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Towards a Better Understanding of the Protective Nature of Sense of
Coherence: The Relationship Between Sense of Coherence, Shame, and
Suicidality

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Towards a Better Understanding of the Protective Nature of Sense of Coherence: The Relationship Between Sense of Coherence, Shame, and Suicidality

by

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Report

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Master of Arts

The University of Texas at Austin

May 2016

Abstract

Towards a Better Understanding of the Protective Nature of Sense of

Coherence: The Relationship Between Sense of Coherence, Shame, and

Suicidality

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The proposed study examines the relationship between sense of coherence (SOC),

internalized shame, and distress and suicidality in college students. The proposed study

consists of an online survey, which will be distributed to 200 undergraduate students at

the University of Texas at Austin. The proposed survey will measure students' SOC,

internalized shame, and distress and suicidality scores in response to a prompt that asks

students to recall an experience in which they fell short of an important standard. It is

hypothesized that a negative relationship between SOC and suicidality will be observed,

and that internalized shame will mediate the relationship between SOC and suicidality.

Potential implications for further research, implications for interventions on college

campuses, and limitations of the proposed study are discussed.

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Chapter 1: Introduction

As the second leading cause of death among college students (Anderson & Smith, 2003), suicide has been a focus of researchers, higher education stakeholders, and policy makers for over 25 years (Drum, Brownson, Burton Denmark, & Smith, 2009). College student suicide prevention efforts have largely been focused on identifying individuals with acute levels of suicidality and providing them with crisis intervention. As a result, less attention has been given, in research and interventions alike, to individuals who may be predisposed to suicidal thoughts but are experiencing distress and suicidality to a lesser degree than their more acutely suicidal counterparts.

Drum et al. (2009) maintain that the current individual-focused paradigm of suicidal intervention, by focusing intervention on acutely suicidal crises, "binds and blinds" practitioners to the wide range of suicidal thoughts that can occur within an individual's experience, in that practitioners are bound to intervene at only the very acute level of suicidality, and are blinded to the earlier, less acute forms of suicidality an individual might experience. In an effort to acknowledge the wide range of suicidal thoughts an individual might endorse, Drum et al. (2009) have constructed a single-item continuum measure of distress and suicidality.

The argument that one should conceptualize mental and physical health on a continuum is not a new one. Antonovsky (1979) developed the salutogenic paradigm, which argues that health should be viewed on a continuum, rather than as a health-disease dichotomy. In recent years, sense of coherence (SOC), a construct central to Antonovsky's salutogenic theory (Antonovsky, 1987), has emerged as a protective quality of self against suicidal thoughts and behaviors (Mehlum, 1998; Ristkari et al, 2005; Sjöström et al., 2012; Edwards & Holden, 2001; Petrie & Brook, 1992). The term "quality of self" is used because SOC is thought to be a global, overarching quality that transcends situation-based or time-based specificity (Antonovsky,

1993). To further inform suicide interventions, it is worthwhile to investigate the mechanism by which this protective effect occurs.

In an effort to further understand the mechanism by which SOC is protective against suicide, the current study turns to Baumeister's (1990) escape theory, which proposes a six-stage model in which progression through the six stages is hypothesized to culminate in a suicide attempt. According to escape theory, a suicide attempt is theorized to be the result of an effort to escape from one's painful self-experience. Escape theory is a useful framework through which to better understand the continuum of suicidal thinking, since the assumption of escape theory is that individuals gradually progress through the six stages, thus reflecting a path toward suicidal thinking that begins with a negative experience of the self and progresses toward an acutely distressful internal experience from which an individual desires to escape. Additionally, since the core assumption of escape theory is that suicide attempts result from an individual's desire to escape from a pervasive and painful self-experience, it follows that a stable quality of self, such as SOC, rather than a situation-specific or state-specific factor, should be investigated as a core protective element against suicidal thinking.

When using escape theory as a model through which one can understand suicidal thinking, stage two (negative attributions to the self) emerges as a point at which SOC might intervene as a protective quality that prevents future progression through the stages of suicidal thinking (and future progression along the suicidal continuum). When encountered with an experience of falling short of an important standard (stage one), individuals with a high level of SOC might attribute their failure to meet an important standard to an element of their self; however, is likely that high SOC would protect against any further progression through the stages of suicidal thought, and they will not go on to develop a heightened state of negative self-awareness and negative affect (stages three and four). In other words, for a high SOC individual,

a "falling short of standards" experience will likely not lead to an experience of internalized shame.

The purpose of this study is to gain further understanding of the mechanism through which SOC acts as a protective quality in preventing individuals from developing suicidal thoughts. Specifically, the current study will aim to determine whether SOC's protective effect against suicidal thinking might be mediated by shame. It is hypothesized that while individuals with a high SOC might still assume personal responsibility for an incident in which they fell short of an important standard, they will be less likely to attribute that experience to and enduring, stable, global element of their self, and will thus be less likely to progress through the stages of escape theory and towards the development of suicidal thoughts.

Chapter 2: Integrative Analysis

The following integrative analysis will seek to review important findings and connections relevant to SOC, internalized shame, and the development of suicidal thoughts. Research on college student suicide and suicide prevention will be discussed first, followed by a discussion of Antonovsky's salutogenic paradigm and the protective nature of sense of coherence. Escape theory will then be introduced as a useful theory through which to interpret suicidal thoughts as lying on a continuum, and internalized shame will be presented as a marker of a completed progression through stages two through four of escape theory. Finally, the relationship between shame and suicide will be discussed, followed by a discussion of the role of internalized shame as a potential mediator of the protective effect of sense of coherence on suicidality.

