
<td>23.03</td>
<td>6.49</td>
<td>21.52</td>
<td>7.09</td>
<td>25.86</td>
<td>5.97</td>
</tr>
<tr>
<td>Education</td>
<td>22.96</td>
<td>7.19</td>
<td>21.47</td>
<td>7.81</td>
<td>26.37</td>
<td>5.42</td>
</tr>
<tr>
<td>Econ&amp;Adm</td>
<td>23.00</td>
<td>6.31</td>
<td>21.92</td>
<td>6.26</td>
<td>25.72</td>
<td>6.02</td>
</tr>
<tr>
<td>Architecture</td>
<td>21.20</td>
<td>6.76</td>
<td>21.77</td>
<td>6.50</td>
<td>26.35</td>
<td>4.84</td>
</tr>
<tr>
<td>Art and Sci.</td>
<td>22.24</td>
<td>7.36</td>
<td>22.42</td>
<td>7.51</td>
<td>24.55</td>
<td>6.01</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22.62</td>
<td>6.80</td>
<td>21.80</td>
<td>7.06</td>
<td>25.70</td>
<td>5.80</td>
</tr>
</tbody>
</table>


Assumption of homogeneity of covariance matrices assumption was violated since Box’s Test of Equality of Covariance Matrices was significant \( (p < .05) \). Therefore, Pillai’s Trace was reported. Homogeneity of variance assumption was checked by Levene’s Test, which was not significant \( (p > .05) \) for presence of meaning, gratitude, integration, differentiation, and self-concept clarity so homogeneity of variance assumption was accepted for these dependent variables. However, it was significant for search for meaning, \( (p < .05) \). So, alpha level was decreased to .04 for this dependent variable.
Table 4.7

Multivariate and Univariate Analyses of Variance

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1.76*</td>
<td>1.72</td>
<td>0.51</td>
<td>2.45</td>
<td>2.14</td>
<td>2.93</td>
<td>1.20</td>
</tr>
</tbody>
</table>


* p < .05

There was a statistically significant difference between faculties on the combine dependent variables, Pillai’s Trace = .05, F (24, 3272) = 1.76, p < .05, \( \eta^2 = .01 \), small effect (Cohen, 1988). For univariate analyses, Bonferroni correction (\( \alpha/\# \) of dependent variables) was applied, 008 (.05/ 6) for all dependent variables except search for meaning which was tested at .006 (.04/ 6). The univariate results showed no significant differences between faculties on any dependent variables (Table 4.7).

4.2.3.4 Influence of Accommodation on the Measures of the Study

A one-way MANOVA was conducted to test the effect of accommodation (independent variable with three levels: dormitory, with parents, without parents) on six dependent variables: presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity. ‘Other’ category was included into ‘without parents’ category due to its very low frequency. The means and standard deviations of the dependent variables with regard to accommodation were given in Table 4.8.

Assumption of homogeneity of covariance matrices assumption was assumed since Box’s Test of Equality of Covariance Matrices was not significant (\( p > .05 \)). Homogeneity of variance assumption was checked by Levene’s Test.
Table 4.8

*Means and Standard Deviations for Dependent Variables as a Function of Accommodation*

<table>
<thead>
<tr>
<th>Group</th>
<th>Pof M</th>
<th>SD</th>
<th>SforM</th>
<th>SD</th>
<th>Gra</th>
<th>SD</th>
<th>Int</th>
<th>SD</th>
<th>Dif</th>
<th>SD</th>
<th>Scc</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dormitory</td>
<td>22.95</td>
<td>6.65</td>
<td>22.27</td>
<td>6.93</td>
<td>25.91</td>
<td>5.98</td>
<td>59.41</td>
<td>10.49</td>
<td>51.02</td>
<td>5.97</td>
<td>51.30</td>
<td>14.60</td>
</tr>
<tr>
<td>With P.</td>
<td>22.35</td>
<td>6.85</td>
<td>22.35</td>
<td>6.63</td>
<td>25.99</td>
<td>5.63</td>
<td>57.20</td>
<td>10.22</td>
<td>50.67</td>
<td>6.07</td>
<td>49.86</td>
<td>13.72</td>
</tr>
<tr>
<td>Without P.</td>
<td>22.50</td>
<td>6.94</td>
<td>20.40</td>
<td>7.62</td>
<td>25.03</td>
<td>5.71</td>
<td>58.67</td>
<td>10.47</td>
<td>51.37</td>
<td>6.16</td>
<td>51.38</td>
<td>14.19</td>
</tr>
<tr>
<td>Total</td>
<td>22.61</td>
<td>6.80</td>
<td>21.81</td>
<td>7.06</td>
<td>25.70</td>
<td>5.80</td>
<td>58.44</td>
<td>10.42</td>
<td>50.99</td>
<td>6.06</td>
<td>50.81</td>
<td>14.19</td>
</tr>
</tbody>
</table>


Levene’s test was not significant (*p* > .05) for presence of meaning, gratitude, integration, differentiation, and self-concept clarity so homogeneity of variance assumption was accepted for these dependent variables. However, it was significant for search for meaning, (*p* < .05). So, alpha level was decreased to .04 for this dependent variable.

There was a statistically significant difference between accommodations on the combined dependent variables, *Wilks’s* *λ* = .96, *F* (12, 1634) = 2.46, *p* = .003, *η²* = .02, small effect (Cohen, 1988). For univariate analyses, Bonferroni correction (*α/# of dependent variables*) was applied, 008 (.05/6) for all dependent variables except search for meaning which was tested at a .006 (.04/6). These results showed significant differences between accommodations for search for meaning, *F* (2,822) = 5.95, *p* = .003, *η²* = .01, small effect. Due to unequal sample sizes and heterogeneity of variance, Games-Howell test was used for post hoc comparisons. No differences were found between accommodations at .006 (Table 4.9).
4.2.3.5 Influence of Relationship Status on the Measures of the Study

A one-way MANOVA was conducted to test the effect of relationship status (independent variable with two levels: yes, and no) on six dependent variables: presence of meaning, search for meaning, integration, differentiation, gratitude, self-concept clarity. The means and standard deviations of the dependent variables with regard to relationship status were given in Table 4.10.

Table 4.9

Multivariate and Univariate Analyses of Variance

<table>
<thead>
<tr>
<th>Variable</th>
<th>MANOVA</th>
<th>Pof M</th>
<th>SforM</th>
<th>Gra</th>
<th>Int</th>
<th>Dif</th>
<th>Scc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>F(12,1634)</td>
<td>2.46*</td>
<td>0.63</td>
<td>5.95*</td>
<td>2.00</td>
<td>3.51</td>
<td>0.83</td>
</tr>
</tbody>
</table>

* p < .01

Table 4.10

Means and Standard Deviations for Dependent Variables as a Function of Relationship Status

<table>
<thead>
<tr>
<th>Group</th>
<th>Pof M M</th>
<th>SD</th>
<th>SforM M</th>
<th>SD</th>
<th>Gra M</th>
<th>SD</th>
<th>Int M</th>
<th>SD</th>
<th>Dif M</th>
<th>SD</th>
<th>Scc M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23.37</td>
<td>6.74</td>
<td>20.49</td>
<td>7.20</td>
<td>26.44</td>
<td>5.45</td>
<td>59.21</td>
<td>10.65</td>
<td>51.70</td>
<td>5.73</td>
<td>52.35</td>
<td>13.82</td>
</tr>
<tr>
<td>No</td>
<td>22.03</td>
<td>6.78</td>
<td>22.77</td>
<td>6.81</td>
<td>25.16</td>
<td>6.00</td>
<td>57.86</td>
<td>10.23</td>
<td>50.45</td>
<td>6.24</td>
<td>49.68</td>
<td>14.38</td>
</tr>
<tr>
<td>Total</td>
<td>22.61</td>
<td>6.79</td>
<td>21.80</td>
<td>7.06</td>
<td>25.71</td>
<td>5.80</td>
<td>58.44</td>
<td>10.43</td>
<td>50.98</td>
<td>6.05</td>
<td>50.82</td>
<td>14.20</td>
</tr>
</tbody>
</table>

Assumption of homogeneity of covariance matrices assumption was assumed since Box’s Test of Equality of Covariance Matrices was not significant ($p > .05$). Levene’s test was not significant ($p > .05$) for all dependent variables so homogeneity of variance was assumed. There was a statistically significant difference between relationship status on the combined dependent variables, Wilks’s $\lambda = .95, F (6,817) = 6.95, p < .001, \eta^2 = .05$, small effect (Cohen, 1988). For univariate analyses, Bonferroni correction ($\alpha$/# of dependent variables) was applied, $008 (.05/6)$ for all dependent variables.

The results showed significant differences between students who had a romantic relationship and students who did not have a romantic relationship for presence of meaning $F (1,822) = 7.84, p = .005, \eta^2 = .01$, for search for meaning $F (1,822) = 21.49, p = .000, \eta^2 = .02$, for gratitude $F (1,822) = 9.98, p = .002, \eta^2 = .01$, for differentiation $F (1,822) = 8.66, p = .003, \eta^2 = .01$ and for self-concept clarity $F (1,822) = 7.19 p = .007, \eta^2 = .01$. However, no difference was found for integration $F (1,822) = 3.40, p = .065$ (Table 4.11). University students with a romantic relationship had more presence of meaning, gratitude, differentiation and self-concept clarity and less search for meaning than students without a romantic relationship but the effect sizes were small.

Table 4.11

*Multivariate and Univariate Analyses of Variance*

<table>
<thead>
<tr>
<th>Variable</th>
<th>MANOVA $F(16,817)$</th>
<th>Pof M $F(1,822)$</th>
<th>SforM $F(1,822)$</th>
<th>Gra $F(1,822)$</th>
<th>Int $F(1,822)$</th>
<th>Dif $F(1,822)$</th>
<th>Scc $F(1,822)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>6.95*</td>
<td>7.84**</td>
<td>21.49*</td>
<td>9.98**</td>
<td>3.40</td>
<td>8.66**</td>
<td>7.19**</td>
</tr>
</tbody>
</table>


* $p < .001$ **$p < .01$
4.2.4 Differences of Self construals of the BID Theory on the Measures of the Study

A one-way MANOVA was conducted to test the effect of self construals (independent variable with four levels; separated-differentiation, separated-patterning, related-patterning, related-differentiation) on four dependent variables (presence of meaning, search for meaning, gratitude, self-concept clarity). Before application of MANOVA, in order to obtain four categories according to the BID Model, a median split was performed. Based on the median split for integration orientation (IO), there were 436 high scorers who had a score equal to or above 59 points (52.8 %) while there were 389 low scorers who had a score below 59 points (47.2 %). On the other hand, in the group of differentiation orientation (DO), there were 434 high scorers who had a score equal to or above 51 points (52.6 %) while there were 391 low scorers who had a score below 51 points (47.4 %). According to high and low ends of these two orientations, four groups in BID Model were formed. There were 229 participants (27.8 %) in the related-individuated group (for IO $M = 66.64$, $SD = 5.62$, for DO $M = 55.87$, $SD = 3.68$), 205 participants (24.8 %) in the separated-individuated group (for IO $M = 49.08$, $SD = 7.77$, for DO $M = 55.29$, $SD = 3.49$), 184 participants (22.3 %) in the separated-patternd group (for IO $M = 50.22$, $SD = 6.24$, for DO $M = 45.59$, $SD = 4.17$) and 207 participants (25.1 %) in the related-patternd group (for IO $M = 65.95$, $SD = 5.15$, for DO $M = 46.12$, $SD = 3.09$). The percentages were found to be very similar to previous study of İmamoğlu (2005) with university students for related-individuated (26 %), separated-individuated (23 %) and related-patternd (24 %) self construal types but slightly lower than separated-patternd (27 %) self construal type. The means, standard deviations and bivariate correlations for the dependent variables with regard to self construals were given in Table 4.12. As shown in the table, presence of meaning was positively correlated with gratitude and self-concept clarity and search for meaning was negatively correlated with self-concept clarity for all self construal types.
Table 4.12

Means, Standard Deviations and Intercorrelations for Dependent Variables as a Function of Self Construal Type

<table>
<thead>
<tr>
<th>Variables</th>
<th>Related-individuated (N=229)</th>
<th>Separated-individuated (N=205)</th>
<th>Separated-patterned (N=184)</th>
<th>Related-patterned (N=207)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Presence of Meaning</td>
<td>1</td>
<td>25.99</td>
<td>6.18</td>
<td>1</td>
</tr>
<tr>
<td>Search for Meaning</td>
<td>-.05</td>
<td>1</td>
<td>20.66</td>
<td>7.91</td>
</tr>
<tr>
<td>Gratitude</td>
<td>.31*</td>
<td>.07</td>
<td>1</td>
<td>28.18</td>
</tr>
<tr>
<td>Self-Concept Clarity</td>
<td>.38*</td>
<td>- .36*</td>
<td>.05</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < .001  **p < .01  ***p < .05
However, search for meaning was not associated with presence of meaning for related-individuated and separated-patterned participants although there was a significant negative relationship between them for separated-individuated and related-patterned participants. Additionally, gratitude was positively correlated with search for meaning for separated-patterned participants.

Assumption of homogeneity of covariance matrices assumption is violated since Box’s Test of Equality of Covariance Matrices is significant \( (p < .05) \). Therefore, Pillai’s Trace will be reported. Levene’s test is significant \( (p < .05) \) for all dependent variables so homogeneity of variance was not assumed. So, alpha level was decreased to \(.04\) for all dependent variables. There was a statistically significant difference between self construal types on the combined dependent variables, Pillai’s Trace = .29, \( F(12, 2460) = 22.34, p < .001, \eta^2 = .10, \) medium effect size (Cohen, 1988). For univariate analyses, Bonferroni correction \((\alpha/# \text{ of dependent variables})\) was applied, \(01 (.04 / 4)\) for all dependent variables. These results showed significant differences between self construal types for presence of meaning \( F(3, 821) = 42.76, p = .000, \eta^2 = .14, \) large effect size; for search for meaning \( F(3, 821) = 9.69, p = .000, \eta^2 = .01, \) small effect size; for gratitude \( F(3, 821) = 51.80, p = .000, \eta^2 = .16, \) large effect size; and for self-concept clarity \( F(3, 821) = 44.18, p = .000, \eta^2 = .14, \) large effect size (Table 4.13). Due to unequal sample sizes and heterogeneity of variance, Games-Howell test was used for post hoc comparisons. The results revealed that the mean score of presence of meaning of related-individuated participants \((M = 25.99, SD = 6.19)\) was significantly different from other types of self construals \((p = .000)\), the mean score of presence of meaning of related-patterned participants \((M = 23.53, SD = 5.42)\) was significantly different from separated-patterned \((M = 20.16, SD = 6.45)\) and separated-individuated \((M = 20.15, SD = 7.18)\) participants \((p = .000)\) but there is no difference between separated-patterned \((M = 20.16, SD = 6.45)\) and separated-individuated \((M = 20.15, SD = 7.18)\) participants. For search for meaning, the mean score of related-individuated \((M = 20.66, SD = 7.91)\) participants was significantly different from separated-individuated participants.
(\(M = 23.76, SD = 7.22\)) (\(p = .000\)) who had also significantly different mean score from related-patterned participants (\(M = 20.66, SD = 5.97\)) (\(p = .000\)). For gratitude, the mean scores of related-individuated (\(M = 28.18, SD = 5.26\)) and related-patterned participants (\(M = 27.54, SD = 4.17\)) were significantly different from separated-individuated (\(M = 23.12, SD = 6.13\)) and separated-patterned (\(M = 23.44, SD = 5.59\)) participants (\(p = .000\)) but there was no difference between separated-patterned (\(M = 23.44, SD = 5.59\)) and separated-individuated (\(M = 23.12, SD = 6.13\)) participants or related-individuated (\(M = 28.18, SD = 5.26\)) and related-patterned (\(M = 27.54, SD = 4.17\)) participants. For self-concept clarity, the mean scores of related-individuated (\(M = 57.27, SD = 13.42\)) and related-patterned (\(M = 53.56, SD = 12.49\)) participants were significantly different from separated-individuated (\(M = 47.20, SD = 14.59\)) and separated-patterned (\(M = 43.71, SD = 11.96\)) participants (\(p = .000\)) but there was no difference between separated-patterned (\(M = 43.71, SD = 11.96\)) and separated-individuated (\(M = 47.20, SD = 14.59\)) participants or related-individuated (\(M = 57.27, SD = 13.42\)) and related-patterned (\(M = 53.56, SD = 12.49\)) participants (Table 4.12). To sum up, related-individuated participants had more presence of meaning than other self construal types, had more gratitude and self-concept clarity than separated-individuated and separated-patterned participants and had less search for meaning than separated-individuated participants. Separated-individuated participants had less presence of meaning, gratitude, self-concept clarity but more search for meaning than related-individuated and related-patterned participants. Separated-patterned participants had less presence of meaning, gratitude and self-concept clarity than related-individuated and related-patterned participants. Related-patterned participants had less presence of meaning than related-individuated participants but more presence of meaning than separated-individuated and separated-patterned participants, had less search for meaning than separated-individuated participants and had more gratitude and self-concept clarity than separated-individuated and separated-patterned participants. Additionally, except search for meaning, effect sizes were large.
Table 4.13

**Multivariate and Univariate Analyses of Variance**

<table>
<thead>
<tr>
<th>Variable</th>
<th>MANOVA $F(12, 2460)$</th>
<th>Pof M $F(3,821)$</th>
<th>SforM $F(3,821)$</th>
<th>Gra $F(3,821)$</th>
<th>Scc $F(3,821)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>22.34*</td>
<td>42.76*</td>
<td>9.69*</td>
<td>51.80*</td>
<td>44.18*</td>
</tr>
</tbody>
</table>


* $p < .001$

### 4.3 Path Analyses

The main aim of the present study was to test a model which investigates the relationships between presence of meaning in life, search for meaning, self construal (differentiation, integration), gratitude and self-concept clarity among university students. In order to test the model, path analysis technique was used. A path model represents hypotheses about effect priority of observed variables (Kline, 2011). The hypothesized path model was shown in Figure 4.1. The direct and indirect effects aimed to explore in the hypothesized model were as follows. First of all, the direct effect of gratitude on integration; direct effects of gratitude, integration, differentiation on self-concept clarity; direct effects of gratitude, integration, differentiation, self-concept clarity on presence of meaning and direct effects of gratitude, integration, differentiation, self-concept clarity, presence of meaning on search for meaning were analyzed. Regarding indirect effects, association of gratitude to presence of meaning via integration, associations of gratitude, integration, differentiation to presence of meaning via self-concept clarity, associations of gratitude, integration, differentiation on search for meaning via self-concept clarity and association of self-concept clarity on search for meaning via presence of meaning were explored. Proposed model was tested via bootstrapping method (500 bootstrapped samples and 95% CI) to estimate indirect effects in
mediating relationships (Preacher & Hayes, 2004). The path model was tested for each type of self construal of BID theory (related-individuated, related-patterned, separated-individuated, separated-patterned) separately. So, four path analyses were conducted. Prior to each path analysis, the assumptions (sample size adequacy, outliers, normality, linearity, homoscedasticity and multicollinearity) were checked and descriptive statistics were reported (Tabachnick & Fidell, 2013). The results were evaluated according to cut-off values given in Table 4.14 (Hu & Bentler, 1999; Kline, 2011b; Schumacker & Lomax, 2010).

