SENSE OF EMPTINESS: DEVELOPMENT AND VALIDATION OF A SCALE

A Dissertation

by

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This dissertation meets the standards for scope and quality of Texas A&M University-Corpus Christi and is hereby approved.

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ABSTRACT

Sense of emptiness is a common human experience and a prevalent mental health issue, included as a diagnostic criterion and/or associated with several mental health disorders. Despite its prevalence and clinical relevance, clinicians are still in need of a clear and consistent way of understanding and assessing this phenomenon, as there has been limited empirical research concerning this topic. Therefore, the present study focused on the development and validation of a measure, Multidimensional Sense of Emptiness Scale [MSES], to provide researchers and mental health practitioners with a method to accurately assess and diagnose mental health issues associated with emptiness.

The initial step of this study was to explore the factorial structure of the emerging instrument within a sample of 405 college students, using principle axis factoring with a direct oblimin rotation. This analysis resulted in the emergence of a four-factor solution, explaining 91.18% of the variance: (a) Sense of Inner Emptiness [SIE], (b) Sense of Meaninglessness [SM], (c) Sense of Absence of Relatedness [SAR], and (d) Sense of Spiritual Emptiness [SSE]. The next step was to examine the internal consistency reliability coefficients of the MSES and the emerged subscales. Reliability estimates of .98, .97, .97, .98, and .97 were for the MSES as well as for the SIE, the SM, the SAR, and the SSE, respectively. With regard to establishing evidence based on relations to other variables, student scores on the MSES correlated significantly with the Suicide Probability Scale. In addition, statistically significant negative relationships were found between scores on the MSES and the Brief Resilience Scale, the Adult Trait Hope Scale, and the Meaning in Life Questionnaire.
The results derived from our psychometric evaluation provide a basis for conceptualizing emptiness as a multidimensional experience as well as indicate substantial utility of the 27-item MSES in counseling research and clinical practice as a valid and reliable instrument for assessing young adults’ levels of experienced emptiness. Further, we believe the high correlation identified between the MSES and the SPS allows this new instrument to be considered for suicide screening and assessment as a marker for suicide attempts.
DEDICATION

To my loving parents, Halise & Rustem Ermis, who encouraged me to achieve my goals and taught me integrity and the value of the human connection.

To my lovely daughter, Busra Betul, who completely changed my life from the moment I felt her presence and brought joy and true love to my life.

To my students in Turkey and individuals all around the world who have and do suffer from the immense, unbearable pain of emptiness.
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“So verily, with the hardship, there is a relief…”

The Holy Qur’an, Surah Al-Inshirah, Verse 5

“Know that victory comes with patience, relief with affliction, and ease with hardship.”

Prophet Muhammed

“Do not feel lonely; the entire universe is inside you!”

“The moon stays bright when it does not avoid the night!”

Mevlana (Rumi)

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CHAPTER I: INTRODUCTION

Globally, the burden of mental disorders continues to grow with significant impact on health and major social, human, and economic consequences in all countries of the world (World Health Organization, [WHO], 2016). Results from a review of 174 surveys across 63 countries indicated that one in five adults (17.6 %) on average experienced a common mental disorder within the past 12 months and 29.2% across their lifetime (Steel et al, 2014). In the United States [US], mental health disorders affect millions of adolescents and adults and contribute heavily to the burden of disease (Center for Behavioral Health Statistics and Quality, [CBHSQ], 2015). According to the National Institute of Mental Health (NIMH, 2016), 18.1% of U.S adults experience anxiety disorders, 9.5% of U.S adults are affected by mood disorders, and 9.1% experience personality disorders with an estimated 12-month prevalence.

Emptiness is included as a diagnostic criterion in the Diagnostic and Statistical Manual-5 [DSM-5] by American Psychiatric Association (APA, 2013) as well as in the Tenth Revision of the Mental and Behavioral Disorders chapter of the International Statistical Classification of Diseases and Related Health Problems [ICD-10] by the World Health Organization (WHO, 1992) –the premier manuals for identifying mental disorders- for several mental health problems including major depressive disorder (MDD; feeling empty; feelings of emptiness) and BPD (chronic feelings of emptiness; APA, 2013; WHO, 1992). The feeling of emptiness has also been associated with narcissistic personality disorder (Blasco-Fontecilla et al., 2013; Gruba-McCallister, 2007; Dimaggio et al., 2008; LaFarge, 1989); bulimia nervosa (Diena, 2015; Meehan, 2007); persistent complex bereavement disorder (Parkes, 2001); and alcohol, drug and sex addictions (Cushman, 1990; Haroosh & Freedman, 2017; May, 1953; Roos, Kriouac, Pearson, Fink, & Witkiewitz, 2015; Thomas, 2014).
In addition, the sense of emptiness has been regarded as a prevalent mental issue (Ellison et al., 2016; Peteet, 2011). For instance, in an empirical study conducted by Johansen, Karterud, Pedersen, Gude, and Falkum (2004) in a clinical setting, 73% of clients with borderline personality disorder [BPD] and 34% of clients without BPD reported the feeling of emptiness. Despite its prevalence, the emptiness state is considered to be the most difficult symptom to understand and explain clinically among all of the DSM-5 criteria particularly used to diagnose BPD (Aguirre & Galen, 2013) as well as one of the least researched DSM criteria, receiving inadequate interest (Klonsky, 2008). Blasco-Fontecilla, Leon-Martinez, Delgado-Gomez, Giner, Guillaume, and Courtet (2013) indicated absence of up-to-date, valid, and reliable instruments to accurately assess and diagnose mental health issues associated with emptiness and attributed the difficulty empirically studying this construct to the lack of standardized scales.

Emptiness is a common human condition (Cushman, 1990; Peteet, 2011); therefore, the phenomenon of emptiness has been reflected upon by numerous scholars from multifarious disciplines (Bugs, 1996) from poet to theologian (Mitchell, 2000). Countless attempts have been made to explain different facets of the emptiness construct including poetry, plays, visual arts, and novels (Bugs, 1996; Hazell, 2003) because the nature of this concept might be ambiguous and arduous to describe in technical language (Blasco-Fontecilla et al., 2013; Mitchell, 2000). In early works of Dostoyevsky (1868/1930) and Tolstoy (1868/1930), references to the sense of emptiness have been encountered as a form of artistic expressions. They explored this phenomenon tentatively in their novels. Sartre (1956), an existentialist philosopher, continued this exploration from a philosophical perspective and associated the emptiness experience to modern existential thought. Theologians have also investigated this experience by approaching it from a spiritual perspective. Christian theologian Paul Tillich (1952) linked emptiness to
existential anxiety, which is predominant in modern culture. Other theological scholars interested in Buddhism, such as Suzuki (1935, 1956) and Streng (1967), approached emptiness from a different perspective and regarded this experience as a transcendental state.

After the second half of 1900s, the state of emptiness has fallen under the searching glare of psychological inquiry and started to be examined by psychology-oriented writers, clinicians, and researchers. Existential psychologists such as May (1953) and Frankl (1959) attempted to clarify the nature of emptiness. Then, psychoanalysts such as Kohut (1971) and Kernberg (1976) and other psychologists such as Hazell (1982, 1984, 2003) and Cushman (1990) offered diverse explanations about the aspects of this notion. Some also attempted to describe the feeling itself and suggested treatment strategies for alleviating the suffering of their clients experiencing emptiness (Buggs, 1996).

As an existential psychologist, Rollo May (1953) linked the emptiness experience to anxiety and regarded emptiness and loneliness as two phases of anxiety. According to May (1953), the people who experience emptiness not only do not know what they want, but also have no clear idea about how they feel. May (1953) also associated emptiness or reactions to it with drug addiction because the individual, lacking a clear internal sense of self, attempts to create an artificial experience to fill up this emptiness with oneself. Another existential psychologist, Frankl (1959), coined the term *existential vacuum* (p. 106); aspects of this term are similar in meaning to the term emptiness (Hazell, 1982, 2003). Frankl (1959) hypothesized humankind being in quest of a sense of meaning in their lives, as opposed to a search for power or pleasure as posited by Adler and Freud respectively. The frustration of the will to meaning results in meaninglessness and inner emptiness. Frankl (1959) dealt extensively with the concept
of emptiness and theorized this concept as being composed of two states: a sense of meaninglessness and a sense of inner emptiness.

Cushman (1990) analyzed the emptiness concept from a social perspective and identified this construct with a consequence of significant lack of community, tradition, and shared meaning. According to Cushman (1990), this type of experience of social absences results in a lack of personal conviction and worth, and ultimately results in chronic emotional hunger, that is, emptiness. People who experience emptiness clearly desire to relate to someone else, but they seem to have no idea as to how to go about doing so, as if they lacked directions or had no road map (Bach, Grossmark, & Kandall, 2014). Therefore, people who experience emptiness yearn to acquire and consume as an unconscious way of compensating for what has been lost.

The spiritual aspect of psychological emptiness addressed by Dunn (1994) remained relatively unnoticed by many within the literature. However, Dunn (1994) believed spiritual emptiness was a crucial factor significantly contributing to a sense of emptiness. Spiritual emptiness refers to the difficulty in answering existential and transcendent questions, the inability to feel spiritual emotions—an instance of emotional numbing (Ho & Ho, 2007), and feelings of disconnection from God/a Higher Power valued by the individual (Arndt et al., 2013).

The nature and form of the emptiness construct may be elusive and difficult to express in technical language; therefore, several attempts have been made to develop scales to capture aspects and to identify discrete factors of this construct (Buggs, 1996). The initial attempt resulted in the development of the Experienced Level of Emptiness Scale (Hazell, 1982, 1984) consisting of two subscales: (a) Experienced Level of Existential Emptiness containing eight items and (b) Experienced Level of Existential Concern including nine items. Buggs (1996) made another attempt by developing the Emptiness Scale. The researcher proposed a two-factor
structure for emptiness: a) an inner sense of emotional hunger and yearning including 20 items and b) a generalized sense of emotional numbness containing eight items. However, accounting for 49% of the variance, factor analysis indicated a one-factor solution as a combination of a generalized sense of emotional numbness and an inner sense of emotional hunger and yearning.

Hazell (1982, 1984) and Buggs (1996) established an empirical foundation with their pioneering research from which to further explore the topic, sense of emptiness. With their endeavor to develop researched and validated instruments to gauge the emptiness experience and identify discrete factors of this construct, both researchers contributed to the psychological emptiness literature providing a base for continued exploration. However, these scales have deficiencies based on the samples they were developed in used, their theoretical foundations, and their internal consistency reliability.

Despite the abundance of theory regarding emptiness and two scale development studies aiming at clarifying the structure of this phenomenon, the emptiness experience has obtained minimal empirical interest among researchers in the counseling field. Conceptually, the sense of emptiness has been related to several psychological constructs such as narcissism (Gruba-McCallister, 2007; Zerach, 2016), loneliness (Clum, 1997), hopelessness (Klonsky, 2008), emotional abuse (Mitchel, 1999), guilt (Adolfson, Larsson, Wijma, & Bertero, 2004), feeling of dissociation (Rallis, Deming, Glenn, & Nock, 2012), disordered eating (Meehan, 2007), and compulsive buying (Zerach, 2016). Yet, the emptiness experience has been more often associated with suicide risk (Blasko-Fontecilla et al., 2013; Klonsky, 2008; Segal-Engelchin, Kfir-Levin, Neustaedter, & Mirsky, 2015).

Suicide, a global mental issue, remains among the most tragic consequences of psychological pain (Zepinic, 2009), accounting for 1.6% of all deaths worldwide and making it
the 17th leading cause of death in 2015 (WHO, 2017) and the second among persons aged 15-34 (Drapeu & McIntosh, 2015). According to a study including 274 psychology college students, 24.7% of participants had a history of suicidal ideation and 6.9% reported at least one suicide attempt (Klonsky, 2008). To date, researchers have traditionally focused on identifying potential risk factors for suicide (Marco et al., 2017). In several qualitative studies, emptiness appeared to be an important element of individuals who commit suicide (Chia, Chia, & Tai, 2008; Kramer, 2002; Segal-Engelchin et al., 2015; Shields, Kavanagh, & Russo, 2017). For instance, a study analyzing the content of 398 Singaporean suicide letters illustrated the sense of emptiness as the second most frequent emotional factor expressed for suicide (25%) following despondency/agony (60%; Chi et al., 2008). These results together indicate the emptiness state as a factor contributing to the risk of suicide. Suicide risk, in this study, is defined as the probability of a person to commit suicide including four components: hopelessness, suicidal ideation, negative self-evaluation, and hostility (Cull & Gill, 2002; Valadez et al., 2009).

Furthermore, the empirical inquiry of the relationship of the emptiness concept with positive psychology constructs, such as hope, meaning in life, and resilience, has received less interest in the field, even though the correlation has been addressed conceptually. Snyder (1996) defines hope as goal-directed thinking in which the individual perceives oneself as being capable of finding ways to reach goals (pathways thinking) and has the motivation to utilize those pathways (agency thinking). According to Cheng et al., (2013), the emptiness state is characterized with a loss of hope, meaning, and purpose in life, suggesting the presence of hope as a buffer against this psychological experience. Therefore, we hypothesize a negative correlation between the Multidimensional Emptiness Scale and the Adult Trait Hope Scale (Snyder et al., 1991).
Frankl (1959), particularly his book *Man's Search for Meaning*, has been given credit for the emergence of meaning as an important psychological construct (Steger, Frazier, Oishi, & Kaler, 2006). Meaning in life is defined as ‘the sense made of, and significance felt regarding, the nature of one’s being and existence’ (Steger et al., 2006, p. 81). Frankl (1959) delineated man’s search for meaning as the primary motivation in life. The meaning which is unique to each person and carries significance in one’s life can satisfy the will to meaning (Thakur & Basu, 2010). According to Frankl, the failure in finding a significant meaning in life can result in meaningfulness and the experience of inner emptiness, which might imply meaning in life as a protective factor against the emptiness experience.

The term *resilience* has been defined as the ability to spring back from challenging life experience and heal from stress (Smith et al., 2008). In the literature, resilient individuals are identified as having the ability to respond successfully to stressful life events (Smith et al., 2008); yet, persons experiencing emptiness are viewed as lacking response to external stimuli or as giving more mechanical response (Moore & Fine, 1990). The concept of resilience bears the idea that what is traumatic can be transformed; otherwise, a denial or no sense is possible, which refers to the emptiness experience (Tosso, 2012). Thus, we assume the presence of a negative relationship between the Multidimensional Emptiness Scale and the Brief Resilience Scale (Smith et al., 2008).

Overall, despite the extensive theoretical conceptualizations and clinical relevance of emptiness as well as two attempts to assess the experienced level of emptiness among adults, there is a significant gap in the literature in terms of coherent conceptualization, assessment, and systematic studies of this phenomenon (Rallis et al., 2012; Zerach, 2016). Therefore, a gap in the literature exists related to the development of a scale to measure experienced levels of emptiness.
Statement of the Problem

Emptiness is a frequent human state (Cushman, 1990). In order to refer to the frequency of this experience, Rollo May made a statement 65 years ago: “The chief problem of people in the middle decade of the twentieth century is emptiness” (1953, p.4). In society, a rampant sense of emptiness has still been experienced by individuals (Didonna & Gonzalez, 2009; Elsner, Broadbear, & Rao, 2018; Peteet, 2011). In addition to being a frequent human state, emptiness has also been seen as a prevalent mental health issue (Ellison et al., 2016; Peteet, 2011). The sense of emptiness has been stated as a DSM-5 diagnostic criterion for major depressive disorder and borderline personality disorder (APA, 2013) as well as associated with various mental disorders including narcissistic personality disorder (Blasco-Fontecilla et al., 2013; Gruba-McCallister, 2007; Dimaggio et al., 2008; LaFarge, 1989), bulimia nervosa (Diena, 2015; Meehan, 2007), persistent complex bereavement disorder (Parkes, 2001), and alcohol, drug and sex addictions (Cushman, 1990; Haroosh & Freedman, 2017; May, 1953; Roos, Kirouac, Pearson, Fink, & Witkiewitz, 2015; Thomas, 2014). Although the sense of emptiness has been widespread among individuals and stated as a DSM criterion for several mental health disorders (APA, 2013), mental health clinicians are still in need of a specific and coherent way of understanding and assessing this phenomenon (Ellison et al., 2016; Klonsky, 2008; Peteet, 2011; Zerach, 2016). Because the definition and nature of the term emptiness is blurred, the conceptualization and assessment of this phenomenon warrants greater delineation.

Two major attempts were made to measure the construct of emptiness. However, both scales have deficiencies based upon the samples they were developed in, their theoretical framework, and their reliability. As a consequence, it is evident that there is a scarcity of up-to-date and sound instruments attempting to measure emptiness that have been thoroughly
researched and validated (Blasko-Fontecilla et al, 2013; Ellison et al., 2016; Klosky, 2008; Zerach, 2016).

**Purpose of the Study**

The overall purpose of the current study is to provide a method to accurately diagnose and assess mental health issues associated with emptiness. In order to accomplish this goal, the present study primarily aims to develop and validate a Multidimensional Sense of Emptiness Scale (MSES) within an adult population in the United States. The development of this scale involves (a) identifying statistically discrete factors able to describe the structure of emptiness in a comprehensive manner by approaching this concept from emotional, existential, social, and spiritual perspective, (b) gauging the level/frequency of experienced emptiness in a statistically reliable manner, and (c) providing both clinicians and sample studied with information pertaining to perceived level of experienced emptiness.

In order to provide evidence based on relations of emptiness to other variables, the present study also aims to examine the relationship of the MSES with suicide probability, hope, meaning in life, and resilience as measured by the Suicide Probability Scale (Cull & Gill, 2002), the Adult Trait Hope Scale (Snyder et al., 1991), Meaning in Life Scale (Steger et al., 2006), and the Brief Resilience Scale (Smith et al., 2008) respectively.

**Research Questions**

The goal of this study is the development of an instrument to measure discrete factors of the experienced emptiness and to assess the relationship among the experienced emptiness, suicidal ideation, hope, meaning in life, and resilience. The following research questions will be examined in this study:
Research question 1: What is the underlying factorial structure of the MSES with a sample of college students?

Research question 2: What is the internal consistency reliability of the MSES with a sample of college students?

Research question 3: To what degree is there a relationship between the MSES and the SPS scores within a sample of college students?

Research question 4: To what degree is there a relationship between the MSES and the ATHS scores within a sample of college students?

Research question 5: To what degree is there relationship between the MSES and the MLQ scores within a sample of college students?

Research question 6: To what degree is there a relationship between the MSES and the BRS scores within a sample of college students?

**Significance of the Study**

The development and validation of the MSES and examination of its relationship to the constructs of suicidal risk, hope, meaning in life, and resilience may contribute to the further understanding of emptiness and provide useful information in the training of counselors, extant literature, and clinical practice in several fundamental ways.

First, the development of the MSES may help mental health clinicians better understand and assess the level of experienced emptiness among their clients and accurately diagnose psychological disorders related to emptiness. Emptiness is a widespread human experience (Cushman, 1990) and prevalent mental health issue (Ellison et al., 2016; Peteet, 2011). According to Johansen et al. (2004), 73% of clients with borderline personality disorder (BPD) and 34% clients without BPD reported feelings of emptiness. It is also noteworthy that the sense
of emptiness was the most consistently associated criterion with psychological morbidity among the BPD criteria (Ellison et al., 2016). In addition, emptiness has been regarded as a significant marker of poor psychological functioning (Ellison et al., 2016). Despite the fact that the sense of emptiness has been stated as a criterion for borderline personality disorder, depression, and bereavement (DSM-V, 2013), mental health clinicians do not have a clear and consistent way of understanding and assessing this phenomenon (Ellison et al., 2016; Klonsky, 2008; Peteet, 2011; Zerach, 2016). Because the definition and nature of the term emptiness is blurred, the conceptualization of this phenomenon warrants greater delineation. Findings from this study may result in identifying a discrete and stable factorial structure of the construct of emptiness, and providing mental health professionals with an increased ability to further assess the level/frequency of emptiness. The results of this study might also help counselors gain further insight into the nature of emptiness and have a conceptual framework to better understand and predict this widespread and growing phenomenon. With the increased ability to understand and assess emptiness, mental health clinicians might further empathize with clients presenting with feelings of emptiness.

Second, in addition to mental health clinicians, this research might help clients experiencing emptiness further understand, identify, and articulate their experiences or feelings of emptiness. If the emptiness experience remains as common as back pain (May, 1953), further understanding of this phenomenon is warranted. Despite its frequency among individuals and the prevalence as a mental health problem, this experience is rarely spoken of or recognized (Hazell, 2003). For some individuals, it is difficult to identify and express their experience related to emptiness (Segulin & Deponte, 2007). In a sample of 50 elderly clients assessed through the Geriatric Depression Scale, 8% had difficulty with understanding the concept of emptiness.
(Flacker & Spiro, 2003). In essence, clients experiencing emptiness might benefit from the findings of this study and be able to further conceptualize as well as express their experiences related to emptiness.

Third, in addition to contributing to the conceptual clarity and assessment of emptiness in terms of both clients and mental health clinicians, this research might encourage counselor educators to integrate the concept of emptiness into their teaching. In fact, Linder, Miller, and Johnson (2000) suggested incorporating how to work with emptiness into counselor education programs to reduce the ambiguity in this area, considering the large number of clients that come to the counseling with emptiness in their lives. Unfortunately, even after 18 years, the ambiguity regarding the conceptualization of emptiness still exists. Integrating the concept of emptiness into counselor training might help counseling students feel more comfortable when working with clients who have a sense of emptiness.

Lastly, this study might provide greater insight into the relationship between suicidal ideation and emptiness as well as increase societies’ understanding of a condition that robs life of meaning. Suicidal ideation and suicide rate are hypothesized to be strongly associated with the state of emptiness (Blasco-Fontecilla et al., 2013). For instance, Chia, Chia, and Tai (2008) analyzed the content of suicide letters and found that the sense of emptiness was the second most frequent factor expressed for suicide (Chia et al., 2008). Although the suicide risk is epidemic (Klonsky, 2008; Lamis & Lester, 2013) and the sense of emptiness is a critical marker of suicide (Chia et al., 2008), there is a lack of empirical research investigating this association between these two constructs. As a result, this research has a potential to provide further understanding of the relationship between emptiness and suicide probability and to help mental health clinicians predict potential suicide based on the markers.
Conceptual Framework

In the present study, the experience of emptiness has been approached from four distinct theoretical perspectives: a) emotional, b) existential, c) social, and d) spiritual. Frankl (1959) posited that the experience of emptiness is made up two states: a sense of inner emptiness and a sense that life is meaningless. In this study, the term *sense of inner emptiness* as the emotional aspect of emptiness refers to feeling a vague numbness or hollowness inside, being unable to identify one’s inner feeling, feeling out of touch with oneself, and feeling like a part is missing. The term *sense of meaninglessness* as the existential perspective of emptiness refers to the sense of lacking meaning, purpose, and direction in life and the perception of life being meaningless.

From the social perspective, Cushman (1990) defined the experience of emptiness as lacking community, a tradition, and shared meaning. In consideration of Cushman’s approach to this experience, the phrase “sense of absence of relatedness” has been coined. *The sense of absence of relatedness* describes individuals perceiving themselves disconnected from people around them and from a shared meaning in the community and society as well as connection in their relationships with others. According to Buggs (1996), individuals experiencing emptiness perceive their relationships with others superficial; that is, they are unable to personally relate to others or feel a deep inner connection with someone else even if they seemingly have relationships with others (Meehan, 2007).