COLLEGE STUDENT SUICIDE: RESEARCH AND PREVENTION EFFORTS

College student suicide has been an area of interest for researchers, mental health professionals, policy-makers, and higher education stakeholders for over 25 years (Drum et al., 2009). In recent years, multi-site descriptive studies have revealed that the rate of suicide among college students is estimated at 6.5 per 100,000 (Schwartz, 2006). Suicide is the second leading cause of death among college students, and is the primary cause of death among women in college (Anderson & Smith, 2003). While the rate of college student suicide is half that of the suicide rate of college students' same-aged peers (Schwartz, 2011), much of that difference can be attributed to the prohibition of firearms on college campuses (Schwartz, 2011; Silverman, Meyer, Sloane, Raffell, & Pratt, 1997), and this "protective" effect of college campuses disappears as students age (Silverman et al., 1997). Additionally, these numbers do not reflect the wide range of suicidal thoughts and experiences with which an individual might struggle, including serious suicidal ideations and behaviors (Joiner, Conwell, Fitzpatrick, Witte, Schmidt, Berlim et al., 2005).

Recognizing college student suicide as an issue worthy of attention and concern, the U.S. House of Representatives passed the Garrett Lee Smith Memorial Act in 2004, which as of 2010 had provided 74 college campuses with suicide prevention grants (Goldston et al., 2010). On a global scale, the World Health Organization identified suicide as a key phenomenon for study within the worldwide sphere of public health (Taylor, Kingdon, & Jenkins, 1997). Unlike other diseases one might strive to prevent, there is no single cause one can identify in the development of suicidal thoughts (Drum & Burton Denmark, 2011), which presents a challenge to those who would view suicide from an epidemiological perspective.

Increasingly, researchers and policy makers alike are coming to understand suicide as a complex public health issue that requires multifaceted prevention efforts. (Anderson & Jenkins, 2005; Mann et al., 2005). Historically, suicide prevention efforts on college campuses have either been primarily educational in nature, informing students of available resources and educating members of the college community on ways to identify warning signs in students (Mitchell, Kader, Darrow, Haggerty, & Keating, 2013), or they have focused on the very acute end of the suicidal spectrum, providing individual intervention to suicidal students only just before, or immediately following, a planned suicide attempt (Haas, Hendin, & Mann, 2003). One problem with the focus on acute suicidal crises becomes apparent when we consider that periods of suicidal ideation are often brief and intense, with more than half of all suicidal crises lasting less than a day, and recurring intermittently throughout the year (Drum et al., 2009). When the majority of prevention efforts are focused on the acute end of an individual's suicidal crisis, it is possible for that individual to slip through the cracks.

Drum et al. (2009) contend that the individual-focused paradigm of suicidal intervention "blinds and binds" mental health practitioners with respect to their suicide intervention efforts. While intervention on an individual in suicidal crisis is absolutely necessary, when the majority of the focus of mental health professionals is on the very acute end of the spectrum, this "blinds"

them to the broad spectrum of thoughts, emotions, and experiences that can culminate in suicidal thinking. Another problem with the individual-focused paradigm of suicide intervention is that it "binds" mental health practitioners to intervention at the very acute end of the spectrum, when hospitalization or other resource-intensive means of intervention may be necessary.

THE DISTRESS AND SUICIDALITY CONTINUUM

Acknowledging the behaviors, thoughts, and feelings that characterize an individual's experience before they reach an acute phase of suicidality enables mental health practitioners, as well as other members of the college campus community, to intervene at earlier points along an individual's development of suicidal thinking. Currently, there is a dearth of measures of suicidal thinking that assess for pre-acute suicidal thoughts. The commonly used Scale for Suicidal Ideation (Beck, Kovacs, and Weissman, 1991), for example, contains 5 screening items that exclude non-suicidal individuals from further evaluation, and focus analysis on individuals who are on the more acute end of the spectrum, thus eliminating the possibility for a sensitive measure of pre-suicidal and passive suicidal thoughts.

Individuals who enter the continuum with passive suicidal ideation are likely to progress along it, with prior endorsement of suicidal thoughts or experience with suicide attempts increasing one's risk of eventually completing suicide (Joiner, 2005; Schwartz, 2006). As an alternative to measures of more acute suicidality, Drum et al. (2009) proposed a measure of distress and suicidality that allows an individual to endorse a variety of distressful and suicide-related thoughts along a progressive continuum. Thoughts range from "this is all just too much" to "I will kill myself," and reflect the range of suicidal thinking an individual can experience. Given the importance of intervening with students who endorse early stages of suicidal thought, the distress and suicidality continuum provides a useful lens through which one might identify earlier points of intervention.

SENSE OF COHERENCE AND THE SALUTOGENIC PARADIGM

Antonovsky's (1979, 1987) theory of salutogenesis was conceptualized in response to the prevalent disease-oriented, or pathogenic, perspective on health. Antonovsky proposed that health should be viewed as a continuum, rather than a health-disease dichotomy, and strove to explain what might cause an individual to move toward the healthy end of the continuum, towards physical and emotional well-being, rather than focusing on those factors which brought about disease (Langeland et al., 2007). Antonovsky (1979) identified several health-promoting "generalized resistance resources," which are defined as internal or external resources that are either currently or potentially available to an individual (e.g., wealth, ego strength, cultural stability, and social support). Central to Antonovsky's salutogenic model is the hypothesis that tension induced by stressful life events has the potential to generate growth in an individual, particularly if a person is exposed to a wealth of generalized resistance resources.

Antonovsky then sought to identify an overarching quality of self which was generated by the existence and utilization of generalized resistance resources, and developed the concept of sense of coherence (SOC) (Antonovsky, 1987). Antonovsky (1987) defines the SOC as:

"a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable, and explicable [comprehensibility]; (2) the resources are available to one to meet the demands posed by these stimuli [manageability]; and (3) these demands are challenges, worthy of investment and engagement [meaningfulness]." (Antonovsky, 1987, p.19).