Table 4.14

Cut-off Values for the Path Models

<table>
<thead>
<tr>
<th></th>
<th>Perfect Fit</th>
<th>Acceptable Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$/df</td>
<td>$0 \leq \chi^2$/df $\leq 3$</td>
<td>$3 \leq \chi^2$/df $\leq 5$</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$0 \leq$ RMSEA $\leq 0.05$</td>
<td>$0.05 \leq$ RMSEA $\leq 0.08$</td>
</tr>
<tr>
<td>CFI</td>
<td>$0.95 \leq$ CFI $\leq 1.00$</td>
<td>$0.90 \leq$ CFI $\leq 0.95$</td>
</tr>
<tr>
<td>GFI</td>
<td>$0.90 \leq$ GFI $\geq 1.00$</td>
<td>$0.85 \leq$ GFI $\leq 0.90$</td>
</tr>
<tr>
<td>SRMR</td>
<td>$0 \leq$ SRMR $\leq 0.05$</td>
<td>$0.05 \leq$ SRMR $\leq 0.08$</td>
</tr>
</tbody>
</table>

Figure 4.1 The Hypothesized Path Diagram
4.3.1 Path Analysis for the Related-Individuated Self Construal

4.3.1.1 Assumptions

Among assumptions, Z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. There were four z-scores greater than -3.29 and +3.29 and multivariate outliers (5 cases) which three of them were also univariate outliers ($p < .001$) (Tabachnick & Fidell, 2013). The analysis was performed with and without outliers. Since there was no difference in results, they were retained in the data set. According to criteria of 5 or 10 observations per estimated parameter (Bentler & Chou, 1987), with 24 parameters to be estimated, the sample size of $N = 229$ was enough. Skewness and kurtosis values and histograms were checked to test univariate normality. All values were between -1.1 and +1.4 which show univariate normality according to criteria of -3/+3 of Kline (2011). Inspection of standardized residual histograms showed normal distribution. For data set to be distributed multivariately normal, according to Raykov and Marcoulides (2008), the multivariate kurtosis value should not exceed $p$. ($p+2$), ($p =$ number of predictor variables). The number of predictors in this study was 5, and the multivariate kurtosis value was 7.18, which was less than 35. So, multivariate normality assumption was assumed. Residual plots were used to check homoscedasticity and linearity which were not violated. Finally, bivariate correlation coefficients (Table 4.15), VIF (variance inflation factor) and tolerance values were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be < .85 (Kline, 2011); VIF values must be < 10, and tolerance values must be > .20 (Tabachnick & Fidell, 2013).

4.3.1.2 Descriptive Statistics

Descriptive statistics namely means, standard deviations and bivariate correlations of related-individuated self construal (RISC) were reported in Table 4.15. As depicted in Table 4.15, presence of meaning was reported with a mean of 26.00 ($SD = 6.19$),
search for meaning with a mean of 20.66 \((SD = 7.91)\), gratitude with a mean of 28.18 \((SD = 5.26)\), integration with a mean of 66.64 \((SD = 5.62)\), differentiation with a mean of 55.88 \((SD = 3.69)\) and self-concept clarity with a mean of 57.27 \((SD = 13.43)\). Presence of meaning was positively correlated with gratitude \((r = .31, p < .05)\), self-concept clarity \((r = .38, p < .05)\), integration \((r = .17, p < .01)\) and differentiation \((r = .13, p < .01)\) but it had no significant correlation with search for meaning \((r = -.05, p > .05)\). Search for meaning was negatively correlated with self-concept clarity \((r = -.36, p < .05)\) and integration \((r = -.18, p < .05)\) but not significantly correlated with differentiation \((r = -.05, p > .05)\) and gratitude \((r = .07, p > .05)\). Gratitude was positively associated with integration \((r = .19, p < .05)\) but not significantly associated with differentiation \((r = .02, p > .05)\) and self-concept clarity \((r = .05, p > .05)\). Integration was positively correlated with self-concept clarity \((r = .28, p < .05)\) but not significantly correlated with differentiation \((r = .07, p > .05)\). Finally, differentiation was positively correlated with self-concept clarity \((r = .21, p < .01)\).

Table 4.15

**Means, Standard Deviations, and Intercorrelations for RISC**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of Meaning</td>
<td>1</td>
<td>-0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26.00</td>
<td>6.19</td>
</tr>
<tr>
<td>Search for Meaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.66</td>
<td>7.91</td>
</tr>
<tr>
<td>Gratitude</td>
<td>.31**</td>
<td>.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28.18</td>
<td>5.26</td>
</tr>
<tr>
<td>Integration</td>
<td>.17*</td>
<td>-0.18**</td>
<td>.19**</td>
<td></td>
<td></td>
<td></td>
<td>66.64</td>
<td>5.62</td>
</tr>
<tr>
<td>Differentiation</td>
<td>.13*</td>
<td>-0.05</td>
<td>-0.02</td>
<td>.07</td>
<td></td>
<td></td>
<td>55.88</td>
<td>3.69</td>
</tr>
<tr>
<td>Self-Concept Clarity</td>
<td>.38**</td>
<td>-0.36**</td>
<td>.05</td>
<td>.28**</td>
<td>.21*</td>
<td></td>
<td>57.27</td>
<td>13.43</td>
</tr>
</tbody>
</table>

*p<.01, **p<.05
4.3.1.3 Model Testing

The hypothesized path diagram shown in Figure 4.1 was tested via path analysis using AMOS.23. The results of model fit statistics were provided in Table 4.16. Chi-square value was not significant ($\chi^2$(1) =1.219, $p > .05$), $\chi^2$/df value was 1.219, and RMSEA value was .03 which showed perfect fit. CFI value and GFI values were .99 and SRMR value was .02 which showed also perfect fit according to the criteria given in Table 4.14. In sum, the model fit results showed that the hypothesized model was perfectly fitted to the data.

Table 4.16

*Goodness of Fit Indexes for the Hypothesized Model for RISC*

<table>
<thead>
<tr>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>1.219</td>
<td>1</td>
<td>1.219</td>
<td>.99</td>
<td>.99</td>
<td>.03</td>
</tr>
</tbody>
</table>

As can be seen in Figure 4.2, standardized estimation values of all 12 direct paths were changed between .01 and -.37, six of which were statistically significant ($p < .05$); the paths from gratitude to integration, differentiation to self-concept clarity, integration to self-concept clarity, gratitude to presence of meaning, self-concept clarity to presence of meaning and self-concept clarity to search for meaning. The standardized parameter estimates were illustrated with black arrows for non-significant paths and blue arrows standing for significant paths.

The squared multiple correlations ($R^2$) were checked to explore the amount of variance explained by the proposed model. The results showed that gratitude explained 4% of the variance in integration. Both differentiation and integration accounted for 11% of the variance in self-concept clarity. Self-concept clarity and gratitude explained 23% of the variance in presence of meaning and self-concept clarity explained 15% of the variance in search for meaning.
4.3.1.4 Total, Direct and Indirect Effects

In this part, total, direct and indirect relationships among the variables were examined. In Table 4.17, beta coefficients of the paths with p values and confidence intervals were presented. The bootstrapped results showed that there were statistically significant direct, indirect, and total effects. Cohen’s (1988) standards were used to evaluate the effect sizes; as .10 corresponding to small, around .30 to moderate, and .50 or more to large effect sizes. As shown in Table 4.17, it was found that gratitude had significant total effects on integration ($\beta = .19, SE = .07, p < .01$, small to moderate effect) and on presence of meaning ($\beta = .32, SE = .08, p < .01$, moderate effect) but had non-significant total effects on self-concept clarity ($\beta = .05, SE = .07, p > .05$) and on search for meaning ($\beta = .07, SE = .08, p > .05$). Differentiation had a significant total effect on self-concept clarity ($\beta = .19, SE = .06, p < .05$, small to moderate effect) but had non-significant total effects on presence of meaning ($\beta = .13, SE = .07, p > .05$) and on search for meaning ($\beta = -.04, SE = .07, p > .05$). Integration had significant total effects on self-concept clarity ($\beta = .26, SE = .07, p < .01$, small to moderate effect) and on search for meaning (negative) ($\beta = -.19, SE = .07, p < .05$, small effect) but had non-significant total effect on presence of meaning ($\beta = .10, SE = .07, p > .05$). Self-concept clarity had significant total effects
on presence of meaning ($\beta = .35, SE = .07, p < .01$, moderate effect) and on search for meaning (negative) ($\beta = -.34, SE = .07, p < .01$, moderate effect). Lastly, presence of meaning had a non-significant total effect on search for meaning ($\beta = .08, SE = .08, p > .05$). In sum, the largest total effects were from self-concept clarity to presence of meaning ($\beta = .35$) and search for meaning ($\beta = -.34$) and from gratitude to presence of meaning ($\beta = .32$) followed by from integration to self-concept clarity ($\beta = .26$).

In terms of direct effects, gratitude had a significant direct effect on integration ($\beta = .19, SE = .07, p < .01$, small to moderate effect) and on presence of meaning ($\beta = .30, SE = .08, p < .001$, moderate effect) but non-significant direct effects on self-concept clarity ($\beta = .00, SE = .07, p > .05$) and on search for meaning ($\beta = .08, SE = .07, p > .05$). The direct effect of integration on self-concept clarity was significant ($\beta = .26, SE = .07, p < .001$, moderate effect) but the direct effects of integration on presence of meaning ($\beta = .01, SE = .06, p > .05$) and search for meaning ($\beta = -.10, SE = .07, p > .05$) were non-significant. Differentiation had a significant direct effect on self-concept clarity ($\beta = .19, SE = .06, p < .01$, small to moderate effect) but non-significant direct effects on presence of meaning ($\beta = .06, SE = .07, p > .05$) and on search for meaning ($\beta = .02, SE = .07, p > .05$). Self-concept clarity had significant direct effects on presence of meaning ($\beta = .35, SE = .07, p < .001$, moderate effect) and on search for meaning (negative) ($\beta = -.37, SE = .07, p < .001$, moderate effect). Presence of meaning had a non-significant direct effect on search for meaning ($\beta = .08, SE = .08, p > .05$). That is, for related-individuated self construal, greater gratitude resulted in greater integration and presence of meaning. Both higher integration and higher differentiation led to higher self-concept clarity. Lastly, higher self-concept clarity resulted in higher presence of meaning and lower search for meaning.

Indirect effects were investigated by employing Bootstrapping method. Eight indirect effects were examined in the hypothesized model, five of which were significant.
The indirect effect of gratitude on self-concept clarity through integration was significant ($\beta = .05, SE = .02, p < .001$, small effect). However, the indirect effects of gratitude on presence of meaning via integration and self-concept clarity ($\beta = .02, SE = .03, p > .05$) and on search for meaning via integration self-concept clarity and presence of meaning ($\beta = -.01, SE = .04, p > .05$) were not significant. The indirect effects of differentiation on presence of meaning via self-concept clarity ($\beta = .07, SE = .03, p < .01$, small effect) and on search for meaning via self-concept clarity and presence of meaning (negative) ($\beta = -.06, SE = .03, p < .05$, small effect) were significant. The indirect effects of integration on presence of meaning via self-concept clarity ($\beta = .09, SE = .03, p < .001$, small effect) and on search for meaning via self-concept clarity and presence of meaning (negative) ($\beta = -.09, SE = .03, p < .01$, small effect) were significant. The indirect effect of self-concept clarity on search for meaning through presence of meaning ($\beta = .03, SE = .03, p > .05$) was not significant. Based on the framework of Zhao, Lynch Jr. and Chen (2010) about the mediation analysis, for the indirect-only (full) mediation, there needs to be two requirements; the indirect is significant and the direct effect is nonsignificant. Accordingly, for related-individuated self construal, gratitude had an indirect effect on self-concept clarity but had no direct effect. Integration had indirect effects on presence of meaning and (negative) search for meaning but had no direct effects. Differentiation had indirect effects on presence of meaning and (negative) search for meaning but had no direct effects. In sum, integration fully mediated the relationship between gratitude and self-concept clarity. Self-concept clarity fully mediated the relationships between integration and presence of meaning and (negative) search for meaning. Self-concept clarity fully mediated the relationships between differentiation and presence of meaning and (negative) search for meaning. Finally, gratitude had no indirect effect on presence of meaning but had only direct meaning.
Table 4.17

Bootstrapped Results of Direct, Indirect and Total Effects for RISC

<table>
<thead>
<tr>
<th>Path</th>
<th>$\beta$</th>
<th>$p$</th>
<th>BC Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gratitude $\rightarrow$ Integration</td>
<td>.19</td>
<td>.004*</td>
<td>.060, .336</td>
</tr>
<tr>
<td>Gratitude $\rightarrow$ Self-concept clarity</td>
<td>.05</td>
<td>.442</td>
<td>-0.082, 0.204</td>
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<tr>
<td>Gratitude $\rightarrow$ Presence of Meaning</td>
<td>.32</td>
<td>.007*</td>
<td>.634, .459</td>
</tr>
<tr>
<td>Gratitude $\rightarrow$ Search for Meaning</td>
<td>.07</td>
<td>.421</td>
<td>-0.085, .202</td>
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<tr>
<td>Differentiation $\rightarrow$ Self-concept clarity</td>
<td>.19</td>
<td>.015**</td>
<td>.063, .302</td>
</tr>
<tr>
<td>Differentiation $\rightarrow$ PofM</td>
<td>.13</td>
<td>.069</td>
<td>-0.015, 0.255</td>
</tr>
<tr>
<td>Differentiation $\rightarrow$ SforM</td>
<td>-.04</td>
<td>.749</td>
<td>-1.65, .116</td>
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<tr>
<td>Integration $\rightarrow$ Self-concept clarity</td>
<td>.26</td>
<td>.005*</td>
<td>0.128, .390</td>
</tr>
<tr>
<td>Integration $\rightarrow$ Presence of Meaning</td>
<td>.10</td>
<td>.111</td>
<td>-0.022, 0.238</td>
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<tr>
<td>Integration $\rightarrow$ Search for Meaning</td>
<td>-.19</td>
<td>.020**</td>
<td>.321, .032</td>
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<tr>
<td>Self-concept clarity $\rightarrow$ PofM</td>
<td>.35</td>
<td>.002*</td>
<td>0.213, 0.480</td>
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<tr>
<td>Self-concept clarity $\rightarrow$ SforM</td>
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<td>.009*</td>
<td>-.461, .202</td>
</tr>
<tr>
<td>Presence of Meaning $\rightarrow$ SforM</td>
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<td>.330</td>
<td>-0.065, .231</td>
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<tr>
<td><strong>Direct Effects</strong></td>
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<tr>
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<td>.19</td>
<td>.004*</td>
<td>.060, .336</td>
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<td>.939</td>
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<td>Differentiation $\rightarrow$ Self-concept clarity</td>
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<td>.015**</td>
<td>0.063, 0.302</td>
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<tr>
<td>Differentiation $\rightarrow$ PofM</td>
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<td>-0.073, 0.187</td>
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<td>Differentiation $\rightarrow$ SforM</td>
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<td>.793</td>
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<td>Integration $\rightarrow$ Self-concept clarity</td>
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<td>Integration $\rightarrow$ Search for Meaning</td>
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<tr>
<td>Self-concept clarity $\rightarrow$ Pof M</td>
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<td>.002*</td>
<td>0.213, -0.480</td>
</tr>
<tr>
<td>Self-concept clarity $\rightarrow$ SforM</td>
<td>-.37</td>
<td>.007*</td>
<td>-.500, -0.221</td>
</tr>
<tr>
<td>Presence of Meaning $\rightarrow$ SforM</td>
<td>.08</td>
<td>.330</td>
<td>-0.065, .231</td>
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Table 4.17 (continued)

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<tr>
<th>Path</th>
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<th>BC Interval</th>
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<td>.001***</td>
<td>.017, .110</td>
</tr>
<tr>
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<td>.393</td>
<td>-.030, -.095</td>
</tr>
<tr>
<td>Gra $\rightarrow$ Int $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
<td>-.01</td>
<td>.651</td>
<td>-.112, .055</td>
</tr>
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<td>Dif $\rightarrow$ Scc $\rightarrow$ PofM</td>
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<td>.006*</td>
<td>.025, .132</td>
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<td>.024**</td>
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<tr>
<td>Integration $\rightarrow$ Scc $\rightarrow$ PofM</td>
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<td>.001***</td>
<td>.045, .170</td>
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<tr>
<td>Integration $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
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<td>.003*</td>
<td>-.155, -.042</td>
</tr>
<tr>
<td>Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
<td>.03</td>
<td>.248</td>
<td>-.019, .102</td>
</tr>
</tbody>
</table>


* $p < .001$, ** $p < .05$, *** $p < .001$

4.3.2 Path Analysis for the Related-Patterned Self Construal

4.3.2.1 Assumptions

Z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. All z-scores were in the range of -3.29 and +3.29 so there were no univariate outliers (Tabachnick & Fidell, 2013). There was one multivariate outlier ($p < .001$). The analysis was performed with and without the outlier. Since there was no difference in results, it was decided to be retained in the data set. According to criteria of 5 or 10 observations per estimated parameter (Bentler & Chou, 1987), with 24 parameters to be estimated, the sample size of $N = 207$ was enough. Skewness and kurtosis values and histograms were checked to test univariate normality. All values were between -1 and +1 which show univariate normality according to criteria of -3/+3 of Kline (2011). Inspection of standardized residual histograms showed normal distributions. For data set to be distributed multivariately normal, according to Raykov and Marcoulides (2008), the multivariate kurtosis value should not exceed p. (p+2), (p = number of predictor
variables). The number of predictors in this study was 5, and the multivariate kurtosis value was 4.13, which was less than 35. So, multivariate normality assumption was assumed. Residual plots were used to check linearity and homoscedasticity which were not violated. Finally, bivariate correlation coefficients (Table 4.18), VIF (variance inflation factor) and tolerance values were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be < .85 (Kline, 2011); VIF values must be < 10, and tolerance values must be > .20 (Tabachnick & Fidell, 2013).