Lastly, *the sense of spiritual emptiness* refers to feelings of disconnection from the universe and a higher power being valued and being unable to feel transcendental emotions resulting in spiritual emptiness (Ho & Ho, 2007). Spiritual emptiness, in addition, involves perceiving oneself as being neglected and abandoned by the higher power (Arndt et al., 2013). Peteet (2011) discussed a client with intense feelings of emptiness as perceiving herself being
disconnected from and abandoned by God. A qualitative study (Dunn, 1994) exploring the phenomenon of psychological emptiness in the lives of religious women seems to support the presented four-dimensional approach to the sense of emptiness, which constitutes the theoretical foundation of the present study.

**Definition of the Key Terms**

For the purposes of this study, following definitions were applied:

**Sense of emptiness.** Emptiness is characterized as a multifaceted psychological state including four distinct theoretical dimensions: emotional, existential, social, and spiritual.

**Sense of inner emptiness.** The sense of inner emptiness refers to feeling empty or hollowness inside, being unable to identify feelings inside, and feeling like a part is missing.

**Sense of meaninglessness.** The sense of meaninglessness refers to feelings of lacking meaning/purpose in life and finding the world meaningless.

**Sense of absence of relatedness.** The sense of absence of relatedness refers to feeling disconnected from people around or society and a shared meaning in the community.

**Sense of spiritual emptiness.** The sense of spiritual emptiness refers to feelings of disconnection from the universe and a higher power being valued and being unable to experience spiritual emotions (Ho & Ho, 2007).

**Suicide risk.** The construct of suicide risk is defined as the probability of a person to commit suicide (Cull & Wayne, 2002).

**Hope.** Snyder (1996) defines hope as goal-directed thinking in which the individual perceives oneself as having capability and motivation to reach goals.

**Meaning in life.** Steger et al. (2006) defines meaning in life as ‘the sense made of, and significance felt regarding, the nature of one’s being and existence’ (p. 81).
Resilience. The term resilience is defined as the ability to spring back from challenging life experience and heal from stress (Smith et al., 2008).
CHAPTER II. REVIEW OF THE LITERATURE

To date, the emptiness experience has been studied by various categories of scholars, including psychologists, artists (Dostoyevski, 1861; Hemingway, 1933; Kafka, 1925; Tolstoy, 1868), theologians (Suzuki, 1956; Tillich, 1952), and philosophers (Camus, 1965; Kierkegaard, 1843; Sartre, 1956). However, this review particularly focuses on psychology literature in the context of the emptiness construct, as this concept has been approached as a psychological experience. Therefore, this review is limited to psychology literature including major theories and perspectives regarding conceptualization and explanation of emptiness. This review also contains a snapshot of mental issues related to emptiness, measurement of emptiness, and association of emptiness with several psychological constructs. Based on the extensive literature review, an inclusive four-dimensional theoretical model is presented, which constituted the foundation for the present scale development study.

More specifically, this chapter is organized into five main sections: (a) prevalence of mental disorders globally and mental issues related to emptiness; (b) theoretical perspectives of emptiness including existential, psychoanalytic, and cognitive-behavior theories as well as contemporary perspectives on emptiness; (c) theoretical foundation of the present study including a comprehensive theoretical model of emptiness; (d) measurement of emptiness including two major scales developed to assess emptiness; (e) emptiness and related psychological constructs including suicide risk, hope, meaning in life, and resilience.

Prevalence of Mental Disorders

Worldwide Prevalence of Mental Disorders

Globally, the burden of mental disorders continues to grow with significant impact on health and the social, human, and economic elements in all countries of the world (World Health
Organization, [WHO, 2016]. Results from a review of 174 surveys across 26 high income countries and 37 low and middle income countries (63 countries in total) indicated that on average one in five adults (17.6%) experienced a common mental health disorder within the past 12 months and 29.2% across their lifetime (Steel et al, 2014). Recently, anxiety disorders have been found to be the most prevalent class of mental disorders in the general population, with an estimated lifetime prevalence averaging approximately 16% (Kessler et al., 2011). Mood disorders are generally found to be the next most prevalent class of mental disorders in global surveys, with lifetime prevalence estimates averaging approximately %12 (Kessler et. al., 2011).

**Prevalence of Mental Disorders in the United States**

In the United States, mental health disorders affect millions of adolescents and adults and contribute heavily to the burden of disease, according to the Center for Behavioral Health Statistics and Quality (CBHSQ, 2015). The 2014 National Survey on Drug Use and Health (NSDUH) reported that an estimated 43.8 million adults aged 18 or older representing 18.1% of all U.S adults (1 in 5 adults) experienced a mental illness in the past year. This survey also reported that approximately 10 million adults representing 4.2% of all U.S adults (1 in 25 adults) experienced a serious mental illness in the given year that substantially interferes with or limits one or more major life activities. According to National Institute of Mental Health (NIMH, 2016), 18.1% of U.S adults experience anxiety disorders, 9.5% of U.S adults are affected by mood disorders, and 9.1% experience personality disorders, with an estimated prevalence of 12-months.

**Mental Issues Related to Emptiness**

Emptiness is considered as a widespread mental issue in modern society (Cushman, 1990; Peteet, 2011), provoking even tragic consequences like suicide (Blascallo-Fontecilla et al.,
In the extant literature, the sense of emptiness has been related to a wide range of psychological issues and mental disorders, having clear clinical relevance (Klonsky, 2008). Emptiness is regarded as a diagnostic criterion for several psychological disorders, such as major depressive (MDD; feeling empty), borderline personality (BPD; chronic feelings of emptiness), and persistent complex bereavement (PCBD; emotional numbness) (American Psychological Association [APA], 2013). In addition to being a symptom of aforementioned mental disorders, the emptiness experience has also been associated with narcissism (Gruba-McCallister, 2007), bulimia nervosa (Diena, 2015; Meehan, 2007), and alcohol and drug addictions (Cushman, 1990; May, 1953).

The emptiness experience, however, is mostly linked to BPD and highlighted as a discriminative DSM-5 criterion to distinguish BPD from other psychological disorders (APA, 2013). Johansen et al., (2004) found that 73% of clients with BPD and 34% of clients without BPD reported the feeling of emptiness. Despite its prevalence and clinical relevance, emptiness is one of the least studied DSM-5 criterion, receiving insufficient empirical attention (Aguirre & Galen, 2013). It is also considered as the most difficult symptom to understand, explain, and assess clinically among all of the DSM-5 criteria used to diagnose BPD (Aguirre & Galen, 2013). Uncertainty regarding the conceptualization of emptiness as a criterion is apparent in the history of DSM revisions. According to DSM-III and DSM-III-R, the seventh criterion for BPD could be considered existent if a person expressed either feelings of emptiness or boredom (Klonsky, 2008). Research findings indicated the sense of boredom as less discriminating than emptiness in identifying individuals with BPD (Widiger, Mangine, Corbitt, Ellis, & Thomas, 1995) and that emptiness and boredom are not overlapping constructs (Klonsky, 2008). Thus, DSM-IV and
DSM-5 no longer equated emptiness and boredom, and the seventh criterion for BPD was revised to include only emptiness.

Furthermore, the emptiness experience has also been associated with a variety of psychological issues including compulsive buying and materialism (Zerach, 2015), hopelessness (Aguirre & Galen, 2013; Ellison et al., 2016; Klonsky, 2008), childhood sexual and emotional abuse (Buggs, 1996; Mitchell, 2000), loneliness (Clum, 1997), guilt (Adolfson, Larsson, Wijma, & Bertero, 2004), dissociation and non-suicidal self-injury (Rallis, Deming, Glenn, & Nock, 2012), and suicidal ideation (Blascallo-Fontecilla et al., 2013). More seriously, emptiness is viewed as one of the most significant—even the central—indicator of suicide risk or suicide (Delgado-Gomez, Blasco-Fontecilla, Sukno, Ramos-Plasencia, & Baca-Garcia, 2012), and regarded among the most tragic consequence of psychological disorders (Zepinic, 2009).

### Theoretical Perspectives on Emptiness

Starting in the 1950s, there have been several important epistemological approaches that endeavored to explain the sense of emptiness. Existential theory (May, 1953; Frankl, 1959), psychoanalytic theory (Kernberg, 1975; Kohut, 1977), and contemporary perspectives are some of the theoretical approaches providing major contributions to the understanding of this psychological experience.

#### Existential Theory

A number of existential philosophers, such as Kierkegaard (1843) and Sartre (1957), wrote extensively on a complex human condition that led to questioning traditional lifestyles, moral values, and meaning in life. Kierkegaard linked anxiety to a questioning of one’s existential approach to life and the uncertainty of venturing into what Sartre (1957) later named the *experience of nothingness*. Sartre (1957) noted this experience as a fundamental facet of
freedom, consciousness, and choice. According to him, self-consciousness or self-reflection regarding choices and responsibilities creates a distance between the observer and the observed. This gap is experienced as a void or nothingness in the self, frequently resulting in an inner emptiness. That is to say, individuals respond to the reality of exercising choices and of taking responsibilities for their actions by turning themselves into a thing or a passive object and playing roles to meet others’ expectations, which causes the experience of void or inner emptiness. The writings of the aforementioned existential philosophers have greatly influenced the thinking and practice of generations of philosophically oriented clinicians like Rollo May and Viktor Frankl, who endeavored to explain the phenomenon of emptiness from the perspective of existential psychology.

**Rollo May.** Throughout the history of psychology, Rollo May has been regarded as the first psychologist who attempted to explicate the term emptiness (Hazell, 1982, 1984). As an existential psychologist, May (1953) drew attention to this notion, asserting on the basis of not only his own clinical practice but also the experience of his colleagues in psychology and psychiatry that the paramount concern of humanity in the middle of the twentieth century is *emptiness*. He addressed this topic by referring to Freudian theory that the most widespread problem for people is not social taboos on sexual behavior or feeling guilty about sex itself; rather, it is that sexual activity is an empty, mechanical, and vacuous experience for most people. Similarly, May (1953) connected emptiness, or reactions to it, to drug addiction because individuals, lacking a clear internal sense of self, attempt to create an artificial experience to cope with their inner void and to fill this emptiness inside.

May (1953) extensively concentrated upon emptiness as a character of modern people in his book *Mans’ Search for Himself*. According to May (1953), people who experience emptiness
not only do not know what they want, but also have no clear idea about how they feel — no coherent experience of desires or wants. Because they have no concrete understanding of their own feelings or desires, they regard themselves as lacking autonomy, being out of control, feeling powerless, and being unable to make decisions about their own lives and eventually feeling vacuous/empty. These people, May (1953) noted, know what they should want such as graduating from college successfully, finding a good job, getting married, and having a family. However, they actually describe what parents, teachers, or employers expect of them rather than what they want for themselves. May (1953) considered these people as “a collection of mirrors, reflecting what everyone else expects of them” (p. 4).

May (1953) suggested that the factors of the exacerbated feeling of emptiness in modern life underlie the social and psychological transformations which have occurred in the twentieth century. A society in the midst of upheaval in ethical standards and moral values is of little help to individuals seeking a sense of personal direction. As a result of this upheaval and ensuing emptiness, May wrote that ‘we are thrown back to the search for ourselves’ (1953, p. 11) which might lead to a sense of powerlessness and helplessness. In addition, May cited Erich Fromm, stating that ‘modern people no longer live under the authority of church or moral laws, but under anonymous authorities like public opinion’ (p. 12). Agreeing with David Riesman, the author of The Lonely Crowd, May (1953) described the modern man experiencing emptiness or vacuity as outer-directed characterized by attitudes of passivity and apathy. According to him, those persons’ desire to be accepted by others even to the extent of being inconspicuous and absorbed in the group. May (1953) also pointed out that this sociological picture is quite similar to the picture of psychological work with clients.
May (1953) related emptiness to anxiety with the threat of nonbeing or being isolated. According to May (1953), emptiness and loneliness are two phases of the same basic experience of anxiety. The feeling of inner emptiness and loneliness go together and the rationale behind the close relationship between loneliness and emptiness is not viewed as difficult to discover (May, 1953). In a period of traumatic change, persons feel emptied and sense a yearning due to the loss in their lives. Standing amid the outer confusion of upheaval in society, these individuals perceive danger and a lack of security. Thus, they ultimately look for any sense of direction and ultimately for other people around in the hope they will give those persons some sense of direction or at least some comfort in the knowledge that they are not alone. However, it is at the price of giving up the existence of an identity.

Victor Frankl. Another existential theoretician Frankl (1959), a logotherapist, wrote about emptiness in his book *Man’s Search for Meaning*; however, he coined the term *existential vacuum*, similar in meaning to the term emptiness (Hazell, 1982). Frankl’s experience as a prisoner in several Nazi concentration camps greatly contributed to his theories about how the dissolution of meaning leads to the experience of emptiness.

Frankl (1959) hypothesized that humankind is in quest of a sense of meaning in their personal existence as opposed to a search for power or pleasure as posited by Adler and Freud respectively. According to him, the frustration of the will to meaning results in existential distress named *noogenic neuroses*. He lays emphasis on that lacking the awareness of a concrete meaning worth living for leads to ultimate meaninglessness in life and the experience of inner emptiness, which he has called existential vacuum (p. 106). He wrote:

> I turn to the detrimental influence of that feeling of which many patients complain today, namely, the feeling of the total and ultimate meaninglessness of their lives. They lack an
awareness of a meaning worth living for. They are haunted by the experience of their inner emptiness, a void within themselves; they are caught in that situation which I have called the existential vacuum (p. 105-106).

Frankl (1959) dealt extensively with the concept of emptiness and theorized this concept as being composed of two states: meaninglessness and the experience of inner emptiness. In other places in his writing, he suggested that emptiness occurs as a consequence of longing to be connected to others as well as from blunting of emotions which causes an inner sense of numbness. In fact, Frankl (1959) did not attempt to link his theory to developmental factors as other theoreticians do, but rather argued that the will to meaning is a universal phenomenon. As proposed by May (1953) earlier, Frankl (1959) considered emptiness as a widespread phenomenon of the twentieth century. At the Policlinic Hospital in Vienna, he found that 55% of his clients have experienced a loss in the meaning of life. Furthermore, his empirical survey revealed that approximately 25% of European and 60% of American students experienced emptiness (Frankl, 1975).

Frankl (1959) attributed the causes of emptiness to the social changes which have taken in the twentieth century. Frankl (1959) addressed people do not know what they wish or want to do; rather, they wish to do what other people do (conformism) or they do what other people wish them to do (totalitarianism). In this, Frankl seems to be in harmony with the approach of May who suggested alienation as one of the paramount factors causing the state of emptiness in anxiety-driven modern society. Frankl (1959) also identified three major failures leading to the experience of emptiness: a) a failure in responsibility to find meaning/mission in life, b) a failure in faith, and c) a failure in appreciating the whole being.
Furthermore, Frankl (1959) contended that people employ various masks and guises under which the state of emptiness appears. According to him, the frustrated will to meaning is sometimes vicariously compensated for by will to power (e.g., money) or will to pleasure. People who become aware of lacking content in their lives and having the void within them might go through depression/aggression or endeavor to fill this void via drug/alcohol use. Therefore, Frankl stressed (1959) that, such widespread mental health disorders as depression, addiction, and suicide are not understandable unless the experience of emptiness underlying them can be recognized. In this way, he attracted notice to the importance of understanding the state of emptiness as a psychological construct.

**Psychoanalytic Theory**

Several years after May and Frankl wrote about emptiness, a few psychoanalysis-focused clinicians also discussed this phenomenon. Theorists and clinicians Otto Kernberg and Heinz Kohut identified the experience of emptiness in their clients and endeavored to understand its etiology. In spite of the prevalence of emptiness among clients undergoing psychoanalysis, the psychoanalytic literature rarely addressed this topic prior to the work of Kernberg and Kohut (Buggs, 1996).

**Otto Kernberg.** Kernberg (1975), an object relations theorist and psychoanalyst, devoted an entire chapter to the experienced emptiness in his book *Borderline Conditions and Pathological Narcissism.* He pointed out that the sense of emptiness emerges when there is a disturbance in the self-feeling, termed by Jacobson (1964) to describe one’s awareness of the intrapsychic integrated self as distinguished from self-esteem or self-regard. Kernberg (1975) propounded that pathological subjective experiences of emptiness arise when the normal relation between the self and object is distorted leading to an internal abandonment of the self. There are
several forms of emptiness, according to Kernberg (1975); yet, he identifies two broad reactions to this experience: a) *acting out*, such as ingestion of alcohol or drugs, frantic social interactions, or attempts to obtain instinctual gratifications via sex, food, or aggression, to escape from the feeling of emptiness inside and regain a sense of internal aliveness and b) *mechanical fashion of living* through experiencing the feeling of emptiness and going through one’s daily activities with a deadening sense of unreality (p. 215).

Furthermore, it is important to note that, as part of his work, Kernberg (1975) highlighted the difference between the two concepts of emptiness and loneliness, which at times can be confusing in the clinical context: “Loneliness implies elements of longing and the sense that there are others who are needed, and whose love is needed and who seem unavailable now. If this longing is present, individuals would not feel empty.” (p. 214). In other words, according to Kernberg (1975), emptiness is the lack of other without realization of the lack or the longing to fill the lack. In general, Kernberg (1975, p. 220) posited that: “The experience of emptiness represents a temporary or permanent loss of the normal relationship of self with the object relations, that is, with the world of inner objects that fixates intrapsychically the significant experiences with others and constitutes a basic ingredient of ego identity.” (p. 220). All clients with the identity diffusion syndrome, thus, hold the potential to experience the emptiness state. In addition, Kernberg (1975) not only hypothesized that the sense of emptiness could be different depending on the personality experiencing it but also characterized emptiness as it might emerge in four personality types (depressive, schizoid, narcissistic, and borderline), capturing different facets of emptiness in accordance with the nature and intensity of each disorder.

According to Kernberg (1975), emptiness emerges from childhood conflicts and family pathology. In this regard, he seems to disagree with May and Frankl who hypothesized that
emptiness arises due to sociocultural changes leading to a perception of alienation from the society. According to Kernberg (1975), social instability might contribute to the experience of emptiness only if there exists intense pathology of internalized object relations, rooted in early infancy and childhood.

**Heinz Kohut.** Another psychoanalyst, Heinz Kohut (1977) shared much of Kernberg’s psychoanalytic perspective yet took a different tack from Kernberg and employed the framework of ‘self-psychology’ in describing the subjective experience of emptiness. According to him, this experience occurs due to disturbance in the mental structure located in the section of the self. He discussed emptiness as a symptom of narcissistic personality disorder. The self-structure grows in response to optimal failures in mirroring and in idealized figures (Kohut, 1977). When the failures are not optimal, the self-structure might become disturbed and inclined to emptiness (Kohut, 1977). Emptiness arises especially in case of criticism or lack of warmth or acclaim from the environment. Kohut (1977) argued that individuals develop ‘a psychic surface out of touch with the nuclear self’ to overcome and mitigate the pain of the inner emptiness. This psychic surface is like a mask, used to lessen the inner pain, but detract the person from the real self. This psychological state can result in frequent inner emptiness, since the person is so alienated from true feelings and feels disconnected with them even if individual endeavors to discover these feelings (Kohut, 1977).

Bringing a different approach to the development of emptiness from May and Frankl, both psychoanalysts Kernberg (1975) and Kohut (1977) highlighted the importance of early interactions with the environment during infancy and childhood and attempted to explain how the psychological state of emptiness gradually develops. Kohut used the terminology of ‘self-psychology’ to enucleate emptiness.
Cognitive-Behavioral Theory

Several cognitive-behavioral theory-oriented authors have addressed the experience of emptiness. The experience is viewed as a sort of dysfunctional avoidance strategy as in the case of deep subjective suffering and inner pain (Beck, et al., 1990; Linehan, 1993).

Marsha Linehan. Linehan (1993), the developer of dialectical behavioral therapy, established her therapeutic model on the assumption that the inability to regulate and mitigate painful emotions is an essential component of explaining behavioral hardships of clients with borderline personality disorder. These clients, according to Linehan (1993), present a sort of intolerance to negative emotions: “Many borderline patients try to control their emotions simply by forcing themselves not to feel what they are experiencing”. Other researchers, such as Fiore and Semerari (2003), noted a related state of emotional anesthesia to abstain from any intense pain by which clients detach themselves from everything and everyone. For instance, a twenty-three-year-old female senior college student came to counseling seeking help for her borderline personality disorder; the aspect she struggled most with was how empty she felt (Aguirre & Galen, 2013, p. 116).

I feel so empty inside. I try to fill the emptiness with people and activities, but it only lasts a while and then I feel empty again. Cocaine, sex, and online gaming seem to help for a while, but they are distractions. I cannot find a nice, stable guy; I have to find guys whose lives are full of drama. That excites me for a while, but I know it is not healthy. I know it; I just cannot stop myself.

Referring to borderline personality disorder, Linehan (1993) claimed that exposure to an invalidating environment, where insufficient and unforeseeable answers follow the manifestation of a person’s inner experiences, results in non-recognition or inhibition of negative emotions;
this continuous inhibition of negative emotions lead to emotional avoidance. The paradigm, Linehan (1993) asserted, is similar to learning flight behavior to avoid painful stimuli. In this case, the emotions seem to be conditioned. According to Linehan (1993), a repeated process of aversive association stimuli regarding an invalidating environment may have resulted in this conditioning. The simple repeated presentation of one of these discriminative and conditioned stimuli can trigger the sense of emptiness, preceding the activation of negative emotions, which the individual avoids and fails to recognize.

**Contemporary Perspectives**

The sense of emptiness has currently been conceptualized in reference to multiple components: an emotional state (Hazell, 1982, 1984, 2003; Klonsky, 2008; Rallis, Deming, Glenn, & Nock, 2012); a multidimensional construct (Blasko-Fontecilla et al., 2013; Peteet, 2011); lacking emotional connection or closeness (Bach, Grossmark, & Kandall, 2014; Cushman, 1990); and spiritual emptiness (Arndt, Gunther, Bauman, Frick, & Jacobs, 2013; Dunn, 1994).

**Emptiness as an emotion.** The construct of emptiness has been conceptualized as an emotion (Hazell, 1982, 1984, 2003), referring to a state of low positive affect and encompassing descriptions of lacking feeling or sensation and lacking purpose or substance (Klonsky, 2008; Rallis et al., 2012). Similarly, Moore and Fine (1990) defined emptiness as a subjective state identified by a painful sense of impoverishment of inner feelings, fantasies, and wishes, as well as absence of or more mechanical reaction to external stimuli. According to Bach, Grossmark, and Kandall (2014), the people who experience emptiness consistently have difficulty in identifying or feeling their emotions and desires, and find it particularly difficult to distinguish which emotions feel real. That is to say, emptiness is often associated with a lack of ability to
feel (Hazell, 2003). Thus, the sense of emptiness captures the feeling of loss and painful awareness of this reality (Buggs, 1996).

At times, clients use the expression “I feel empty” to describe their own internal experience. This attempt seems to convey a compelling and meaningful emotional experience, one that is distinct from, perhaps more severe than, other emotional states such as depression, loneliness, isolation, or aloneness (Meehan, 2007). Emptiness is a complex emotional experience which is difficult to comprehend by the clinician if it has not been experienced personally; therefore, clinicians may sometimes liken emptiness to other similar emotional states such as boredom, futility, loneliness, or hopelessness in order to understand the emptiness experience and to be able to relate to the client (Mitchell, 2000). However, emptiness is different from these conditions due to the lack of feeling associated with the experience (Hazell, 2003).