The three components of SOC (comprehensibility, manageability, and meaningfulness) are thought to be strongly related to one another, but separate theoretical constructs. Antonovsky (1987) hypothesized that the presence of several generalized resistance resources could lead to high levels of all three components of SOC, and that the three components would be highly

related to each other. Indeed, factor analyses of Antonovsky's measure of SOC, called the "Orientation to Life Questionnaire," have shown that the three components are highly intercorrelated (Antonovsky, 1993). While Antonovsky does not recommend attempting to attain or analyze subscale scores for each construct, he does maintain that there is a strong theoretical basis for his definition and identification of the three separate components.

Antonovsky (1987) theorized that the first component of SOC, comprehensibility, is brought about by consistent life experiences. The manageability component is thought to be brought about by good load balance and the meaningfulness component by participation in shaping outcome and the experience of being highly valued. An individual can be high on certain components and low on others, though Antonovsky hypothesized that it would be rare to find an individual who is low on comprehensibility but high on manageability, since he believed that it was necessary to view the world as comprehensible before one could view it as manageable.

Though SOC has been shown to correlate positively with several related constructs (e.g., locus of control, self-esteem, and self-efficacy, Antonovsky, 1993; Kröninger-Jungaberle & Grevenstein, 2013) the construct of SOC bears consideration as an overarching, global construct that shares commonality with several protective factors. Antonovsky's intent in conceptualizing the SOC was to identify a construct that has applications across all situations, all points in time, and across cultures and other variables of identity (gender, social class, race, religion, sexuality, etc.). Rather than associate SOC with a single coping style, Antonovsky states that SOC is a broad characterization of one's relationship to self and to the world around them that will result in the choosing of the most adaptive coping style given the situation at hand.

Sense of Coherence as a Protective Quality

Several researchers have found that SOC is a quality of self that can have protective powers against both mental and physical illness. SOC predicts well-being and life satisfaction in mental health consumers (Langeland, Wahl, Kristoffersen, Nortvedt & Hanestad, 2007b), and is

negatively correlated with psychiatric diagnoses, substance abuse, and major depression (Ristkari et al., 2005; Carstens & Spangenberg, 1997). Surtees et al. (2006) found a negative link between SOC and cancer mortality, and Suominen et al. (1999) found a link between SOC and positive health outcomes, even when certain generalized resistance resources such as high socioeconomic status were taken into account. In a non-clinical population, SOC has been found to reduce burnout among health social workers (Gilbar, 1998), and has been associated with positive health outcomes and high levels of psychological well-being (Kröninger-Jungaberle & Grevenstein, 2013; Nilsson et al., 2010).

Sense of Coherence and Suicide

In several studies, a negative association has been found between SOC and suicidal ideation and attempts (Mehlum, 1998; Ristkari et al., 2005; Sjöström et al., 2012; Edwards and Holden, 2001). Petrie and Brook (1992) found that SOC negatively predicted suicidal ideation in recently hospitalized patients, even when other predictive factors such as hopelessness, self-esteem, and depression were taken into account. In a college student sample, Edwards and Holden (2001) found that SOC interacted with emotion-oriented coping to predict suicidal ideation. In their female participants, there was an even more powerful link between SOC and suicide, and the aforementioned interaction also predicted suicide attempts and self-reported likelihood of future suicidal behavior. These results indicate that SOC may have a powerful buffering effect against the development of suicidal thinking.

THEORIES OF SUICIDE

Suicide and suicide-related behaviors are complex and multi-dimensional in nature. There are a number of factors that have been studied as contributing to the development of suicidal thoughts and behaviors. These risk factors include, but are not limited to, the presence of previous suicidal behavior (including attempts and self harm), family conflict, social isolation, mental disorders, physical illness, unemployment, negative life events, low self-esteem, poor

problem solving abilities (Joiner, 2005; Van Orden et al. 2010; Wilburn & Smith, 2005). Susser and Susser (1996) argue that rather than focusing on risk factors, current epidemiological research should focus on "causal pathways at the societal level," broadening the focus and opening the door to a broader scope of intervention.

In an effort to broaden the scope of suicide research, several researchers have developed theories of suicide that identify the process by which one might develop suicidal thoughts, and eventually act on those thoughts in the form of suicidal behaviors (Van Orden et al., 2010; Joiner, 2005; Shneidman, 1998; Baumeister, 1990). Baumeister (1990), drawing on escape theory (Baechler, 1980), conceptualized the development of suicidal thoughts as a six-stage process, which is driven by an individual's desire to escape from his or her internal experience. The progressive, multi-stage model proposed by escape theory makes it an ideal theory from which to consider the continuum of distress and suicidality, with the end goal of identifying points for early intervention.

The Escape Theory of Suicide

According to escape theory, suicidality is influenced by a causal chain of events, in which suicidal thoughts progress through six stages. The six stages of escape theory are as follows: (1) falling short of standards, (2) negative attributions to the self, (3) high self-awareness, (4) negative affect, (5) cognitive deconstruction, and finally (6) negative consequences of cognitive deconstruction such as disinhibition, passivity, lack of emotion, and irrational thought, all of which can ultimately culminate in a suicide attempt (Baumesiter, 1990; Chatard & Selimbegovic, 2011). Escape theory is rooted in the assumption that people attempt suicide because they are motivated to escape from the painful internal experience of the self, not because they desire death (Chatard & Selimbegovic, 2011). If one cannot find an alternative means of escape from the six-stage cycle, a suicide attempt is to be expected (Baumeister, 1990).