4.3.2.2 Descriptive Statistics

Descriptive statistics namely means, standard deviations and bivariate correlations of related-patterned self construal (RPSC) were reported in Table 4.18. As depicted in Table 4.18, presence of meaning was reported with a mean of 23.53 (SD = 5.42), search for meaning with a mean of 20.66 (SD = 5.97), gratitude with a mean of 27.54 (SD = 4.18), integration with a mean of 65.95 (SD = 5.15), differentiation with a mean of 46.13 (SD = 3.09) and self-concept clarity with a mean of 53.56 (SD = 12.49). Presence of meaning was negatively correlated with search for meaning (r = -.14, p < .05) and positively correlated with gratitude (r = .20, p < .01), self-concept clarity (r = .33, p < .01), integration (r = .19, p < .01) but had no significant correlation with differentiation (r = -.05, p > .05). Search for meaning was negatively correlated with self-concept clarity (r = -.22, p < .01) but not significantly correlated with gratitude (r = .05, p > .05), integration (r = -.08, p > .05) and differentiation (r = .11, p > .05). Gratitude was positively associated with integration (r = .27, p < .01) but not significantly associated with differentiation (r = .12, p > .05) and self-concept clarity (r = -.02, p > .05). Integration was positively correlated with self-concept clarity (r = .30, p < .01) but not significantly correlated with differentiation (r = .02, p > .05). Finally, differentiation was not significantly correlated with self-concept clarity (r = -.04, p > .05).
Table 4.18

Means, Standard Deviations, and Intercorrelations for RPSC

<table>
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<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
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<td></td>
<td></td>
<td></td>
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<td>23.53</td>
<td>5.42</td>
</tr>
<tr>
<td>Search for Meaning</td>
<td>-.14*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.66</td>
<td>5.97</td>
</tr>
<tr>
<td>Gratitude</td>
<td>.20**</td>
<td>.05</td>
<td>.1</td>
<td></td>
<td></td>
<td></td>
<td>27.54</td>
<td>4.18</td>
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<tr>
<td>Integration</td>
<td>.19**</td>
<td>-.08</td>
<td>.27**</td>
<td>1</td>
<td></td>
<td></td>
<td>65.95</td>
<td>5.15</td>
</tr>
<tr>
<td>Differentiation</td>
<td>-.05</td>
<td>.11</td>
<td>.12</td>
<td>.02</td>
<td>1</td>
<td></td>
<td>46.13</td>
<td>3.09</td>
</tr>
<tr>
<td>Self-Concept Clarity</td>
<td>.33**</td>
<td>-.22**</td>
<td>-.02</td>
<td>.30**</td>
<td>-.04</td>
<td>1</td>
<td>53.56</td>
<td>12.49</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01

4.3.2.3 Model Testing

The hypothesized path diagram shown in Figure 4.1 was tested via path analysis using AMOS.23. The results of model fit statistics were provided in Table 4.19.

Table 4.19

Goodness of Fit Indexes for the Hypothesized Model for RPSC

<table>
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<tr>
<th></th>
<th>χ2</th>
<th>df</th>
<th>χ2/df</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
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<tr>
<td>Model</td>
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<td>1</td>
<td>.028</td>
<td>1.00</td>
<td>1.00</td>
<td>.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

Chi-square value was not significant ($\chi^2(1) = .028, p > .05$), $\chi^2/df$ value was .028, and RMSEA value was .00 which showed perfect fit. CFI value and GFI values were 1.00 and SRMR value was .00 which showed also perfect fit according to the criteria given in Table 4.14. In sum, the hypothesized model was perfectly fitted to the data.
As can be seen in Figure 4.3, standardized estimation values of all 12 direct paths were changed between -0.02 and 0.33, 5 of which were statistically significant ($p < 0.05$); the paths from gratitude to integration, integration to self-concept clarity, gratitude to presence of meaning, self-concept clarity to presence of meaning and self-concept clarity to search for meaning. The standardized parameter estimates were illustrated with black arrows for non significant paths and blue arrows standing for significant paths.

The squared multiple correlations ($R^2$) were checked to explore the amount of variance explained by the proposed model. The results showed that gratitude explained 7% of the variance in integration. Integration accounted for 10% of the variance in self-concept clarity. Self-concept clarity and gratitude explained 16% of the variance in presence of meaning and self-concept clarity explained 7% of the variance in search for meaning.

### 4.3.2.4 Total, Direct and Indirect Effects

In this part, total, direct and indirect relationships among the variables were examined. In Table 4.20, beta coefficients of the paths with $p$ values and confidence intervals were presented. The bootstrapped results showed that there were
statistically significant direct, indirect, and total effects. Cohen’s (1988) standards were used to evaluate the effect sizes; as .10 corresponding to small, around .30 to moderate, and .50 or more to large effect sizes. As shown in Table 4.20, it was found that gratitude had significant total effects on integration ($\beta = .27, SE = .07, p < .01$, moderate effect) and on presence of meaning ($\beta = .21, SE = .07, p < .01$, small to moderate effect) but had non-significant total effects on self-concept clarity ($\beta = -.01, SE = .08, p > .05$) and on search for meaning ($\beta = .04, SE = .07, p > .05$). Differentiation had non-significant total effects on self-concept clarity ($\beta = -.03, SE = .07, p > .05$), on presence of meaning ($\beta = -.07, SE = .08, p > .05$) and on search for meaning ($\beta = .11, SE = .07, p > .05$). Integration had significant total effects on self-concept clarity ($\beta = .33, SE = .07, p < .01$, moderate effect) and on presence of meaning ($\beta = .15, SE = .07, p < .05$, small effect) but had non-significant total effect on search for meaning ($\beta = -.10, SE = .08, p > .05$). Self-concept clarity had significant total effects on presence of meaning ($\beta = .32, SE = .07, p < .01$, moderate effect) and on search for meaning (negative) ($\beta = -.21, SE = .08, p < .05$, small to moderate effect). Lastly, presence of meaning had a non-significant total effect on search for meaning ($\beta = -.08, SE = .09, p > .05$). In sum, the largest total effects were from integration to self-concept clarity ($\beta = .33$), from self-concept clarity to presence of meaning ($\beta = .32$) and followed by from gratitude to integration ($\beta = .27$).

In terms of direct effects; gratitude had a significant direct effect on integration ($\beta = .27, SE = .07, p < .01$, moderate effect) and on presence of meaning ($\beta = .21, SE = .07, p < .05$, small to moderate effect) but non-significant direct effects on self-concept clarity ($\beta = -.10, SE = .07, p > .05$) and on search for meaning ($\beta = .06, SE = .07, p > .05$). The direct effect of integration on self-concept clarity was significant ($\beta = .33, SE = .07, p < .01$, moderate effect) but the direct effects of integration on presence of meaning ($\beta = .04, SE = .07, p > .05$) and search for meaning ($\beta = -.03, SE = .08, p > .05$) were non-significant. Differentiation had non-significant direct effects on self-concept clarity ($\beta = -.03, SE = .07, p > .05$), on presence of meaning
Self-concept clarity had significant direct effects on presence of meaning ($\beta = .32, SE = .07, p < .01$, moderate effect) and on search for meaning (negative) ($\beta = -.19, SE = .08, p < .05$, small to moderate effect). Presence of meaning had a non-significant direct effect on search for meaning ($\beta = -.08, SE = .09, p > .05$). That is, for related-patterned self construal, greater gratitude resulted in greater integration and presence of meaning. Higher integration led to higher self-concept clarity. Different from related-individuated self construal, differentiation had no effect on self-concept clarity. Lastly, higher self-concept clarity resulted in higher presence of meaning and lower search for meaning.

Indirect effects were investigated by employing Bootstrapping method. Eight indirect effects were examined in the hypothesized model, three of which were significant. The indirect effect of gratitude on self-concept clarity through integration was significant ($\beta = .09, SE = .03, p < .01$, small effect). However, the indirect effects of gratitude on presence of meaning via integration and self-concept clarity ($\beta = .01, SE = .03, p > .05$) and on search for meaning via integration, self-concept clarity and presence of meaning ($\beta = -.02, SE = .03, p > .05$) were not significant. The indirect effects of differentiation on presence of meaning via self-concept clarity ($\beta = -.01, SE = .02, p > .05$) and on search for meaning via self-concept clarity and presence of meaning ($\beta = .01, SE = .03, p > .05$) were not significant. The indirect effects of integration on presence of meaning via self-concept clarity ($\beta = .10, SE = .03, p < .001$, small effect) and on search for meaning via self-concept clarity (negative) ($\beta = -.07, SE = .03, p < .01$, small effect) were significant. The indirect effect of self-concept clarity on search for meaning through presence of meaning ($\beta = -.03, SE = .03, p > .05$) was not significant. In sum, for related-patterned self construal, integration fully mediated the relationship between gratitude and self-concept clarity and self-concept clarity fully mediated the relationships between integration and presence of meaning and (negative) search for meaning according to the criteria offered by Zhao et al. (2010) about mediation analysis. Differentiation had no direct
and indirect effects on presence of meaning and search for meaning. Finally, gratitude had no indirect effect on presence of meaning but had only direct meaning.

Table 4.20

Bootstrapped Results of Direct, Indirect and Total Effects for RPSC

<table>
<thead>
<tr>
<th>Path</th>
<th>$\beta$</th>
<th>$p$</th>
<th>BC Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gratitude $\rightarrow$ Integration</td>
<td>.27</td>
<td>.004*</td>
<td>.129, .406</td>
</tr>
<tr>
<td>Gratitude $\rightarrow$ Self-concept clarity</td>
<td>-.01</td>
<td>.920</td>
<td>-.150, .150</td>
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<tr>
<td>Gratitude $\rightarrow$ Presence of Meaning</td>
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<td>.004*</td>
<td>.061, .356</td>
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<td>Gratitude $\rightarrow$ Search for Meaning</td>
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<td>.611</td>
<td>-.083, .169</td>
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<td>-.030, .249</td>
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<td>.183, .451</td>
</tr>
<tr>
<td>Self-concept clarity $\rightarrow$ SforM</td>
<td>-.21</td>
<td>.026**</td>
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<tr>
<td>Presence of Meaning $\rightarrow$ SforM</td>
<td>-.08</td>
<td>.355</td>
<td>-.248, .101</td>
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<tr>
<td><strong>Direct Effects</strong></td>
<td></td>
<td></td>
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<tr>
<td>Gratitude $\rightarrow$ Integration</td>
<td>.27</td>
<td>.004*</td>
<td>.129, .406</td>
</tr>
<tr>
<td>Gratitude $\rightarrow$ Self-concept clarity</td>
<td>-.10</td>
<td>.180</td>
<td>-.243, .048</td>
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<tr>
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<td>.21</td>
<td>.009**</td>
<td>.054, .366</td>
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<tr>
<td>Gratitude $\rightarrow$ Search for Meaning</td>
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<td>.493</td>
<td>-.069, .176</td>
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<tr>
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<tr>
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<tr>
<td>Integration $\rightarrow$ Self-concept clarity</td>
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<td>.003*</td>
<td>.180, .451</td>
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<tr>
<td>Integration $\rightarrow$ Presence of Meaning</td>
<td>.04</td>
<td>.492</td>
<td>-.101, .180</td>
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<tr>
<td>Integration $\rightarrow$ Search for Meaning</td>
<td>.03</td>
<td>.832</td>
<td>-.197, .156</td>
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</table>
Table 4.20 (continued)

<table>
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<th>BC Interval</th>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Self-concept clarity $\rightarrow$ Pof M</td>
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<td>.005*</td>
<td>.183, .451</td>
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<tr>
<td>Self-concept clarity $\rightarrow$ SforM</td>
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<td>.031**</td>
<td>-.341, -.028</td>
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<tr>
<td>Presence of Meaning $\rightarrow$ SforM</td>
<td>-.08</td>
<td>.355</td>
<td>-.248, .101</td>
</tr>
<tr>
<td><strong>Indirect Effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gra $\rightarrow$ Int $\rightarrow$ Scc</td>
<td>.09</td>
<td>.002*</td>
<td>.041, .165</td>
</tr>
<tr>
<td>Gra $\rightarrow$ Int $\rightarrow$ Scc $\rightarrow$ PofM</td>
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<td>.747</td>
<td>-.055, .081</td>
</tr>
<tr>
<td>Gra $\rightarrow$ Int $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
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<td>.508</td>
<td>-.092, .043</td>
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<td>Dif $\rightarrow$ Scc $\rightarrow$ PofM</td>
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<td>.645</td>
<td>-.057, .024</td>
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<tr>
<td>Dif $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
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<td>Integration $\rightarrow$ Scc $\rightarrow$ PofM</td>
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<td>.004*</td>
<td>.044, .177</td>
</tr>
<tr>
<td>Integration $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
<td>-.07</td>
<td>.008*</td>
<td>-.159, -.022</td>
</tr>
<tr>
<td>Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
<td>-.03</td>
<td>.315</td>
<td>-.088, .030</td>
</tr>
</tbody>
</table>


*p < .001, **p < .05, ***p < .001

4.3.3 Path Analysis for the Separated-Individuated Self Construal

4.3.3.1 Assumptions

The assumptions of z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. There was only one z-score according to the criteria of $<-3.29$ and $>+3.29$ and no multivariate outliers ($p < .001$) (Tabachnick & Fidell, 2013). The analysis was performed with and without the outlier. Deleting the outlier made a difference that the direct effect of gratitude on presence of meaning changed from $p = .048$ to $p = .052$. Since the Z score of the case is -3.49 which was not so higher than -3.29, the case was decided to be retained in the data set in order not to lose variability. According to criteria of 5 or 10 observations per estimated parameter (Bentler & Chou, 1987), with 24 parameters to
be estimated, the sample size of $N = 205$ was enough. Skewness and kurtosis values and histograms were checked to test univariate normality. All values were between -1.1 and +1 which show univariate normality according to criteria of -3/+3 of Kline (2011). Inspection of standardized residual histograms showed normal distribution. For data set to be distributed multivariately normal, according to Raykov and Marcoulides (2008), the multivariate kurtosis value should not exceed p. (p+2), (p = number of predictor variables). The number of predictors in this study was 5, and the multivariate kurtosis value was 3.25, which was less than 35. So, multivariate normality assumption was assumed. Residual plots were used to check linearity and homoscedasticity which were not violated. Finally, bivariate correlation coefficients (Table 4.21), VIF (variance inflation factor) and tolerance values were examined to check multicollinearity assumption. This assumption was met according to criteria of correlation coefficients must be < .85 (Kline, 2011); VIF values must be < 10, and tolerance values must be > .20 (Tabachnick & Fidell, 2013).

4.3.3.2 Descriptive Statistics

Descriptive statistics namely means, standard deviations and bivariate correlations of separated-individuated self construal (SISC) were reported in Table 4.21.

Table 4.21

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>$M$</th>
<th>$SD$</th>
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</thead>
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<td></td>
<td></td>
<td></td>
<td>20.15</td>
<td>7.18</td>
</tr>
<tr>
<td>Search for Meaning</td>
<td>-.19*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23.76</td>
<td>7.22</td>
</tr>
<tr>
<td>Gratitude</td>
<td>.22*</td>
<td>.12</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>23.12</td>
<td>6.14</td>
</tr>
<tr>
<td>Integration</td>
<td>.26*</td>
<td>-.06</td>
<td>.36*</td>
<td>1</td>
<td></td>
<td></td>
<td>49.09</td>
<td>7.77</td>
</tr>
<tr>
<td>Differentiation</td>
<td>.13</td>
<td>-.07</td>
<td>.02</td>
<td>-.08</td>
<td>1</td>
<td></td>
<td>55.29</td>
<td>3.49</td>
</tr>
<tr>
<td>Self-Concept Clarity</td>
<td>.39*</td>
<td>-.36*</td>
<td>.08</td>
<td>.25*</td>
<td>.07</td>
<td>1</td>
<td>47.20</td>
<td>14.59</td>
</tr>
</tbody>
</table>

*p < .01
As shown in Table 4.21, presence of meaning was reported with a mean of 20.15 (SD = 7.18), search for meaning with a mean of 23.76 (SD = 7.22), gratitude with a mean of 23.12 (SD = 6.14), integration with a mean of 49.09 (SD = 7.77), differentiation with a mean of 55.29 (SD = 3.49) and self-concept clarity with a mean of 47.20 (SD = 14.59). Presence of meaning was positively correlated with gratitude (r = .22, p < .01), self-concept clarity (r = .39, p < .01), integration (r = .26, p < .01), negatively correlated with search for meaning and (r = -.19, p < .01) but it had no significant correlation with differentiation (r = .13, p > .05). Search for meaning was negatively correlated with self-concept clarity (r = -.36, p < .01) but not significantly correlated with integration (r = -.06, p > .05) differentiation (r = -.07, p > .05) and gratitude (r = .12, p > .05). Gratitude was positively associated with integration (r = .36, p < .01) but not significantly associated with differentiation (r = .02, p > .05) and self-concept clarity (r = .08, p > .05). Integration was positively correlated with self-concept clarity (r = .25, p < .01) but not significantly correlated with differentiation (r = -.08, p > .05). Finally, differentiation had non-significant correlation with self-concept clarity (r = .07 p > .05).

4.3.3 Model Testing

The hypothesized path diagram shown in Figure 4.1 was tested via path analysis using AMOS. The results of model fit statistics were provided in Table 4.22. Chi-square value was not significant ($\chi^2$(1) =1.557, p > .05), $\chi^2$/df value was 1.557, and RMSEA value was .05 which showed perfect fit. CFI value and GFI values were 1.00 and SRMR value was .02 which showed also perfect fit according to the criteria given in Table 4.14. In sum, the model fit results showed that the hypothesized model was perfectly fitted to the data.

As can be seen in Figure 4.4, standardized estimation values of all 12 direct paths were changed between .02 and .36, five of which were statistically significant (p < .05); the paths from gratitude to integration, integration to self-concept clarity,
gratitude to presence of meaning, self-concept clarity to presence of meaning and self-concept clarity to search for meaning. The standardized parameter estimates were illustrated with black arrows for non significant paths and blue arrows standing for significant paths.

Figure 4.4 The Hypothesized Path Diagram with Standardized Estimates for SISC

The squared multiple correlations ($R^2$) were checked to explore the amount of variance explained by the proposed model. The results showed that gratitude explained 13 % of the variance in integration. Integration accounted for 8 % of the variance in self-concept clarity. Self-concept clarity and gratitude explained 21 % of the variance in presence of meaning and self-concept clarity explained 14 % of the variance in search for meaning.

Table 4.22

Goodness of Fit Indexes for the Hypothesized Model for SISC

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>CFI</th>
<th>GFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>1.557</td>
<td>1</td>
<td>1.557</td>
<td>1.00</td>
<td>1.00</td>
<td>.05</td>
<td>.02</td>
</tr>
</tbody>
</table>


4.3.3.4 Total, Direct and Indirect Effects

In this part, total, direct and indirect relationships among the variables were examined. In Table 4.23, beta coefficients of the paths with $p$ values and confidence intervals were presented. The bootstrapped results showed that there were statistically significant direct, indirect, and total effects. Cohen’s (1988) standards were used to evaluate the effect sizes; as .10 corresponding to small, around .30 to moderate, and .50 or more to large effect sizes. As shown in Table 4.23, it was found that gratitude had significant total effects on integration ($\beta = .36$, $SE = .08$, $p < .01$, moderate effect) and on presence of meaning ($\beta = .22$, $SE = .07$, $p < .01$, small to moderate effect) but had non-significant total effects on self-concept clarity ($\beta = .08$, $SE = .07$, $p > .05$) and on search for meaning ($\beta = .02$, $SE = .08$, $p > .05$).