**Emptiness as a multidimensional construct.** According to Peteet (2011), effectively addressing emptiness requires one to clearly distinguish its dimensions. Therefore, Peteet (2011) suggested a phenomenological approach that described subjective, objective, and existential aspects of emptiness in order to help clinicians understand each dimension. Subjective experiences of emptiness as a distorted perception refers to an individual experiencing intense emotions and/or having habitual ways of thinking which might make the world seem half empty. Objective experiences of emptiness as deprivation or deficiency indicates an individual experiencing a loss or becoming aware of an important lack. According to Peteet (2011), bereavement can create an empty space in the shape of the lost object. Individuals feeling empty experience the lack of a capacity for closeness, termed interpersonal emptiness; the awareness of this lack is one of the most painful realities for its sufferers, whose hunger to meet unmet needs for love and connection (Peteet, 2011). Existential aspects of emptiness, Peteet (2011) pointed
out, refers to existential concerns of individuals who are feeling empty, such as questioning life, feeling distant from God, struggling with spiritual emotions, and being unable to make sense of a loss.

**Emptiness as absence of relatedness.** Cushman (1990) explored the concept of emptiness from a social perspective and defined this construct as a consequence of significant lacking community, tradition, and shared meaning. According to Cushman (1990), this type of experience of social absences results in a lack of personal conviction and worth, and ultimately results in chronic emotional hunger, that is, emptiness. People who experience emptiness clearly desire to relate to someone else, but they seem to have no clue as to how to go about doing so, as if they lacked directions or had no road map (Bach et al., 2014). Therefore, people who experience emptiness yearn to acquire and consume as an unconscious way of compensating for what has been lost.

Individuals experiencing emptiness may introspectively seek for these feelings inside but instead find nothing there (Buggs, 1996). This absence of feeling might lead a person to hunger for some emotional experience or connection to another human being to fill up this emptiness (Cushman, 1990). Others may not experience this absence of feeling with a generalized sense of emotional numbness and have little sense of ever feeling differently. Still others may not be able to find words to articulate this experience of emptiness and it gets expressed through low self-esteem, eating disorders, drug or alcohol use, chronic consumerism or absence of personal meaning, and a hunger for spiritual guidance (Cushman, 1990).

**Emptiness as lacking spiritual emotions.** Dunn (1994) addressed that the notably missing construct needed in regard to the experience of emptiness is spiritual emptiness. According to Dunn (1994), this construct might be one of the elements which contribute to
emptiness. Spiritual emptiness refers to the difficulty in answering existential and transcendent questions, such as concerns about the meaning/purpose of life or connection to the universe (Ho & Ho, 2007). The concept of spiritual emptiness also refers to the inability to feel spiritual emotions—an instance of emotional numbing (Ho & Ho, 2007). In some studies, the term spiritual emptiness has been interchangeably used with spiritual dryness (O’Connor, 2002). Spiritual emptiness has been defined as feelings of disconnection to God/a Higher Power being valued by the individual, being spiritually empty, getting no answer for prayers, being unable to feel spiritual emotions inside, and finally being abandoned by the Higher Power (Arndt et al., 2013).

**Conceptual Framework of the Present Study**

Considering the existing literature, presenting a fundamental definition representing emptiness in a universal sense seems challenging because emptiness is used to describe a subjective experiential state unique to each individual based on underlying psychodynamics (Mitchell, 2000). Yet, review of existent theories and conceptual research studies on emptiness as well as investigation of overlapping aspects of this construct in different clinical cases enable the creation of a more inclusive multidimensional theoretical model, which can be a useful guide in approaching and understanding the experience of emptiness.

In this emerging theoretical framework of emptiness, this phenomenon has been approached from four theoretical perspectives: a) emotional, b) existential, c) social, and d) spiritual. From the existential standpoint, human beings have a will to find meaning worth living for (Frankl, 1959). According to Frankl (1959), meaning is what people desire and meaningfulness is a void or inner emptiness in people’s lives. Frank (1959) believed that emptiness is made up two states: a sense of inner emptiness and a sense that life is meaningless.
Sense of Inner Emptiness

In this theoretical model, the term *sense of inner emptiness* represents the emotional aspect of emptiness and refers to the internal experience of numbness which can also be construed as the difficulty in getting in touch with one’s feelings, the internal sense of hollowness that can sometimes exist at the border of psychosomatic experience, and the feeling that part of one is missing. In addition, the sense of inner emptiness represents individuals’ experiences of emptiness, such as having difficulty with identifying the feeling, sensing an inner void, feeling emotionally hungry, and yearning for something to emotionally fill that void.

Any attempt to develop an instrument to measure emptiness needs to account for one’s sense of inner emptiness. Example items on a subscale representing the sense of inner emptiness might include “I feel empty inside”, “I feel as though a part of me is missing”, “There is hollowness inside of me”, “I experience a vague emotional numbness”, “It is hard for me to identify what I feel”, “I feel emotionally hungry”, “I yearn for something to emotionally fill me up”, and “I feel out of touch with myself”.

Sense of Meaninglessness

The term *sense of meaninglessness* represents an existential perspective of experienced emptiness and refers to perception of lacking meaning, purpose, and/or mission in life as well as finding the whole world or life meaningless and empty. In his book, *Feeding off Emptiness*, Loatman (2017) wrote about his experiences of emptiness and described his existential feelings of emptiness as sensing a void in his life, asking questions such as “who I am?” and “what is the meaning of life?”, and being in search for something meaningful to fill the void. In this regard, existential concern and quest has been hypothesized to constitute another component of the existential facet of emptiness. These aspects of the sense of meaninglessness subscale on an
instrument to measure emptiness are exemplified by items, such as “My life has no significant purpose”, “I think about whether there is a meaning in life”, “There is a great void in my life which I cannot stand”, “I am in search of something that makes my life meaningful”, “I am in a great effort to figure out who I really am”.

**Sense of Absence of Relatedness**

From the social perspective, Cushman (1990) defines emptiness as lacking community, a tradition, and shared meaning. According to Cushman (1990), the experience of social absences results in emotional hunger, seen as emptiness. In light of Cushman’s approach to the experience of emptiness, the term sense of absence of relatedness has been coined. The sense of absence of relatedness represents whether individuals perceive themselves disconnected from people around them and from a shared meaning in the community and society. According to Buggs (1996), those individuals perceive their relationships with others as superficial; that is, they are unable to personally relate themselves to others or sense a deep inner connection with someone else even if they seemingly have relationships with others (Meehan, 2007). Individuals experiencing emptiness hunger to relate to others yet seem to have no self-direction as to how to go about doing so, as if they are lacking in guidance or road map (Bach et al., 2014; Cushman, 1990). In fact, Frank (1959) also touched upon the relational aspect of emptiness, stating that emptiness occurs as a consequence of longing to be connected to others or as a result of a desire for relatedness to others.

Example items representing the sense of absence of relatedness subscale on an instrument to measure emptiness might include “I I am unable to relate to others”, “I lack of capacity of closeness”, “I experience times of relational emptiness”, “Inside, I ache to be connected others”,

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“My relationship with others seems superficial”, and “I am detached from the shared meaning in the community”.

**Sense of Spiritual Emptiness**

The spiritual aspect of emptiness has remained unnoticed despite being considered by some to be a crucial factor contributing to the sense of emptiness (Dunn, 1994). In this theoretical perspective, *the sense of spiritual emptiness* refers to perceptions of disconnection from a Higher Power valued by the individual (the Divine/the Transcendent Entity) as well as an inability to experience spiritual emotions resulting in spiritual emptiness (Ho & Ho, 2007). *Spiritual emptiness*, in addition, involves perceiving oneself as being neglected and abandoned by the higher power or the Divine. (Arndt et al, 2013). Peteet (2011) discussed a client with intense feelings of emptiness as perceiving herself being disconnected from God and being abandoned by God. Furthermore, the sense of emptiness, based on the reviewed case studies regarding experienced emptiness in the literature, is contemplated to include a sense of disconnection from the universe and nature as well as lacking a sense of harmony. These aspects of the sense of spiritual emptiness subscale of an emptiness instrument are exemplified by items, such as “I feel distant from my Higher Power/the Divine”, “I feel detached from nature”, “I do not feel a deep inner sense of harmony”, and “I experience times of spiritual emptiness”.

A qualitative study exploring the phenomenon of psychological emptiness in the lives of women seems to support a four-dimensional structure of this construct. Using in-depth interviews, Dunn (1994) revealed three themes with subthemes. These themes include a) breakdown of the traditional structure of religious life, representing loss of meaning and uncertainty about new forms of religious life, referring to the spiritual aspect of emptiness, b) a struggle with intimacy referring to an inability to develop intimate relationships and a sense of
disconnection from others, and c) a core-self psychological emptiness, referring to the fragmentation of the self and a sense of having no feelings inside.

Current Assessment Tools and Their Limitations

The nature and form of the emptiness concept may be elusive and difficult to express in technical language; therefore, two major attempts have been made to develop scales in order to capture aspects of and identify discrete factors of this phenomenon (Buggs, 1996). These scales are the Experienced Level of Emptiness Scale (Hazell, 1982, 1984) and the Emptiness Scale (Buggs, 1996).

Experienced Level of Emptiness Scale

Hazell (1982, 1984) made the first attempt to develop a standardized measure in order to accurately assess the level of experienced emptiness. Within a sample of 270 college students (92 male, 178 female), the results of factor analysis indicated a two-factorial solution: (a) Experienced Level of Existential Emptiness (8 items) and (b) Experienced Level of Existential Concern (9 items). Explaining 60.3% of the variance, the factor loadings of the first subscale vary from .67 to .84 and factor loadings of the latter scale change between .44 and .83. In addition, the Cronbach alpha reliability coefficients were found to be .916 for the Existential Emptiness subscale and .904 for the Existential Concern subscale. Furthermore, the relationship between experienced emptiness and depression were examined and a high correlation was found between these two constructs (Pearson $r = .69$, $p < .001$).

Within this scale, existential emptiness subscale refers to the internal experience of numbness, an inner sense of hollowness, and the feeling that part of oneself is missing. These three conceptual dimensions of the existential emptiness subscale were exemplified by items, “It is hard for me to know what I feel”, “I feel like there is nothing inside me”, and “I feel as though
part of me is missing”. Another subscale, existential concern, represents the concern for authenticity or true identity, concern about death, and concern for the meaning and purpose of life. These components of existential concern subscale were exemplified by items, “I try to figure out who I really am”, “and I think about my own death”, and “I try to discover my life’s purpose”.

**Emptiness Scale**

Buggs (1996) made another attempt by developing the Emptiness Scale within a clinical sample of 201 individuals (71 male and 130 female), recruited from a low-fee outpatient clinic and a community mental health center. Buggs (1996) proposed a two-factorial structure for emptiness: a) an inner sense of emotional hunger and yearning (20 items) and b) a generalized sense of emotional numbness (8 items). However, one major factor emerged from the principal component analysis named “an inner sense of emotional hunger and yearning”, accounting for 49% of the variance. Unexpectedly, five items on a smaller second factor, explaining 11.2% of the variance, mentioned connection to people, which suggests an aspect of emptiness involving relatedness to others (Buggs, 1996). However, he dropped this subscale from the instrument - even though the computed Eigen value for this subscale was 3.1 exceeding critical value of 1-, as it was not hypothesized to be a part of the originally proposed foundation of emptiness.

According to Buggs (1996), these items may have tapped into a more concrete and specific aspect of emptiness that occurs as a consequence of longing to be connected to others, as suggested by Frankl (1959).

Buggs (1996) also examined early childhood experience of respondents, including abuse and parenting styles, in an effort to understand the etiology of emptiness. The results of this study indicated that there is a relationship between scores on the emptiness scale and self-reports
of abuse during childhood, especially emotional abuse. Consistent with the literature, these results suggested that a history of emotional, physical, and sexual abuse may lead to a host of diverse symptoms in adulthood (Buggs, 1996). Another finding related to parenting styles indicated a correlation between emptiness scores and certain types of parental behaviors. For example, for both male and female subjects, there was a negative correlation between supportive attention and emptiness (the more perceived supportive attention from parents, the lower emptiness). With regard to parental disciplinary behavior, the father’s disciplinary behavior was found to be more positively related to emptiness scores than the mother’s for both male and female subjects. Providing evidence regarding the internal structure of the Emptiness Scale, these findings highlighted the importance of parental behavior that includes recognition of the child’s uniqueness and support for a range of feelings facilitating healthy development (Buggs, 1996).

**Limitations**

Hazell (1982, 1984) and Buggs (1996) established an empirical foundation with their pioneering research from which to further explore the topic, sense of emptiness. With their endeavor to develop researched and validated instruments to gauge the emptiness experience and identify discrete factors of this construct, both researchers contributed to the psychological emptiness literature providing a base for continued exploration. However, the scales they developed are not without their criticism. First, their theoretical foundations might be viewed limited, as both approached the emptiness concept only from the existential or emotional perspective although empirical studies suggest the presence of other domains of emptiness including desire for relatedness to others (Buggs, 1996) and spiritual emptiness (Dunn, 1994). Second, the samples used also appear to be a source of deficiency. Both researchers recruited less than 300 respondents; therefore, the sample size of those studies might be questionable, as
an appropriate sample size for exploratory factor analysis is suggested to include at least 300 participants (Field, 2013; Tabachnick & Fidell, 2012). In addition, the samples they obtained are prone to questioning due to lack of diversity. For instance, in Buggs’s study, approximately 90% of the sample consisted of Caucasian participants, which might raise high concerns regarding generalizability of the results to other individuals from different cultural groups or ethnic backgrounds. In Hazell’s study, participants’ ethnicity was not reported. Third, reliability of the overall scale is also questionable as both Hazell and Buggs failed to report internal consistency reliability coefficients of the overall scales. Lastly, the dates those scales were developed appeared to be a deficiency. Hazell (1982) and Buggs (1996) developed these instruments almost two to four decades ago, thus dating these instruments.

**Sense of Emptiness and Relevant Psychological Constructs**

Despite the abundance of theory regarding the phenomenon of emptiness and two major attempts to measure this construct, the emptiness concept has not gained adequate empirical attention. Several reasons may explain the lack of studies addressing the emptiness experience and its association with other psychological concepts.

First, the definition and boundaries of emptiness are still blurred (Blasco-Fontecilla et al, 2013). The term emptiness has been employed in reference to multiple components: an emotional state (Hazell, 2003), a symptom of a disorder (Klosky, 2008), a defense mechanism (LaFarge, 1989), an existential state (Frankl, 1959), a part of the human condition (Cushman, 1990), a personality trait (Verkes, Mast, Hengeveld, Tuyl, Zwizermen, & Kempen, 1998), or even a desirable spiritual goal (Jennings, 2007). In addition, the concept of emptiness may sometimes resemble other similar emotional states such as boredom, depression, hopelessness, and futility (Mitchell, 2000) and has been used interchangeably with those concepts (Klonsky,
However, emptiness is different from these conditions due to lack of feeling associated with it (Hazell, 2003). Second, the lack of standardized scales of the emptiness construct may have caused difficulty with studying this construct and empirically investigating its association with other concepts (Blasco-Fontecilla et al., 2013). Third, it is difficult for some clients to understand and express their feelings associated with emptiness (Segulin & Deponte, 2007). For example, in a sample of 50 elderly clients assessed with the Geriatric Depression Scale, 8% did not even understand the emptiness concept (Flacker & Spiro, 2003).

Based on some theories, the sense of emptiness has been related to several psychological constructs, such as narcissism (Gruba-McCallister, 2007; Zerach, 2016), loneliness (Clum, 1997), hopelessness (Klonsky, 2008), emotional abuse (Mitchel, 1999), guilt (Adolfson, Larsson, Wijma, & Bertero, 2004), dissociation (Rallis, Deming, Glenn, & Nock, 2012), and compulsive buying (Zerach, 2016). Yet, conceptually, the emptiness experience has more often been associated with suicide risk (Blasko-Fontecilla et al., 2013; Klonsky, 2008; Segal-Engelchin, Kfir-Levin, Neustaedter, & Mirsky, 2015).

This study, therefore, aimed to investigate the correlation of the Multidimensional Sense of Emptiness Scale (MSES) with the Suicide Probability Scale (Cull & Gill, 2002) in order to provide further evidence regarding the internal structure of the MSES under development. In addition, the lack of studies on this topic revealed that researchers have paid less attention to the empirical inquiry of the relationship between the emptiness construct and other positive psychology constructs, such as hope, meaning in life, and resilience. Hence, another purpose of this study was to examine the association of the MSES with the Adult Trait Hope Scale (Snyder et al., 1991), the Meaning in Life Scale, and the Brief Resilience Scale (Smith et al., 2008). The
results of this investigation were also utilized for further validation regarding the internal structure of the MSES.

**Emptiness and Suicide Risk**

Suicide is a global mental health issue and remains among the most tragic consequence of psychological pain (Zepinic, 2009), accounting for 1.6% of all deaths worldwide and making it the 17th leading cause of death in 2015 (WHO, 2017). The estimated number of completed suicides in the US in 2015 totaled 44,193, making suicide the 10th leading cause of death in the US (Drapeau & McIntosh, 2015). In the US, suicide is the third leading cause of death among persons aged 10-14, the second among persons aged 15-34, the fourth among persons aged 35-44, and the fifth among persons aged 45-54 (Drapeau & McIntosh, 2015).

Suffering from a severe mental disorder is a common factor leading to suicidal behavior; approximately 90% of people who commit suicide and 47% - 74% of the population at risk of suicide have a diagnosed mental disorder (Marco, Perez, & Garcia-Alandete, 2016). Research findings support various mental disorders as risk factors for suicide, such as depression, anxiety, substance use disorders (Nock et al., 2009), eating disorders (Chesney, Goodwin, & Fazel, 2014), and borderline personality disorder (Hughes, Bass, Bradley, & Hirst-Winthrop, 2017; Schneider et al., 2008). Researchers have traditionally focused on identifying potential risk factors for suicide (Marco et al., 2017). Among the identified risk factors for suicide attempts, hopelessness has been proposed as a proximal risk factor (Klonsky & May, 2015) and found to be a predictor of eventual suicide even when controlling for past suicidal behaviors (Klonsky, Kotov, Bakst, Rabinowitz, & Bromet, 2012).

In addition to hopelessness, the feeling of emptiness is considered as an important element with individuals who commit suicide (Kramer, 2002). Segal-Engelchin et al. (2015)
explored the mental pain experiences of a culturally diverse sample of four female suicide attempt survivors using in-depth interviews. The findings revealed several characteristics of the mental pain experience such as hopelessness, emptiness, and despair, suggesting emptiness as one of the markers of suicide. In addition, Shields et al. (2017) reviewed 11 qualitative studies addressing issues related to the bereavement process following suicide. Similarly, the results indicated that those bereaved by suicide encounter a range of intense feelings including blame, guilt, and emptiness. Furthermore, Chia et al. (2008) analyzed the content of 398 Singaporean suicide letters and found the sense of emptiness as the second most frequent emotional factor expressed for suicide (25 %) following despondency/agony (60 %).

Recently, Delgado-Gomez et al. (2012) conducted various analyses to find the most discriminative factors of suicide attempts. The set of studies indicated the emptiness experience as the most relevant factor to classify suicide attempters. In addition, Blascallo-Fontecilla, Baca-Garcia, Courtet, Garcia-Nieto, and Leon (2015) explored the reasons for suicide attempts in major repeaters. The research findings revealed automatic negative reinforcement (to stop bad feelings, psychological pain) reported in almost all attempters — 86 % of non-major repeaters and 91 % of major repeaters— suggesting that people might commit suicide to relieve painful emotions. The same study results also illustrated major repeaters (individuals with ≥5 lifetime suicide attempts) approximately five times more likely than non-major repeaters to endorse automatic positive reinforcement (to feel something because the individual feels empty) as a reason for attempting suicide. These findings suggest that individuals who attempt suicide because of feeling empty or just desiring to feel something, even if pain, are more likely to be major repeaters. Blasco-Fontecilla et al. (2013), thus, identified the feeling of emptiness as a central element associated with suicide attempts. Based on these findings in the available
literature, we anticipate finding a positive correlation between the Multidimensional Emptiness Scale and the Suicide Probability Scale (Cull & Wayne, 2002).

**Emptiness and Hope**

In addition to suicide risk, another psychological condition with which the emptiness experience has often been associated is hopelessness (Aguirre & Galen, 2013; Ellison et al., 2016; Klonsky, 2008). Opposite to hopelessness, a risk factor for mood disorders, hope as a positive psychology construct —identified as a protective factor against mental disorders— has received increased attention in the last two decades with its emphasis on the adaptive role of positive thinking (Abdel-Khalek & Snyder, 2007; Baptista, Carneiro, & Cardoso, 2013). Snyder, Feldman, Taylor, Schroeder, and Adams (2000) highlighted the positive influence of hope in human resiliency and indicated its capacity as a strength to prevent the onset of problems and to alleviate existing ones. According to Kowalcky (2013), hope has become of central importance in the discipline of psychology.

Snyder (1996) operationally characterized hope as a goal directed, cognitive set including two interrelated components: pathways and agency thinking. *Pathways thinking* refers to an individual’s perceived capability to generate successful routes to reach one’s goals; *agency thinking* reflects the person’s perceived motivation to utilize those pathways to pursue desired goals. In this regard, Snyder, Irving, and Anderson (1991) defined hope as “a positive motivational state that is based on an interactively derived sense of successful (a) agency and (b) pathways” (p. 287). In addition, these pathways and agency thoughts interact, reinforcing each other along the goal pursuit sequence (Snyder, 1996).

The prevalence of mental disorders in modern society suggests a widespread struggle for which hope might offer some remedy. For instance, depression and suicide are often
characterized by hopelessness and/or a belief that no alternative choices or relief exists (Kowalcky, 2013). If depression and suicide are a consequence of the abyss of hopelessness to some extent, hope seems a quality worthy of cultivation and possession. Likewise, the emptiness state as a mental issue is characterized with a loss of hope, meaning and purpose in life (Cheng et al., 2013), suggesting the presence of hope as a buffer against this psychological state. Therefore, we assume to identify a negative correlation between the Multidimensional Emptiness Scale and the Adult Trait Hope Scale (Snyder et al, 1991).

**Emptiness and Meaning in Life**

In the recent decades, the construct of meaning in life has received renewed attention, in conjunction with a growing focus on positive traits and psychological strengths (Steger & Samman, 2012; Steger et al., 2006). In their scale development study to measure the construct of meaning in life, Steger et al. (2006) defined this concept as ‘the sense made of, and significance felt regarding, the nature of one’s being and existence’ (p. 81), representing an effort to encompass all of the major definitions of meaning (Steger & Samman, 2012). Meaning in life is regarded as a positive variable—an indicator of well-being—(Steger et al, 2006), a facilitator of adaptive coping and post-trauma adjustment (Steger, Frazier, & Zacchanini, 2008), a marker of physical health (Steger, Mann, Michels, & Cooper, 2009), and a protective factor against psychological distress (Steger et al, 2006). As seen, meaning in life appears to be a notable psychological resource (Steger & Samman, 2012).