The first stage of suicidality, falling short of standards, is described by Baumeister (1990) as "a severe experience that current outcomes (or circumstances) fall far below standards [which] is produced either by unrealistically high expectations or by recent problems or setbacks, or by both" (p. 91). The unrealistically high expectations can be self-generated or can be societally or culturally generated (Dean & Range, 1996). Recent, acute disappointments are thought to be more important in their role in causing progression through the six stages than more chronic disappointments, because of the acuity of the emotions involved with that experience. Above all else, the magnitude of the failure to meet standards is thought to be the most important factor in predicting whether someone will eventually become suicidal (Baumeister, 1990).

In the second stage of suicidality according to escape theory, the disappointing outcomes from stage one are blamed on the self, thus creating negative thoughts about the self (Baumeister, 1990). A key component to the development of negative self-attributions is the individual's perception that the cause of the failure to meet standards is internal, rather than external. Additionally, the individual is likely to apply these negative self-attributions to future events, and to develop constructs through which he or she interprets the world, at which point attributions will progress beyond the individual event to encompass enduring, stable dispositions (Baumeister, 1990).

In the third stage of escape theory, a state of heightened self-awareness ensues, in which the individual becomes acutely aware of him or herself as incompetent, unworthy, or deserving of blame. This then results in a pervasive state of negative affect as a result of the comparison of self to standards, which characterizes stage four of escape theory (Baumeister, 1990). Higgins (1987) proposed two states of negative affect that can arise from a failure to meet standards: one is dejection, which results from a falling short of one's ideals, and the other is agitation (e.g., guilt and anxiety), which results from a falling short of societal standards, duties, or obligations. In stage five, the individual then attempts to escape the painful mental state he/she is

experiencing through cognitive deconstruction, or numbing/distancing oneself from the painful internal experience. This then results in one of several consequences of cognitive destruction (stage six), including a reduction of inhibitions, which serves to reduce barriers to a suicide attempt.

Baumeister (1990) describes one of the markers of cognitive deconstruction as a rejection of meaning, particularly meaning related to negative self-attributions. He states that "the optimal resolution is for the individual to cope by constructing and elaborating new, integrative meanings for the relevant circumstances in his or her life" (p. 92), however, when this does not occur, several consequences result from the individual's attempts to sustain this state of cognitive deconstruction, including a sense of passivity, flattened affect, and, most importantly to suicide, reduced inhibition. As Baumeister puts it, "deconstruction removes meanings from awareness and thereby reduces actions to mere movements; as a result, the internal objections [to suicide] vanish" (p. 93).

While it seems possible that SOC would intervene to prevent suicidal thinking at several stages of escape theory, the hypothesis of the current study is that SOC will intervene most powerfully in preventing individuals from progressing from a brief period of negative self-attribution after a falling short of standards experience, in which an individual might identify their self as the cause of that "falling short of standards" experience, to a global, stable sense of unworthiness or incompetence that is marked by a heightened state self-awareness and a state of negative affect. For this reason, stages one through four of escape theory will be discussed in more in the following sections.

Stage One: Falling Short of Standards

There is a considerable amount of evidence to suggest that the first stage of escape theory, falling short of standards, plays an important role in the development of suicidal thinking. Suicide rates are higher in nations with greater economic development and higher quality of life

(Lester, 1986), indicating that high quality of life may produce a higher standard for living against which people compare themselves. When external circumstances are very bad, it may be easier for individuals to attribute negative events in their lives to external circumstances, rather than to themselves (Henry & Short, 1954). Additionally, perfectionism has been found to correlate with suicidal thinking (Beevers & Miller, 2004; Dean & Range, 1996), suggesting that self-imposed high standards can be equally powerful in creating this discrepancy between standards and actual life circumstances. Chatard and Selimbegovic (2011) found that participants, when asked to imagine an incident in which they failed to attain an important standard, experienced an increase in suicide-related thought accessibility, as well as an increase in accessibility of thoughts generally related to escape, indicating that an individual's thought process after a failure to attain standards may be a key point of intervention.

In addition to high standards and expectations, recent acute stressors and setbacks can play an important role in generating a sense that one has failed to meet and important standard (Baumeister, 1990). Past research has linked suicide attempts to a number of failure-related stressors including a recent substantial deterioration of intimate relationships (Bourque, Kraus, & Cosand, 1983), health (Bourque et al., 1983), and circumstances at work (Motto, 1980). Additionally, a drop in grades, particularly in students who have previously attained above average grades, has been linked to suicidality (Hendin, 1995).

Stages Two Through Four: Negative Attributions to self, Heightened Self-awareness, and Negative Affect

When considering stages two (negative self-attributions), three (heightened self-awareness), and four (negative affect) of escape theory, it is helpful to turn to research on attributional style. The tendency to attribute negative events to internal (i.e., self-oriented), global (existing across multiple domains), and stable (enduring) causes has been widely researched with respect to its contribution to a state of negative affect. Joiner (2001) found a

strong relationship between negative attributional style and feelings of hopelessness (which subsequently led to depressive symptoms). Additionally, negative attributional style has been found to predict a poor response to pharmacotherapy in a sample of depressed individuals (Levitan, Rector, & Bagby, 1998). Specifically, the tendency to internalize negative events has been linked to prior episodes of depression (Ball, McGuffin, & Farmer, 2008), indicating that the self-focus of negative attributions is particularly powerful as a contributor to depression.