Differentiation had non-significant total effects on self-concept clarity ($\beta = .10$, $SE = .07$, $p > .05$), on presence of meaning ($\beta = .14$, $SE = .07$, $p > .05$) and on search for meaning ($\beta = -.08$, $SE = .07$, $p > .05$). Integration had significant total effects on self-concept clarity ($\beta = .27$, $SE = .07$, $p < .01$, moderate effect) and on presence of meaning ($\beta = .21$, $SE = .07$, $p < .05$, small effect) but had non-significant total effect on search for meaning ($\beta = -.08$, $SE = .07$, $p > .05$). Self-concept clarity had significant total effects on presence of meaning ($\beta = .33$, $SE = .07$, $p < .01$, moderate effect) and on search for meaning (negative) ($\beta = -.36$, $SE = .07$, $p < .01$, moderate effect). Lastly, presence of meaning had a non-significant total effect on search for meaning ($\beta = -.07$, $SE = .09$, $p > .05$). In sum, the largest total effects were from self-concept clarity to search for meaning ($\beta = -.36$), from gratitude to integration ($\beta = .36$), from self-concept clarity to presence of meaning ($\beta = .33$) and followed by from integration to self-concept clarity ($\beta = .27$).

In terms of direct effects; gratitude had significant direct effects on integration ($\beta = .36$, $SE = .08$, $p < .01$, moderate effect) and on presence of meaning ($\beta = .15$, $SE = .08$, $p < .05$, small effect) but had non-significant direct effects on self-concept clarity ($\beta = -.02$, $SE = .07$, $p > .05$) and on search for meaning ($\beta = .05$, $SE = .08$, $p > .05$).
The direct effect of integration on self-concept clarity was significant ($\beta = .27$, $SE = .07$, $p < .01$, moderate effect) but the direct effects of integration on presence of meaning ($\beta = .13$, $SE = .08$, $p > .05$) and search for meaning ($\beta = .02$, $SE = .07$, $p > .05$) were non-significant. Differentiation had non-significant direct effects on self-concept clarity ($\beta = .10$, $SE = .07$, $p > .05$), on presence of meaning ($\beta = .11$, $SE = .07$, $p > .05$) and on search for meaning ($\beta = -.04$, $SE = .07$, $p > .05$). Self-concept clarity had significant direct effects on presence of meaning ($\beta = .33$, $SE = .07$, $p < .01$, moderate effect) and on search for meaning (negative) ($\beta = -.34$, $SE = .07$, $p < .01$, moderate effect). Presence of meaning had a non-significant direct effect on search for meaning ($\beta = -.07$, $SE = .09$, $p > .05$). That is, for separated-individuated self construal, greater gratitude resulted in greater integration and presence of meaning. Similar to related-patterned self construal, only higher integration but not higher differentiation led to higher self-concept clarity and higher self-concept clarity resulted in higher presence of meaning and lower search for meaning.

Indirect effects were investigated by employing Bootstrapping method. Eight indirect effects were examined in the hypothesized model, three of which were significant. The indirect effects of gratitude on self-concept clarity through integration ($\beta = .10$, $SE = .03$, $p < .01$, small effect) and presence of meaning via integration and self-concept clarity ($\beta = .07$, $SE = .04$, $p < .05$, small effect) were significant. However, the indirect effect of gratitude on search for meaning via integration, self-concept clarity and presence of meaning ($\beta = -.04$, $SE = .04$, $p > .05$) was not significant. The indirect effects of differentiation on presence of meaning via self-concept clarity ($\beta = .03$, $SE = .02$, $p > .05$) and on search for meaning via self-concept clarity and presence of meaning ($\beta = -.04$, $SE = .03$, $p > .05$) were not significant. The indirect effects of integration on presence of meaning via self-concept clarity ($\beta = .09$, $SE = .03$, $p < .01$, small effect) and on search for meaning via self-concept clarity and presence of meaning (negative) ($\beta = -.10$, $SE = .03$, $p < .01$, small effect) were significant. The indirect effect of self-concept clarity on search for meaning through presence of meaning ($\beta = -.02$, $SE = .03$, $p > .05$) was not significant.
In sum, for separated-individuated self construal, integration fully mediated the relationship between gratitude and self-concept clarity and self-concept clarity fully mediated the relationships between integration and presence of meaning and (negative) search for meaning according to the criteria offered by Zhao et al. (2010) about mediation analysis. Differentiation had no direct and indirect effects on presence of meaning presence of meaning through integration and self-concept clarity. So, there is complementary (partial) mediation (Zhao et al., 2010) between gratitude and presence of meaning.

Table 4.23

Bootstrapped Results of Direct, Indirect and Total Effects for SISC

<table>
<thead>
<tr>
<th>Path</th>
<th>β</th>
<th>p</th>
<th>BC Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Effects</strong></td>
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<td></td>
</tr>
<tr>
<td>Gratitude — Integration</td>
<td>.36</td>
<td>.004*</td>
<td>.225, .511</td>
</tr>
<tr>
<td>Gratitude — Self-concept clarity</td>
<td>.08</td>
<td>.288</td>
<td>-.055, .209</td>
</tr>
<tr>
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<td>.22</td>
<td>.004*</td>
<td>.061, .371</td>
</tr>
<tr>
<td>Gratitude — Search for Meaning</td>
<td>.02</td>
<td>.801</td>
<td>-.124, .175</td>
</tr>
<tr>
<td>Differentiation — Self-concept clarity</td>
<td>.10</td>
<td>.146</td>
<td>-.032, .227</td>
</tr>
<tr>
<td>Differentiation — SforM</td>
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<td>.265</td>
<td>-.226, .064</td>
</tr>
<tr>
<td>Integration — Self-concept clarity</td>
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<td>.127, .387</td>
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<td>.009*</td>
<td>.057, .354</td>
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<td>.256</td>
<td>-.226, .058</td>
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<tr>
<td>Self-concept clarity — PofM</td>
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<td>.004*</td>
<td>.199, .458</td>
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<tr>
<td>Self-concept clarity — SforM</td>
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<td>.003*</td>
<td>-.492, -.239</td>
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<tr>
<td>Presence of Meaning — SforM</td>
<td>-.07</td>
<td>.411</td>
<td>-.230, .095</td>
</tr>
<tr>
<td><strong>Direct Effects</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gratitude — Integration</td>
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<td>.004*</td>
<td>.225, .511</td>
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<tr>
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<td>.048**</td>
<td>.000, .301</td>
</tr>
<tr>
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<td>-.093, .211</td>
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</table>
Table 4.23 (continued)

<table>
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<tr>
<th>Path</th>
<th>( \beta )</th>
<th>( p )</th>
<th>BC Interval</th>
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<td><strong>Direct Effects</strong></td>
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<tr>
<td>Differentiation ( \rightarrow ) Self-concept clarity</td>
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<td>-.032, .227</td>
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<tr>
<td>Differentiation ( \rightarrow ) Pof M</td>
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<td>.137</td>
<td>-.032, .236</td>
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<td>.127, .387</td>
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<td>Integration ( \rightarrow ) Presence of Meaning</td>
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<td>.199, .458</td>
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<tr>
<td>Self-concept clarity ( \rightarrow ) SforM</td>
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<td>.003*</td>
<td>-.480, -.201</td>
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<tr>
<td>Presence of Meaning ( \rightarrow ) SforM</td>
<td>-.07</td>
<td>.411</td>
<td>-.230, .095</td>
</tr>
</tbody>
</table>

| **Indirect Effects** | | | |
| Gra \( \rightarrow \) Int \( \rightarrow \) Scc | .10 | .003* | .045, .169 |
| Gra \( \rightarrow \) Int \( \rightarrow \) Scc \( \rightarrow \) PofM | .07 | .047** | .003, .155 |
| Gra \( \rightarrow \) Int \( \rightarrow \) Scc \( \rightarrow \) PofM \( \rightarrow \) SforM | -.04 | .302 | -.111, .041 |
| Dif \( \rightarrow \) Scc \( \rightarrow \) PofM | .03 | .125 | -.010, .041 |
| Dif \( \rightarrow \) Scc \( \rightarrow \) PofM \( \rightarrow \) SforM | -.04 | .116 | -.112, .011 |
| Integration \( \rightarrow \) Scc \( \rightarrow \) PofM | .09 | .003* | .039, .148 |
| Integration \( \rightarrow \) Scc \( \rightarrow \) PofM \( \rightarrow \) SforM | -.10 | .002* | -.178, -.049 |
| Scc \( \rightarrow \) PofM \( \rightarrow \) SforM | -.02 | .331 | .099, .022 |


\(*p < .001, **p < .05, ***p < .001\)

4.3.4 Path Analysis for the Separated-Patterned Self Construal

4.3.4.1 Assumptions

Z scores and Mahalanobis distance were used to check for univariate and multivariate outliers respectively. There were one z-score greater than -3.29 and +3.29 and four multivariate outliers \((p < .001)\) which one of them was also the univariate outlier (Tabachnick & Fidell, 2013). The analysis was performed with and
without outliers. Since there was difference in results, they were deleted from the
data set. According to criteria of 5 or 10 observations per estimated
parameter (Bentler & Chou, 1987), with 24 parameters to be estimated, the sample
size of N= 180 was enough. Skewness and kurtosis values and histograms were
checked to test univariate normality. All values were between -1.1 and +1 which
show univariate normality according to criteria of -3/+3 of Kline (2011). Inspection
of standardized residual histograms showed normal distribution. For data set to be
distributed multivariately normal, according to Raykov and Marcoulides (2008), the
multivariate kurtosis value should not exceed p. (p+2), (p = number of predictor
variables). The number of predictors in this study was 5, and the multivariate kurtosis
value was 6.57, which was less than 35. So, multivariate normality assumption was
assumed. Residual plots were used to check homoscedasticity and linearity which
were not violated. Finally, bivariate correlation coefficients (Table 4.24), VIF
(variance inflation factor) and tolerance values were examined to check
 multicollinearity assumption. This assumption was met according to criteria of
correlation coefficients must be < .85 (Kline, 2011); VIF values must be < .10, and
tolerance values must be > .20 (Tabachnick & Fidell, 2013).

4.3.4.2 Descriptive Statistics

Descriptive statistics namely means, standard deviations and bivariate correlations of
separated-patterned self construal (SPSC) were reported in Table 4.24. As can be
seen, presence of meaning was reported with a mean of 20.23 (SD = 6.32), search for
meaning with a mean of 22.19 (SD = 6.32), gratitude with a mean of 23.49 (SD =
5.39), integration with a mean of 50.35 (SD = 6.16), differentiation with a mean of
45.84 (SD = 3.79) and self-concept clarity with a mean of 43.94 (SD = 11.55).
Presence of meaning was positively correlated with gratitude (r = .21, p < .01), self-
concept clarity (r = .45, p < .01), integration (r = .19, p < .05) but it had no
significant correlation with search for meaning (r = -.01, p > .05) and differentiation
(r = -.08, p > .05). Search for meaning was negatively correlated with self-concept
Table 4.24

Means, Standard Deviations, and Intercorrelations for SPSC

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of Meaning</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>20.23</td>
<td>6.32</td>
</tr>
<tr>
<td>Search for Meaning</td>
<td>-0.01</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22.19</td>
<td>6.32</td>
</tr>
<tr>
<td>Gratitude</td>
<td>0.21**</td>
<td>0.19*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>23.49</td>
<td>5.39</td>
</tr>
<tr>
<td>Integration</td>
<td>0.19*</td>
<td>0.10</td>
<td>0.41**</td>
<td>1</td>
<td></td>
<td></td>
<td>50.35</td>
<td>6.16</td>
</tr>
<tr>
<td>Differentiation</td>
<td>-0.08</td>
<td>0.11</td>
<td>0.13</td>
<td>-0.06</td>
<td>1</td>
<td></td>
<td>45.84</td>
<td>3.79</td>
</tr>
<tr>
<td>Self-Concept Clarity</td>
<td>0.45**</td>
<td>-0.35**</td>
<td>-0.02</td>
<td>0.08</td>
<td>-0.17*</td>
<td>1</td>
<td>43.94</td>
<td>11.55</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

Clarity (r = -0.35, p < .01) and positively correlated with gratitude (r = 0.19, p < .05) but not significantly correlated with integration (r = 0.10, p > 0.05) and differentiation (r = 0.11, p > 0.05). Gratitude was positively associated with integration (r = 0.41, p < 0.01) but not significantly associated with differentiation (r = 0.13, p > 0.05) and self-concept clarity (r = -0.02, p > 0.05). Integration had no correlation with self-concept clarity (r = 0.08, p > 0.05) and differentiation (r = -0.06, p > 0.05). Finally, differentiation was negatively correlated with self-concept clarity (r = -0.17 p < 0.05).

4.3.4.3 Model Testing

The hypothesized path diagram shown in Figure 4.1 was tested via path analysis using AMOS.23. The results of model fit statistics were provided in Table 4.25. Chi-square value was not significant (χ2(1) = 2.587, p > .05), χ2/df value was 2.587, CFI value was .99, GFI value was 1.00 and SRMR value was .02 which all showed perfect fit according to the criteria given in Table 4.14. Only RMSEA value was .09 which showed poor fit. Since other fit statistics showed perfect fit, it was concluded that the hypothesized model had a good fit to the data.
As can be seen in Figure 4.5, standardized estimation values of all 12 direct paths were changed between -.03 and .44, four of which were statistically significant ($p < .05$); the paths from gratitude to integration, differentiation to self-concept clarity, self-concept clarity to presence of meaning and self-concept clarity to search for meaning. The standardized parameter estimates were illustrated with black arrows for non significant paths and blue arrows standing for significant paths.

The squared multiple correlations ($R^2$) were checked to explore the amount of variance explained by the proposed model. The results showed that gratitude explained 17 % of the variance in integration. Differentiation accounted for 3 % of the variance in self-concept clarity. Self-concept clarity explained 25 % of the variance in presence of meaning and self-concept clarity explained 18 % of the variance in search for meaning.
4.3.4.4 Total, Direct and Indirect Effects

In this part, total, direct and indirect relationships among the variables were examined. In Table 4.26, beta coefficients of the paths with p values and confidence intervals were presented. The bootstrapped results showed that there were statistically significant direct, indirect, and total effects. Cohen’s (1988) standards were used to evaluate the effect sizes; as .10 corresponding to small, around .30 to moderate, and .50 or more to large effect sizes. As shown in Table 4.26 it was found that gratitude had significant total effects on integration (β = .41, SE = .07, p < .01, moderate to large effect), on search for meaning (β = .18, SE = .07, p < .05, small to moderate effect) and on presence of meaning (β = .29, SE = .07, p < .015, moderate effect) but had non-significant total effect on self-concept clarity (β = .00, SE = .08, p > .05). Differentiation had significant total effect on self-concept clarity (negative) (β = -.16, SE = .07, p < .05, small to moderate effect), but non-significant total effects on presence of meaning (β = -.10, SE = .08, p > .05) and on search for meaning (β = .09, SE = .09, p > .05). Integration had non-significant total effects on self-concept clarity (β = .09, SE = .09, p > .05), on presence of meaning (β = .11, SE = .09, p > .05) and on search for meaning (β = .04, SE = .09, p > .05). Self-concept clarity had significant total effects on presence of meaning (β = .44, SE = .07, p < .01, moderate to large effect) and on search for meaning (negative) (β = -.35, SE = .07, p < .01, moderate effect). Lastly, presence of meaning had a non-significant total effect on search for meaning (β = .14, SE = .09, p > .05). In sum, the largest total effects were from self-concept clarity to presence of meaning (β = .44), from gratitude to integration (β = .41) and from self-concept clarity to search for meaning (β = -.35).

In terms of direct effects; gratitude had significant direct effect on integration (β = .41, SE = .07, p < .01, moderate to large effect) but had non-significant direct effects on self-concept clarity (β = -.04, SE = .09, p > .05), on search for meaning (β = .12, SE = .09, p > .05) and on presence of meaning (β = .19, SE = .09, p > .05). The direct
effects of integration on self-concept clarity ($\beta = .10, SE = .09, p > .05$), on presence of meaning ($\beta = .07, SE = .09, p > .05$) and search for meaning ($\beta = .06, SE = .08, p > .05$) were non-significant. Differentiation had a significant direct effect on self-concept clarity (negative) ($\beta = -.16, SE = .07, p < .05$, small effect) but non-significant direct effects on presence of meaning ($\beta = -.03, SE = .07, p > .05$) and on search for meaning ($\beta = .04, SE = .09, p > .05$). Self-concept clarity had significant direct effects on presence of meaning ($\beta = .44, SE = .07, p < .01$, moderate to large effect) and on search for meaning (negative) ($\beta = -.41, SE = .07, p < .01$, moderate to large effect). Presence of meaning had a non-significant direct effect on search for meaning ($\beta = .14, SE = .09, p > .05$). That is, for separated-patterned self construal, greater gratitude resulted in greater integration but different from other self construals, greater gratitude did not result in greater presence of meaning and higher differentiation led to lower self-concept clarity. Lastly, similar to other self construals, higher self-concept clarity resulted in higher presence of meaning and lower search for meaning.

Indirect effects were investigated by employing Bootstrapping method. Eight indirect effects were examined in the hypothesized model and only one of them was significant. The indirect effects of gratitude on self-concept clarity through integration ($\beta = .04, SE = .04, p > .05$), on presence of meaning via integration and self-concept clarity ($\beta = .03, SE = .05, p > .05$) and on search for meaning via integration, self-concept clarity and presence of meaning ($\beta = .06, SE = .05, p > .05$) were not significant. The indirect effect of differentiation on presence of meaning through self-concept clarity was significant (negative) ($\beta = -.07, SE = .03, p < .05$, small effect) but on search for meaning via self-concept clarity and presence of meaning ($\beta = .05, SE = .03, p > .05$) was not significant. The indirect effects of integration on presence of meaning via self-concept clarity ($\beta = .04, SE = .04, p > .05$) and on search for meaning via self-concept clarity and presence of meaning ($\beta = -.02, SE = .04, p > .05$) were not significant. The indirect effect of self-concept clarity on search for meaning through presence of meaning ($\beta = -.06, SE = .04$, 

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p > .05) was not significant. In sum, for separated-patterned self construal, gratitude had a direct effect on integration and self-concept clarity had a direct effect (negative) on search for meaning. Self-concept clarity fully mediated the relationship between differentiation and (negative) presence of meaning according to the criteria offered by Zhao et al. (2010) about mediation analysis. Integration had no direct and indirect effects on presence of meaning and search for meaning. Finally, gratitude had no direct and indirect effects on presence of meaning and search for meaning.