Frankl (1959), particularly his book *Man’s Search for Meaning*, has been given credit for the emergence of meaning as an important variable (Steger et al., 2006). Frankl (1959) delineated man’s search for meaning as the primary motivation in life and not a secondary rationalization of instinctual drives. The meaning which is unique and specific to each person
and carries significance can satisfy the will to meaning (Thakur & Basu, 2010). Frankl (1959) suggested three avenues in which meaning can be discovered: (1) creating a work or doing a deed; (2) experiencing something or encountering someone; and (3) adopting an attitude toward unavoidable suffering. According to him, the failure in finding a significant meaning in life worth living for can result in meaninglessness and the experience of inner emptiness, which indicates meaning in life as a buffer against the emptiness experience. Therefore, we anticipate identifying a negative correlation between the Multidimensional Emptiness Scale and the Meaning in Life Questionnaire (Steger et al, 2006).

**Emptiness and Resilience**

The concept of resilience is one of the mostly studied construct in the mental health field in the context of its facilitative role for positive psychological outcomes and protective function against adverse mental consequences, with a body of evidence demonstrating the beneficial effect of resilience over the decades (Beutel et al., 2017). Within the field of mental health, there is a range of conceptual definitions of resilience (Holdevici, Craciun, & Craciun, 2015; Mohanty, 2016). Despite ongoing debate on the conceptualization of resilience and the variety of approaches that are used to study the construct (Govender, Cowden, Asante, George, & Reardon, 2017); resilience is typically viewed as successful adaptation to adverse life circumstances (Rathore, 2017). The term *resilience* has been defined as the ability to spring back from challenging life experience and heal from stress (Smith et al, 2008) or the capacity of adapting successfully in the face of threats, tragedy, trauma, adversity, and any critical sources of stress and maintaining flexibility with balance while dealing with stressful circumstances (APA, 2010). In this sense, resilience is considered to be a dynamic process that manifests itself in response to life circumstances and individual personality profiles (Balgiu, 2017).
In the literature, while resilient persons are identified as having the ability to successfully respond to stressful life events (Smith et al, 2008); individuals devoid of resilience skills are considered to cope with negative circumstances by having lack of response or expressing more mechanical response to an external stimuli (Moore & Fine, 1990), which might lead them to experience lack of feelings associated with the particular life event. The resilience coping skills bear the idea that what is traumatic can be transformed; otherwise, a denial or no sense is possible, referring to the emptiness experience (Tosso, 2012). Based on the available literature, we assume to find a negative correlation between the Multidimensional Emptiness Scale and the Brief Resilience Scale is hypothesized (Smith et al, 2008).
CHAPTER III. RESEARCH DESIGN AND METHODOLOGY

This study was designed to develop and validate a measure, the Multidimensional Sense of Emptiness Scale [MSES], in order to accurately assess levels of experienced emptiness among adults. In order to provide further evidence based on relations to other variables, this study also investigated the relationship of the MSES with relevant psychometrically sound instruments, the Suicide Probability Scale (SPS; Cull & Gill, 2002), the Adult Trait Hope Scale (ATHS; Snyder et al., 1991), Meaning in Life Questionnaire (MLQ; Steger et al., 2006), and the Brief Resilience Scale (BRS; Smith et al., 2008). In line with the purpose of the study, the following research questions were addressed:

**Research question 1:** What is the underlying factorial structure of the MSES with a sample of college students?

**Research question 2:** What is the internal consistency reliability of the MSES with a sample of college students?

**Research question 3:** To what degree is there a relationship between the MSES and the SPS scores within a sample of college students?

**Research question 4:** To what degree is there a relationship between the MSES and the ATHS scores within a sample of college students?

**Research question 5:** To what degree is there a relationship between the MSES and the MLQ scores within a sample of college students?

**Research question 6:** To what degree is there a relationship between the MSES and the BRS scores within a sample of college students?

In the current study, four basic steps were followed to accomplish the identified goals and address the stated research questions. The main phases included in this study are: (1) establish
content-related evidence for the instrument, the MSES, using a four-step sequential mixed-method approach (Ermis-Demirtas, 2018), (2) establish evidence regarding internal structure of the instrument using exploratory factor analysis [EFA], (3) establish evidence based on relations to other variables examining the correlation of the MSES with the SPS, the ATHS, the MLQ, and the BRS, and lastly (4) establish internal consistency reliability of the instrument. By this way, multiple sources of validity evidence were sought to support the intended interpretation of the instrument scores (Heppner, Wampold, Owen, Wang, & Thompson, 2016).

**Phase 1: Establishing Evidence Based on Content of the Instrument**

The purpose of this initial phase was to provide validity evidence based on content of this emerging instrument (content validity). Considering content validity as a necessary source of evidence in drawing conclusions about a scale’s quality, the *Standards for Educational and Psychological Testing* (American Educational Research [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014) encouraged scale developers to provide validity evidence based on the content of a measure.

In this study, a four-step sequential mixed-method content validation procedure was followed to provide validity evidence regarding the content relevance of the MSES (Ermis-Demirtas, 2018; McKenzie, Wood, Kotecki, Clark, & Brey, 1999). These four steps were (1) creation of an initial draft of the questionnaire, (2) selection of a panel of experts to evaluate the questionnaire, (3) a qualitative review of the questionnaire, and (4) a quantitative review of the questionnaire (Ermis-Demirtas, 2018; Ermis-Demirtas & Watson, 2017; McKenzie et al., 1999). The four-step sequential mixed-method content validation procedure was preferred in this study, as this method provides a comprehensive procedure incorporating both qualitative and
quantitative phases in establishing content validity of a measure (Ermis-Demirtas, 2018; Ermis-Demirtas & Watson, 2017).

**Step 1: Creation of an Initial Draft of the Instrument**

The initial stage of the instrument development, creation of an initial draft of the measure, included four interwoven steps: (a) operationalization of the construct of interest, (b) literature review, (c) generation of items, and (d) selection of a response format (Heppner et al., 2016).

**Operationalization of the construct of interest.** In this study aiming to develop a scale to measure the emptiness construct, *emptiness* was characterized as a multifaceted psychological state including four distinct theoretical dimensions: emotional, existential, social, and spiritual. In this regard, *the sense of inner emptiness* is defined as feeling empty or hollowness inside, being not able to identify one’s feelings, and feeling like a part is missing. *The sense of meaninglessness* refers to feelings of lacking meaning or purpose in life and finding the world meaningless. *The sense of absence of relatedness* refers to feeling disconnected from the people around, society, and a shared meaning in the community. *The sense of spiritual emptiness* is defined as feelings of disconnection from the universe and a Higher Power valued by the individual and being unable to feel spiritual emotions.

**Literature review.** Scale developers are recommended to review the extant literature to see how previous researchers have approached the same construct (Clark & Watson, 1995; Sullivan, 2011). After operationalizing the emptiness construct, therefore, the next step was to look for related theories providing guidance in generating item domains of emptiness. This review included investigation of professional journals, related publications, books, and dissertations. In addition, the researcher reviewed the previous attempts to measure the same
construct as well as closely relevant constructs, as suggested by Clark and Watson (1995). In this sense, the previous scales developed to measure the emptiness state, the Experienced Level of Emptiness Scale (Hazell, 1982, 1984) and the Emptiness Scale were reviewed; useable items, already proven to be psychometrically sound, were incorporated into the MSES with some revisions. Furthermore, the relevant instruments were included in the review process of existing measures, such as the Spiritual Dryness Scale (Büssing, Güntler, Bauman, Frick, & Jacobs, 2013), the Meaning in Life Scale (Steger et al., 2006), and the Mental Pain Scale (Orbach, Mikulincer, Sirotu, & Gilboa-Schechtmen, 2003).

**Item generation.** An initial pool of 57 items was generated based on the review of the literature and the existing scales developed to measure the same or similar constructs. An attempt was made to generate items reflecting theoretical, empirical, and clinical issues related to the experienced emptiness. For example, the main theoretical domains of the phenomenon of emptiness documented in the literature (emotional, existential, social, and spiritual) were incorporated into the scale under construction. In addition, conceptual articles and qualitative studies germane to the emptiness experience as well as pre-existing scales measuring the level of experienced emptiness (Buggs, 1996; Hazell, 1982) were utilized in the item development process for the current scale. The literature on clinical practice with the individuals experiencing emptiness also served as a resource for generating the initial item pool.

The items were grouped into four categories, considered to reflect discrete factors of the emptiness construct. These categories included the sense of inner emptiness, the sense of meaninglessness, the sense of absence of relatedness, and the sense of spiritual emptiness. Specifically, the first dimension, *sense of inner emptiness*, included 13 items; the second factor, *sense of meaninglessness*, contained 17 items; the third dimension, *sense of absence of*
relatedness, included 14 items; and the last factor, sense of spiritual emptiness, included 13 items. It is worthy to note that, however, the generation of these dimensions was purely exploratory in nature.

Response format. The instrument was devised to utilize a Likert-type response format. Participants responded to each item in the questionnaire using a 7-point Likert-type scale response set with values ranging from 0 (none of the time true of me) to 6 (all of the time true of me) as a combination of reflection and frequency response anchors (Vagias, 2006). Weems and Onwuegbuzie (2001) recommend using a Likert-type scale because it provides ample yet concrete options along a spectrum rather than using ‘yes-no’ answer format, to capture finer nuances of the measured construct. In addition, the commonly used midpoint categories such as ‘I don’t know’ or ‘undecided’ are avoided to obtain higher data accuracy and forgo participant indecisiveness (DeVellis, 2016). Directions for the instrument instructed participants to determine how often each statement describing their feeling, perception, or behavior is true for them over the past year based on their subjective experiences.

Step 2: Selection of the Subject Matter Experts (SMEs) Panel

The panel of SMEs is recommended to include content reviewers who have published or worked in the field (Wallace et al., 2003). The Standards for Educational and Psychological Testing (AERA, APA, & NCME, 2014) require scale developers to have content reviewers who have obtained relevant training, experience, or qualifications to review instruments. Including an expert in measurement or a relevant field is also considered to be helpful in determining whether the instrument is well-constructed and appropriate for psychometric testing (Doris et al., 2003).

For the second step, considering the requirements established by the Standards for Educational and Psychological Testing (AERA et al,) as well as suggestions to include experts
from the measurement field, identification criteria used in this study to determine the expert raters in the judging panel included having (a) panelists specialized in the emptiness construct or accumulated extensive counseling experience as well as (b) reviewers with expertise in test adaptation. Based on the identification criteria, a total of 15 content experts were contacted, with eight of the volunteering to serve as a reviewer. Out of eight content experts, six of them were recruited from counseling, one from clinical psychology, and one from psychiatry. Each of the expert panel members has an established reputation as a scholar in their own fields, works as a full-time professor, and has extensive clinical experience ranging from approximately 15 to 30 years, working with a range of clientele diagnosed with a mental disorder. In addition, six out of eight reviewers have experience with instrument development germane to mental health. In regard to content reviewers specialized in the emptiness construct with a publication, two of the experts were identified to have either doctoral dissertation or peer-reviewed articles in national and international journals related to the topic.

In the literature, there are various suggestions with respect to the number of content experts needed. Delgado-Rico et al. (2012) recommended including at least three content expert judges. However, Gable and Wolf (1993) suggested selecting a minimum of two and maximum 20 experts. Including a larger number of experts might generate more information about the measure; yet, it holds a potential to make the review of obtained suggestions from the SME judges and the consensus-reaching process much more complicated. Therefore, the optimal number of reviewers has been suggested from eight to 12, considering the desired level of expertise and diversity of knowledge (Polit, Beck, Cheryl, & Owen, 2007). In this sense, recruiting eight content reviewers in total was considered sufficient to establish the content validity of the MSES.
Step 3: A Qualitative Review of the Questionnaire

With the jury selection complete, the researcher initiated the qualitative review process of the instrument by sending the SME jurors a packet of materials including the following: (a) a cover letter thanking them for their participation, addressing the purpose of the study, and explaining their tasks; (b) a copy of the drafted instrument comprising the instruction for and the response format of the instrument and an operational definition of each content domain followed by items; and (c) a list of questions to answer.

Upon obtaining the responses of all content reviewers, the researcher started to analyze each component of the instrument in light of the panelists’ recommendations (Delgado-Rico et al., 2012). In this step, the consensus among the panelists’ suggestions was considered in terms of revisions because such consensus is regarded as an indicator of a revision being highly recommended (McKenzie et al., 1999). In case of obtaining a very good comment from only one content reviewer, however, the researcher decided to make the recommended revision without looking for consensus. The review of the feedback elicited from these experts resulted in 23 items being revised, four items being added, and nine items being dropped from the developing instrument. This qualitative review process ended up with 52 items.

Step 4: A Quantitative Review of the Questionnaire

After the appropriate revisions were made based on the feedback elicited from the content reviewers, a packet of the quantitative materials were e-mailed to the each juror. In this quantitative review, SMEs were requested to rate the appropriateness of each item by asking whether the item is ‘essential’, ‘useful but not essential’, or ‘not necessary’ for the each dimension of the MSES.
After receiving ratings of each panelist, the researcher initiated the process of quantifying experts’ degree of agreement regarding the content relevance of an instrument. In this study, Lawshe technique was utilized as a quantitative approach to content validity because this technique is considered more relatively straightforward, allowing simple calculations and providing a table for identifying critical cutoff values (Wilson, Pan, & Schumsky, 2012). The procedure of this method primarily entailed calculation of the Content Validity Ratio [CVR] of each item in the instrument based on the formula, which is \[ \text{CVR} = \frac{n_e - N/2}{(N/2)} \]. Then, the computed CVR value of each item was compared to the critical levels necessary for statistical significance at \( p < .05 \). In this study, the Content Validity Ratio Critical Value [CVR_{\text{critical}}] was determined to be .75 due to including eight content reviewers in the judging panel. When the CVR value of an item failed to reach the CVR_{\text{critical}} value of .75, the item was excluded from the instrument. During the quantitative review procedure, 13 items having a CVR value lower than the CVR_{\text{critical}} value of .75 were deleted from the 52-item pool, which resulted in 39-item instrument for pilot testing.

After computing the CVR values of all items in the scale and deciding on inclusion of the items within the final instrument, the CVI was then computed for the whole test by calculating the mean of the CVR values of the retained items (Lawshe, 1975). Tilden, Nelson, and May (1990) suggest CVI values exceed .70; however, Davis (1992) suggest a CVI exceeding .80 is preferred. In many situations, it is more efficient to report the overall CVI score than each individual CVR values (Gilbert & Prion, 2016). In this step, the CVI value of the 39-item instrument was found to be .89, considered adequate based on the recommendations by Davis (1982; CVI > .80). Upon the completion of this portion of the validating process, the instrument was ready to be pilot-tested (McKenzie et al., 1999).
Phase 2: Establishing Evidence for Internal Structure of the Instrument

The purpose of this phase was to conduct exploratory factor analysis [EFA] in order to explore the factorial structure of the MSES. According to DeVellis (2016), the EFA yields an unbiased examination of the factor structure. To measure such latent constructs, an EFA is recommended (Field, 2013). In the current study, EFA was employed as a theory-generating procedure. In this section, I addressed the following components of this step, establishing evidence for internal structure of the MSES: (1) participants, (2) procedure, (3) instruments, and (4) methods of statistical data analysis.

Participants

Potential participants included students from any educational levels of college at a medium-sized, four-year, Hispanic-serving University in southern United States. The inclusion criteria for participation in this study were: (a) current enrollment at the university, (b) a minimum age of 18, and (c) the ability to provide consent for participation in this study. The survey packet including five instruments along with a demographic form was administered to a sample of college student volunteers solicited from the large volume classes from the various departments at the university. In the demographic contexture of the students, there is an evident transformation from predominantly white to a Hispanic student population as provided by the South Texas University Accountability Reports (2015). According to this report, Hispanic students constituted 44.7 % of the student population, followed by White (39.4 %), African American (5.4 %), Asian (2.4 %), and others (8.1 %).

Participants in this study were 405 college students (232 women, 57.3 %; 173 men, 42.7 %) at a medium-sized four-year university in the central southern region of the United States. Participants from various majors ranged in age from 18 to 47 with a mean age of 20.82 years (SD
In terms of ethnicity, participants identified as Hispanic/Latino ($n = 178; 44\%$), White ($n = 150; 37\%$), Asian American ($n = 20; 4.9\%$), African American ($n = 19; 4.7\%$), Native American ($n = 5; 1.2\%$), Pacific Islander ($n = 3; 0.7\%$) along with biracial ($n = 25; 6.2\%$) and other ($n = 5; 1.2\%$).

This sample included college students from different levels of undergraduate education, with 39.5\% identified as freshmen ($n = 160$), 22.2\% sophomore ($n = 90$), 16.8\% junior ($n = 68$), and 21\% senior ($n = 85$) along with 0.2\% response being missing ($n = 1$). Participants were predominantly first- ($n = 155; 38.3\%$) and second-generation ($n = 167; 41.2\%$) college students with the remaining sample identifying as third-generation college students ($n = 83; 20.5\%$). On average, participants were enrolled in 13.97 ($SD = 2.72$) semester credit hours while participating in this study. In terms of academic performance, participants self-identified with low ($n = 1; 0.2\%$), below average ($n = 23; 5.7\%$), average ($n = 225; 55.6\%$), above average ($n = 116; 28.6\%$), and excellent ($n = 40; 9.9\%$) with a self-reported mean GPA of 3.15 ($SD = 0.54$).

In addition to presented demographic and educational information, participants’ suicide attempt and abuse history are provided to further describe the sample used in this study. First, 64 of 405 participants (15.8\%) reported a history of suicide attempt ranging from 1 attempt to 8 attempts. Second, 145 participants (35.8\%) reported a history of abuse including emotional ($n = 114; 28.1\%$), physical ($n = 56; 13.8\%$), and sexual ($n = 47; 11.6\%$).

**Procedure**

Utilizing a convenient sampling method, participants were recruited on a volunteer basis from a public four-year Hispanic serving institution in southern Texas in the United States. Due to nature of the scale development study, a method of item-observation rate was used to determine the required sample size. According to Gorsuch (1983), the minimum ratio for item-
observation is 1:10, which is considered as the sublimit. Given this criterion, the current study needed to include approximately 400 participants. Approval from the Institutional Review Board (IRB) was obtained prior to the data collection procedure.

First, first-year seminar coordinator was contacted to ask for the permission to collect data and to request sending an e-mail to the first-year college instructors teaching large volume classes. In the same way, department chairs having undergraduate programs within their department were contacted through e-mail to request their permission to recruit students for the project as well as to reach out the professors within their department teaching large classes. Faculty e-mail addresses were obtained by visiting each college department’s web page, and emails were sent to obtain permission to enter the classroom. The researcher specified that she would need to use approximately 30 minutes of lecture time to provide students with the information needed to participate in this research study. The e-mail sent to the coordinators, department chairs, and course instructors also included the purpose of the study, the introduction of the researcher, administration of the instruments, and the contact information.

Based on the faculty positive responses, the researcher took a further step and scheduled a class time with the instructors willing to provide permission to recruit student participants in their classes. At the scheduled times, the investigator visited these classes and presented the proposed research, answering any questions or concerns with regard to the participation or the nature of the study. Students were informed that the study was anonymous; that is, they should not have written their names or other identifying information on their demographic forms or the instruments. The potential respondents were also informed that their participation was voluntary; that is to say, they may have decided not to participate or to withdraw at any time without their current or future relations with their university being affected.
Instruments

Students willing to participate in this study completed a brief demographic questionnaire along with five instruments, the initial item pool of the MSES, the ATHS (Snyder et al., 1991), the BRS (Smith et al., 2008), the MLQ (Steger et al., 2006), and the SPS (Cull & Gill, 2002).

**Multidimensional Sense of Emptiness Scale (MSES).** The initial item pool of the MSES was developed to assess the level of experienced emptiness among adults, including four distinct dimensions: (a) the sense of inner emptiness, (b) the sense of meaninglessness, (c) the sense of absence of relatedness, and (d) the sense of spiritual emptiness. The initial draft of the MSES consisted of 39 items and utilized a 7-point Likert-type scale. The scale response options are 0 (*none of the time true of me*), 1 (*a little of the time true of me*), 2 (*some of the time true of me*), 3 (*half of the time true of me*), 4 (*more often than not true of me*), 5 (*most of the time true of me*), and 6 (*all of the time true of me*). Factorial analysis resulted in the emergence of a four-factor solution as proposed: (1) *Sense of Inner Emptiness* including seven items, (2) *Sense of Meaninglessness* containing four items, (3) *Sense of Absence of Relatedness* including eight items, and (4) *Sense of Spiritual Emptiness* containing eight items. In this form, the instrument scores for the total scale range from 0 to 162, with higher scores indicating higher level of experienced emptiness. For the subscales, the scores range from 0 to 42 for the first subscale, from 0 to 24 for the second subscale, from 0 to 48 for the third subscale, and from 0 to 48 for the fourth subscale. For each subscale, higher scores are indicative of higher level of related emptiness experience.

**Adult Trait Hope Scale (ATHS).** The ATHS (Snyder et al., 1991) was developed to assess adult individuals’ level of hope based on goal-oriented thinking, including two dimensions: (a) pathways and (b) agency. Each subscale consists of four items with four
remaining distracter items non-scored. This 12-item instrument utilizes an 8-point Likert-type scale, having responses ranging from 1 \((\text{definitely false})\) to 8 \((\text{definitely true})\). This measure yields a minimum score of 8 and a maximum score of 64, with higher scores representing higher level of hope. Snyder et al. (1991) reported adequate internal consistency for the ATHS, with Cronbach’s alpha levels ranging from .74 to .84. In this study, the Cronbach’s alpha coefficients of internal consistency reliability for the general scale and each of the subscales were .81 for pathways, .79 for agency, and .83 for the total scale. Additionally, test-retest reliability was reported as .80, indicating adequate test stability over a 10-week period.

Furthermore, Snyder et al. (1991) determined convergent validity of the ATHS by investigating other instruments measuring similar concepts such as optimism and self-esteem. Snyder et al (1991) found Scheier and Carver’s Life Orientation Test (LOT), an instrument used to measure optimism, correlated .60 to .50 with the Adult Trait Hope Scale. Additionally, the Adult Trait Hope Scale correlated 0.58 with Rosenberg’s Self-Esteem Scale (Snyder et al, 1991). Snyder et al (1991) found the Adult Trait Hope Scale negatively correlated with scales measuring concepts considered the opposite of hope such as hopelessness and depression. The Adult Trait Hope Scale negatively correlated with the Hopelessness Scale \((r = -.51)\) and with the Beck Depression Inventory \((r = -.42; \text{Synder et al.}, 1991)\).

**Brief Resilience Scale (BRS).** The BRS (Smith et al., 2008) was developed to measure resiliency coping skills among adults referring to the ability to recover from challenging life conditions. Participants use a 5-point Likert-type scale across 6 items to rate their level of agreement with statements describing resiliency skills (e.g., “I tend to bounce back quickly after hard times.”) from 1 \((\text{strongly disagree})\) to 5 \((\text{strongly agree})\). The BRS yields a minimum score of 6 and maximum score of 30 with higher scores suggesting higher resilience. Smith et al.
(2008) reported internal consistency coefficients ranging from .80 to .91; similarly, our sample revealed an alpha coefficient within the excellent range of scores (α=.90). Additionally, test-retest reliability coefficients were found to be moderate ranging from .62 over 3-month to .69 over 1-month.