Few studies have sought to measure a heightened state of self-awareness in isolation; however, Henken (1976) found that suicide notes have a greater number of self-referent pronouns than notes written by individuals facing involuntary death, indicating that there is something about the suicidal experience that causes one to turn inward and focus on the self. Additionally, as Joiner's (2007) interpersonal theory of suicide highlights, the suicidal individual experiences thwarted belongingness, reflecting a lack of attending to a social group or a community, suggesting that the suicidal individual is perhaps more self-aware than aware of others. While Baumeister (1990) concedes that the construct of self-awareness is difficult to measure, the concept of a heightened state of self-awareness as it follows from the previous stage, negative self-attributions, can be theoretically linked to the development of internalized shame, or trait shame.

Baumeister (1990) links the related construct of shame and self-blame to the development of negative affect through negative self-attributions and heightened self-awareness. The construct of shame has been linked to a negative internal and global attribution style (Lewis, 1992), and the subsequent stage, heightened self-awareness, reflects internalized shame, in which an individual is inclined to turn inwards and becomes dispositionally oriented to interpret events through a self-shaming perspective (Matos, Pinto-Gouveia, & Duarte, 2012). For this reason, internalized shame will be investigated in the current study as the emotion that most closely

approximates the experience an individual goes through when progressing from stages two through four of escape theory.

SHAME

M. Lewis (1992) identifies shame as an emotion central to the human experience, and pointed to a dearth of research on the impact of shame on one's psychological well-being. Over the years, interest in shame, as well as other self-conscious emotions, has increased (Tracy, Robins, & Tangney, 2007). Shame is categorized as a self-conscious emotion in that it requires awareness of the self in order to be felt. Self-conscious emotions may not fully emerge until the end of an individual's third year of life. Researchers hypothesize that this is because self-awareness does not develop until 18 to 24 months in a child, and self-awareness and the formation of stable self-representations is required in order to experience shame (Tangney & Dearing, 2002; Izard, Ackerman, & Schultz, 1999)

Several researchers have made an effort to differentiate between shame and guilt, two constructs that are easily confounded. While shame and guilt both may be felt as a response to a failure to meet standards, shame is distinguishable from guilt in that a shame response involves a focus on the whole self, and a feeling that is akin to embarrassment but much stronger. Contrary to previous assumptions that guilt is a private emotion and shame is a public emotion, several researchers have found that the core distinction between shame and guilt lies in the stability and global nature of self-focus, which with shame is enduring and global (Parker & Thomas, 2009). Lester (1997) describes the distinction as the difference between "'I can't believe that I did that' (guilt) and 'I can't believe that I did that' (shame)" (p. 353). Additionally, guilt and shame have differential impacts on well-being, with shame acting as the more powerful predictor of depression and anxiety (Tangney, Wagner, & Gramzow, 1992; Kim, Thibodeau, & Jorgenson, 2011).

Shame across the life span has been found to be negatively associated with overall psychological well-being (Orth, Robins, & Soto, 2010). Internalized shame, or the dispositional tendency towards stable and global negative attributions to the self, has been identified as a predictor of a number of mental health issues, including depressive symptoms and anxiety (De Rubeis & Hollenstein, 2009; Tangney, Wagner, & Gramzow, 1992), and has been linked with narcissistic personality, shame, and rage (Grosch, 1994). Internalized shame is described by Matos, Pinto-Gouveia, and Duarte (2012) as an experience in which "attention and cognitive processing are directed inwardly to the Self's emotions, personal attributes and behaviour, and focused on the Self's flaws and shortcomings" (p. 1412). Kaufman (1996) has proposed that internalized shame is linked to complex memory systems accompanied by vivid imagery of the self being shamed, which are internalized into one's way of conceptualizing their self and reflect a stable, globally oriented way of perceiving the self that is categorized by a pervasive feeling of inferiority.

Shame and Suicide

In an article reviewing connections between shame and suicide, Lester (1997) states that because shame is an emotion experienced in response to the feared reactions of others, that it is a social emotion. He argues that suicide due to shame should be conceptualized as not only stemming from a desire to escape from the self, but also a desire to escape from others. However, as a way to integrate this information into escape theory, one might turn to H. B. Lewis (1971), who proposed the idea of the "internalized other" as a key component to shame, in which the ashamed individual imagines how the self may look to another person, even when alone.

Several researchers have indicated shame as a key factor in the development of suicidal thoughts. Shneidman (1998) listed "shame avoidance" and "order and understanding" as two of the seven most commonly thwarted needs in suicidal individuals, indicating that sense of

coherence and shame both likely play a role in the development of, or protection against, suicidal thoughts. In a study of completed suicides in New Orleans, Breed (1972) estimated that approximately one-third of those individuals had experienced shame from failure. Lewis (1992) notes that suicide can often be the result of shame or anger turned inward. Bryan et al. (2013) found that shame interacted with hopelessness to predict suicidal ideation in a military sample, and Brown et al. (2009) found that shame played an important role in the development of self-injurious behaviors in women with borderline personality disorder.

Shame and SOC

Though the link between shame and SOC has not been widely studied, Antonovsky (1987) does make some assumptions regarding the protective nature of SOC after a "falling short of standards" experience. Drawing upon the example of an individual who has just been laid off from his job, Antonovsky illustrates how SOC may serve to shape that individual's experience: an individual who is high on SOC will consider the elements of his unemployment that are within his control (severance pay, references, etc.), will take necessary steps to begin a new career, and will view their pursuit of a new job as a meaningful one that is worthy of investment. Because of this high SOC orientation to the problem, Antonovsky hypothesizes that this individual will have fewer negative psychological repercussions, and will experience less shame, as a result of this event. In studies of unemployed individuals, researchers have identified a negative relationship between SOC and shaming experiences (Starrin, Jonsson, & Rantakeisu, 2001; Stankūnas, Kalediene, & Starkuviene, 2009). Additionally, a negative association between SOC and stigma experiences has been found in a sample of individuals who have been hospitalized for mental illness (Lundberg, Hansson, Wentz, & Bjorkman, 2009). These findings indicate that Antonovsky may have been correct in his hypothesis, and that the relationship between SOC and shame merits further investigation.