Table 4.26

Bootstrapped Results of Direct, Indirect and Total Effects for SPSC

<table>
<thead>
<tr>
<th>Path</th>
<th>β</th>
<th>p</th>
<th>BC Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gratitude → Integration</td>
<td>.41</td>
<td>.004*</td>
<td>.261, .550</td>
</tr>
<tr>
<td>Gratitude → Self-concept clarity</td>
<td>.00</td>
<td>.976</td>
<td>-.160, .161</td>
</tr>
<tr>
<td>Gratitude → Presence of Meaning</td>
<td>.29</td>
<td>.014**</td>
<td>.036, .379</td>
</tr>
<tr>
<td>Gratitude → Search for Meaning</td>
<td>.18</td>
<td>.043**</td>
<td>.002, .330</td>
</tr>
<tr>
<td>Differentiation → Self-concept clarity</td>
<td>-.16</td>
<td>.027**</td>
<td>-.296, -.020</td>
</tr>
<tr>
<td>Differentiation → PofM</td>
<td>-.09</td>
<td>.269</td>
<td>-.079, .257</td>
</tr>
<tr>
<td>Integration → Self-concept clarity</td>
<td>.09</td>
<td>.281</td>
<td>-.078, .256</td>
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<tr>
<td>Integration → Presence of Meaning</td>
<td>.11</td>
<td>.224</td>
<td>-.055, .286</td>
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<tr>
<td>Integration → Search for Meaning</td>
<td>.04</td>
<td>.617</td>
<td>-.134, .214</td>
</tr>
<tr>
<td>Self-concept clarity → PofM</td>
<td>.44</td>
<td>.004*</td>
<td>.314, .572</td>
</tr>
<tr>
<td>Self-concept clarity → SforM</td>
<td>-.35</td>
<td>.006*</td>
<td>-.493, -.184</td>
</tr>
<tr>
<td>Presence of Meaning → SforM</td>
<td>.14</td>
<td>.164</td>
<td>-.046, .324</td>
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**Direct Effects**

<table>
<thead>
<tr>
<th>Path</th>
<th>β</th>
<th>p</th>
<th>BC Interval</th>
</tr>
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<tbody>
<tr>
<td>Gratitude → Integration</td>
<td>.41</td>
<td>.004*</td>
<td>.261, .550</td>
</tr>
<tr>
<td>Gratitude → Self-concept clarity</td>
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<td>.816</td>
<td>-.199, .168</td>
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<tr>
<td>Gratitude → Presence of Meaning</td>
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<td>.057</td>
<td>-.004, .337</td>
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<td>Gratitude → Search for Meaning</td>
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<tr>
<td>Differentiation → Self-concept clarity</td>
<td>-.16</td>
<td>.07**</td>
<td>-.296, -.020</td>
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### Table 4.26 (continued)

<table>
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<tr>
<th>Path</th>
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<td>Differentiation $\rightarrow$ Pof M</td>
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<td>.677</td>
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</tr>
<tr>
<td>Integration $\rightarrow$ Presence of Meaning</td>
<td>.07</td>
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<tr>
<td>Integration $\rightarrow$ Search for Meaning</td>
<td>.06</td>
<td>.391</td>
<td>-.095, .231</td>
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<td>Self-concept clarity $\rightarrow$ Pof M</td>
<td>.44</td>
<td>.004*</td>
<td>.314, .572</td>
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<tr>
<td>Self-concept clarity $\rightarrow$ SforM</td>
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<td>.006*</td>
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<td>Presence of Meaning $\rightarrow$ SforM</td>
<td>.14</td>
<td>.164</td>
<td>-.046, .324</td>
</tr>
<tr>
<td><strong>Indirect Effects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gra $\rightarrow$ Int $\rightarrow$ Scc</td>
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<td>.263</td>
<td>-.032, .117</td>
</tr>
<tr>
<td>Gra $\rightarrow$ Int $\rightarrow$ Scc $\rightarrow$ PofM</td>
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<td>.511</td>
<td>-.072, .129</td>
</tr>
<tr>
<td>Gra $\rightarrow$ Int $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
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<td>.249</td>
<td>-.044, .163</td>
</tr>
<tr>
<td>Dif $\rightarrow$ Scc $\rightarrow$ PofM</td>
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<td>.019**</td>
<td>-.135, -.014</td>
</tr>
<tr>
<td>Dif $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
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<td>.062</td>
<td>-.002, .121</td>
</tr>
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<td>.280</td>
<td>-.033, .130</td>
</tr>
<tr>
<td>Integration $\rightarrow$ Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
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<td>.570</td>
<td>-.091, .054</td>
</tr>
<tr>
<td>Scc $\rightarrow$ PofM $\rightarrow$ SforM</td>
<td>-.06</td>
<td>.142</td>
<td>-.018, .148</td>
</tr>
</tbody>
</table>


* $p < .001$, ** $p < .05$, *** $p < .001$

### 4.4 Summary of the Results

MANOVAs revealed some differences on the measures of the study in terms of demographic variables. Female students scored higher than male students on integration and gratitude. University students with a romantic relationship had more presence of meaning, gratitude, differentiation and self-concept clarity and less search for meaning than students without a romantic relationship. However, the effect sizes were small for all of the differences. There was not a statistically
significant difference between years of study, accommodations and faculties on the combined dependent variables.

In terms of self construals of the BID Theory, MANOVAs produced significant differences on presence of meaning, search for meaning, gratitude and self-concept clarity. Related-individuated participants had more presence of meaning than other self construal types. They were followed by related-patterned individuals who had more presence of meaning than separated-individuated and separated-patterned participants and there was no difference between separated-individuated and separated-patterned participants in presence of meaning. In terms of search for meaning, separated-individuated participants had more search for meaning than related-individuated and related-patterned participants. There was no difference between separated-patterned, related-individuated and related-patterned participants in search for meaning. Regarding to gratitude, related-individuated and related-patterned participants had more gratitude than separated-individuated and separated-patterned participants. There was no difference between separated self construals and related self construals in gratitude. Finally, related-individuated and related-patterned participants had more self-concept clarity than separated-individuated and separated-patterned participants and there was no difference between separated self construals and related self construals in self-concept clarity. Additionally, except search for meaning, all effect sizes were large.

Significant direct and indirect effects were obtained through path analysis for each type of self construal. Regarding to direct effects, for all self construals gratitude had positive direct effect on integration and self-concept clarity had a positive direct effect on presence of meaning and a negative direct effect on search for meaning. Except separated-patterned self construal, for all self construals gratitude had a positive direct effect on presence of meaning. For related-individuated self construal both integration and differentiation had positive direct effects on self-concept clarity.
For related-patterned and separated-individuated self construals, only integration had a direct positive effect on self-concept clarity and for separated-patterned self construal only differentiation had a negative direct effect on self-concept clarity. The variance accounted for in integration by gratitude was ranged between 4 % and 17 % for all self construals. The variance accounted for in search for meaning by self-concept clarity were ranged between 7 % and 18 % for all self construals. For related-individuated self construal, the variance accounted for in self-concept clarity by differentiation and integration was 11 %. For related-patterned self construal, the variance accounted for in self-concept clarity by integration was 10 %. For separated-individuated self construal, the variance accounted for in self-concept clarity by integration was 8 %. For separated-patterned self construal, the variance accounted for in self-concept clarity by differentiation was 3 %. Except separated-patterned self construal, the variance accounted for in presence of meaning by self-concept clarity and gratitude were ranged between 16 % and 23 % for all self construals. For separated-patterned self construal the variance accounted for in presence of meaning by self-concept clarity was 25 %.

In terms of indirect effects, except separated-patterned self construal, gratitude had an indirect effect on self-concept clarity through integration and integration had a positive indirect effect on presence of meaning and a negative indirect effect on search for meaning via self-concept clarity. Only for separated-individuated self construal, gratitude had an indirect effect on presence of meaning through integration and self-concept clarity. Differentiation had a positive indirect effect on presence of meaning and negative indirect effect on search for meaning via self-concept clarity for related-individuated self construal but differentiation had no indirect effects on presence of meaning and search for meaning through self-concept clarity for related-patterned and separated-individuated self construals. Finally, differentiation had a negative indirect effect on presence of meaning via self-concept clarity for separated-patterned self construal.
CHAPTER 5

DISCUSSIONS AND IMPLICATIONS

The final chapter is composed of three sections. In the first section, findings of the present study are summarized and discussed in the light of the literature. Second section provides the implications of the results for research and practice and the last section is comprised of recommendations for further studies on the basis of the current study.

5.1 Discussion of the Findings

Firstly, influences of demographic variables (gender, year of study, faculty, accommodation, relationship status) on presence of meaning, search for meaning, integration, differentiation, gratitude, and self-concept clarity (SCC) and the differences of four self construals of BID (Balanced Integration Differentiation) Theory on presence of meaning, search for meaning, gratitude, and self-concept clarity were discussed. Finally, findings regarding to the model, which investigates the relationships between presence of meaning in life, search for meaning, self construal (integration, differentiation), gratitude and self-concept clarity, were discussed by comparing the effects of variables in each self construal.

5.1.1 Discussion of the Findings of Differences of Demographic Variables on the Measures of the Study

Some differences were obtained on the measures of the study (presence of meaning, search for meaning, integration, differentiation, gratitude, and self-concept clarity) in terms of two demographic variables (gender, relationship status).
Regarding to gender variable, female students scored higher than male students on integration and gratitude with small effect sizes. However, there was no difference between females and males in presence of meaning, search for meaning, differentiation and self-concept clarity. In previous studies, females also reported more integration (İmamoğlu, 2003; İmamoğlu & Karakitapoğlu- Aygün, 2004; Köse, 2009) and more gratitude compared to males (Kashdan et al., 2009; Kong, 2015; Sivis-Çetinkaya, 2013; Xia & Ning, 2009). These results were expected as it was known beforehand that girls express more positive emotions and less negative externalizing negative emotions than boys (Chaplin & Aldao, 2013). Women have more positive attitudes toward gratitude and willingness to openly express emotions but gratitude is viewed as more burdensome, challenging and anxiety provoking by men (Kashdan et al., 2009). Girls are also raised to be nurturing, obedient, and responsible while boys are raised to achieve, to be independent and self-reliant in socialization practices (Barry, Bacon, & Child, 1957). In line with this, Schwartz and Rubel (2005) reported that the most important values of man are power, novelty, stimulation, hedonism, and achievement whereas being tolerant, acting in a benevolent manner toward other people, trying to understand and improve relationships are the most important values of women across 70 countries. So together with having more gratitude which builds and maintains relationships (Jia et al., 2014; Jia et al., 2015; Williams & Bartlett, 2015), females were more inclined to build relationships. Though female students were also scored higher on differentiation than male students in earlier studies (İmamoğlu, 2003; İmamoğlu & Karakitapoğlu-Aygün, 2004; İmamoğlu & İmamoğlu, 2007), no difference was found in the current study. Köse (2009) also reported no gender difference in differentiation. It was thought that although differentiation is also influenced by the social environment, distinct from integration it is mainly an intrapsychic process and might not be different for females and males.

In accordance with previous research, females and males also did not differentiate on presence of meaning and search for meaning (Çamur, 2014; Debats, 1999;
Demirbaş, 2010; Girgin, 2018; Kızırlırmak, 2015; Steger et al., 2006; Yüksel, 2013). There are also some studies reporting gender differences (Crumbaugh, 1968; Schnell, 2009). The reason behind these contradictory findings was thought to be the scale used since gender invariance of meaning scales was questionable (Reker, 2005). The studies mentioned above reporting no difference, utilized Meaning in Life Questionnaire (MIL) which is a subjective measure and provides the opportunity to individuals to use their own criteria for meaning in life judgments (Steger et al., 2006). So, this prevents the content favoring females or males who have different sources of meaning in life (Grouden, 2014). Finally, no gender difference was observed in self-concept clarity (SCC). Earlier studies found females have marginally lower SCC than males (Campbell et al., 1996; Parise et al., 2019a) or no difference (Cicero, 2019; Willis & Burnett, 2016). Since, SCC scale (Campbell et al., 1996) was reported to be gender invariant (Cicero, 2019), this small difference might be due to females’ increased relationship orientedness compared to males. SCC was reduced due to interpersonal rejection (Ayduk et al., 2009), role exists (Light & Visser, 2013), loss of a romantic relationship (Slotter et al., 2010) and females might give more importance to these situations, which in turn impairs their SCC levels. However, because the reported difference is consistently small across studies and no difference was also found, it can be concluded that males and females do not differentiate in SCC substantially.

Intimacy is a key feature of emerging adulthood (Arnett, 2000) and university students with a romantic relationship had more presence of meaning, gratitude, differentiation and self-concept clarity and less search for meaning than students without a romantic relationship but there is no difference between them in integration. Additionally, the mean of relationship satisfaction is quite high (4.40). Building romantic relationships is an important task of early adulthood (Arnett, 2000; Erikson, 1968; Levinson, 1986). Moreover, romantic relationships play an invaluable role in well-being of young adults (Gomez-Lopez, Viejo, & Ortega-Ruiz, 2019; Ratelle, Simard, & Guay, 2012) and have a lasting impact on
development of an individual (Gala & Kapadia, 2013). Together with the high satisfaction level, it is reasonable to find high presence of meaning, gratitude, self-concept clarity and lower search for meaning among students having a romantic relationship since relationships are sources of meaning in life (Baum, 1988; Debats et al., 1995; DeBats, 1999; Lambert et al., 2010a; Stavrova & Luhmann, 2016); built and maintained by gratitude (Algoe et al., 2008; Bartlett et al., 2012; Ji et al., 2014) and lead to self-concept clarity (Demidenko et al., 2010; Emery et al., 2018; Richman et al., 2016). Additionally, self-concept clarity causes higher relationship satisfaction (Lewandowski et al., 2010; Parise et al., 2019a). A research investigating the role of meaning in life in romantic relationships revealed that both one’s own and one’s partner’s meaning in life predict more internalized motivational states and perceived relationship quality of university students (Hadden & Knee, 2018). This finding is in line with the results of the current study that high presence of meaning and high relationship satisfaction were reported by the students who had a romantic relationship. The reason, why students having a romantic relationship had more differentiation, might be the autonomy support provided by the romantic partners. Autonomy support is defined as “acknowledging the other’s perspective, providing choice, encouraging self-initiation, and being responsive to the other” (Deci, L a Guardia, Moller, Scheiner, & Ryan, 2006, p. 313). Studies show that autonomy support provided by the romantic partners is positively related to relationship satisfaction (Carbonneau, Martos, Sallay, Rochette, & Koestner, 2019; Ratelle et al., 2012) which was found as also high in the present study. Finally, no difference was found in integration between students with a romantic relationship and without a romantic relationship. This might be due to the existence of other sources for integration that relationships with friends and families continue to be salient in early adulthood (Ratelle et al., 2012; Ratelle, Larose, Guay, & Sencal, 2005).

Lastly, there was not a statistically significant difference between years of study, accommodations and faculties on presence of meaning, search for meaning, integration, differentiation, gratitude, and self-concept clarity. There is scarcity of
research pertaining to these variables. Available studies reported nonsignificant effect of years of study (Çamur, 2014; Steger et al., 2006) and faculty (Demirbaş, 2010; Kızılirmak, 2015) on presence of meaning and search for meaning. With regards to gratitude, Xia and Ning (2009) reported that no difference was observed in gratitude among liberal arts, science, military and medicine majors except that students of liberal arts had more gratitude than students of military. Since military major is largely composed of males, this difference might be due to gender. Another study by Kong et al. (2015) also reported nonsignificant difference in gratitude with regards to faculty. So, results of the current study are in line with the limited number of relevant studies.

5.1.2 Discussion of the Findings of Differences of Self Construals of the BID Theory on the Measures of the Study

In terms of self construals (separated differentiation, separated patterning, related patterning, related differentiation) of the BID Theory, MANOVAs produced significant differences on presence of meaning, self-concept clarity, gratitude (large effect sizes) and search for meaning (small effect size). Related-individuated participants had more presence of meaning than other self construal types. They were followed by related-patterned individuals who had more presence of meaning than separated-individuated and separated-patterned participants and there was no difference between separated-individuated and separated-patterned participants in presence of meaning. These findings were in line with previous ones that as the most optimal psychosocial functioning (İmamoğlu, 2003; İmamoğlu & Güler-Edwards, 2007; İmamoğlu & İmamoğlu, 2007; Yeniçeri, 2013), related-individuated self construal had more presence of meaning than other self construal types. Related-patterned self construal comes second and had more presence of meaning than both of the separated self construals. Since, relationships are the firstly stated sources of meaning (Debats, 1999; Lambert et al., 2010a; Wissing et al.,
separated self construals might not differentiate from each other and have similar presence of meaning which is less than related self construals have.

In terms of search for meaning, separated-individuated participants had more search for meaning than related-individuated and related-patterned participants but the effect size of this difference is small. Also for separated-individuated participants, presence of meaning and search for meaning is inversely related. Their lack of meaning might motivate them for search for meaning which might be fostered by behaving with intrinsic referents. There was no difference between separated-patterned, related-individuated and related-patterned participants in search for meaning. Search for meaning is distinct and independent from presence of meaning and it does not derive only from meaninglessness (Steger et al., 2006). Additionally, it is affected by several individual characteristics (Steger et al., 2008a). So, related self construals might have search for meaning similar to separated patterned self construal albeit with different reasons. Regarding to gratitude and self-concept clarity, related-individuated and related-patterned participants had more gratitude and self-concept clarity than separated-individuated and separated-patterned participants.

There was no difference between separated or related self construals in gratitude and self-concept clarity. These results are also parallel to earlier findings that gratitude engenders relatedness (Algoe et al., 2008; Bartlett et al., 2012; Ji et al., 2014) and self-concept clarity is possible with relatedness (Demidenko et al., 2010; Emery et al., 2018; Richman et al., 2016). So, related self construals have more gratitude and self-concept clarity than separated ones.

Taken in tandem, although related-individuated self construal did not differentiate from related-patterned self construal in gratitude, self-concept clarity and search for meaning, it was significantly different from related-patterned self construal in presence of meaning. This can be interpreted as additive contribution of differentiation to presence of meaning and support the view that related-individuated self construal represents the most optimal psychosocial functioning. As the most
unbalanced one, separated-patterned self construal was not different from separated-individuated self construal in any of the variables. This might be because of the heavy influence of relatedness in presence of meaning in life, gratitude and self-concept clarity. Supporting this view, separated-patterned participants did not differentiate from separated-individuated participants in positive-other scores of attachment orientation (İmamoğlu, 2005). The lack of difference in gratitude is also understandable with the findings that they also had similar inhibition of negative emotions and negative affect (Köse, 2009) in previous studies. In sum, related self construals have more favorable psychosocial functioning than separated self construals by having more presence of meaning, gratitude, self-concept clarity and less unfavorable search for meaning.