Furthermore, Smith et al. (2008) assessed convergent validity of the Brief Resilience Scale by examining correlations between the Brief Resilience Scale and other instruments. Smith et al (2008) found positive correlations between the Brief Resilience Scale and measures of resilience, optimism, purpose in life, social support, active coping, and positive reframing. Further assessment of convergent validity revealed negative correlations between the Brief Resilience Scale and measures of pessimism, alexithymia, negative interactions, behavioral disengagement, denial, self-blame, perceived stress, anxiety, depression, negative effect, and physical symptoms (Smith et al., 2008).

**Suicide Probability Scale (SPS).** The SPS (Cull & Gill, 2002) was devised to assess suicide risk in clinical and non-clinical adolescent and adult populations. The 36-item SPS includes four main factors in the formal scoring of the measure: (a) hopelessness with 12 items, (b) suicidal ideation with eight items, (c) negative self-evaluation with nine items, and (d) hostility with seven items. The SPS is a self-report assessment in which respondents indicate on a 4-point Likert scale to what degree they found each statement to be true about them using a response scale ranging from ‘none or little of the time’ to ‘most or all of the time’. These ratings are then weighted selectively by item and totaled to achieve a Total Weighted Score and four subscale scores. The highest score obtainable from the scale is 144 and the lowest is 36. A high score attained from the overall scale is directly proportional to suicide probability.
Cull and Gill (2002) reported excellent internal consistency for the total scale with an alpha coefficient of .93 and internal consistency ranging from fair to good for the remaining scales (.62 for Negative Self-Evaluation, .78 for Hostility, .80 for Hopelessness, and .89 for Suicide Ideation). Similarly, there was fair to excellent split-half reliability ranging from .58 (Negative Self-Evaluation) to .93 (total scale).

**Meaning in Life Questionnaire (MLQ).** The MLQ (Steger et al., 2006) is devised to assess the Presence of, and Search for, Meaning in Life. This is a 10-item self-report inventory designed to measure two dimensions of meaning in life: (1) Presence of Meaning –how much respondents feel their lives have meaning- and (2) Search for Meaning –how much respondents strive to find meaning and understanding in their lives (Steger, 2006). Respondents answer each item on a 7-point Likert-type scale ranging from 1 ‘absolutely true’ to 7 ‘absolutely untrue’. The Presence subscale is obtained by summing items 1, 4, 5, 6, and 9-reverse coded. The Search subscale is obtained by summing items 2, 3, 7, 8, and 10. A total score of the MLQ is computed by summing all items in the inventory with higher scores indicating a high level of subjective meaning in life. The MLQ has good internal consistency, with coefficient alphas ranging in the low to high .80s for the Presence subscale and mid .80s to low .90s for the Search subscale (Strack, 2007).

**Demographic Questionnaire.** The Demographics Sheet was designed to collect data from the participants. The participants were requested to provide their information for the following questions: (a) age, (b) gender, (c) marital status, (d) ethnic category, (e) living status, (f) academic performance rating, (g) academic load, (h) student status, (i) working situation, (j) previous suicide attempts, and (k) abuse history including emotional, physical, and sexual abuse.
**Data Analysis**

**Preliminary analysis.** Before performing the descriptive statistics and EFA, I analyzed the obtained raw data to check the appropriateness of the selected statistical method. The skewness and kurtosis were checked to determine the normality assumption of the data. The skewness and kurtosis values between -2 and +2 are viewed appropriate to meet the normality assumption of univariate distribution (Field, 2013). The homogeneity of variance was tested using the Box’s M statistics (Field, 2013), a significance value above \( p = .05 \), indicating the satisfaction with the assumption of homogeneity of variance. In addition, missing data and outliers were taken into account because of the potential negative impact on the statistical analysis procedure (Field, 2013). In case of missing data, mean substitution was employed to replace the missing value. Using the box-plot provided an exploratory graphic representation of the distribution, outliers was checked visually and extreme scores were eliminated to increase the accuracy of the results (Field, 2013).

In order to assess factorability, the Bartlett’s Test of Sphericity investigated the correlation matrix, a significant \( p \)-value demonstrating the satisfaction with the assumption of the data feasibility for the EFA (Field, 2013). Furthermore, Kaiser-Meyer-Olkin (KMO) test was utilized to determine the sampling adequacy for each variable and the overall model, with higher KMO illustrating higher suitability of the data. Specifically, Kaiser (1974) suggested guidelines to interpret the KMO values as following: .90 - 1.0 (marvelous), .80 - .89 (meritorious), .70 - .79 (middling), .60 - .69 (mediocre), .50 - .59 (miserable), and below .50 (unacceptable). Once determining the collection of variables to be appropriate for factor analysis, the EFA started to be performed and factors to be extracted (Watson, 2017).
**Factorial analysis.** The function of EFA is to exclude unnecessary and similar questions and extract the items best representing the construct to be assessed. Factor extraction is a procedure of accounting for the shared variance in each variable from its unique variance (Mvududu & Sink, 2013; Watson, 2017). Factors are extracted until the explained variance in the intercorrelation matrix is maximized while employing the least number of distinctive factors (Mvududu & Sink, 2013).

There is an array of extraction methods available; the three most commonly applied in EFA are (a) maximum likelihood factor extraction [ML], (b) principal component analysis [PCA], and (c) principal axis factoring [PAF] (Yong & Pearce, 2013). ML attempts to analyze the maximum likelihood of sampling the observed correlation matrix (Tabachnick & Fidell, 2013). ML extraction method is employed when the assumption of normality for the data distribution is met (Watson, 2017). This method is considered to be more useful for confirmatory factor analysis [CFA] and is applied to estimate the factor loading for a population (Schmitt, 2011; Yong & Pearce, 2013). Therefore, it is less commonly used for estimating EFA models (Schmitt, 2011). PCA is used to extract maximum variance from the data set with each component thus reducing a large number of variables into smaller number of components (Tabachnick & Fidell, 2013). PCA assumes measurement without error and is, therefore, less likely to generalize to CFA than EFA estimation methods of the common factor model (Schmitt, 2011); that is to say, PCA is not often used in EFA design (Watson, 2017). PAF is a widespread extraction method to estimate the common factor model (Mvududu & Sink, 2013). PAF does afford the advantage of operating under the common factor model, thus taking into account measurement error (Schmitt, 2011). PAF is best suited for exploring the underlying factors theorized by the researcher; that is to say, the method reveals the latent structure of a set of
original variables (Mvududu & Sink, 2013). In this study, PAF as a commonplace extraction method was used to identify factors of the MSES. Each of the extraction method has advantages and disadvantages; however, the PAF extraction method has been demonstrated to produce reliable solutions when researchers are looking to identify latent factors underlying variables in the study (Watson, 2017).

After extracting initial factors, researchers determine which emerging constructs should be included for further analysis and interpretation (Watson, 2017). For interpretation, Kaiser (1960) recommended retaining only those factors with Eigen values being greater than 1.0. Another method utilized to determine which factors to include is to investigate the cumulative variance explained by the retained factors (Watson, 2017). Majority of statistics scholars suggest including as many factors as needed to explain 75-90% of the variance (Pett et al., 2003).

It is often difficult to interpret the factors initially extracted and retained utilizing the methods presented earlier. To address this problem, researchers prefer to rotate these factors to more favorable positions in order to obtain the simplest possible factorial structure (Dimitrov, 2012). Researchers can rotate the factor matrix orthogonally or obliquely. The orthogonal procedure may be appropriate when the theory and research support uncorrelated factors, namely, when one is measuring distinct concepts (Dimitrov, 2012). One widely used orthogonal rotation algorithm is varimax, as it maximizes the variance across the factors and is easy to interpret (DeVellis, 2016). Varimax as a type of orthogonal rotation, however, should be rarely used in counseling investigations, because most constructs are intercorrelated (Mvududu & Sink, 2013). Oblique rotations should be used when minor to moderate correlations are expected between variables (Watson, 2017). Two oblique rotation algorithms are direct oblimin and promax (Dimitrov, 2012). Of these two approaches, direct oblimin is the one most used by
researchers (Watson, 2017). The selection of an oblique rotation method results in the generation of the three factor matrices: a factor pattern matrix, a factor structure matrix, and a factor correlation matrix (Watson, 2017). In this study, direct oblimin as an oblique rotation method was utilized, as minor to moderate correlations between the dimensions of the MSES are anticipated. In addition, the factor pattern matrix was applied in determining the extent to which a sample structure has been achieved.

Once the factors are rotated, the researcher initiated the process of making decisions with regard to selecting items to represent each factor. Several criteria are available for researchers to determine whether to include or exclude an item based on statistical results. In this study, the following criteria were applied to decide on inclusion or removal of the item from the instrument: a) Communality values between .40 and 1.0 were retained (Pett et al., 2003), b) items with loadings less than .32 were deleted from the factor (Tabachnick & Fidell, 2013), c) when an item loaded on two or more factors, there was at least .10 difference between these loadings; otherwise, the item decided to be removed from all factors (Tabachnick & Fidell, 2013), and factors with less than three items loading on them were dropped from the further analysis (Pett et al., 2003). After loading items onto the factors, I started to name those factors considering the content of their items. A commonly applied rule of thumb is to look at the two or three highest loaded items to see what underlying dimension they might represent (Watson, 2017).

**Phase 3: Establishing Evidence Based on Relations to Other Variables**

The purpose of this phase was to establish further evidence based on relations to other variables (Balkin, 2017), that is, evidence regarding construct validity of the instrument. *Construct validity* is about establishing the theoretical relationship of a variable to other variables (DeVellis, 2016). Evidence based on relations to other variables is one of the five primary
sources of validity evidence, and concerned with depicting relationships between assessment scores and important criteria (AERA, APA, & NCME, 2014). To establish evidence based on relations to other variables, I investigated the relationship of the MSES with other validated measures, the ATHS (Snyder et al., 1991), the MLQ (Steger et al., 2006), the BRS (Smith et al., 2008), and the SPS (Cull & Gill, 1988, 2002).

Convergent and Discriminant Validity

Convergent and discriminant validity as a type of construct validity is used to identify the strength and direction of the relationship between theoretically relevant constructs (DeVellis, 2016). Convergent validity is supported by high positive correlations, high positive or negative relationships, between the scores of two theoretically related measures, whereas discriminant validity is used to identify negative relationships among conceptually two relevant constructs. In order to establish evidence regarding the convergent validity of the Brief Resilience Scale, for instance, Smith et al. (2008) examined the relationship between the BRS and personal characteristics, social relations, coping, and health outcomes. The results demonstrated that the BRS was positively correlated with optimism, purpose in life, social support, active coping, and positive affect. Synder et al. (1991) tested discriminant validity of the ATHS and found medium to high negative correlations with the Hopelessness Scale ($r = -.51$) and with the Beck Depression Inventory ($r = -.42$).

In the current study, evidence based on relations to other variables (convergent and discriminant validity) was established through the investigation of the relationship between the MSES and suicide probability, hope, meaning in life, and resilience, measured by the SPS (Cull & Gill, 2002), the ATHS (Snyder et al., 1991), the MLQ (Steger et al., 2006), and the BRS (Smith et al., 2008), respectively. Based on the existing literature, we anticipate identifying a
positive correlation between the MSES and the SPS and a negative association of the MSES with the ATHS, the MLQ, and the BRS.

**Study Design**

Correlational designs are used to investigate the relationships between two or more variables (Adams & Lawrence, 2015). Simple correlational design (Heppner et al., 2016), will be utilized to identify the strength and direction of the relationship between two variables. Adam and Lawrence (2015) recommended using correlational designs when it is not possible or ethical to manipulate variables. In the current study, therefore, simple correlational design was preferred to examine the relationship between the identified constructs. According to Adams and Lawrence (2015), correlational designs have a higher potential of threats to external validity than experimental designs as there is no manipulation/control of the variables. With that in mind, the results were accordingly interpreted in caution.

**Data Analysis**

**Preliminary analysis.** A priori power analysis was conducted to identify the minimum number of participants required to establish statistical power for this correlational research design at the .80 level given $\alpha = .05$. Using the G*Power 3.1 statistical power analysis program (Faul, Erdfelder, Buchner, & Lang, 2007), the minimum number of participants for this study was determined to be 107.

**Pearson Product Moment Correlation.** Simple correlational design uses a statistical analysis typically Pearson Product Moment Correlation [PPMC] in parametric research to determine the nature of the relationship between two variables. The correlation coefficient, or $r$, provides an index of the degree of linear relationship between two variables (Heppner et al., 2016). The correlation coefficient between two scores can range from +1.00 (a very strong
positive relationship) to -1.00 (a very strong negative relationship). In this study, PPMC, \( r \), was performed to determine the degree of the linear relationships between emptiness and other theoretically relevant constructs, suicide probability, hope, meaning in life and resilience.

**Phase 4: Establishing Internal Consistency Reliability**

Reliability communicates to practitioners and researchers alike the degree to which scores are consistent and accurate over repeated administrations (DeVellis, 2016). This consistency ultimately influences the interpretations and conclusions of an assessment (Bardhoshi & Erford, 2017). In this step, after constructing the factorial structure of the scale, I initiated the process of establishing internal consistency reliability of the Multidimensional Sense of Emptiness Scale under development. Three internal consistency reliability measures were utilized as the following: (a) Cronbach’s Alpha, (b) split-half, and (c) item-total correlation.

**Cronbach’s Alpha Internal Consistency Reliability**

With regard to the assessment of internal consistency reliability, I used Cronbach’s alpha (\( \alpha \)) to assess internal consistency reliability concerned with the homogeneity of the items within scale (DeVellis, 2016). The Cronbach’s Alpha provides correlation coefficient statistics guiding the researcher determine the strength of the relationship among items/variables as well as determine the overall reliability of the survey (DeVellis, 2016). Reliability coefficients range from 0.00 (no reliability; all error variance) to 1.00 (perfect reliability; error free) (Bardhoshi & Erford, 2017). The general guideline requires instruments having a Cronbach’s Alpha of at least .7 (DeVellis, 2016; Field, 2013). According to Bardhoshi and Erford (2017), reliability coefficients of .80 and higher are suitable for screening-level clinical decisions; the desired reliability for diagnostic assessments is .90 or higher. For this scale development study, the
Cronbach’s alpha coefficient value (α) was computed separately for the total scale as well as for each subscale as each has been hypothesized to measure a distinct yet relevant construct.

**Split-Half Correlation**

Split-half reliability is concerned with estimating internal consistency with a group of examinees by testing the correlation between two parallel halves of the instrument (Erford, 2013). As the two halves of the test are assumed to be parallel, these half-test scores are correlated to obtain an estimate of half-test reliability (Bardhoshi & Erford, 2017). In this study, the split-half correlation coefficient was calculated for the total scale along with the four subscales using Spearman-Brown to test split-half reliability concerned with correlations between the half-test scores (DeVellis, 2016). Spearman-Brown coefficients higher than .80 are recommended (Bardhoshi & Erford, 2017).

**Item-Total Correlation**

Another measure, regarding the internal consistency reliability, is corrected item-total correlation, used to assess how highly each item is correlated with the subscale and the overall scale (Tabachnick & Fidell, 2013). Correlation coefficients above .3 to .4 are considered adequate to determine reliability; items with correlations below these values recommended to be considered for removal (Field, 2013).

**Limitations**

The objective of the present study was to contribute to the empirical literature of psychological emptiness by developing an instrument to measure this construct and examining the relationship between sense of emptiness and relevant psychological constructs of suicide risk, hope, meaning in life, and resilience. However, the results of this study are subjected to certain
limitations which may hinder the generalizability of the study findings. The limitations associated with this study design and analysis generally pertain to the sample characteristics.

First, this study employed a convenient sample of students enrolled in a regional four-year public university in South Texas. Therefore, a limitation of this study was generalizability, as the potential for demographic representation to be fairly homogeneous existed. In addition, the sample pool from which the participants were drawn represents a considerable limitation for the present study as the majority of the respondents enrolled in the university are comprised of Hispanics and Caucasians with a small number of African Americans and Native Americans. Therefore, it is unclear whether the study results on the current sample can be generalized to other geographical regions, which tend to be more culturally diverse.

The demographic attributes of the sample pool created two additional limitations. First, all of the participants in the present study are college students enrolled in courses at a university in southern Texas, with the approximately 40% of them being freshmen. Second, the largest age group of participants is less than 30 years of age due to the certain age characteristics of college students. Considering the developmental stages and certain characteristics of the majority of the current study sample, it is indefinite whether the study findings can be generalized to the other educational levels of college (sophomores juniors, and seniors), to a non-student sample, or to a community sample over 30 years of age.

An additional limitation inherent in using self-reported questionnaires is that self-reported responses on the assessment instruments are subject to response bias and increased error in validity and reliability of the measure. Participants might select responses which they perceive more desirable instead of considering accuracy. However, the researcher assumed that individuals responded to the questions honestly. Furthermore, the theoretical foundation of this
scale development study might constitute another limitation, as the developing instrument was theoretically founded on four distinct domains, explaining different aspects of the emptiness state. There might be other existing facets of emptiness; however, the scale items were generated considering the identified dimensions of this construct.
REFERENCES

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https://doi.org/10.1007/BF02291575


doi:10.1177/2150137813494766


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doi:10.1177/0734282911406653


LIST OF APPENDICES
Appendix 1: Qualitative Review Form of the Instrument

Dear Professor:

Thank you for agreeing to serve on the jury for the development of the data collection instrument I have been developing on the state of emptiness. Your input and feedback are very important to establish the content validity of the instrument. I estimate that each of your qualitative review of this 57-item instrument will take approximately one hour.

In the form, you will find a copy of the drafted instrument and specific directions to follow while completing your review. Please feel free to write your comments on the instrument. If you have any questions, please feel free to contact me. Please, accept my thanks in advance for your help and advice in the development of this instrument.

Sincerely,

Hulya Ermis-Demirtas,
Doctoral Candidate and Teaching Assistant
Department of Counseling and Educational Psychology
Texas A&M University- Corpus Christi
Qualitative Review of the Instrument

Please, provide your feedback with regard to the title of the instrument, the instruction(s), representativeness of the instrument domains, the response format, and instrument items. Please, do not hesitate to write your comments or recommendations on the instrument.

Title of the Study: Development and Validation of the Multidimensional Sense of Emptiness Scale (MSES)

Appropriateness of the Instrument Title

- Is the title of the instrument appropriate? If no, please explain. Your suggestion to improve? ……………………………………………………………………………………………

Content areas/ Hypothesized four dimensions of the scale:

In this theoretical model, the sense of emptiness has been approached from four theoretical perspectives: a) emotional, b) existential, c) social, and d) spiritual. From the existential perspective, Frankl (1959) posited that human beings have a will to find meaning in their life. According to Frankl (1959), meaning is what people desire and meaninglessness is a hole or emptiness, in people’s lives. Frank (1959) pointed out that the experience of emptiness is made up two states: a sense that life is meaningless and a sense of inner emptiness.

In this theoretical model, the term sense of inner emptiness represents the emotional aspect of the human experience of emptiness and refers to feeling empty, a vague numbness or hollowness inside, being not able to identify one’s inner feeling, feeling out of touch with oneself, and feeling like a part is missing. The term sense of meaninglessness represents an existential perspective of experienced emptiness and refers to feelings of lacking meaning/purpose in life and finding the world meaningless.

From the social perspective, Cushman (1990) defined the experience of emptiness as lacking community, a tradition, and shared meaning. According to Cushman (1990), the
experience of social absences results in emotional hunger, seen as emptiness. In light of Cushman’s approach to the experience of emptiness, the term sense of absence of relatedness has been coined. *The sense of absence of relatedness* represents whether individuals perceive themselves disconnected from people around them as well as detached from a shared meaning in the community and society.

The spiritual aspect of emptiness has remained unnoticed despite considered by some to be crucial factor contributing to the sense of emptiness (Dunn, 1994). For this study, *the sense of spiritual emptiness* refers to feelings of disconnection from the universe and a higher power being valued by the individual and being unable to feel spiritual emotions resulting in spiritual emptiness (Ho & Ho, 2007). Spiritual emptiness, in addition, involves perceiving oneself as being neglected and abandoned by the higher power or the transcendental entity. (Arndt et al., 2013). Peteet (2011) discussed a client with intense feelings of emptiness as perceiving herself being disconnected from God and being abandoned by God.

Through the qualitative approach, (Dunn, 1994) explored the perception of psychological emptiness in the lives of women valuing spirituality. This phenomenological inquiry seems to support the four dimensions of this construct, as hypothesized for the current study. Using in-depth interviews, Dunn (1994) revealed three themes with subthemes. These themes include a) breakdown of the traditional structure of religious life, representing loss of meaning and uncertainty about new forms of religious life, referring to the spiritual aspect of emptiness, b) a struggle with intimacy referring to an inability to develop intimate relationships and a sense of disconnection from others, and c) a core-self psychological emptiness referring to fragmentation of the self and a sense of having no feelings inside.
Appropriateness of the Content Domains Covered within the Instrument

- Are the content areas covered for this instrument appropriate? If no, please explain. Your suggestion to improve? .................................................................
- Are the content areas covered for this instrument complete? If no, please explain. Your suggestion to improve? .................................................................
- Any other comments or suggestions relevant to the content areas covered for the instrument? .................................................................

Instrument Directions (Option 1):
Please, respond to each statement below. Endorse the answer that best describes your experiences in the past 30-days, using the following scale:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Instrument Directions (Option 2)
Listed items below are a set of statements that some people might use to describe their feelings, thoughts, behaviors, or sensations. Please read each statement and determine how often the statement is true for you. Then, circle the appropriate number in the box to indicate how often you feel the statement applies to you. Endorse the answer that best describes your experiences in the past 30-days.

Please, be sure to rate every item, using the following scale:

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely, in less than 10% of the chances when I could have.</th>
<th>Occasionally, in about 30% of the chances when I could have.</th>
<th>Sometimes, in about 50% of the chances when I could have.</th>
<th>Frequently, in about 70% of the chances when I could have.</th>
<th>Usually, in about 90% of the chances I could have.</th>
<th>Every time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Appropriateness of the Instrument Directions

- Which direction above (1 or 2) does seem better for this scale?
- Are the directions concise? If no, please explain? Your suggestion to improve?
- Are the directions clear? If no, please explain? Your suggestion to improve?
- Are the directions complete? If no, please explain? Your suggestion to improve?
- Any other comments or suggestions besides there three areas relevant to the directions for the instrument?

**Response Options (1):**

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**Response Options (2):**

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely, in less than 10% of the chances when I could have.</th>
<th>Occasionally, in about 30% of the chances when I could have.</th>
<th>Sometimes, in about 50% of the chances when I could have.</th>
<th>Frequently, in about 70% of the chances when I could have.</th>
<th>Usually, in about 90% of the chances I could have.</th>
<th>Every time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**Appropriateness of the response options**

- Which response format does seem better for this instrument?
- Are the response options adequate for the instrument items? If no, please explain? Your recommendation to improve the adequateness/appropriateness of the response options?

**Domain I: The Sense of Inner Emptiness**

1. I feel empty inside.
2. I feel as though a part of me is missing.
3. I feel like I have nothing left inside me --- or there is nothing left inside me???.
4. It is hard for me to identify what I feel.
5. There is hollowness inside me.
6. I feel dead inside.
7. I feel emotionally hungry.
8. I hunger for something to emotionally fill me up.
9. I feel numb inside.
10. I feel as if what I experience is not real.
11. I feel a vague numbness.
12. I feel out of touch with myself.

**Review of the First Domain Items - I**

- Are the subscale items appropriate? If no, please explain? What can be your suggestion to improve?
- Are the items clear? If no, please explain? What can be you suggestion to improve?
- Would you recommend revising any items?
- Would you recommend adding any items?
- Would you recommend deleting any items?
- Any other comment or recommendations?