SUMMARY

Due to the wealth of research implicating SOC as a protective quality against the development of suicidal thoughts, the nature of the protective relationship between SOC and suicide merits further investigation. Stages two through four of escape theory (negative self-attributions, heightened self-awareness, and negative affect) reflect the development of thoughts that are characterized by internalized shame, and the relationship between shame and suicide is widely researched and well-established. The hypothesis of this study is that high SOC will intervene following an individual's falling short of standards experience, so that high levels of comprehensibility, manageability, and meaningfulness will allow that individual to cope with the experience in a way that does not lead towards developing an experience of internalized shame, and will thus prevent that individual from progressing further along the suicidal continuum.

Chapter 3: Proposed Research Study

STATEMENT OF PURPOSE

This general summary indicates that further research should be done to investigate the protective nature of SOC. The current study will aim to assess whether sense of coherence is a quality of self that protects against the development of suicidal thoughts, and will seek to understand the mechanism by which that protection occurs. Specifically, the study will investigate whether an individual with high SOC is less likely to have high levels of internalized shame, and therefore less likely to progress along the suicidal continuum. Multiple regression analyses will be conducted to further understand the relationship between SOC and suicidality, and to determine whether internalized shame has an indirect, mediating effect on that relationship.

RESEARCH QUESTIONS AND HYPOTHESES

Research Question 1: When an individual has a "falling short of standards" experience, does SOC play a protective role against the development suicidal thinking?

Hypothesis 1: When asked to recall a past "falling short of standards" experience and report their degree of suicidal thinking at that time, individuals' SOC scores will negatively predict their suicidal continuum scores.

Rationale: As discussed in the integrative analysis, several studies have found a negative association between SOC and suicidal thoughts and behaviors (Mehlum, 1998; Ristkari et al, 2005; Sjöström et al., 2012; Edwards and Holden, 2001). Individuals with high SOC have been shown to have better health outcomes (Surtees et al., 2006; Suominen et al., 1999) and are more resilient psychologically (Gilbar, 1998; Nilsson, 2010). It is therefore expected that students who report high levels of SOC will be likely to report less severe levels of distressed and suicidal thinking than their low-SOC counterparts; in other words, a negative relationship between SOC and distress and suicidality continuum scores is expected.

Research Question 2: When an individual experiences "falling short of an important standard," does internalized shame explain the link between SOC and suicide?

Hypothesis 2a: Given a "failure to meet standards" prime, high sense of coherence scores will negatively predict internalized shame scores.

Rationale: Antonovsky (1987) describes individuals high in SOC as able to effectively use the correct coping strategy given the broad range of obstacles they might encounter in their lifetime. Additionally, researchers have identified a negative link between SOC and shaming experiences (Starrin et al., 2001; Stankūnas et al., 2009; Lundberg et al., 2009). It is thus hypothesized that while a high SOC individual might attribute the cause of their "falling short of standards" experience to themselves, that experience will not turn into an experience of internalized shame, because that individual is likely to have a wealth of generalized resistance resources at his/her disposal, and is likely to view the resulting obstacles encountered after the "falling short of standards" experience as understandable, surmountable, and meaningful.

Hypothesis 2b: Given a "failure to meet standards" prime, shame will be positively correlated with suicidal thinking.

Rationale: Several researchers have identified an association between suicide and shame (Bryan et al., 2013; Brown et al., 2009; Shneidman, 1998; Lester, 1997). Additionally, shame is associated with known suicide risk factors such as hopelessness, depression, and anxiety (De Rubeis & Hollenstein, 2009; Tangney, Wagner, & Gramzow, 1992). Because the progression from stage two through stage four of escape theory (Baumeister, 1990) closely resembles the development of internalized shame, it is predicted that those individuals who are high on internalized shame will also endorse more severe suicidal thoughts as measured by the distress and suicidality continuum (Drum et al., 2009).

Hypothesis 2c: Given a "failure to meet standards" prime, shame will partially mediate the relationship between SOC and suicidal thinking.

Rationale: Given the strong evidence for the hypotheses above, it follows that shame may mediate the relationship between SOC and suicidal thinking. It seems likely that part of the protective nature of SOC in preventing suicidal thoughts lies in an individual's ability to problem solve, understand, and find meaning in a difficult "falling short of standards" experience, rather than develop high levels of self-awareness and negative affect, therefore it follows that SOC would be likely to be negatively correlated with shame. It is also likely that shame will be positively correlated with suicide, thus indicating an indirect effect of shame on the relationship between SOC and suicide. It is unlikely, however, that full mediation will occur, given that suicide is a complex and nuanced problem with many causes, and SOC is a broad construct that is highly correlated with several protective and risk factors that are not investigated in this study (Antonovsky, 1993). It seems likely that there will remain some variance in the correlation between SOC and suicide that is unexplained by shame, and that shame will thus serve as a partial mediator of the relationship between SOC and suicidality.

METHOD

The proposed study will utilize multiple regression analyses to further investigate the relationship between SOC, shame, and suicidal thinking. Approval to collect the data required for the study will be obtained through the Institutional Review Board at the University of Texas at Austin.

Participants

Participants in the present study will consist of 200 undergraduate college students at the University of Texas at Austin. Participants will be recruited through a request for participants made to the Department of Educational Psychology study pool at this university. Participants' ages are likely to range from 17 to 24 years of age. Demographic information will be collected on gender, race, student status, and socioeconomic status (as measured by parental income).