5.1.3 Discussion of the Findings of the Path Analyses

The main aim of the present study was to investigate the relationships between presence of meaning in life, search for meaning, self construal (integration, differentiation), gratitude and self-concept clarity based on the proposals of Steger’s theory of meaning (2009, 2012) and the BID model (İmamoğlu, 1998, 2003). As hypothesized, different significant direct and indirect effects were obtained through path analyses for each type of self construal, in addition to the perfect fit indices of the model to the data. Regarding to gratitude, for all self construals gratitude had positive direct effect on integration. This is in line with the earlier studies that gratitude builds and maintains relationships (Algoe et al., 2008; Bartlett et al., 2012; Jia et al., 2014; Jia et al., 2015; Ng et al., 2017). Additionally, except for separated-patterned self construal, although gratitude had no direct effect on self-concept clarity, it had an indirect effect on self-concept clarity through integration. Self-concept clarity is intertwined with relatedness (Ayduk et al., 2009; Lewandowski et al., 2010; Light & Visser, 2013; Parise et al., 2019a; Slotter et al., 2010) since 'self is both a social product and a social process' (Heine et al., 1999, p. 788). So, gratitude contributes to self-concept clarity by the way of engendering integration.
Gratitude had no indirect effect on presence of meaning but it had a positive direct effect on presence of meaning for related-patterned and related-individuated participants. This finding is in line with the studies reporting the effect of gratitude on meaning in life (Disaboto et al., 2016; Kleiman et al., 2013; Van Tongeren et al., 2015; Wood et al., 2009) and extends the results of previous studies. For separated-patterned self construal, though gratitude had a positive direct effect on integration, different from other self construals, it had no indirect effect on self-concept clarity via integration and direct effect on presence of meaning. Additionally, integration had no direct effect on self-concept clarity only for separated-patterned participants. Moreover, in the correlation analysis, only for separated-patterned self construal, gratitude had a significant positive correlation with search for meaning. When these findings are evaluated together, it can be concluded that the experience of gratitude is not totally positive for separated-patterned individuals. In fact, gratitude’s associations with prosocial behaviors, subjective well-being is not sufficient to decide this is good gratitude. One might be exploited though she/he believes to benefit. Since injustice in human affairs derive from too much attachment (tribal) and too little attachment (colonial) (Carr et al., 2015). In line with this thought, emotional deprivation schema was found to be a significant predictor of gratitude. In this schema, overcompensatory counter dependency type of style shows social isolation and overcompensatory insufficient control and self-discipline style shows overdependence on others (Topcu, 2016). Some researchers claim that gratitude is accompanied by embarrassment, guilt, indebtedness etc. (Morgan et al., 2014; Waters & Stokes, 2015). Roberts (2015) posits that in fact there is a debt but it is a ‘debt of grace’ and if one feels an unpleasant burden, it is because of two reasons. First reason is, not wanting to be in a gracious relationship and the second reason is construing the debt as a ‘debt of injustice’. A related interpretation from Topcu (2016) was that people who use overcompensatory coping styles try to perpetuate their emotional deprivation schema so they avoid and distort support, help, grace from others and might view gratitude unfavorably as indebtedness. Supporting these
ideas, Mikulincer and Shaver (2010) found that both anxious and avoidant attachment representations negatively affected the prosocial effect of the gratitude induction whereas secure attachment has the positive effect. Another study by Mathews and Green (2010) reported that highly self-focused individuals recall increased indebtedness rather than gratitude to a benefactor. In previous studies, separated-patterned people were reported to have high characteristics of schema domains (inhibition of expressing emotions, insufficient ego control), high level of depression, negative affect, reassurance-seeking (Köse, 2009) and appeared as the least securely attached type (İmamoğlu, 2005). So, it can be inferred that as the most unbalanced type, gratitude might have an ambivalent character for separated-patterned individuals by being related to search for meaning positively and by not leading to self-concept clarity or presence of meaning. For separated-individuated self construal, significance levels for gratitude’s positive direct effect on presence of meaning ($\alpha = .048$) and indirect effect on presence of meaning through integration and self-concept clarity ($\alpha = .047$) were found as just below a significance level of 0.05. Though these effects should be evaluated with caution and should be investigated in new samples, it can be said that separated-individuated participants had more favorable gratitude than separated-patterned participants. This finding is also interesting since separated-patterned and separated-individuated participants had similar gratitude. So it can be said that the magnitude of gratitude is not adequate to decide about its functional quality. Finally, the variance accounted for in integration by gratitude was the lowest for related-individuated (4 %) and related-patterned (7 %) and the highest for separated-individuated (13 %) and separated-patterned (17 %) self construals. As the balance deteriorates in self construal, the variance explained by gratitude in integration increases. It might be speculated that relationships are affected by maladaptive gratitude much more than relationships are affected by healthy gratitude although maladaptive gratitude is lesser than adaptive gratitude in magnitude. So, the influence of gratitude is more complex than as previously thought. In sum, it can be concluded that gratitude has more favorable impact for
related self construals than separated self construals and for separated-individuated individuals than separated-patterned individuals. Additionally, gratitude has direct influence on integration for all self construals but although it has direct influence on presence of meaning for related self construals, it has no or controversial effect on presence of meaning for separated self construals. Thus, it can be interpreted that the link between meaning in life and gratitude is not by the way of relatedness and its positive valence but due to the feeling of mattering which favorable gratitude most probably includes.

Similar to gratitude, effects of integration and differentiation also change for each type of self construal. The only common effect for all self construal types is, they do not have direct effects on both presence of meaning and search for meaning but have indirect effects through self-concept clarity as hypothesized according to proposals of Steger’s theory of meaning (2009, 2012). In previous research, autonomy (differentiation) and relatedness (integration) positively predicted presence of meaning in life (Martela et al., 2017; Trent & King, 2010; Yeniçeri, 2013). However, the influences of integration and differentiation on meaning in life were not investigated conjointly. The present research extended the results of previous studies. Only for related-individuated self construal, integration and differentiation had positive indirect effects on presence of meaning and negative indirect effects on search for meaning via self-concept clarity. Being connected to others and actualizing one’s unique potentials lead to higher presence of meaning and lower search for meaning through higher self-concept clarity for related-individuated individuals. For related-patterned and separated-individuated self construals, integration had a positive indirect effect on presence of meaning and a negative indirect effect on search for meaning via self-concept clarity. Being connected to others lead to higher presence of meaning and lower search for meaning through higher self-concept clarity for related-patterned and separated-individuated individuals. The lack of effect of differentiation on presence and search for meaning can be understandable for related-patterned type but it is interesting for
separated-individuated type. Nevertheless, this finding is compatible with the proposals of BID theory that integration and differentiation are complementary processes (İmamoğlu, 1998, 2003). Healthy individuation is achieved with positive feelings towards others so one might feel negative affectivity derived from isolation and his/her individuation might have a self-sufficient character in separated-individuated type (İmamoğlu, 2003) and this type of individuation cannot contribute to meaning in life. Congenial to this finding, differentiation had even a negative indirect effect on presence of meaning via self-concept clarity for separated-patterned people. Although behaving with extrinsic referents had no effect on presence of meaning for related-patterned people, it becomes detrimental for separated-patterned individuals. Similarly, though integration had a positive indirect effect on presence of meaning and a negative indirect effect on search for meaning via self-concept clarity for separated-individuated participants, it had no effect on presence or search for meaning in life for separated-patterned participants who had difficulty both in integration and differentiation. This is also in accordance with previous research which reported the separated-patterned self construal as the most unbalanced type (İmamoğlu 2003; İmamoğlu, 2005; Köse, 2009; Yeniçeri, 2013). Finally, gratitude together with self-concept clarity account for the variance in presence of meaning for related-individuated (23 %), related-patterned (16 %) and separated-individuated (21 %) self construals but only self-concept clarity accounts for the variance in presence of meaning (25 %) for separated-patterned self construal. Thus, the current study provided some support for the Steger’s (2009, 2012) assumption that people make sense (self-concept clarity) and matter (gratitude) by the way of deciding who they are through interactions with the world (self construal) and as a result they form meaning in life and they do this accordingly to the proposals of the BID theory (İmamoğlu, 1998, 2003). Additionally, though gratitude is possible only through interactions with others, its effect is not via integration but direct on presence of meaning in life.
The variance accounted by integration and differentiation in self-concept clarity are parallel to the degree of balance in self construals. The largest variance belongs to related-individuated self construal that the variance accounted for in self-concept clarity by differentiation and integration was 11 %. For related-patterned self construal, the variance accounted for in self-concept clarity by integration was 10 %. For separated-individuated self construal, the variance accounted for in self-concept clarity by integration was 8 %. The lowest variance belongs to separated-patterned self construal that the variance accounted for in self-concept clarity by differentiation was 3 %. Thus, it can be inferred that integration and differentiation are contributing to self-concept clarity independently. To sum up, in line with the Steger’s theory of meaning (2009, 2012), establishing identity and connections with others through integration and differentiation seems to serve for coherence -self-concept clarity- to cultivate and sustain meaning in life and similar to gratitude, their effects change according to self construal.

There was a significant negative correlation between presence of meaning and search for meaning as demonstrated by earlier studies (Dursun, 2012; Kashdan & Steger, 2007; Steger et al., 2008a) for separated-individuated and related-patterned self construals. Some empirical evidence exists pertinent to this result that the inverse relationship between presence and search for meaning becomes stronger for individuals who have low autonomy and high relatedness (Steger et al., 2008a). Their unbalanced self systems might have a role in their search for meaning and owning one of the orientations might foster this process. For related-individuated and separated-patterned self construals, there was no relationship between presence of meaning and search for meaning. These results are plausible since search for meaning is distinct and independent from presence of meaning and it does not derive only from meaninglessness (Steger et al., 2006). Having the most optimal psychosocial functioning, related-individuated participants have the highest level of presence of meaning compared to others and their search for meaning might have more positive characteristics rather than lack of meaning such as aiming personal
growth. Since early research showed that search for meaning was related to openness to ideas about life, artistic and investigative personality types (Steger et al., 2008a) and personal growth predicted search for meaning (Grouden, 2014). On the other hand, separated-patterned participants have less presence of meaning than related self construals and their presence of meaning is not related to search for meaning. Additionally, gratitude is positively correlated with search for meaning. So, their search might have different characteristics. Indirect support for this conviction comes from self-concept clarity which is the predictor of search for meaning for all self-construals. They had the lowest self-concept clarity score compared to other self construals. It was reported that low clarity people had difficulty in clearly identifying and understanding their problematic emotions, thoughts and behaviors (Leite & Kuiper, 2008) and they engage in more ruminative self-attentional process than high clarity people (Campbell et al., 1996). So, they might not evaluate properly their situation or be aware of their functioning for the purpose of directing their search to obtain meaning.

Finally, presence of meaning and gratitude did not predict search for meaning in any of the self construals but self-concept clarity emerged as a negative predictor of search for meaning in all self construals. Meaning Maintenance Model (Heine et al., 2006) asserts that meaning (seeking coherent relations) is an inherent need and the necessity of repairing threats to meaning is greater to the extent that it is related to the self. This new finding is also compatible with the earlier findings that self-clarity threat was found to cause restoring a sense of meaning through fluid compensation (Boucher et al., 2015) and meaning threat was reported to lead people to seek and maintain structural organization in the self-concept to protect themselves (Landau et al., 2009). The variance accounted for in search for meaning by self-concept clarity were ranged between 7 % and 18 % for all self construals. Except related-patterned self construal (7 %), other variances are similar to each other. Although there is meaningful pattern in variance accounted by integration and differentiation in self-concept clarity, the variance accounted for in search for
meaning by self-concept clarity does not show any. This might be due to influences of various factors on search for meaning such as personality (Demirbaş, 2014; Steger et al., 2008a). Nevertheless, self-concept clarity (sense making) is not only influential on presence of meaning as Steger (2009, 2012) mentioned but also on search for meaning and it was shown for the first time in the current study.

In summary, findings of the current study extended the results of previous studies and provided strong support both Steger’s theory of meaning (2009, 2012) and BID theory of İmamoğlu (1998, 2003). All variables in the model of meaning in life relate to each other mostly in line with the proposals of the utilized theories. Establishing identity and building connections are necessary for comprehension (coherence, mattering) or to cultivate and sustain meaning in life (Steger, 2009, 2012). Both integration and differentiation had influences on presence (positive) and search (negative) for meaning in life via self-concept clarity (coherence) and gratitude (mattering) directly predicted presence of meaning (positive). These effects emerged in each self construal differently according to the complementary nature of integration and differentiation as proposed by the BID theory of İmamoğlu (1998, 2003).

5.2 Implications for Research and Practice

Meaning in life has been a widely studied topic in psychology. Although its close link with philosophical inquiry makes it complicated for definition and investigation, it has been handled to a great extent by distinguishing meaning of life and meaning in life (Debats et al., 1995) or cosmic and personal meaning (Yalom, 1980). However, despite not at the cosmic level, most of the scholars’ theories talk about the necessary conditions leading to meaningful life (Baumeister, 1991; Frankl, 1963; Maddi, 1967; Reker & Wong, 1988; Yalom, 1980). This engenders subjectivity in examinations due to different content proposed by each scholar. Moreover, it hinders to understand its significant role in psychology of an individual by again blurring
its borders with philosophical questions. Additionally, the common assumption of these approaches is meaning in life is constructed by the individual and it is difficult to attain. King and Hicks (2009) claimed that this conviction derived from the fact that people are interested in meaning when they feel lack of it. Heintzelman and King (2015) provided support for this idea that people engage more in reflection when they experience low meaning and they rely on more intuitive processing when they have high meaning. Additionally, according to epidemiological data and research using self-report measures, meaning in life scores are above the midpoint which means that life is pretty meaningful for people (Heintzelman & King, 2014b; Steger, Oishi, & Kashdan, 2009) and it cannot be explained by social desirability and impression management (Heintzelman, Trent, & King, 2015). In accordance with the previous findings, presence of meaning scores were also above the midpoint for all types of self construals in the current study. Heintzelman and King (2014a) proposed a certain type of feeling called ‘feeling of meaning’, which tracks environmental coherence, an adaptive trait for survival like negative and positive affect which enable the person to respond to immediate circumstances by directing cognitive processing. This adaptive functioning is supported by research that even existence of structure in the environment (Heintzelman & King, 2013), behavioral routines (Heintzelman & King, 2018) were related to higher meaning in life. Meaning Maintenance Model (Heine et al., 2006) also asserts that meaning (seeking coherent relations) is an inherent need and the necessity of repairing threats to meaning is greater to the extent that it is related to the self. It was reported that through fluid compensation, self-clarity threat was found to cause restoring a sense of meaning (Boucher et al., 2015). Threat of death, which shows that the world is not meaningful and stable and causes anxiety (TMT, Greenberg et al. 1986), was reported to lead people to seek and maintain structural organization in the self-concept to protect themselves in five different studies (Landau et al., 2009). Another study by Zhang, Sang, Chan and Schlegel (2019) reported that people engage in a compensation type process to reaffirm meaning in life through autonomy when they experience threats to their
belonging. Additionally, self-concept clarity showed high degree of stability, it is undermined with greater self-reflection and it has a positive significant relationship with defensiveness since self-concept is a core element of the psyche (Johnson & Nozick, 2011). Together with its obvious role in well-being (Steger, 2018a), it seems that meaning in life is a fundamental aspect of human functioning. So it can be concluded that meaning in life is not an extraordinary experience confined to some individuals who have existential concerns and it deserves to be investigated further.

Steger et al. (2006) made a valuable contribution to meaning in life literature by offering a definition of meaning in life and developing a scale which is in line with the suggestions of Battista and Almond (1973). For investigation of meaning in life, Battista and Almond (1973) offered to ask ‘What is the nature of an individual's experience of his life as meaningful?’ or "What are the conditions under which an individual will experience his life as meaningful? (p. 409)". However, rather than bringing out the mechanisms related to how people form meaning judgments, studies mostly utilize meaning in life as a well-being construct. In addition to this, Steger (2009, 2012) posited a personal meaning theory which explains how meaning is developed through comprehension (coherence, mattering). This theory was utilized by Shin (2013) for an intervention however with a more focus on the interaction between comprehension and purpose. Shin (2013) also did not elaborate on significance (mattering) which has been recently given attention in meaning research (Martela & Steger, 2016). The current study is the first study which tested the proposals of Steger (2009, 2012) directly and extended the results of earlier studies which reported close associations between identity, self-concept clarity and meaning in life (Dezutter et al., 2013; Hardy et al., 2013; Negru-Subtirica et al., 2016; Schwartz et al., 2017; Waterman, 2014). So, studies testing new models will provide new theoretical understandings which will be useful for research and practice.

The offered framework yielded compatible results with the BID theory of İmamoğlu (1998, 2003) which posits that integration and differentiation are
complementary in nature. Scholars have mentioned about their close relation. Sense of being in the world with others -community feeling, interindividuality, and interest in making changes for an ideal society- is conducive to self-actualization (Bland & DeRobertis, 2017). Humanists like Karen Horney, Carl Rogers, and Charlotte Bühler claimed that “authentic selfhood is social throughout development” (Derobertis, 2008, p.3). The achievement of psychological independence is facilitated by perceiving ontological dependence (Ozawa-de Silva, 2007). In needs hierarchy theory of Maslow, it can be inferred that individuals are more ego centered at the lower end and as they progress to the higher they become more self-transcendent. According to Loevinger’s theory of ego development, interpersonal style develops from an exploitive approach to a respectful interdependent approach through later stages (Manners & Durkin, 2001). Even wisdom was described in this perspective by Sternberg (2001) as ‘not simply about maximizing one’s own or someone else’s self-interest, but about balancing of various self-interests (intrapersonal) with the interests of others (interpersonal) and of other aspects of the context in which one lives (extrapersonal), such as one’s city or country or environment or even God’ (p.231).

The present study confirmed these theoretical thoughts that the balanced type (related-individuated) had the most presence of meaning to which only both integration and differentiation contributed conjointly. Additionally, relatedness (integration) seems to be the main actor of meaning in life that in three self construals integration had an indirect effect on meaning in life. Moreover, the positive impact of differentiation (individuation) is also binded to integration (relatedness) since individuation has no influence on presence of meaning when integration does not contribute to meaning in life. This finding is consistent with early thought and research. Stuewe-Portnoff (1988) stated succinctly that ‘..meaning is necessarily relational. My orientation within the symbolic universe requires the collaboration of another being to whom I have meaning. Defining what I mean without an external ‘to whom’ is impossible (p. 548)’. Adler also viewed ‘meaningfulness’ as expressions of social interest (Jskelinen, 2000) and stated that (as cited in Ansbacher, 1978),
Social interest remains throughout life. It becomes differentiated, limited, or expanded and, in favorable cases, not only to family members but to the larger group, to the nation, to all of mankind. It can even go further, extending itself to animals, plants, and inanimate objects and finally even to the cosmos (p. 136).