**Domain II: The Sense of Meaninglessness (Existential Emptiness)**

1. The whole world/universe seems to have no purpose.
2. I think about whether there is a meaning in my life.
3. I wonder if my life really has a significant purpose.
4. I feel my life has no significant meaning.
5. I feel my life has no mission.
6. I feel my life has no clear purpose.
7. I think about what my life will amount to.
8. For me, the whole world/universe seems empty.
9. There is a great void in my life.
10. I find the whole world/universe meaningless.
11. The whole world seems to have no meaning.
12. I am searching for something that makes my life meaningful.
13. I am searching for meaning in my life.
15. I am in a great effort to figure out who I am.
16. I ask myself, “what is life?”.
17. I yearn for a purpose that makes my life meaningful.

Review of the Second Domain Items – II

- Are the subscale items appropriate? If no, please explain? What can be your suggestion to improve?
- Are the items clear? If no, please explain? What can be your suggestion to improve?
- Would you recommend revising any items?
- Would you recommend adding any items?
- Would you recommend deleting any items?
- Any other comment or recommendations?

Domain III: The Sense of Absence of Relatedness

1. I feel like I am not able to relate myself to others.
2. I experience lack of capacity of closeness.
3. I view myself relationally empty.
4. I experience times of relational/social emptiness.
5. I feel detached from others.
6. I feel I am not relating to anyone.
7. I feel distant from people around me.
8. Inside, I ache to be connected to others.
9. I feel I don’t belong to any group around me.
10. I don’t have a sense of connectedness with society.
11. I feel as though I am distant/detached from shared meaning in the community.
12. My relationships with others seem superficial.
13. I have sense of togetherness with my peers.
14. I yearn for emotional touch to be really near someone.

### Review of the Third Domain Items – III

- Are the subscale items appropriate? If no, please explain? What can be your suggestion to improve?
- Are the items clear? If no, please explain? What can be you suggestion to improve?
- Would you recommend revising any items?
- Would you recommend adding any items?
- Would you recommend deleting any items?
- Any other comment or recommendations?

### Domain IV: The Sense of Spiritual Emptiness

1. I feel my Higher Power (the Divine or Transcendental Entity) is distant from me.
2. Inside, I hunger for being closer to my Higher Power.
3. I feel detached from the nature.
4. I am unable to feel/experience spiritual emotions.
5. I experience times of spiritual emptiness.
6. I perceive myself as being spiritually empty.
7. I feel as though my Higher Power has abandoned me.
8. I feel as if my Higher Power has neglected me.
9. I do not feel a deep inner sense of harmony.
10. I am unable to get help from my Higher Power.
11. I feel my prayers go unanswered.
12. I feel like I am unable to find strength in my spirituality.
13. I feel disconnected from the universe.
Review of the Fourth Domain Items – IV

- Are the subscale items appropriate? If no, please explain? What can be your suggestion to improve?
- Are the items clear? If no, please explain? What can be your suggestion to improve?
- Would you recommend revising any items?
- Would you recommend adding any items?
- Would you recommend deleting any items?
- Any other comment or recommendations?

Appendix 2: Quantitative Review Form of the Instrument
Quantitative Review of the Instrument

Instructions: As a reviewer, please rate the appropriateness of each item considering the operational definition of the construct. Respond to the following question for each item using the 3-point scale: “Is the skill, characteristic, or knowledge measured by this item ‘essential’, ‘useful, but not essential’, or ‘not necessary’ to the performance of the construct?” Please, do not hesitate to add additional comments or recommendations in the spaces provided.

<table>
<thead>
<tr>
<th>Essential</th>
<th>Useful but not essential</th>
<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DIMENSION I: THE SENSE OF INNER EMPTINESS

The term *sense of inner emptiness* represents the emotional aspect of the human experience of emptiness and refers to feeling empty, a vague emotional numbness or hollowness inside, being unable to identify one’s inner feeling, feeling out of touch with oneself, and feeling like a part is missing.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Essential</th>
<th>Useful but not essential</th>
<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I feel empty inside.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>I feel as if a part of me is missing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I feel like I have nothing left inside of me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>It is hard for me to identify what I feel.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>I feel complete. (RC)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>It feels as if there is a hollow space inside me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>I feel dead inside.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>I feel in touch with myself. (RC)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>I feel emotionally hungry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>I hunger/crave for something to fill me up emotionally.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>It feels like there is a great void inside me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>I feel a vague emotional numbness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Any Comments or Suggestions:

DIMENSION II: THE SENSE OF MEANINGLESSNESS
The term *sense of meaninglessness* represents an existential perspective of experienced emptiness and refers to feelings of lacking meaning, purpose, or a clear direction in life as well as finding the world/life meaningless, purposeless, or empty.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Essential</th>
<th>Useful but not Essential</th>
<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I cannot find meaning in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>There is no clear purpose in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I find life to be meaningful. (RC)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>The world lacks significant purpose.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>For me, the entire world seems empty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>I think about my life will amount to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>My life has no clear direction.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>For me, life is empty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>I believe life has a significant purpose. (RC)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>I am on quest of a meaningful purpose for my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>There is a great void in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>I ask myself, “What is life?”</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>I am searching for something that can make my life meaningful.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any Comments or Suggestions:

**DIMENSION III. THE SENSE OF ABSENCE OF RELATEDNESS**

*The sense of absence of relatedness* represents whether individuals perceive themselves disconnected from people around them as well as detached from a shared meaning in the community and society.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Essential</th>
<th>Useful but not Essential</th>
<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am unable to relate to significant others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>I lack the capacity for closeness.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I view myself as relationally empty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
4. I feel my relationships with others are empty.  
5. I feel connected to my family. (RC)  
6. I feel I am not relating to anyone.  
7. I feel distant from people around me.  
8. Inside, I crave to be connected with others.  
9. I feel I do not belong to any group around me.  
10. I do not have a sense of connectedness with society.  
11. I feel disconnected from others.  
12. I feel detached from the shared meaning in my community.  
13. I have a sense of togetherness with my peers. (RC)  
14. My relationships with others seem superficial.  

**Any Comments or Suggestions:**

---

**DIMENSION IV: THE SENSE OF SPIRITUAL EMPTINESS**

The *sense of spiritual emptiness* refers to feelings of disconnection from the universe and a higher power being valued by the individual and being unable to feel spiritual emotions resulting in spiritual emptiness (Ho & Ho, 2007). Spiritual emptiness, in addition, involves perceiving oneself as being neglected and abandoned by the higher power or the transcendental entity. (Arndt et al., 2013). Peteet (2011) discussed a client with intense feelings of emptiness as perceiving herself being disconnected from and being abandoned by God.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Essential</th>
<th>Useful but not Essential</th>
<th>Not Necessary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I feel distant from my Higher Power/Divine/God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Inside, I crave to be closer to my Higher Power/Divine/God.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I feel detached from nature.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>I feel a deep inner sense of harmony. (RC)</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>I feel spiritually empty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
6. I am searching for connection to my Higher Power/Divine/God.  
7. It feels as if my Higher Power/Divine/God has abandoned me.  
8. I find strength in my spirituality. (RC)  
9. I feel as if my Higher Power/Divine/God has neglected me.  
10. I experience times of spiritual emptiness.  
11. My voice is not heard by my Higher Power/Divine/God is not heard.  
12. I feel disconnected from the universe.  
13. I am unable to get help from my Higher Power/Divine/God.

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>None or a little of the time</th>
<th>Some of the time</th>
<th>Good part of the time</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td></td>
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<td>3</td>
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<td>7.</td>
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<td>13.</td>
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</tr>
</tbody>
</table>

Any Comments or Suggestions:

**Response Format**

**Directions:** Listed below are a series of statements that some people might use to describe their feelings and behaviors. Please read each statement and determine how often the statement is true for you. Then, circle the letter T in the appropriate box to indicate how often you feel the statement applies to you. Be sure to rate every item. When you are through, return the completed rating form to the person who gave it to you.

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>7.</td>
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<td>8.</td>
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<td>13.</td>
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</tr>
</tbody>
</table>

Any comments related to the response format: There two response formats I have found in the literature which were used frequently.

**Frequency:**

(This response format is used for the Suicide Probability Scale).
Reflect me?

(This response format was used for the Adult Trait Hope Scale and Meaning in Life Scale). In the Meaning in Life Scale, two more options are provided: (a) slightly untrue of me –after somewhat untrue of me- and then (b) slightly true of me –before somewhat true of me.

<table>
<thead>
<tr>
<th>Absolutely untrue of me</th>
<th>Mostly untrue of me</th>
<th>Somewhat untrue of me</th>
<th>Somewhat true of me</th>
<th>Mostly true of me</th>
<th>Absolutely true of me</th>
</tr>
</thead>
</table>

Combination:
A third option might be a combination of frequency and reflection scales.

<table>
<thead>
<tr>
<th>None of the Time True of Me</th>
<th>A little of the Time True of Me</th>
<th>Some of the Time True of Me</th>
<th>Most of the Time True of Me</th>
<th>All of the Time True of Me</th>
</tr>
</thead>
</table>

Comments or recommendations:

Instrument Directions:
Listed items below are a set of statements that some people might use to describe their feelings, thoughts, behaviors, or sensations. Please read each statement and determine how often the statement is true for you. Then, circle the appropriate number in the box to indicate how often you believe the statement applies to you. Please, be sure to rate every item.
Protocol Number: IRB # 120-17
Title: Emptiness: Development and Validation of a Scale
Review Category: Exempt (2)

Approval determination was based on the following Code of Federal Regulations:

Eligible for Exemption (45 CFR 46.101)
Criteria for Approval has been met (45 CFR 46.111) - The criteria for approval listed in 45 CFR 46.111 have been met.

2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless (i.) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii.) any disclosure of human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Provisions:

Comments: The TAMUCC Human Subjects Protections Program has implemented a post-approval monitoring program. All protocols are subject to selection for post-approval monitoring.

This research project has been granted the above exemption. As Principal Investigator, you assume the following responsibilities:

1. Informed Consent: Information must be presented to enable persons to voluntarily decide whether or not to participate in the research project unless otherwise waived.
2. Amendments: Changes to the protocol must be requested by submitting an Amendment Application to the Research Compliance Office for review. The Amendment must be approved by the IRB before being implemented.
3. Completion Report: Upon completion of the research project (including data analysis and final written papers), a Completion Report must be submitted to the Research Compliance Office.
4. Records Retention: All research related records must be retained for three years beyond the completion date of the study in a secure location. At a minimum these documents include: the research protocol, all
questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to participants, all correspondence to or from the IRB or Office of Research Compliance, and any other pertinent documents.

5. Adverse Events: Adverse events must be reported to the Research Compliance Office immediately.

6. Post-approval monitoring: Requested materials for post-approval monitoring must be provided by dates requested.

Appendix 4: IRB Amendment Approval
Approval determination was based on the following Code of Federal Regulations:

Criteria for exemption have been met (45 CFR 46.101): The research has NOT been prohibited exemption [45 CFR 46.101(i)]. The research involves the use of survey procedures; data is recorded in a manner that does not allow identification of subjects directly or through identifiers; and any disclosure of response could NOT reasonably place the subject at risk of criminal or civil liability or be damaging to the subject’s financial standing, employability, or reputation [45 CFR 46.101(b)(2)].

Criteria for Approval has been met (45 CFR 46.111) - The criteria for approval listed in 45 CFR 46.111 have been met.

2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless (i.) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii.) any disclosure of human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.

Provisions:

Comments: The TAMUCC Human Subjects Protections Program has implemented a post-approval monitoring program. All protocols are subject to selection for post-approval monitoring.

1. Informed Consent: Information must be presented to enable persons to voluntarily decide whether or not to participate in the research project unless otherwise waived.
2. Amendments: Changes to the protocol must be requested by submitting an Amendment Application to the Research Compliance Office for review. The Amendment must be approved by the IRB before being implemented.
3. Completion Report: Upon completion of the research project (including data analysis and final written papers), a Completion Report must be submitted to the Research Compliance Office.
4. Records Retention: All research related records must be retained for three years beyond the completion date of the study in a secure location. At a minimum these documents include: the research protocol, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to participants, all correspondence to or from the IRB or Office of Research Compliance, and any other pertinent documents.

5. Adverse Events: Adverse events must be reported to the Research Compliance Office immediately.

6. Post-approval monitoring: Requested materials for post-approval monitoring must be provided by dates requested.

Appendix 5: Information Sheet

[Emptiness: Development and Validation of a Scale]

Introduction
The purpose of this form is to provide you with information that might affect your decision as to whether or not to participate in this research study. If you decide to participate in this study, this form will also be used to record your consent.

You have been asked to participate in a research project studying the emptiness construct. The overall purpose of this study is to provide a means to accurately diagnose and assess mental health issues associated with emptiness of those providing service. In order to accomplish this goal, the current study primarily purposes to develop the Emptiness Scale (ES). We selected you as a possible participant because you are a college student currently enrolled in course work at Texas A&M University- Corpus Christi.

**What will I be asked to do?**
If you agree to participate in this study, you will be asked to complete a one page demographic paper and the five surveys. The surveys are brief and in total take approximately 30 to 45 minutes.

**What are the risks involved in this study?**
The risks associated in this study are minimal, and are not greater than risks ordinarily encountered in daily life. Participation is strictly voluntary. If you do happen to experience distress, we have information available for you about receiving support here on campus.

**What are the possible benefits of this study?**
You will receive no direct benefit from participating in this study other than learning about survey research and/or gaining more insight into your inner psychological experience; however, cumulative information gained from the study can provide valuable information about the measurement of emptiness and its relationship with other aforementioned constructs.

**Do I have to participate?**
No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University-Corpus Christi being affected.

**Who will know about my participation in this research study?**
This study is anonymous and we will not be collecting any identifying information about you.

**Whom do I contact with questions about the research?**
If you have questions regarding this study, you may contact Hulya Ermis-Demirtas (hermisdemirtas@islander.tamucc.edu) or Dr. Robert Smith (robert.smith@tamucc.edu).

**Whom do I contact about my rights as a research participant?**
This research study has been reviewed by the Research Compliance Office and/or the Institutional Review Board at Texas A&M University-Corpus Christi. For research-related
problems or questions regarding your rights as a research participant, you can contact the Research Compliance Office, at (361) 825-2497 or send an email to “IRB@tamucc.edu”.

Participation
Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the information sheet for your records. By participating in this study, you certify that you are 18 years of age or older.

Appendix 6: Recruitment Script

Recruitment Script

Purpose of the Study

I am Hulya Ermis-Demirtas, a doctoral candidate from the Department of Counseling
and Educational Psychology at Texas A & M University-Corpus Christi. For my dissertation, I am conducting a study involving college students. Your participation in this study is voluntary. If you agree to participate, you will complete a demographic form and five brief surveys. This should take approximately 30 minutes (no more than 45 minutes).

The purpose of the study is to develop a scale to measure the emptiness experience and to investigate its association with other psychological constructs of hope, resilience, meaning in life, and suicide risk. You were selected as a possible participant because you meet the criteria as a college student, 18 years or older.

Duration and Location

The study will consist of the administration of a survey that measures emptiness, hope, resilience, meaning in life, suicide risk, and the completion of a demographic form. As mentioned, this will take approximately 30 minutes (no more than 45 minutes) and it is voluntary. If you agree to participate in this study, you will be fully instructed on the procedures for the demographic form and the surveys. No more than minimal distress is expected from participation in this study. However, if you experience any stress due to answering the questionnaires, please stop and speak with me. If further help is needed, we have counseling services available. You may withdraw from the study at any time with no risk.

Procedures

Procedures involve the completion of a demographic form, and the surveys. Scores on the instruments are anonymous. Hence, no one will be able to connect your scores to you.

Potential Risks, Discomforts and Anticipated Benefits

The questions on the instrument pertain to the emptiness experience, hope, resilience, meaning in life, and suicide risk. If you do take part in the study but then change your mind, you
are free to withdraw at any time. Again, participation is voluntary.

If you ever have any questions about this research, please feel free to contact me, Hulya Ernis-Demirtas (hermisdemirtas@islander.tamucc.edu), or Dr. Robert Smith (robert.smith@tamucc.edu). If you ever have any questions about your rights as a research participant or possible research-related injuries, please feel free to contact the Research Compliance Officer, at (361) 825-2497.

Anonymity

Your name will not appear in any publications or reports produced from this study. Any information presented is anonymous so that information from you will be held in confidence. The answers that you provide are anonymous.

Consent to Participate

By agreeing to participate, you are certifying that you are 18 years of age or older. Even after agreeing to participate, you may decide not to participate or to withdraw at any time without current or future relations with Texas A&M University-Corpus Christi being affected. If at some point you decide not to answer the questions, you can choose the option to quit the survey.

Thank You

Appendix 7: Theoretical Form of the Multidimensional Sense of Emptiness Scale

MSES

Directions: Listed items below are a set of statements that some people might use to describe their feelings, thoughts, behaviors, or sensations. Please read each statement and determine how often the statement is generally true for you over the last year. Then, using the scale shown
below, circle the appropriate number in the box to indicate how often you believe the statement applies to you. Please, be sure to rate every item.

<table>
<thead>
<tr>
<th></th>
<th>STATEMENTS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel empty inside.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>I feel as if a part of me is missing.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>I feel dead inside.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>I feel like I have nothing left inside of me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>It feels as if there is a hollow space inside me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>I feel emotionally hungry.</td>
<td>0</td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>I crave for something to fill me up emotionally.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>It feels like there is a great void inside me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>I feel a vague emotional numbness.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>I cannot find meaning in my life.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>11</td>
<td>There is no clear purpose of my life.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>12</td>
<td>I find life to be meaningful. (***)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13</td>
<td>My life has no clear direction.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14</td>
<td>For me, life is empty.</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>5</td>
<td>6</td>
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<tr>
<td>15</td>
<td>I believe life has a significant purpose. (***)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16</td>
<td>There is a great void in my life.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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</tr>
<tr>
<td>17</td>
<td>I ask myself, “What is life?”</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I am searching for something that can make my life meaningful.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I am <strong>unable</strong> to relate to significant others.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
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<tr>
<td>20</td>
<td>I lack the capacity for closeness.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>It feels like my relationships with others are empty.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>I feel connected to my family. (***)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I feel I <strong>am not</strong> relating to anyone.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I feel distant from people around me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Inside, I crave to be connected with others.</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>I feel I <strong>do not</strong> belong to any group around me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>I <strong>do not</strong> have a sense of connectedness with society.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>I feel detached from the shared meaning in my community.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>I have a sense of togetherness with my peers. (***)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>30</td>
<td>My relationships with others seem superficial.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>I feel distant from my Higher Power/Divine/God.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>I feel detached from nature.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
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<tr>
<td>33</td>
<td>I feel a deep inner sense of harmony. (***)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>I feel spiritually empty.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>I am searching for connection to my Higher Power/Divine/God.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>It feels as if my Higher Power/Divine/God has abandoned me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>37</td>
<td>I find strength in my spirituality. (***).</td>
<td>0 1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>My voice is not heard by my Higher Power/Divine/God.</td>
<td>0 1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>I am unable to get help from my Higher Power/Divine/God.</td>
<td>0 1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** Reverse-scored items.

Note. This instrument was used to collect data from participants to explore the factorial structure of the Multidimensional Sense of Emptiness Scale. After factorial analysis, 12 items were eliminated from the final instrument, resulting in a 27-item instrument.

Appendix 8: The Suicide Probability Scale Sample Items

SPS
**Directions:** Listed below are a series of statements that some people might use to describe their feelings and behaviors. Please read each statement and determine how often the statement is true for you. Then, circle the letter T in the appropriate box to indicate how often you feel the statement applies to you.
Be sure to rate every item. When you are through, return the completed rating form to the person who gave it to you.

<table>
<thead>
<tr>
<th>EXAMPLE STATEMENTS</th>
<th>None or a little of the time</th>
<th>Some of the time</th>
<th>Good part of the time</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I get mad, I throw things.</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
<tr>
<td>2. I feel many people care for me deeply.</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
<tr>
<td>3. I feel I tend to be impulsive.</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
</tbody>
</table>

Appendix 9: The Adult Trait Hope Scale Sample Items

**THE FUTURE SCALE**

**Directions:** Please, read each item carefully. Using the scale shown below, please select the number that best describes YOU and put that number in the blank provided.
Example Items:

___ 1. I can think of many ways to get out of a jam.
___ 2. I energetically pursue my goals.
___ 3. I feel tired most of the time.
accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

<table>
<thead>
<tr>
<th>Absolutely Untrue</th>
<th>Mostly Untrue</th>
<th>Somewhat Untrue</th>
<th>Can’t Say True or False</th>
<th>Somewhat True</th>
<th>Mostly True</th>
<th>Absolutely True</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Example Items

_____ 1. I understand my life’s meaning.

_____ 2. I am looking for something that makes my life feel meaningful.

_____ 3. I am always looking to find my life’s purpose.

Appendix 11: The Brief Resilience Scale Sample Items

BRS
Instructions: Use the following scale and circle one number for each statement to indicate how much you disagree or agree with each of the statements.

1= Strongly Disagree  2= Disagree  3= Neutral  4= Agree  5= Strongly Agree

Example Items

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I tend to bounce back quickly after hard times.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have a hard time making it through stressful events.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. It does not take me long to recover from a stressful event.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Appendix 11: Demographic Questionnaire
**Appendix 12: Reprint Authorization of the Suicide Probability Scale**

<table>
<thead>
<tr>
<th>Age:</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: (circle one)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity: (circle one)</td>
<td>African American</td>
<td>Asian American</td>
</tr>
<tr>
<td>Marital Status: (circle one)</td>
<td>Single</td>
<td>Married</td>
</tr>
<tr>
<td>Student Status: (circle one)</td>
<td>First Generation you are first person in family to attend college</td>
<td>Second Generation Parent attended college</td>
</tr>
<tr>
<td>Educational level: (Circle One)</td>
<td>Freshmen</td>
<td>Sophomore</td>
</tr>
<tr>
<td>Academic Load (i.e., how many credit hours are you taking this semester):</td>
<td>__</td>
<td></td>
</tr>
<tr>
<td>Living Situation: (circle one)</td>
<td>Live on campus with a roommate</td>
<td>Live off-campus with a roommate</td>
</tr>
<tr>
<td>Working Situation (circle one):</td>
<td>Not currently employed</td>
<td>On-campus employment (work-study/assistantship)</td>
</tr>
<tr>
<td>Performance rating (circle one):</td>
<td>I would rate my overall performance in college as (Circle one)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 – low; 2 – below average; 3 – average; 4 – above average; 5 – excellent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>My grade point average at a 4-point scale in college at this time is __________</td>
<td></td>
</tr>
<tr>
<td>The following questions are more personal. When answering these questions, please remember this data is anonymous.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever attempted suicide? (Circle one)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>If yes, how many times? ________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a child (up to 18), have you ever been abused? (Circle one)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>If yes, what kind of abuse? (Circle all that apply)</td>
<td>Emotional</td>
<td>Physical</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>License #</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPS-001147</td>
<td>April 18, 2018</td>
</tr>
</tbody>
</table>

| Principal Investigator's name and title: | |
|-----------------------------------------| |
| Hulya Ermis-Demirtas                    | |

<table>
<thead>
<tr>
<th>Name of the Assessment:</th>
<th>Permitted number of uses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide Probability Scale (SPS)</td>
<td>400</td>
</tr>
</tbody>
</table>

**Description of the study:**

“The Sense of Emptiness: Development and Validation of a Scale.”