Data Collection Procedure

Participation in the study will involve completing an online survey, administered through a secure survey website (Qualtrics). The survey will consist of an open-ended prompt intended to inquire about a recent "falling short of standards" experience and to prime students to the feelings and thoughts they endorsed at the time of that experience. The survey will also include measures of demographics, sense of coherence, internalized shame, and a single-item measure of distress and suicidality (see Appendices). The survey will include a consent form, which participants will read and electronically sign. Data will be collected confidentially, and identifying information will be removed from participants' responses once the study is complete. Because the study may require students to remember an experience in which they experienced some degree of suicidal thinking, the final page of the survey will include resources and information through which students can seek help, including the numbers for the university's counseling center and help line.

Measures

Demographics Questionnaire—A demographic information survey will include information on age, year in school (i.e., freshman, sophomore, etc., gender, ethnic identity, religion, parental education, and socioeconomic status (as measured by combined parental/caregiver income). See Appendix A for this measure.

"Falling short of standards" prompt—Participants will be asked to complete an openended prompt in response to the question, "Think back to a time in the past year to an experience in which your circumstances fell far below an important standard that had been set." They will be instructed to "please write for at least five minutes about [their] experience, and to try to provide as much detail as possible, including a detailed description of the feelings or thoughts [they] experienced during and/or after the experience." For the full prompt, see Appendix B. Distress and Suicidality Continuum—Participants' thoughts will be assessed using a measure of distress and suicidality that was designed by Drum and his colleagues (2009) in an effort to capture the continuum of distressed and suicidal thoughts an individual might endorse. Participants will be asked the question, "During and after the "falling short of standards" experience, did you have any thoughts similar to the following? Please select "yes" for all thoughts that apply." Response options include, in order:

- 1) "This is all just too much"
- 2) "I wish this would all end"
- 3) "I have to escape"
- 4) "I wish I was dead"
- 5) "I want to kill myself"
- 6) "I might kill myself"
- 7) "I will kill myself"
- 8) I did not have any thoughts like these.

Confirmatory factor analysis led to the discovery that responses to the items on this scale (excluding the response option "I did not have any thoughts like these"), along with responses to two dichotomous yes/no questions assessing for suicidal ideation and suicide attempts, all loaded onto a single factor with a fit index of (CFI = 0.97), indicating that the items are highly correlated. See Appendix C for this measure.

Internalized Shame Scale—The Internalized Shame Scale (ISS) measures an individual's dispositional proneness to global negative evaluations of the self (Cook, 1987). The ISS is comprised of 30 items. Of those 30 items, 24 items form the trait shame scale, and the remaining 6 items comprise a brief measure of self-esteem. The latter items are adapted from the Rosenberg (1965) Self-Esteem Scale and are used to protect against response bias. Internal consistency for the trait shame scale has been found to be high, with a Cronbach's alpha of 0.96

in a clinical population and 0.95 in non-clinical population (Cook, 2001). Additional studies of internal consistency have found Cronbach's alpha coefficients of 0.97 for the trait shame scale and 0.90 for the self-esteem scale (Rybak & Brown, 1996). Studies of test-retest reliability reveal high temporal stability, with test-retest correlation coefficients of 0.81 and 0.75 for the shame and self-esteem subscales, respectively (del Rosario & White, 2006).

The ISS asks participants to rate the frequency with which they experience particular thoughts or feelings related to shame. Items are scored on a Likert scale (1 = "never; 5 = "almost always). Sample items from the scale include "I feel intensely inadequate and full of self-doubt" and "I see myself striving for perfection only to continually fall short." See Appendix D for this measure.

Sense of Coherence scale—The Sense of Coherence scale (SOC-29), called "The Orientation to Life Questionnaire" in its operational format, will be used to assess participants' level of SOC (Antonovsky, 1987). Items in the SOC-29 are rated on a seven point Likert scale. Sample items include "In the past ten years, your life has been (1 = Full of changes without your knowing what will happen next; 7 = Completely consistent and clear)," and "How often do you have the feeling that there's little meaning in the things you do in your daily life? (1 = Very often; 7 = Very seldom or never) (Antonovsky, 1987). Summated ratings are computed for the total Sense of Coherence score, and range from 29 to 203. The SOC-29 has been found to have adequate internal consistency, with a Cronbach's alpha that has ranged from 0.82 to 0.95 in 26 previous studies (Antonovsky, 1993). Test-retest correlations reflect temporal stability of the instrument and range from 0.69 to 0.78 within the time span of 1 year (Eriksson and Lindstrom, 2005). See Appendix E for this measure.

ANALYSES AND EXPECTED RESULTS

Preliminary Analyses

Prior to hypothesis testing, the data will be analyzed to determine whether significant differences in variables of interest (shame, sense of coherence, and distress and suicidality) exist between groups on all demographic variables. Descriptive statistics including the mean, standard deviation, ranges, and minimum and maximum values and frequencies will be computed, examined, and plotted. Significant differences in variables of interest between groups on any demographic measures will be noted, and those demographic variables will be controlled for in the subsequent regression analyses that will be conducted. Continuous variables will be assessed for normality and outliers. Tolerance statistics will be calculated for each independent variable in the regression analysis in order to assess for multicollinearity. According to Menard (2002), an R2 of 0.80 or higher for any of the independent variables is indicative of multicollinearity and could be a sign of an inflated Type II error rate.

To determine the sample size required for adequate statistical power, an a priori power analysis using G*Power 3.0.10 for the regression analyses was conducted. Assuming that additional predictor variables will be added to control for demographic differences, 157 students will be necessary for a medium effect size (f-squared = .15) with an estimated power of .80 and an alpha level of .05. To account for attrition and approximate class sizes, a sample size of 200 students will be sought. Analyses will be conducted using SPSS 19.0.0.