Studies conducted with university students also show the positive influence and significance of relatedness in their development. When young people are supported to build connections with the world around them by having positive caring relationships, participating in their communities (church groups, study groups, etc.), being recognized for being good at something, finding a sense of belonging and having hope for the future, they were able to gain a more positive sense of self and meaning (Noble-Car et al., 2013). Relating to others (gaining a great sense of closeness, ability to rely on people, willing to invest in and disclose more to associates) was one of the three domains of growth reported by emerging adults (55%–60%). Additionally, the most chosen item (45%) about decline (experiences engendering vulnerability) was also about relatedness (people not being as wonderful as previously believed) (Gottlieb et al., 2007). Among four different purpose orientations of college students; prosocial, financial, personal recognition, and creative; only prosocial orientation was found to be positively related to both satisfaction with the college experience and showed the most adaptive psychological profile and uniquely positively predicted generativity, personal growth, purpose, and integrity at middle adulthood after 13 years from the initial assessment (Hill, Burrow, Brandenberger, Lapsley, & Quaranto, 2010). According to a recent report from the University of Chicago Consortium on Chicago School Research, integrated identity, which was described as sense of internal consistency and coherence serving as an internal framework for one to make choices congruent with her values, beliefs and values, was one of the key factors of young adult success together with agency and competencies. Additionally, strong, supportive, developmental relationships with adults and peers were required to provide the social context to develop these key factors (Nagaoka et al., 2015). The eight dimensions of young adult development determined by the Search Institute and the Social Development Research Group based on an extensive theoretical and empirical literature, put the dimension of
healthy family and social relationships as the foundation for development of agency, identity, and commitment to community which lead to other seven developmental outcomes such as life skills, ethical behavior (Scales, Benson, Oesterle, Hill, Hawkins, & Pashak, 2016). Zepke and Leach (2010) synthesized 93 research studies from ten countries and identified four perspectives to make proposals for improvement of student engagement. These perspectives are motivation and agency of the student; transactions between teachers and students; institutional support and engagement for active citizenship. Including motivation and agency, all research perspectives invoke suggestions based on enhancing relationships and collaboration between parties. Therefore, new studies examining the characteristics of healthy integration which fosters healthy differentiation should be conducted in order to support both personal and academic development of university students.

The significance of gratitude for psychological health was again revealed in the current study that while predicting self-concept clarity indirectly through integration, it predicted presence of meaning in life directly. The important point regarding to this finding is, relatedness has no impact in this effect despite its strong associations with both gratitude and meaning in life. Although it needs further investigation, it is thought that the reason of this effect is gratitude’s encompassing of mattering. So, the effect of gratitude in psychological health is beyond its effect of engendering relatedness. Emmons and Stern (2013) emphasized the critical role of gratitude as,

Gratitude, in this profound sense, is not simply a mere attitude, a deep feeling, or even a desirable virtue. It is as elemental as life itself. In many world ethical systems, gratitude is the shaping and compelling force behind acts of compassion because life is seen as a vast network of interdependence, interpenetration, and mutuality that constitutes being. (p. 847)

Other empirical evidence also supports the salient role of gratitude. A study conducted with people from 54 nations and all 50 U.S. states (111,676 adult respondents) revealed gratitude as one of the most commonly endorsed strengths together with kindness, fairness, authenticity, and open-mindedness (Park, Peterson,
& Seligman, 2006). Additionally, in contrast to adults, gratitude was one of the robust predictors of life satisfaction among youth (Park & Peterson, 2006). Within a wide variety of strengths why gratitude stands out, is more understandable in the light of the finding that gratitude’s influence on well-being is not confined to relatedness. Moreover, the current study revealed that its experience is not always favorable for the individual. Therefore, gratitude is more than a positive emotion and it needs and deserves to be investigated further in order to understand and use it more effectively in interventions.

As discussed before, as a need meaning matters everybody regardless of being aware of it or not. The degree of mattering of this issue is depended on some personal characteristics like need for structure (Baldwin, Landau, & Swanson, 2017; Stavrova et al., 2020). Nevertheless, its close and consistent association with psychological needs (relatedness, autonomy), self-concept and well-being, is thought to show its significance for survival. Therefore, every psychological intervention has potential to affect meaning in life of people to some extent regardless of being discussed openly like in existential psychotherapy (Yalom, 1980). Interventions directly named and aimed meaning might not reach everybody since it can connote an intellectual inquiry. Nevertheless, they can be useful for some students that meaning-centered psychoeducational group interventions proved useful for well-being of university students (Cheng et al., 2015; Demirci Seyrek, 2017). Additionally, simply trying to increase gratitude or meaning in life does not work according to the findings of the current study. The complementary relationship between relatedness and individuation showed how gratitude and meaning in life are experienced differently in each self construal. The findings of some earlier studies also supported this interpretation. For example, to increase meaning in life by encouraging people to help others is not an effective solution. It was found that attachment moderated the relationship between caregiving orientations and meaning in life. Caregiving hyperactivation (being so involved in helping people who might not want support) and caregiving deactivation (lack of empathy and viewing others as burden)
orientations result in anxious, intrusive, overly self-focused forms of caring which lead to lower levels of meaning in life (Reizer et al., 2013). Similarly, aiming only to increase gratitude may not be helpful or it may be even worse. Oğuz-Duran and Tan (2013) investigated the effect of gratitude journaling and reported short lived, minor effect on well-being. Although self-critics (feelings of unworthiness, incompetence, and hopelessness) benefit from a gratitude intervention as increase in self-esteem and decrease in physical symptom severity, needy participants (sense of helplessness in need satisfaction, dependent on other people to be content) reported detrimental effects of the intervention on their self-esteem (Sergeant & Mongrain, 2011). So, tests of self orientations (differentiation, integration) might be helpful to evaluate students’ current functioning to determine specific needs and design interventions accordingly. For example for separated-patterned people, individual counseling might be more appropriate than group counseling since as the most unbalanced type they might have difficulty to meet demands of a group or different strategies and techniques are needed for related-patterned people and for separated-individuated people in a group process. Additionally, people might be attracted to seeking help in distinct ways due to their self construals. Individuated self-construal types might refrain from seeking help due to their self sufficient characters. So, they should be reached by using different strategies which do not threaten their self views. Lastly, not simply applying some methods or giving information but genuine interest and engagement lead to desirable outcomes in individuals. Since, Wilson (2016) reported that students who are reminded to practice gratitude reported more positive and calm attitude, focus in learning, effort amidst challenges and lessened stress than students who are not reminded though they practice gratitude on their own. Moreover, some of them also expressed their gratitude for reminders. So, the constructed relationship itself caused gratefulness much more than the technique used.

Finally, the matter should not be confined to developing psychoeducational interventions based on meaning in life or gratitude. Braskamp et al. (2008) stated that ‘…it takes a whole campus of whole persons to develop whole students’ (p. 27) for
guidance of students to find purpose and meaning in their lives. Supporting their idea, according to the results of a longitudinal study with over 14000 college students, within higher education multiple experiences at various levels such as studying abroad, engaging in cross-race discussions, participating more frequently in active forms of learning and service-learning, and frequent interactions with faculty predicted growth in prosocial orientation (Brandenberger & Bowman, 2015) which is a source of meaning. Since group counseling, workshops, seminars could reach a limited number of students, Shek (2010) proposed curricula-based courses in which intrapersonal competencies, interpersonal relationship skills, civic responsibilities, and citizenship are promoted to support holistic youth development. These suggestions are worth attention since narcissism, which is one of the strongest inhibitors of gratitude (Solom, Watkins, McCurrach, & Scheibe, 2017), anti-social and self-centered tendencies have been on the rise (Twenge & Foster, 2010; Twenge, Miller, & Campbell, 2014). According to young adults; enjoying life, obtaining material possessions, being happy come first in vision of a good life (Glanzer, Hill, & Robinson, 2015). ‘Generation Me’ is characterized by lowered interest in community, civic orientation, concern for others and increased interest in goals concerned with fame, money, image (Twenge et al., 2012). In line with these findings, positive Models of Others have decreased (Konrath, Chopik, Hsing, & O’Brien, 2014). So, any psychosocial effort to support students gained more importance and findings of the current and similar studies should be taken into consideration while planning programs about student affairs and educational activities.

5.3 Recommendations for Further Studies

Regarding to findings of the study, there are some recommendations to be made. First of all, there is unexplained variance in meaning in life. This was thought to be derived from other factors associated with self-concept clarity, gratitude or other factors which were not included in the Steger’s theory of meaning in life
(2009, 2012). Spirituality and religion are two other sources of meaning (Emmons, 2003; Schnell, 2009) and the transpersonal gratitude related to these sources might not be fully captured by the gratitude scale. So, a scale measuring interpersonal and transpersonal gratitude distinctively might be more useful to investigate their distinct influences.

Another factor which might be responsible for unexplained variance is the lack of clear understanding about mattering. This component of meaning in life has been recently given attention and there is not any consensus on its conceptualization whether it is derived from existential or quotidian sources (George & Park, 2016b). It is thought that the important point is not the source but content of mattering. Elliott et al. (2004) suggested three components of it; awareness (other is aware of my presence), importance (other is attentive to my needs) and reliance (other seeks support from me). These dimensions can guide new research about mattering since they are parallel to what Debats (1999) determined themes in personal meaning reports of participants; (1) devoting to a person, task, activity with energy, effort, commitment and (2) striving for satisfaction of relational needs (recognition, support, affiliation). Gratitude is thought to encompass all these dimensions. However, although reliance includes helping behavior which is a main source of meaning in life (Emmons, 2003; Schnell, 2009; Martela et al., 2017), helping does not always derive from being grateful. Additionally, it was thought that in the context of meaning in life, it incorporated more elements in its meaning that it might include not only providing support but also making a desirable change (from the perspective of the person) on not only lives of humans but also tasks and activities which were mentioned as themes of personal meaning reports by Debats (1999) and even all living things since meaning in life was found to fully mediate the relationship between nature connectedness and well-being (Howell, Passmore, & Buro, 2013). So, this can be viewed as mattering to the world. Literature about work meaning provides some support for this idea. Contribution is one of the pathways of experiencing meaningful work (Rosso et al., 2010). Expressing full potential is one
of the dimensions of meaningful work for Lips-Wiersma and Wright (2012). Frankl (1963) also asserted that meaning derives from creative sources such as accomplishment in art or work. Taken in tandem, in order to delineate the exact contributions of factors to meaning in life, mattering should be conceptualized more clearly and new measurement tools should be developed.

There are other potential factors which should be investigated in new models of meaning in life. One of these factors is personality which was related to meaning in life (Demirbaş, 2014; Steger et al., 2008a) and self-concept clarity (Campbell et al., 1996). Perceived parental attitudes were also related to meaning in life. Students with authoritarian parents score higher on search for meaning than students with democratic, unconcerned and protective parents (Yüksel, 2013). In parallel to this finding, Demir and Murat (2017) reported that students with democratic parents have more presence of meaning in life than students with authoritarian parents. These and other factors should be included in models with constructing their links to components (coherence, mattering) of meaning in life in later studies.

Until this time, too many factors have been examined regarding to meaning in life in the literature and the significant role of it in well-being is well known. Especially for young adults, due to developmental needs of this period (Arnett, 2000; Erikson, 1968), meaning in life gained more importance since, identity encompasses the association between the individual and the society (Johnson & Nozick, 2011) and active exploration of who to be, what to stand for by making decisions about goals, values, beliefs will eventually affect one’s meaning in life. University context has so many opportunities to support students in this process by creating a rich social learning environment through co-curricular activities, institutional culture, interactions with instructors and classmates. The experiences of young adults, who are not university students, will probably be different since they marry or work earlier than university students. Future work should investigate whether these different social experiences engender similar or distinct meaning in life trajectories.
Finally, based on the methodological limitations of the study, further recommendations should be made. Correlational design was utilized in the current study and cause-effect relationship cannot be inferred. Future studies with experimental designs will provide information about causality. Additionally, longitudinal data of the same model will enable more precise prediction. And lastly, the model should be tested in different samples.
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Işık, S., & Ergüner-Tekinalp, B. (2017). The effects of gratitude journaling on Turkish first year college students’ college adjustment, life satisfaction and positive affect. *International Journal for the Advancement of Counselling, 39*(2), 164-175.


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APPENDICES

A. APPROVAL OF METU HUMAN SUBJECTS ETHICS COMMITTEE

Sayı: 28620816 / 142

09 Nisan 2019

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (IAEK)

İlgili: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Prof. Dr. Ayhan DEMİR

Danışmanlığınızı yaptığınız Esra ÇEBİ'nin “Testing a model of Meaning in Life among University Students based on Balanced Integration-Differentiation Model, Gratitude and Self-Concept Clarity” başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve 152-ODTÜ-2019 protokol numarası ile onaylanmıştır.

Saygılarırmızla bilgilirinize sunarız

Prof. Dr. Ayhan SOL

Prof. Dr. Ayhan Gürbüz DEMİR

Prof. Dr. Yaşar KONDAKÇI

Doç. Dr. Emre SELÇUK

Doç. Dr. İpınar KAYGAN

Dr. Öğr. Üyesi Ali Emre TURGUT

Üye

Üye

Üye

Üye

Üye

Üye

Üye

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Değerli Katılımcı,

Bu araştırma ODTÜ Eğitim Bilimleri Bölümü öğretim üyesi Prof. Dr. Ayhan Demir danışmanlığında doktora öğrencisi Esra Çebi tarafından yapılmaktadır. Bu çalışmanın amacı üniversite öğrencilerinde minnettarlık, bütünleşme, ayrışma ve benlik belirginliği ile yaşamda anlam arasındaki ilişkilerin incelenmesidir. Çalışmaya katılmak gönüllülük esasına bağlı olup, elde edilecek bilgiler toplu olarak değerlendirilecek ve gizli tutularak bilimsel araştırma kapsamında kullanılacaktır. Sizden beklenen soruları samimiyetle ve eksiksiz olarak cevaplamanızdır. Anketi cevaplamanız yaklaşık olarak 15 dakika sürmektedir. Ankette kişisel rahatsızlığa neden olabilecek sorular olmadığı halde böyle bir durum hissederseniz ya da başka bir sebepten dolayı rahatsızlık hissederseniz, anketi cevaplamayı bırakabilirsiniz. Çalışmanın sonuçları hakkında bilgi edinemek isterseniz Esra Çebi (e-posta: e127615@metu.edu.tr) ile iletişim kurabilirsiniz.

Esra ÇEBİ
ODTÜ Eğitim Bilimleri
Doktora Öğrencisi

Yukarıdaki bilgileri okudum ve bu çalışmaya tamamen gönüllü olarak katılıyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyad Tarih İmza
---/----/-----
C. DEMOGRAPHIC INFORMATION FORM

1. Yaşınız:.....

2. Cinsiyetiniz: ( ) Kadın ( ) Erkek

3. Sınıfınız: ( ) Hazırlık ( ) 1 ( ) 2 ( ) 3 ( ) 4

4. Fakülteniz: ( ) Mühendislik ( ) Eğitim ( ) İktisadi ve İdari Birimler ( ) Mimarlık ( ) Fen Edebiyat

5. Nerede kalıyorsunuz?
   ( ) Yurt ( ) Aile yanı ( ) Ev
   ( ) Diğer........(belirtiniz)

6. Şu anda romantik bir ilişkiınız var mı? ( ) Evet ( ) Hayır
   Cevabınız evet ise ilişkinizden ne derece memnunsunuz? Uygun rakamı daire içine alarak belirtiniz.
   1 2 3 4 5
   Hiç memnun Çok
   değilim memnunum
D. SAMPLE ITEMS FROM BALANCED INTEGRATION DIFFERENTIATION SCALE (BIDS)

1. Kendi kendime kaldığında yapacak ilginc şeyler bulabilirim.
8. Kendimi yakın çevremden duygusal olarak kopmuş hissediyorum.
10. Hayatta gerçekleştirmek istediğim şeyler için çalışırken, ailemin sevgi ve desteği hep yanımda hissederim.
17. Kendimi ilginc bulunuyorum.
21. İnsanın kendi özelliklerini geliştirip ortaya çıkarabilmesi gerekir.
27. Çevreme ters gelse bile, kendime özgü bir amaç için yaşayabilirim.
E. SAMPLE ITEMS FROM TURKISH VERSION OF MEANING IN LIFE SCALE (MIL)

1. Hayatımın anlamını kavıyorum.
4. Hayatımın net bir amacı var.
7. Sürekli bana kendi hayatımın önemli olduğunu hissettirecek bir şeyin arayışı içerisindeyim.
F. SAMPLE ITEMS FROM TURKISH VERSION OF GRATITUDE QUESTIONNAIRE (GQ)

4. Çok çeşitli insanlara minnettarım.
3. Kişiliğimi nasıl tanımladığım sorulsa, yapacağım tanıım bir günden diğerine değişebilir.

7. Kişiliğimin farklı yönleri arasında pek çelişki yoktur.

10. İstesem bile başka birine, gerçekten nasıl biri olduğumu anlatabileceğimi sanmıyorum.

H. CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Çebi, Esra
Nationality: Turkish (TC)
Date and Place of Birth: 12 February 1983, Çankırı
Marital Status: Married
email: escebi@gmail.com

EDUCATION

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WORK EXPERIENCE

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<td>Psychologist</td>
</tr>
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<td>Rize Police Department</td>
<td>Psychologist</td>
</tr>
</tbody>
</table>

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**PUBLICATIONS**

**INTERNATIONAL**

Full paper published in a peer reviewed journal


**NATIONAL**

**JOURNAL PAPER**

Full paper published in a peer reviewed journal

1. GİRİŞ


Son olarak, bütünleşme ve farklılaşma birbirini tamamlayan süreçler olduklarını için (İmamoğlu, 2003), yaşama anlamın varlığını, minnettarlığı ve benlik belirginliğini yordayıcı etkilerinin benlik kurşularına göre değişeceğini düşünülmektedir. Örneğin sağlıklı farklılaşma, insanlarla ilişki içinde olmayı gerektirmektedir (İmamoğlu, 2003). Bundan ötürü kopuk kendileşme ve ilişkili kendileşme benlik kurşuna sahip bireylerin farklılaşma deneyimlerinin, yaşama anlamın varlığını ve aranan anlam üzerindeki yordayıcı etkisi de değişkenlik gösterecektir. Benzer olarak, minnettarlık herkes için her zaman pozitif bir duyguydu ve anlaşılan, suçluluş, borçlu olmak gibi duygularla eşleştirilebilmektedir (Morgan vd., 2014; Waters ve Stokes, 2015). Nitekim kopuk kendileşme benlik kurşuna benzyen özerk kişilerarası ilişki tarzına sahip bireylerin minnettarlığını daha az deneyimledikleri ve değer verdikleri bulunmuştur (Parker vd., 2016). Bütünleşme ve farklılaşmanın tamamlayıcı süreçler olmalarının, aranan anlamın özellikleri konusunda da değişken sonuçlar ortaya koyması beklenmektedir. Çünkü anlam arayışı, her zaman anlam eksikliğinin bir sonucu değildir (Steger vd., 2006) ve bireyler, var olan anlamların artırmak, geliştirmek içinde anlam arayışında bulunabilirler (Grouden,


1.1 Çalışmanın Amacı

Bu çalışmanın ana amacı, benlik kurgusunun (bütünleşme, ayrışma), minnettarlığın ve benlik belirginliğinin yaşamda anlam (yaşamda anlamın varlığı, yaşamda anlam arayışı) ile ilişkilerinin üniversiteler öğrencilerinde incelenmesidir. İkinci olarak, Dengeli Bütünleşme Ayrışma Modelindeki dört benlik kurgusunun, yaşamda anlamın varlığı, yaşamda anlamın arayışı, minnettarlık ve benlik belirginliği üzerindeki etkisini ve demografik değişkenlerin (cinsiyet, sınıf, fakülte, kalınan yer, ilişki durumu) yaşamda anlamın varlığı, yaşamda anlam arayışı, minnettarlık, bütünleşme, ayrışma ve benlik belirginliği üzerindeki etkisini araştırmaktır.
1.2 Çalışmanın Önemi


Gençlerin bir bütün olarak gelişmek ve kendilerini gerçekleştirmek için fırsatlarla ihtiyaçları vardır. Bundan ötürü yetiştirilmiş, akademik eğitimin gi daha fazlasını içermektedir (Robinson vd., 2006). Robinson ve Glanzer (2016) tarafından yürütülen bir çalışma, öğrencilerin %76,2’sinin, üniversite öğreniminin yaşam amaçlarını geliştirmelerini sağlayacağı beklentisi içinde olduklarını bildirmıştır. Amerika Birleşik Devletlerindeki bazı üniversiteler bu etkinin farkında olup, üniversite öğreniminin pek çok bileşeni (müfredat, müfredat dışı etkinlikler vb.), öğrencilerin yaşama anlam ve amaçlarını bulmalarına ve entellektüel gelişmelerine yardımcı olacak şekilde yapılandırılmışlardır (Braskamp vd., 2008; Thompson ve


2. YÖNTEM

2.1 Araştırmanın Deseni

Bu araştırmda bütünleşmenin, ayrıışmanın, minnettarlığın ve benlik belirginliğinin, yaşamda anlamın varlığını ve yaşamda anlam arayışını ne ölçüde yordadığı araştırılmıştır. Bu amaçla değişkenler arasındaki ilişkileri incelemek için ilişkisel araştırma deseni (Fraenkel vd., 2012) kullanılmıştır.
2.2 Örneklem ve İşlem


2.3 Ölçme Araçları

2.4 Analiz Planı

Bu çalışmada öncelikle değişkenlerin betimsel analizleri ve ölçeklerin faktör yapılarını test etmek için doğrulayıcı faktör analizleri yapılmıştır. Daha sonra demografik değişkenlerin (cinsiyet, sınıf, fakülte, kalınan yer, ilişki durumu) yaşamda anlamın varlığı, yaşamda anlamın arayışı, minnettarlık, bütünleşme, ayrışma ve benlik belirginliği üzerinde etkisini ve Dengeli Bütünleşme Ayırışma Modelindeki dört benlik kurgusunun, yaşamda anlamın varlığı, yaşamda anlamın arayışı, minnettarlık ve benlik belirginliği üzerindeki etkisini ölçmek için MANOVA kullanılmıştır. Son olarak benlik kurgusunun (bütünleşme, ayrışma), minnettarlık ve benlik belirginliğinin yaşamda anlam (yaşamda anlamın varlığı, yaşamda anlam arayışı) ile ilişkilerinin oluşturduğu model, Yol Analizi ile test edilmiştir. Betimsel analizler, MANOVA için IBM SPSS 20 ve Doğrulayıcı Faktör Analizleri, Yol Analizi için de IBM AMOS 23 kullanılmıştır.

3. BULGULAR

3.1 Demografik Değişkenlerin Yaşamda Anlamın Varlığı, Yaşamda Anlam Arayışı, Minnettarlık, Bütünleşme, Ayırışma ve Benlik Belirginliği Üzerindeki Etkisi

Demografik değişkenlerin (cinsiyet, sınıf, fakülte, kalınan yer, ilişki durumu) yaşamda anlamın varlığı, yaşamda anlam arayışı, minnettarlık, bütünleşme, ayrışma ve benlik belirginliği üzerindeki etkisi, tek yönlü MANOVA analizleri ile incelenmiştir. Katılımcıların sınıf, fakülte ve kalınan yere göre yaşamda anlamın varlığı, yaşamda anlam arayışı, minnettarlık, bütünleşme, ayrışma ve benlik belirginliğinde farklılıklar mevcut olup, tek yönlü MANOVA analizleri ile incelenmiştir. Katılımcıların sınıf, fakülte ve kalınan yere göre yaşamda anlamın varlığı, yaşamda anlam arayışı, minnettarlık, bütünleşme, ayrışma ve benlik belirginliğinde farklılıklar mevcut olup, tek yönlü MANOVA analizleri ile incelenmiştir. Sadece cinsiyet (Pillai’s Trace = .06, F (6, 818) = 9.55, p < .001, η² = .06) ve ilişki durumuna (Wilks’s λ = .95, F (6,817) = 6.95, p < .001, η² = .05) göre bazı farklılıklar bulunmuştur. Bağımsız değişkenin bağımlı değişkenin her biri üzerindeki etkisine bakıldığında katılımcıların,
minnettarlık ($F(1,823) = 19.90, p < .001, \eta^2 = .02$) ve bütünleşme ($F(1,823) = 15.95, p < .001, \eta^2 = .02$) üzerinden aldıkları puanlar, cinsiyete göre farklılaşmaktadır. Kadın katılımcılar erkeklere göre daha fazla minnettarlık ve bütünleşme bildirmişlerdir fakat etki büyüğü küçütür. İlişki durumunu bakıldığında ($Wilks's \lambda = .95, F(6,817) = 6.95, p < .001, \eta^2 = .05$) anlamlı fark varındır. Bağımsız değişkenin bağımlı değişkenin her biri üzerindeki etkisine bakıldığında, yaşamda anlamın varlığı ($F(1,822) = 7.84, p = .005, \eta^2 = .01$), aranan anlam ($F(1,822) = 21.49, p = .000, \eta^2 = .02$), minnettarlık ($F(1,822) = 9.98, p = .002, \eta^2 = .01$) ayrışma ($F(1,822) = 8.66, p = .003, \eta^2 = .01$) ve benlik belirginliğinde ($F(1,822) = 7.19, p = .007, \eta^2 = .01$) anlamlı farklılık bulunmuştur. Romantik bir ilişkisi olan katılımcılar olmayanlara göre daha fazla anlam, minnettarlık, ayrışma, benlik belirginliği ve daha az aranan anlam bildirmişlerdir fakat etki büyüklükleri yine küçütür.

### 3.2 Benlik Kurgusunun, Yaşamda Anlamın Varlığı, Yaşamda Anlam Arayışı, Minnettarlık ve Benlik Belirginliği Üzerindeki Etkisi

Dengeli Bütünleşme Ayırışma Modelindeki dört benlik kurgusunun, yaşamda anlamın varlığı, yaşamda anlam arayışı, minnettarlık ve benlik belirginliği üzerindeki etkisini ölçmek için MANOVA kullanılmıştır. Katılımcıların hangi benlik kurgusuna sahip olduğunu belirlemek için ayrışma (kopuk-kendileşme) ve bütünleşme (kopuk/ilişkili) puanlarının ortancasına göre alt ve üst uçları kullanarak dört grup oluşturulmuştur. Buna göre katılımcıların 229’u (% 27.8) ilişkili-kendileşme, ($Bütünleşme \bar{X} = 66.64, ss = 5.62, Ayırışma \bar{X} = 55.87, ss = 3.68$), 205’i (% 24.8) kopuk-kendileşme ($Bütünleşme \bar{X} = 49.08, ss = 7.77, Ayırışma \bar{X} = 55.29, ss = 3.49$), 184’ü (% 22.3) kopuk-kalıplaşma ($Bütünleşme \bar{X} = 50.22, ss = 6.24, Ayırışma \bar{X} = 45.59, ss = 4.17$) ve 207’si (% 25.1) ilişkili-kalıplaşma ($Bütünleşme \bar{X} = 65.95, ss = 5.15, Ayırışma \bar{X} = 46.12, ss = 3.09$) benlik kurgusuna sahiptir. Tek yönlü MANOVA analizine göre katılımcıların benlik kurgusuna göre aldıkları puanlar, yaşamda anlamın varlığı, yaşamda anlam arayışı, minnettarlık ve
benlik belirginliğine göre farklılık göstermektedir (Pillai’s Trace = .29, F (12, 2460) = 22.34, p < .001, η² = .10). Bağımsız değişken bağımlı değişkenin her biri üzerindeki etkisine bakıldığında yaşamda anlam (F (3, 821) = 42.76, p = .000, η² = .14), aranan anlam (F (3, 821) = 9.69, p = .000, η² = .01), minnettarlık (F (3, 821) = 51.80, p = .000, η² = .16) ve benlik belirginliğinde (F (3, 821) = 44.18, p = .000, η² = .14) anlamli farklılıklar bulunmuştur. Aranan anlam dışında (küçük etki), bütün etki büyüklükleri büyük düzeydedir. Özetle, ilişkili-kendileşme benlik kurgusuna sahip bireyler diğer tüm benlik kurgularından; ilişkili-kalıplaşma benlik kurgusuna sahip bireyler ise kopuk-kalıplaşma ve kopuk-kendileşme benlik kurgusuna sahip bireylerden daha yüksek yaşamda anlam puanına sahiptir. İlişkili-kendileşme ve ilişkili-kalıplaşma benlik kurgusuna sahip bireyler, kopuk-kalıplaşma ve kopuk-kendileşme benlik kurgusuna sahip bireylerden daha yüksek minnettarlık ve benlik belirginliğine sahiptir. İlişkili-kendileşme ve ilişkili-kalıplaşma benlik kurgusuna sahip bireyler, kopuk-kendileşme benlik kurgusuna sahip bireylerden daha az aranan anlam puanına sahiptir. Kopuk-kalıplaşma ve kopuk-kendileşme benlik kurgusuna sahip bireyler arasında ve ilişkili-kendileşme ve ilişkili-kalıplaşma benlik kurgusuna sahip bireyler arasında minnettarlık ve benlik belirginliği açısından bir fark yoktur. Son olarak ilişkili-kendileşme, ilişkili-kalıplaşma ve kopuk-kalıplaşma arasında aranan anlam açısından fark yoktur.

3.3 Yol Analizleri

Benlik kurgusunun (bütünleşme, ayrışma), minnettarlığın ve benlik belirginliğinin yaşamda anlam (yaşamda anlamın varlığı, yaşamda anlam arayışı) ile ilişkilerinin oluşturulduğu model, her benlik kurgusu için ayrı ayrı test edilmiştir. Yol analizi sonuçlarına göre ilişkili-kendileşme benlik kurgusuna sahip bireyler için modelin uyum iyiliği indeksleri mükemmel uyum göstermektedir; (χ²(1) = 1.219, p > .05), χ²/df = 1.219, CFI = .99, GFI = .99, RMSEA = .03 ve SRMR = .02. Buna göre bütünleşme, minnettarlık ile benlik belirginliği arasında tam arac rol oynarken, benlik belirginliği de hem bütünleşme hem de ayrışma ile var olan anlam (pozitif)
ve aranan anlam (negatif) arasında tam aracı rol oynamaktadır. Minnettarlığın var olan anlam üzerinde dolayılı etkisi olmamasına rağmen doğrudan etkisi vardır. İlişkili-kalıplaşma benlik kurgusuna sahip bireyler için modelin uyum iyiliği indeksleri de mükemmel uyum göstermektedir; ($\chi^2(1) = 0.28, p > .05$), $\chi^2/df = 0.28$, $CFI = 1.00$, $GFI = 1.00$, $RMSEA = .00$ ve $SRMR = .00$. Buna göre bütünleşme, minnettarlık ile benlik belirginliği arasında tam aracı rol oynarken, benlik belirginliği de sadece bütünleşme ile var olan anlam (pozitif) ve aranan anlam (negatif) arasında tam aracı rol oynamaktadır. Minnettarlığın var olan anlam üzerinde dolayılı etkisi olmamasına rağmen doğrudan etkisi vardır. Kopuk-kendileşme benlik kurgusuna sahip bireyler için modelin uyum iyiliği indeksleri de mükemmel uyum göstermektedir; ($\chi^2(1) = 1.557, p > .05$), $\chi^2/df = 1.557$, $CFI = 1.00$, $GFI = 1.00$, $RMSEA = .05$ ve $SRMR = .02$. Buna göre bütünleşme, minnettarlık ile benlik belirginliği arasında tam aracı rol oynarken, benlik belirginliği de sadece bütünleşme ile var olan anlam (pozitif) ve aranan anlam (negatif) arasında tam aracı rol oynamaktadır. Minnettarlığın var olan anlam üzerinde ise hem doğrudan hem de dolayılı etkisi vardır. Dolayısıyla, minnettarlığın var olan anlam üzerinde kısımı aracı rolü vardır. Kopuk-kalıplaşma benlik kurgusuna sahip bireyler için modelin uyum iyiliği indeksleri de SRMR dışında mükemmel uyum göstermektedir; ($\chi^2(1) = 2.587, p > .05$), $\chi^2/df = 2.587$, $CFI = .99$, $GFI = 1.00$, $RMSEA = .02$ ve $SRMR = .09$. Buna göre minnettarlığın bütünleşme üzerinde ve benlik belirginliğinin aranan anlam üzerinde (negatif) doğrudan etkisi bulunurken, benlik belirginliği de sadece ayrışma ile var olan anlam arasında (negatif) tam aracı rol oynamaktadır. Özetle, test edilen modelde her benlik kurgusu için değişen doğrudan ve dolayılı etkiler bulunmuştur.
4. TARTIŞMA

4.1 Demografik Değişkenlerin Yaşamda Anların Varlığı, Yaşamda Anlam Arayışı, Minnettarlık, Bütünleşme, Ayrışma ve Benlik Belirginliği Üzerindeki Etkisinin Tartışılması


4.2 Benlik Kurgusunun, Yaşamda Anlamın Varlığı, Yaşamda Anlam Arayışı, Minnettarlık ve Benlik Belirginliği Üzerindeki Etkisinin Tartışılması

Dengeli Büünleşme Ayrımcı Modelindeki dört benlik kurgusunun, yaşama anlamın varlığı, yaşamda anlam arayışı, minnettarlık ve benlik belirginliği üzerinde etkisini incelenmek için uygulanan tek yönü MANOVA anlamlı farklılıklar göstermiştir. İlişkili-kendileşme benlik kurgusuna sahip bireyler diğer tüm benlik kurgularından; ilişkili-kalıplama benlik kurgusuna sahip bireyler ise kopuk-kalıplama ve kopuk-kendileşme benlik kurgusuna sahip bireylerden daha yüksek yaşamda anlam puanına sahiptir. Bu sonuç, ilişkili-kendileşme benlik kurgusunun en değerli ve optimal psikolojik işleyişe sahip olduğu bulgusuyla uyum içindedir


4.3 Yol Analizlerinin Tartışılması


İlişkili-kendileşmiş ve ilişkili-kalıplaşmış bireyler için minnettarlık var olan anlam üzerinde doğrudan etkilidir. Bu bulgu da minnettarlığın var olan anlam ile ilişkisini ortaya koyan önceki çalışmaları tutarlı olup (Disaboto vd., 2016; Kleiman vd., 2013; Van Tongeren vd., 2015; Wood vd., 2009), bu bağlantının bütünleşme

Minnettarlığa benzer şekilde, bütünleşme ve ayrışmanın yordayıcı etkisi de her benlik kurgusu için değişmektedir. Tüm benlik kurgularında ortak olan tek bulgu

Aranan anlam ve var olan anlam arasındaki ilişki, benlik kurucusuna göre değişkenlik göstermektedir. Kopuk-kendileşmiş ve ilişkili-kalıplaslanmış bireyler için olumsuz ilişki, ilişkili-kendileşmiş ve kopuk-kalıplaslanmış bireyler için anlamsız ilişki

(Landau vd., 2009). Dolayısıyla benlik belirginliğinin sadece var olan anlamı değil aranan anlamı da yordamasi önceki bulgularla uyumluştur.

4.4 Araştırma ve Uygulamaya Yönelik Öneriler

doğuştan gelen bir ihtiyaç olduğunu ve anlamaya yönelik tehditleri giderme ihtiyacıının, tehdit benlikle ne kadar ilgiliyse o kadar büyük olduğunu belirtmiştir. Ayrıca, benlik kavramının psişenin özüne ait bir parça olmasından dolayı benlik belirginliğinin yüksek kararlılık gösterdiği, yüksek öz yansıtma zorunluluğunu savunmacılığı ile olumlu ilişki içinde olduğu bildirilmiştir (Johnson ve Nozick, 2011). İyiilik hali ile sıkı ilişki de göz önünde bulundurulduğunda (Steger, 2018a), yaşamda anlamın bireyin işlevselliğinin temel bir parçası olduğu düşünülmektedir. Dolayısıyla yaşamda anlam sadece varoluşsal kayıtları olan bazı bireylerin deneyimlediği bir tecrübe olmayıp, tüm insanları ilgilendiren ve daha fazla araştırılmasını hak eden bir konudur.

her türlü girişime rehberlik etmesi için, bireylerin sağlıklı ayrışmasını da (kendileşmesini) destekleyecek sağlıklı bütünleşmenin nasıl olması gerektiğini ile ilgili daha fazla çalışma yapılmasını yararlı olacaktır.


Sergeant ve Mongrain, 2011) elde edilen verilerle daha anlaşılabilir olmuştur. Bütünleşme ve ayrışmanın birbirini tamamlayıcı süreçler olarak her benlik kurgusunda yarattığı etki, minnettarlık ve yaşamda anlamın, kişilerce ne kadar farklı şekillerde deneyimlenebildiğini göstermiştir. Bütünleşme ve ayrışmayı değerlendiren testlerin kullanılmasıyla, bireylerin psikolojik ihtiyaçları konusunda daha detaylı bilgilerin elde edilerek daha verimli hizmetlerin verilmesi sağlanabilir. Örneğin, kopuk-kalıplaslanmış bireyler grupla danışma için uygun adaylar olmayabilir.


4.5 Gelecek Çalışmalar için Öneriler

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