Reference terms dated 12Jan’18

**Method of administration:**

Via paper/pencil administration with hand-scoring.

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**CHAPTER IV: ARTICLE**

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Abstract

The authors present the development of the Multidimensional Sense of Emptiness Scale (MSES). The purpose of this article is threefold: (a) provide a rationale for the MSES; (b) review statistical analysis procedures followed to develop the MSES; and (c) discuss implications and limitations of this study and offer future research recommendations for helping professionals.

Keywords: sense of emptiness, instrument development, multidimensional construct.
Psychological emptiness is regarded as a widespread mental health issue subjectively experienced by individuals in the society (Didonna & Gonzalez, 2009; Peteet, 2011). In the available literature, the sense of emptiness has been related to a wide range of psychological issues and mental disorders (Didonna & Gonzalez, 2009; Elsner, Broadbear, & Rao, 2018), having clear clinical relevance (Ellison, Rosenstein, Chelminski, Dalrymple, & Zimmerman, 2016; Klonsky, 2008). In an empirical study conducted by Johansen, Karterud, Pedersen, Gude, and Falkum (2004) in a clinical setting, 73% of clients with borderline personality disorder (BPD) and 34% of clients without BPD reported the feeling of emptiness.

Despite the frequency of psychological emptiness among clients and its association with various mental health issues, mental health practitioners are still in need of a clear and consistent way of understanding this phenomenon (Klonsky, 2008; Peteet, 2011; Zerach, 2016). Conceptualization of this concept warrants greater delineation, as the definition and nature of the term emptiness is blurred (Johansen et al., 2004; Elsner et al., 2018) and resembles other similar emotional states such as boredom, depression, hopelessness, and futility (Mitchell, 2000). However, emptiness is different from these conditions due to lack of feeling associated with the experience (Hazell, 2003). In addition, the feeling of emptiness is viewed as the most difficult diagnostic criterion to understand, explain, and assess clinically (Aguirre & Galen, 2013) and as one of the least researched DSM-5 criteria, receiving inadequate interest (Klonsky, 2008). Blasco-Fontecilla, Leon-Martinez, Delgado-Gomez, Giner, Guillaume, and Courtet (2013) indicated absence of up-to-date, valid, and reliable instruments to accurately assess and diagnose mental health issues associated with emptiness and attributed the difficulty empirically studying this construct to the lack of standardized scales. Therefore, they called attention to develop psychometrically sound scales to efficaciously measure the level of experienced emptiness.
among clients. In fact, there are two available instruments in the literature developed to measure the frequency of experienced emptiness; however, these scales have deficiencies based on the samples they were developed in, their theoretical foundations, and their internal consistency reliability. Consequentially, an accurate evaluation method for assessing individuals’ level of psychological emptiness is warranted (Blasco-Fontecilla et al., 2013; Elsner et al., 2018).

**Clinical Relevance of Sense of Emptiness**

Emptiness is included as a diagnostic criterion in the *Diagnostic and Statistical Manual-5* [DSM-5] by American Psychiatric Association (APA, 2013) as well as in the Tenth Revision of the Mental and Behavioral Disorders chapter of the *International Statistical Classification of Diseases and Related Health Problems* [ICD-10] by the World Health Organization (WHO, 1992)—the premier manuals for identifying mental disorders— for several mental health problems including major depressive disorder (MDD; feeling empty; feelings of emptiness) and BPD (chronic feelings of emptiness) (APA, 2013; WHO, 1992). The feeling of emptiness has also been associated with narcissistic personality disorder (Blasco-Fontecilla et al., 2013; Gruba-McCallister, 2007; Dimaggio et al., 2008; LaFarge, 1989), bulimia nervosa (Diena, 2015; Meehan, 2007), persistent complex bereavement disorder (Parkes, 2001), and alcohol, drug and sex addictions (Cushman, 1990; Haroosh & Freedman, 2017; May, 1953; Roos, Kirouac, Pearson, Fink, & Witkiewitz, 2015; Thomas, 2014).

Furthermore, the sense of emptiness has been associated with a variety of psychological issues including compulsive buying and materialism (Zerach, 2015), hopelessness (Ellison et al., 2016; Klonsky, 2008), childhood sexual and emotional abuse (Buggs, 1996; Mitchell, 2000), loneliness (Clum, 1997), guilt (Adolfson, Larsson, Wijma, & Bertero, 2004), grief (Elsner et al., 2018), disordered eating (Meehan, 2007), dissociation and non-suicidal self-injury (Ralls,
Deming, Glenn, & Nock, 2012), suicidal ideation (Blascallo-Fontecilla et al., 2013), and even agoraphobia (Milrod, 2007). More seriously, empirical studies indicated psychological emptiness as one of the most significant—even the central—indicator of suicide risk or suicide (Delgado-Gomez, Blasco-Fontecilla, Ramos-Plasencia, & Baca-Garcia, 2012; Segal-Engelchin, Kfir-Levin, Neustaedter, & Mirsky, 2015).

Theoretical Considerations Regarding Sense of Emptiness

The sense of emptiness is viewed as a common human experience (Cushman 1990; Peteet, 2011). Therefore, numerous scholars from multifarious disciplines from poetry to theology have reflected upon the emptiness experience to shed light on different facets of this phenomenon (Buggs, 1996; Meehan, 2007; Mitchell, 2000). After the second half of 1900s, the emptiness state became part of psychological inquiry and started to be examined by psychology-oriented writers, clinicians, and researchers. Existential psychologists such as May (1953) and Frankl (1959) attempted to clarify the nature of emptiness. Then, psychoanalysts such as Kohut (1971) and Kernberg (1976) and other psychologists including Hazell (1982, 1984, 2003) and Cushman (1990) offered diverse explanations regarding aspects of this psychological experience. Some also attempted to describe the feeling itself and suggested treatment strategies for alleviating the suffering of their clients experiencing emptiness (Buggs, 1996).

Existential psychologist Frankl (1959), as an example, coined the term existential vacuum (p. 106); aspects of this term are similar in meaning to the term emptiness (Hazell, 1982, 2003). Frankl (1959) hypothesized humankind being in quest of a sense of meaning in their lives. According to him, the frustration of the will to meaning results in meaninglessness and inner emptiness. Frankl (1959) theorized the concept of emptiness as being composed of two states: a sense of meaninglessness and a sense of inner emptiness. Cushman (1990) analyzed the
emptiness concept from a social perspective and identified this construct with a consequence of significant lacking community, tradition, and shared meaning. The spiritual aspect of emptiness remained unnoticed despite being considered by some to be a crucial factor contributing to the sense of emptiness (Dunn, 1994). In a qualitative study, Dunn (1994) explored the perception of psychological emptiness in the lives of women valuing spirituality and revealed spiritual emptiness as a domain of the emptiness experience.

**Current Assessment Tools and Their Limitations**

The form and nature of the emptiness construct may be elusive and difficult to express in technical language; therefore, two major attempts were made to capture aspects and identify discrete factors of this phenomenon in order to accurately assess individuals’ level of emptiness. Hazell (1982, 1984) made the initial attempt by developing the Experienced Level of Emptiness Scale within a sample of 270 college students. In this sample, 66 % of the participants (n = 178) were identified female and more than half of the respondents took place in the age range of 17 and 19 (n = 142; 53 %). Results of the factor analysis indicated a two-factorial solution explaining 60.3 % of the variance: (a) experienced level of existential emptiness including eight items and (b) experienced level of existential concern including nine items. Factor loadings varied from .67 to .84 for the first subscale and from .44 to .83 for the latter subscale. In addition, Cronbach’s alpha reliability coefficients were found to be .92 for the experienced emptiness subscale and .90 for the existential concern subscale. In addition, the relationship between experienced emptiness and depression were examined and a high correlation appeared between these two constructs (r = .69, p < .001).

Buggs (1996) made another attempt by developing the Emptiness Scale within a clinical sample of 201 individuals (71 male and 130 female), recruited from an outpatient clinic and a
community mental health center. In this sample, 89.5% of the participants \((n = 170)\) were identified Caucasian and 64.7% \((n = 130)\) were self-identified female. Buggs (1996) proposed a two-dimensional conceptualization of emptiness: (a) an inner sense of emotional hunger and yearning including 20 items and (b) a generalized sense of emotional numbness including eight items. However, one major factor emerged from the principal component analysis (PCA), composed of 13 numbness items and nine hunger/yearning items. PCA failed to indicate the presence of two discrete and stable factors as originally proposed but, rather, a single major factor accounted for 49% of the variance. Unexpectedly, explaining 11.2 of the variance, a smaller second factor including five items emerged from the analysis, which mentioned connection to people and suggested an aspect of emptiness involving relatedness to others.

Hazell (1982, 1984) and Buggs (1996) established an empirical foundation with their pioneering research from which to further explore the topic, sense of emptiness. With their endeavor to develop researched and validated instruments to gauge the emptiness experience and identify discrete factors of this construct, both researchers contributed to the psychological emptiness literature providing a base for continued exploration. However, the scales they developed are not without their criticism. First, their theoretical foundations might be viewed limited, as both approached the emptiness concept only from the existential or emotional perspective although empirical studies suggest the presence of other domains of emptiness including desire for relatedness to others (Buggs, 1996) and spiritual emptiness (Dunn, 1994). Second, the samples used also appear to be a source of deficiency. Both researchers recruited less than 300 respondents; therefore, the sample size of those studies might be questionable, as an appropriate sample size for exploratory factor analysis is suggested to include at least 300 participants (Field, 2013; Tabachnick & Fidell, 2012). In addition, the samples they obtained are
prone to questioning due to lack of diversity. In Buggs’s study, for instance, approximately 90 % of the sample consisted of Caucasian participants, which might raise concerns regarding generalizability of the results. In Hazell’s study, participants’ ethnicity was not reported. Lastly, reliability of the overall scale is also questionable as both Hazell and Buggs failed to report internal consistency reliability coefficients of the overall scales.

**Conceptual Framework**

Considering the existing literature, presenting a fundamental definition representing the feeling of emptiness in a universal sense seems challenging because emptiness is used to describe a subjective experiential state unique to each individual based on underlying psychodynamics (Mitchel, 2007). A review of theories, conceptual studies, and empirical research on psychological emptiness, as well as an investigation of overlapping aspects of this construct have supported the formulation of an inclusive multidimensional theoretical model. In this conceptual framework, the sense of emptiness construct is a multifaceted psychological state as inferred from the extent literature (Blasco-Fontecilla et al., 2013; Buggs, 1996; Peteet, 2011), including four distinct perspectives: (a) emotional, (b) existential, (c) social, and (d) spiritual.

Frankl (1959) posited that the emptiness experience is made up two states: a sense of inner emptiness and a sense of meaninglessness. In this study, the term *sense of inner emptiness* represents emotional aspect of emptiness and refers to feeling empty, a vague emotional numbness, and internal hollowness; having difficulty identifying one’s inner feelings; feeling out of touch with oneself; sensing an inner void inside; feeling emotionally hungry; and yearning for something to emotionally fill that void. The term *sense of meaninglessness*, the existential perspective of psychological emptiness, refers to the sense of lacking meaning, purpose, and a clear direction in life and the perception of life being meaningless.
From the social perspective, Cushman (1990) defined the emptiness experience as lacking community, a tradition, and shared meaning. Considering Cushman’s approach to this experience, the term sense of absence of relatedness has been coined. The *sense of absence of relatedness* represents individuals perceiving themselves disconnected from people around them and lacking a shared meaning in the community as well as emotional connection in their relationships with others. Lastly, the *sense of spiritual emptiness* refers to feelings of disconnection from nature, universe, and a higher power. In addition, there is a sense of neglect or abandonment by a higher power, and the inability to find a deep inner sense of harmony and strength in spirituality (Arndt, Gunther, Bauman, Frick, & Jacobs, 2013; Ho & Ho, 2007).

In a phenomenological study, Dunn (1994) explored the phenomenon of psychological emptiness in the lives of women valuing spirituality and revealed three themes along with subthemes. These themes include (a) breakdown of the traditional structure of spiritual life, representing loss of meaning and uncertainty about new forms of spiritual life, referring to the both existential and spiritual aspects of emptiness, (b) a struggle with intimacy referring to an inability to develop intimate relationships and a sense of disconnection from others, and (c) a core-self psychological emptiness, referring to the fragmentation of the self and a sense of having no feelings inside. The results of this qualitative inquiry seem to support the proposed four-dimensional approach to the study of emptiness, which constituted the conceptual framework for the present scale development study.

**Purpose of the Study and Research Questions**

The overall purpose of the current study was to provide a method to accurately assess and diagnose mental health issues associated with emptiness. In order to accomplish this goal, the present study involved the development and validation of a Multidimensional Sense of
Emptiness Scale [MSES] in a sample of college students in the United States. In an effort to establish evidence based findings on relations to other variables, the present study also examined the relationship of the MSES with the Suicide Probability Scale (SPS; Cull & Gill, 1998, 2002), the Adult Trait Hope Scale (ATHS; Snyder, Harris, Anderson, Holleran, Irving, & Sigmon, 1991), the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006), and the Brief Resilience Scale (BRS; Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008) respectively. This investigation was guided by the following research questions:

**Research question 1:** What is the underlying factorial structure of the MSES with a sample of college students?

**Research question 2:** What is the internal consistency reliability of the MSES with a sample of college students?

**Research question 3:** To what degree is there a relationship between the MSES and the SPS scores within a sample of college students?

**Research question 4:** To what degree is there a relationship between the MSES and the ATHS scores within a sample of college students?

**Research question 5:** To what degree is there a relationship between the MSES and the MLQ scores within a sample of college students?

**Research question 6:** To what degree is there a relationship between the MSES and the BRS scores within a sample of college students?

**Method**

**Participant Characteristics**

Participants in this study were 405 college students (232 women, 57.3%; 173 men, 42.7%) at a medium-sized 4-year university in the central southern region of the United States.
Participants from various majors ranged in age from 18 to 47 with a mean age of 20.82 years (SD = 3.71). In terms of ethnicity, participants identified as Hispanic/Latino (n = 178; 44 %), White (n = 150; 37 %), Asian American (n = 20; 4.9 %), African American (n = 19; 4.7 %), Native American (n = 5; 1.2 %), Pacific Islander (n = 3; 0.7 %) along with biracial (n = 25; 6.2 %) and other (n = 5; 1.2 %).

This sample included college students from different levels of undergraduate education, with 39.5 % identified as freshmen (n = 160), 22.2 % sophomore (n = 90), 16.8 % junior (n = 68), and 21 % senior (n = 85) along with 0.2 % response being missing (n = 1). Participants were predominantly first- (n = 155; 38.3 %) and second-generation (n = 167; 41.2 %) college students with the remaining sample identifying as third-generation college students (n = 83; 20.5 %). On average, participants were enrolled in 13.97 (SD = 2.72) semester credit hours while participating in this study. In terms of academic performance, participants self-identified with low (n = 1; 0.2 %), below average (n = 23; 5.7 %), average (n = 225; 55.6 %), above average (n = 116; 28.6 %), and excellent (n = 40; 9.9 %) with a self-reported mean GPA of 3.15 (SD = 0.54).

In addition to presented demographic and educational information, participants’ suicide attempt and abuse history are provided to further describe the sample used in this study. First, 64 of 405 participants (15.8%) reported a history of suicide attempt ranging from 1 attempt to 8 attempts. Second, 145 participants (35.8 %) reported a history of abuse including emotional (n = 114; 28.1 %), physical (n = 56; 13.8 %), and sexual (n = 47; 11.6 %).

Measurement of Related Constructs

**Suicide risk.** The Suicide Probability Scale (SPS; Cull & Gill, 1998) is a 36-item, self-report measure designed to assess suicide risk in adults and adolescents. Individuals are asked to rate the frequency of their subjective experience and past behaviors using a 4-point Likert Scale.
ranging from 1 (*none or little of the time*) to 4 (*most or all of the time*). Responses are summed to evaluate both general and specific suicide risk along with four key dimensions including suicide ideation, hopelessness, negative self-evaluation, and hostility. Cull and Gill (2002) reported an internal consistency coefficient of .93 for the total scale within their sample; similarly, the SPS ratings among our sample yielded an alpha coefficient in the excellent range ($\alpha = .91$). The internal consistency coefficients for the subscales were .62 for Negative Self-Evaluation, .78 for Hostility, .80 for Hopelessness, and .89 for Suicide Ideation (Cull & Gill, 2002). The SPS is viewed as one of the only available instruments specifically focused on suicide risk and one of the most widely used suicide measures in the mental health field (Balkin & Juhnke, 2014).

**Hope.** The Adult Trait Hope Scale (ATHS; Snyder et al., 1991) was developed to assess adult individuals’ level of hope based on goal-oriented thinking, including two dimensions: (a) pathways and (b) agency. Each subscale consists of four items with four remaining distracter items non-scored. This 12-item instrument utilizes an 8-point Likert-type scale, having responses ranging from 1 (*definitely false*) to 8 (*definitely true*). This measure yields a minimum score of 8 and a maximum score of 64, with higher scores representing higher level of hope. Snyder et al. (1991) reported adequate internal consistency for the ATHS, with Cronbach’s alpha levels ranging from .74 to .84. In this study, the Cronbach’s alpha coefficients of internal consistency reliability for the general scale and each of the subscales were .81 for pathways, .79 for agency, and .83 for the total scale. Additionally, test-retest reliability was reported as .80, indicating adequate test stability over a 10-week period.

**Meaning in Life.** The Meaning in Life Questionnaire (MLQ; Steger et al., 2006) is a 10-item, self-report inventory developed to measure individuals’ perceptions of life meaning including two dimensions: (a) Presence of Meaning —how much respondents feel their lives
have meaning— and (b) Search for Meaning —how much respondents strive to find meaning and understanding in their lives (Steger et al., 2006). Participants use a 7-point Likert-type scale ranging from 1 (absolutely true) to 7 (absolutely untrue). The Presence subscale is obtained by summing items 1, 4, 5, 6, and 9-reverse coded. A total score of the MLQ is computed by summing all items in the inventory with higher scores indicating a high level of subjective meaning in life. The MLQ has good internal consistency, with Coefficient alphas ranging in the low to high .80s for the Presence subscale and mid .80s to low .90s for the Search subscale (Strack, 2007).

**Resilience.** The Brief Resilience Scale (BRS; Smith et al., 2008) was developed to measure resiliency coping skills among adults referring to the ability to recover from challenging life conditions. Participants use a 5-point Likert-type scale across 6 items to rate their level of agreement with statements describing resiliency skills (e.g., “I tend to bounce back quickly after hard times.”) from 1 (strongly disagree) to 5 (strongly agree). The BRS yields a minimum score of 6 and maximum score of 30 with higher scores suggesting higher resilience. Smith et al. (2008) reported internal consistency coefficients ranging from .80 to .91; similarly, our sample revealed an alpha coefficient within the excellent range of scores ($\alpha = .90$). Additionally, test-retest reliability coefficients were found to be moderate ranging from .62 over 3-month to .69 over 1-month.

**Procedure**

**Initial item-pool development.** A 4-step sequential mixed method approach (Ermis-Demirtas, 2018) was used to generate an initial item pool and to establish content-related evidence for the Multidimensional Sense of Emptiness Scale [MSES]. The four phases in establishing content-oriented evidence of the MSES included (a) creation of an initial draft of the
MSES, (b) selection of a panel of experts to evaluate the MSES, (c) a qualitative review of the MSES, and (d) a quantitative review of the MSES (Ermis-Demirtas, 2018).

During the first step, we conducted a thorough review of the professional literature on the sense of emptiness concept to identify potential factors associated with this construct and develop the initial item pool. This in-depth and comprehensive review of the extant literature included theoretical, empirical, and clinical issues regarding the subjective experience of emptiness such as conceptual articles, qualitative and quantitative studies, and preexisting scales developed to measure this construct. Using Victor Frankl’s (1959) existentialist perspective as our foundational framework, we conceptualized the subjective experience of emptiness as a multidimensional construct and sought to generate items pertaining to each of the potential correlates to sense of emptiness identified in the literature. Using the guidelines for optimal item design by Kline (2005), we created an initial item pool of 57 items spread across four domains of the sense of emptiness, including (a) the sense of inner emptiness, (b) the sense of meaninglessness, (c) the sense of absence of relatedness, and (d) the sense of spiritual emptiness.

After constructing the initial item pool, we set out to create the format for our developing instrument. In terms of response-format, we selected a 7-point Likert-type scale response set with values ranging from 0 (none of the time true of me) to 6 (all of the time true of me) as a combination of reflection and frequency response anchors (Vagias, 2006). In addition, we avoided using the midpoint categories such as ‘I do not know’ or ‘undecided’ to obtain higher data accuracy and forgo participant indecisiveness (DeVellis, 2016). Directions for the instrument instructed participants to determine how often each statement describing their feeling, perception, or behavior is true for them over the past year based on their subjective experiences.
Our second step was to identify and contact content experts and have them review the initial draft of the instrument under development. A total of 15 content experts were contacted, with eight of them volunteering to serve as a reviewer. Out of eight content experts, six of them recruited from counseling, one from clinical psychology, and one from psychiatry. Each of the expert panel members has an established reputation as a scholar in their own fields, works as a full-time professor, and has clinical experience ranging from approximately 15 to 30 years. In addition, six out of eight reviewers have experience with instrument development germane to mental health. In regard to content reviewers specialized in the emptiness construct with a publication, two of the experts were identified to have either doctoral dissertation or peer-reviewed articles in national and/or international journals related to the topic.

For the third phase, we dispatched a qualitative assessment packet, including the instrument along with the instructions and requested experts to provide feedback on the content, organization, existing questions, and administration process of the instrument. The review of the feedback elicited from these experts resulted in 23 items being revised, four items being added, and nine items being dropped from the developing instrument. This qualitative review process ended up with 52 items.

During the last phase, we shared a quantitative assessment packet with each of these eight reviewers and requested them to rate the appropriateness of each item for the dimensions of the instrument based on a 3-point response set with 1 indicating ‘essential’, 2 ‘useful but not essential’, and 3 ‘not necessary’. We employed Lawshe’s (1975) technique as a relatively straightforward quantitative approach to content validity, allowing simple calculations and providing a table for identifying critical cut-off values (Ermis-Demirtas, 2018; Wilson, Pan, & Schumsky, 2012). After receiving experts’ ratings, we calculated the Content Validity Ratio
(CVR) value for each item. Using the table proposed by Lawshe (1975), we determined the CVR_{critical} value to be .75 since the judging panel constituted eight content reviewers. The items with the CVR values exceeding the CVR_{critical} value of .75 remained in the final instrument. The last step in this procedure was to compute the Content Validity Index (CVI) within the retained items by calculating the mean of CVR values of those items (Lawshe, 1975). Based on the recommendations by Davis (1992) regarding adequacy of the CVI value, a CVI value exceeding .80 was preferred. This last phase resulted in a 39-item instrument being administered to our sample of college students.

**Participant recruitment.** Potential participants for this study were recruited from several first-, second-, third-, and fourth-year undergraduate courses offered in a range of majors during the spring semester. Upon obtaining permission from the department chairs, relevant undergraduate program coordinators, and course instructors, primary researcher in this study planned to attend these classes and present the study along with the opportunity to take the survey to potential student participants. Volunteer students to take part in this research were disseminated a survey packet, including the MSES and a demographic questionnaire along with four other instruments, and provided time to complete the surveys in class. At the end of the administration period, the primary researcher collected completed survey packets and entered data into an electronic database.

**Data Analysis**

**Statistical Power Analysis**

A statistical power analysis was conducted to identify the required sample size for running factorial analysis based on a ratio of 10 participants-to-item, n/p ≥ 10 (Dimitrov, 2012). In addition, Tabachnick and Fidell (2012) suggested a sample size greater than 300 as being
appropriate for EFA. With these two guidelines in mind, having 39 items required a sample size of at least 390 participants. Therefore, the obtained sample size of 405 is considered adequate to perform factorial analysis.

**Preliminary Analysis**

After transferring the data file into a Statistical Package for the Social Sciences (SPSS; IBM Corporation, 2013), two steps were followed to clean the data. First, the data set was screened for missing data; 18 cases were removed due to extensive participant non-completion of the assessment (more than half of the items were unanswered), reducing the initial sample of 423 to \(n=405\). The next step was to impute a small percentage of missing values considered at random using the series mean function in SPSS.

Before examining the factorial structure of the assessment, we assessed intercorrelations among 39 items to determine whether any items in the scale were so highly correlated with one another recommended to be eliminated from subsequent analysis to reduce redundancy (Field, 2013; Watson, 2017). The decision to delete the items was made using two well-recognized criteria. First, the correlation matrix among items was used to check the pattern of relationships. The intercorrelation matrix for the majority of items was greater than .2, indicating reasonable factorability (Watson, 2017). Second, the correlation coefficients between items and the determinant of the correlation matrix were checked to test multicollinearity. Majority of the correlation coefficients were lower than .9 and the determinant value was .002, suggesting that multicollinearity was not an issue (Field, 2013).

**Primary Analysis**

**Exploratory factor analysis (EFA).** To identify the factorial structure of the MSES, we performed an EFA utilizing the principal axis factoring [PAF] as a widely used extraction
method due to taking into account the measurement error (Schmitt, 2011), allowing factors to correlate (Costello & Osborne, 2005), and producing relatively the most reliable factorial solutions when seeking to determine latent structure of a set of original variables (Mvdudu & Sink, 2013; Watson, 2017). In order to determine the exact number of factors to extract, we used the following criteria: (a) factors with eigenvalues greater than 1.0, (b) visual analysis of the scree plot, and (c) the conceptual meaningfulness of the factors (Watson, 2017).

A direct oblimin oblique rotation was performed to rotate the factors to more favorable position to obtain the simplest possible factorial structure and to improve model interpretation (Dimitrov, 2012). This rotation method is preferred when minor to moderate correlations are expected among factors (Watson, 2017). Once factors were rotated and the closest approximation to the simple structure of the MSES was identified, the following criteria was used to determine the number of factors and individual items to retain for the final solution: (a) the exact value of all factor pattern coefficients needed to be >.32 on at least one factor, b) when a variable loads strongly on two or more factors, the variable should be assigned to the factor associated with the highest loading, assuming that factor loading is at least .10 greater than the next highest loading for the variable, and c) factors with fewer than three variables loading on them should be dropped from further analysis (Watson, 2017).

**Reliability analysis.** Cronbach’s coefficient alpha ($\alpha$) was used to assess internal consistency reliability concerned with the homogeneity of the items within scale (DeVellis, 2016). The general guideline requires instruments having $\alpha$ of at least .70 (Field, 2013). Spearman-Brown coefficient was used to test split-half reliability concerned with correlations between scales scores (DeVellis, 2016). Spearman-Brown coefficients higher than .80 are recommended (Bardhoshi & Erford, 2017).
Bivariate correlations. With an effort to establish evidence based on relations to other variables (Balkin, 2017), Pearson’s product-moment correlation was computed among scores on the MSES, SPS, ATHS, BRS, and MLQ to determine the nature of the relationships between those scales and to establish degree of convergent and discriminant validity. The bivariate correlation, \( r \), between two scores close to +1 was viewed as an indicative of a very strong positive relationship; \( r \) close to -1.00 was considered as an indicative of a very strong negative relationship (Field, 2013). In addition, Pearson’ correlation coefficients were interpreted as small (.10), medium (.30), or large (.50) effect using the benchmarks presented by Swank and Mullen (2017).

Results

Content-Related Evidence

Based on the qualitative feedback elicited from eight content reviewers recruited in this study, nine items were dropped from the initial 57-item pool, 23 items were revised, and four items were added to the instrument to make items more precise, clear, and connected to the identified dimensions of the sense of emptiness construct. This qualitative review process resulted in 52 items in the developing instrument. During the quantitative review procedure, 13 items having a CVR value lower than the \( CVR_{critical} \) value of .75 were deleted from the 52-item pool, which resulted in 39-item instrument for pilot testing. The last step in establishing content-related evidence was to compute the CVI value within the retained 39 items. The CVI value of the 39-item instrument was found to be .89, considered adequate based on the recommendations by Davis (1982; CVI > .80).

Evidence Regarding Internal Structure
Exploratory factor analysis. Following the recommendations from the extant methodological literature (Costello & Osborne, 2005; Field, 2013), data from 405 college students were first analyzed using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity to determine the suitability of the sample for factor analysis. Results suggested a meritorious level of homogeneity (KMO = .98) and were significant for Bartlett’s test of sphericity, $\chi^2 (N = 405, 741) = 27075.701, p < .001$, indicating the data appropriate for factor analysis procedures.

Once data were deemed appropriate for analysis, the PAF procedure with a direct oblimin rotation was applied to extract factors from the data. Using the extraction criteria identified earlier, four factors were initially retained, accounting for 82.55 % of the variance for the entire set of variables. The scree plot test also confirmed the four-factor solution. Once factors were rotated and the closest approximation to the simple structure of the MSES was determined, a decision-making procedure regarding how many items to retain for the final solution was initiated using the retention criteria identified earlier. In this process, 12 items loaded on two factors having less than .10 factor loading difference were excluded from the final solution. This process resulted in an increased explained variance of 91.18 % for the 27 retained items in the final solution, two of the items being reverse-scored.

The first factor, named Inner Sense of Emptiness, included seven items with an eigenvalue of 20.81 and accounted for 77.08 % of the variance. Collectively, the statements loading on this factor describe emotional aspect of sense of emptiness such as feelings of emptiness and emotional hunger, internal perception of a part being missing inside, and the internal sense of hollowness, unbearable inner void, and emotional yearn to fill that void. Factor 2 included eight items (two of the items are reverse-scored) with an eigenvalue of 1.80 and
explained 6.24 % of the variance. This factor was labeled *Sense of Spiritual Emptiness* as the items loading on this scale each describe spiritual aspect of subjective psychological experience of emptiness such as feeling spiritually empty, distant from the Higher Power, detached from nature, abandoned by the Higher Power along with a perception of being unable to receive help.

The third factor, named *Sense of Absence of Relatedness*, also included eight items with an eigenvalue of 1.38 and accounted for 4.59 % of the variance. The items loaded on this factor depict relational manifestations of the subjective emptiness experience that refer to feeling detached from the people around, society and shared meaning in the community, and perceiving the personal relationships superficial. Factor 4 consisted of four items with an eigenvalue of 1.08 and explained 2.45 % of the variance. This factor was labeled *Sense of Meaninglessness* as the items loading on this factor describe the perceptions of having a void in life as well as lacking meaning, purpose, and life direction. Items and factor loadings for the rotated factors retained in the final four-factor solution are presented in Table 1.

**Evidence Regarding Internal Consistency Reliability**

First, internal consistency reliability coefficients were calculated for the total scale along with the four subscales using Cronbach’s alpha with an $\alpha$ of .70 or higher as a standard (DeVellis, 2016; Field, 2013). According to Bardhoshi and Erford (2017), reliability coefficients of .80 or higher are suitable for screening-level clinical decisions; yet, .90 or higher is desired for diagnostic assessments. Reliability estimate for the total scale was found to be .98, which indicated very high reliability, confirming its utility for diagnostic assessments ($\alpha > .90$). The reliability estimates for the subscales were .98 for the sense of absence of relatedness, .98 for the sense of inner emptiness, .97 for the sense of spiritual emptiness, and .97 for the sense of meaninglessness. These values also indicated high internal consistency reliability evidence for
scores obtained from these four subscales, supporting their use for screening-level clinical and diagnostic decisions ($\alpha > .90$).

Second, corrected item-total correlations were calculated to assess how highly each item correlates with the subscales and the total scale and determined to be ranging from .76 to .91 with a mean corrected item-total correlation of .86, which illustrated adequate reliability (Field, 2013; Tabachnick & Fidell, 2013). The mean corrected item-total correlation by subscale was .95 (sense of inner emptiness), .94 (sense of meaninglessness), .89 (sense of spiritual emptiness), and .89 (sense of absence of relatedness).

Lastly, the split-half correlation coefficient was calculated for the total scale along with the four subscales using Spearman-Brown. The correlations between two halves were found to be .90 for the total scale, .96 for both the subscales of sense of inner emptiness and absence of relatedness, .95 for the sense of meaninglessness, and .94 for the sense of spiritual emptiness. As the coefficients are higher than the recommended .80 (Bardhoshi & Erford, 2017), these scores are considered adequate for both screening and diagnostic decisions.

**Evidence Regarding Relations to Other Variables**

**Convergent validity.** Bivariate correlation analysis of scores on the MSES and the SPS revealed a statistically significant positive relationship ($r = .94, p < .01$), indicative of a large effect size. The strong positive relationship between scores on the two scales and theoretically related constructs provide preliminary evidence confirming convergent validity. Table 2 presents the identified bivariate correlations of the MSES with the SPS along with their subscales.

**Discriminant validity.** The Pearson’s product-moment correlation identified a strong negative relationship of the MSES with the ATHS ($r = -.77, p < .01$) and with the BRS ($r = -.72, p < .01$), indicative of a large effect size. A negative correlation also identified between the
MSES and the MLQ ($r = -.27$, $p < .01$), indicative of a small effect size. The negative relationships with a small to large effect size, between scores on these scales provide strong evidence supporting discriminant validity. Table 3 summarizes the observed correlations of the MSES with the ATHS, the BRS, and the MLQ along with their subscales.

**Discussion**

The objective of this research was to develop and validate a new instrument, MSES, designated to measure various dimensions of the emptiness experience among adults with the aim to be used in both counseling research and practice, particularly with clients expressing a sense of emptiness. To achieve this goal, our first step was to explore the factorial structure of the developing instrument within a sample of 405 college students, using principle axis factoring with a direct oblimin rotation. This analysis resulted in the emergence of a four-factor solution: (a) Sense of Inner Emptiness, (b) Sense of Meaninglessness, (c) Sense of Absence of Relatedness, and (d) Sense of Spiritual Emptiness.

The Sense of Inner Emptiness factor consisted of seven items describing various emotional aspects of emptiness including feelings of emptiness and emotional hunger, a sense of internal hollow space and a part being missing inside, perception of an unbearable internal void, and emotional yearn to fill that void. The Sense of Meaninglessness contained four items describing the perceptions of experiencing a significant void in life as well as lacking meaning, purpose, and life direction. The Sense of Absence of Relatedness factor consisted of eight items that focused on relational manifestations of the subjective emptiness experience referring to feeling disconnected from the people, society, and the shared meaning in the community as well as lacking a sense of closeness. Finally, the Sense of Spiritual Emptiness contained eight items – two of them being reverse-scored- including various components of spiritual aspect of emptiness
such as feeling spiritually empty, distant from the Higher Power, detached from nature, abandoned by the Higher Power along with a perception of being unable to receive help. For the 27-item MSES with two items being reverse-scored, scores range from 0 to 162, with higher scores indicating higher level of experienced emptiness. For the subscales, the scores range from 0 to 42 for the Sense of Inner Emptiness, from 0 to 24 for the Sense of Meaninglessness, from 0 to 48 for the Sense of Absence of Relatedness, and from 0 to 48 for the Sense of Spiritual Emptiness. For each subscale, higher scores are indicative of higher level of related emptiness experience.

Our next step was to examine the internal consistency reliability coefficients of the MSES and the emerged subscales. Reliability estimates of .98, .98, .97, .98, and .97 for the MSES as well as for the Sense of Inner Emptiness, Sense of Meaninglessness, Sense of Absence of Relatedness, and Sense of Spiritual Emptiness, respectively, exceeded standard conventions where values above .70 are viewed acceptable (DeVellis, 2016; Field, 2013) and suitable for screening-level clinical and diagnostic decisions (Bardhoshi and Erford, 2017). In addition, corrected-item total correlations ranged from .76 to .91 with a mean corrected item-total correlation of .86. Lastly, the split-half correlation coefficients between two halves were .90 for the MSES, .96 for the both subscales of Sense of Inner Emptiness and Absence of Relatedness, .95 for Sense of Meaninglessness, and .94 for Sense of Spiritual Emptiness. All coefficients were observed to be higher than the standard .80 (Bardhoshi & Erford, 2017). Taken together, these reliability estimates indicate scores on the MSES and its subscales to offer a degree of consistency and precision justifying its use for screening and diagnostic decisions in both counseling research and clinical practice applications.
For our final step in the validation process, we examined convergent validity by correlating scores on the MSES and its subscales with existing instruments designed to assess similar constructs. Student scores on the MSES and its subscales correlated significantly with the SPS along with its subscales of hopelessness, suicidal ideation, negative self-evaluation, and hostility. In addition, statistically significant negative relationships were found between scores on the MSES along with its subscales and the BRS as well as the ATHS including the subscales of agency and pathways. Interestingly, relatively low significant correlations were found between the MSES including the subscales and the MLQ. With regard to the MLQ subscales, presence of meaning was negatively correlated with the MSES along with its subscales whereas search for meaning was positively correlated with these measures. These relationships indicate that individuals experiencing emptiness might lack meaning in their lives; however, they continue to searching for a significant meaning. Therefore, the MLQ subscale of search for meaning was observed to fail discriminating individuals experiencing emptiness because both individuals lacking meaning and having significant meaning in their lives expressed search for meaning. Taken together, these results regarding relations to other variables demonstrate scores obtained from the MSES to support the claim that the MSES along with its four subscales are measuring the constructs defined. Based on the identified significant correlations between the MSES including its subscales and alternate measures of similar construct, we believe the MSES to be sufficiently valid when compared to reference standards and can be used as a screening and diagnostic tool in research and practice settings by helping professionals.

Combined, the results derived from our psychometric evaluation perhaps would provide a basis for conceptualizing emptiness as a multidimensional experience. Compared to the available instruments designed to measure the emptiness experience, namely, the Experienced Level of
Emptiness Scale and the Emptiness Scale, the MSES appears to be a more comprehensive measure of psychological emptiness with promising validity and reliability developed within a relatively larger sample. Therefore, the MSES could be used in counseling research as a promising instrument for assessing young adults’ levels of experienced emptiness and investigating the relationship of the emptiness experience with other psychological constructs.

With regard to the use of the MSES in the counseling practice, the 27-item final version of the instrument may provide mental health practitioners with a psychometrically sound, user-friendly, and theory-driven instrument to utilize in measuring clients’ degrees of emptiness. Further, the MSES could be a useful additional tool for clinicians when assessing and diagnosing mental health issues associated with the sense of emptiness including BPD and depression. As a four-factor instrument, the MSES might allow mental health clinicians to conduct a multifaceted and comprehensive assessment of clients during which they can gain additional information to identify counseling goals and design treatment interventions and strategies. Additionally, the high correlation identified between the MSES and the SPS might allow this new instrument measuring the sense of emptiness to be considered for suicide screening and assessment in conjunction with other instruments as markers of suicide ideation and risk.

Limitations of the Present Study and Recommendations for Future Research

Despite the potential utility of the MSES among young adults, some limitations need to be considered within the context of this study. With regard to the sample, one of the limitations of this study is that we validated this instrument only in a non-clinical sample, and not in other types of population. Another limitation is that although this was a non-clinical sample, it consisted entirely of young undergraduate university students. This restriction of range inhibits generalization of the results to the normal population as a whole. In addition, the majority of the
participants were self-identified as Hispanic and White respectively, thereby limiting the study’s
generalizability across various ethnicities and cultural backgrounds. In addition, approximately
half of the participants were identified as freshmen. Considering the unique challenges first-year
college students encounter due to transition and adjustment to the college (Soledad, Carolina,
Adelina, Fernandez, & Fernanda, 2012), psychological issues including sense of emptiness,
absence of relatedness might be elevated among this sample throughout this transitional stage of
their lives. Therefore, we assume that the particular characteristics of the first-year college
students might constitute another limitation for this study.

Further, with regard to instrumentation, this study was an initial investigation of the
psychometric properties of the MSES and the findings merit further inquiry. In assessing various
domains of psychological emptiness, initial items were developed based on a four-dimensional
conceptualization of this construct, which might constitute another limitation. Additionally, the
MSES items that were excluded from the final instrument also may represent areas of the
emptiness experience that cannot be measured by other items remaining within the assessment.
However, a systematic procedure was followed during the item exclusion within the content and
factor analysis processes with the intention of developing a psychometrically sound instrument to
measure the conceptually identified emptiness domains with these data. Lastly, many research
studies that rely on self-report instruments are limited by participants’ inclinations to complete
such instruments in a socially desirable manner, and this study has no exception.

Future research may be conducted addressing the limitations of this study, while also
expanding on the findings of the current investigation. First, future research is needed to conduct
a confirmatory factor analysis to test the four-factorial structure of the MSES. Additionally, the
study could be replicated within a broader variety of individuals to address sampling limitations,
as the factorial structure of this instrument was analyzed based on the data obtained from a single sample. Future research may contain an increased representation from diverse groups, such as a sample of various ethnic identities and cultural backgrounds, in addition to a clinical sample. Researchers may also further explore the psychometric properties of the MSES to provide additional reliability and validity evidence for this measure. Test-retest reliability measures would be useful as would further investigations of convergent validity with existing measures of associated mental disorders including depression and BPD. Finally, further research might seek—albeit difficult—to investigate the predictive relationship between sense of emptiness and suicide ideation/risk in a clinical sample or across various samples with the use of MSES in conjunction with other instruments relevant to the risk factors for suicide.

**Conclusion**

In summary, this study provided an initial investigation of the psychometric properties of the MSES with a non-clinical sample of college students. The results identified a four-factor MSES structure as proposed—sense of inner emptiness, sense of meaninglessness, sense of absence of relatedness, and sense of spiritual emptiness—accounting for 91.18% of the variance. In addition, convergent and discriminant validity along with reliability of the 27-item MSES was supported with these data. To conclude, these findings indicate the MSES as a promising instrument for researchers and practitioners in the mental health field to use in measuring the level of experienced emptiness among young adults, particularly college students, offering helping professionals a tool to accurately assess and diagnose mental health issues associated with the sense of emptiness.

doi:10.1080/0739933049044821


http://www.suicidology.org/portals/14/docs/resources/factsheets/2013datapgsv2alt.pdf


<table>
<thead>
<tr>
<th></th>
<th>Factors</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Factor 1</td>
</tr>
<tr>
<td>I feel emotionally hungry.</td>
<td>.987</td>
</tr>
<tr>
<td>I crave for something to fill me up emotionally.</td>
<td>.963</td>
</tr>
<tr>
<td>I feel empty inside.</td>
<td>.942</td>
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</tbody>
</table>
I feel as if a part of me is missing. .904
It feels like there is a great void inside me. .892
It feels as if there is a hollow space inside me. .883
I feel like I have nothing left inside of me. .834
My voice is not heard by my Higher Power/Divine/God. .988
I am unable to get help from my Higher Power/Divine/God. .984
I feel distant from my Higher Power/Divine/God. .962
It feels as if my Higher Power/Divine/God has abandoned me. .926
I feel detached from nature. .925
I feel spiritually empty. .921
I find strength in my spirituality. (*) .846
I feel a deep inner sense of harmony. (*) .667
I am unable to relate to significant others. .970
I feel I am not relating to anyone. .961
I feel I do not belong to any group around me. .961
I do not have a sense of connectedness with society. .960
I lack the capacity for closeness. .943
I feel detached from the shared meaning in my community. .935
I feel distant from people around me. .925
My relationships with others seem superficial. .902
I cannot find meaning in my life. .995
There is no clear purpose of my life. .992
My life has no clear direction. .933
There is a great void in my life. .731

(*) Reverse-scored items.

Table 2
Descriptive Statistics and Bivariate Correlations for Scores on the MSES and the SPS Including Their Subscales

<table>
<thead>
<tr>
<th>Scales, Subscales, and Constructs</th>
<th>M</th>
<th>SD</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MSES-Total</td>
<td>46.03</td>
<td>42.43</td>
<td>.94*</td>
<td>.89*</td>
<td>.92*</td>
<td>.86*</td>
<td>.86*</td>
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<tr>
<td>2. MSES-Sense of Inner Emptiness</td>
<td>12.70</td>
<td>12.18</td>
<td>.90*</td>
<td>.85*</td>
<td>.88*</td>
<td>.81*</td>
<td>.81*</td>
</tr>
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</table>
### Table 3

*Descriptive Statistics and Bivariate Correlations for Scores on the MSES, the ATHS, the MLQ, and the BRS Including Their Subscales*

<table>
<thead>
<tr>
<th>Scales, Subscales, and Constructs</th>
<th>M</th>
<th>SD</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MSES-Total</td>
<td>46.03</td>
<td>42.43</td>
<td>-.77*</td>
<td>-.74*</td>
<td>-.73*</td>
<td>-.27*</td>
<td>-.87*</td>
<td>.58*</td>
<td>-.72*</td>
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<tr>
<td>2. MSES-Inner Emptiness</td>
<td>12.70</td>
<td>12.18</td>
<td>-.73*</td>
<td>-.69*</td>
<td>-.69*</td>
<td>-.22*</td>
<td>-.81*</td>
<td>.57*</td>
<td>-.75*</td>
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<tr>
<td>3. MSES-Meaninglessness</td>
<td>6.20</td>
<td>7.01</td>
<td>-.71*</td>
<td>-.69*</td>
<td>-.66*</td>
<td>-.30*</td>
<td>-.86*</td>
<td>.55*</td>
<td>-.67*</td>
</tr>
</tbody>
</table>

*Note*. MSES = Multidimensional Sense of Emptiness Scale; SPS = Suicide Probability Scale

*p < .01.*
<table>
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<tr>
<th></th>
<th>MSES-Absence of Relatedness</th>
<th>4.</th>
<th>12.95</th>
<th>13.76</th>
<th>-.67*</th>
<th>-.65*</th>
<th>-.63*</th>
<th>-.22*</th>
<th>-.77*</th>
<th>.53*</th>
<th>-.61*</th>
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<tr>
<td></td>
<td>MSES-Spiritual Emptiness</td>
<td>5.</td>
<td>14.18</td>
<td>13.18</td>
<td>-.73*</td>
<td>-.68*</td>
<td>-.70*</td>
<td>-.28*</td>
<td>-.80*</td>
<td>.51*</td>
<td>-.63*</td>
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<tr>
<td></td>
<td>ATHS</td>
<td>6.</td>
<td>47.25</td>
<td>11.04</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>ATHS-Agency</td>
<td>7.</td>
<td>23.62</td>
<td>5.88</td>
<td></td>
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<tr>
<td></td>
<td>ATHS-Pathways</td>
<td>8.</td>
<td>23.63</td>
<td>5.73</td>
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*Note. MSES = Multidimensional Sense of Emptiness Scale; ATHS = Adult Trait Hope Scale; MLQ = Meaning in Life Questionnaire; BRS = Brief Resilience Scale

*p < .01.