Regression Analyses

For all regression analyses, continuous predictor variables will be grand-mean centered and categorical predictors will be effects coded. To investigate Hypothesis 1, a multiple regression model will be used to evaluate whether SOC negatively correlates with individuals' scores on the continuum of suicidal thinking. Participants' distress and suicidality continuum scores will be regressed on SOC, while controlling for any demographic variables on which

significant mean differences in SOC scores or continuum scores were observed. Unstandardized regression coefficients (b values) and R2 values will be reported for all variables of interest (SOC and any demographic variables of interest) and examined for significance.

To investigate Hypothesis 2, a mediation model will be assessed to evaluate whether shame mediates the relationship between SOC and suicidality, following the criteria suggested by Baron and Kenny (1986). Those criteria are as follows:

- 1. SOC must be a significant negative predictor of suicidal ideation (as measured by the suicidal continuum item). This will be tested in the multiple regression analysis that will be conducted to test Hypothesis 1.
- 2. SOC must be a significant negative predictor of participants' ISS scores. To test this relationship, a multiple regression analysis will be conducted in which ISS is regressed on SOC, again controlling for any demographic variables in which mean differences between groups were observed. The unstandardized regression coefficient (b-value) and R2 value for SOC will be reported and tested for significance.
- 3. Shame must be a significant predictor of suicidal thoughts (after controlling for SOC scores). To test this relationship, participants' distress and suicidality continuum scores will be regressed on SOC, ISS, and any relevant demographic variables. The unstandardized regression coefficient (b-value) and R2 value for SOC and internalized shame will be reported and tested for significance.
- 4. Unstandardized regression coefficients from the previous analyses reflecting the relationship between SOC and shame, the relationship between shame and suicidality (controlling for SOC), and the relationship between SOC and suicidality (controlling for ISS) will be used to assess the meditational role of shame on the relationship between SOC and suicidality. An empirical M-test of the indirect effect of SOC on suicidal thinking via internalized shame will be conducted using PRODCLIN, a program developed by MacKinnon et

al. (2007). Use of an empirically based estimate of the indirect effect results in improved power (compared to Sobel's test) while maintaining nominal α -levels.

Expected Results

It is expected that SOC will be a significant negative predictor of distress and suicidality continuum scores (Hypothesis 1):

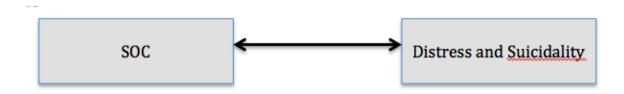


Figure 1: Predicted relationship between sense of coherence and distress and suicidality

Additionally, it is expected that, according to Baron and Kenny's (1986) guidelines, SOC will be a significant predictor of internalized shame, and internalized shame will be a significant predictor of distress and suicidality. It is also expected that once the mediating effect of shame is accounted for, the direct relationship between SOC and distress and suicidality will be less pronounced, though still significant, indicating that internalized shame is a partial mediator of the relationship between SOC and distress and suicidality scores (Hypothesis 2):

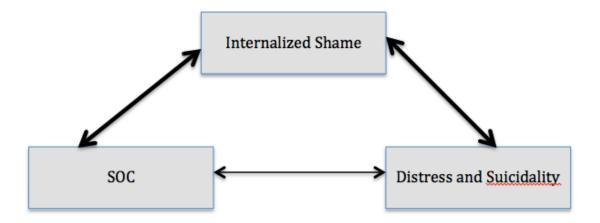


Figure 2: Predicted mediating role of internalized shame on the relationship between sense of coherence and distress and suicidality

Chapter 4: Discussion

SUMMARY

In order to continue to expand the scope and effectiveness of suicide prevention efforts, it is necessary to examine suicidality from a perspective that allows for a range of thoughts and experiences. When suicidal thoughts are viewed as lying on a continuum, this allows policy makers, administrators, and mental health professionals to identify earlier points of intervention, which has implications for prevention efforts (Drum et al., 2009). Campus-wide suicide prevention efforts can be further informed by research that goes beyond the identification of individual risk and protective factors, and moves towards the identification of broad, overarching, protective qualities of self that might lead a population towards health and away from suicidal ideation, even in the face of a difficult "falling short of standards" experience (Susser & Susser, 1996). Antonovsky's (1987) SOC is one such quality of self that may give researchers and stakeholders an avenue through which to intervene on college student suicide, and the continuum of distress and suicidality provides a unique measure through which researchers can study the continuum of suicidal thoughts an individual might endorse.

The proposed study will seek to further understand the relationship between SOC and suicidality. In order to identify a potential point at which SOC might intervene in protecting against the development of suicidal thoughts, escape theory (Baumeister, 1990) will be used as a framework through which to view the progression of suicidal thinking. It is hypothesized that after a "falling short of standards" experience, individuals with high SOC will be unlikely to progress from stage two, negative self attributions, through to stages three and four of escape theory, towards the development of heightened self-awareness and negative affect. To determine whether an individual has progressed towards heightened self-awareness and negative affect, a measure of internalized shame will be used, and the role of internalized shame as a mediator of the relationship between SOC and suicidality will be investigated.

IMPLICATIONS

It is hypothesized that a negative relationship between SOC and participants' scores on the distress and suicidality continuum will be found. Past research has established a negative association between SOC and suicide (Mehlum, 1998; Ristkari et al, 2005; Sjöström et al., 2012; Edwards & Holden, 2001; Petrie & Brook, 1992); however, the majority of these studies conceptualize suicide as a dichotomous variable, with the presence or lack of ideation or behaviors being the only measure of suicidality. If the hypothesis of the proposed study is supported, this will add to the growing body of research that identifies a negative link between SOC and suicide by providing information about the impact of SOC on the range of suicidal thoughts an individual can endorse.

Shame is widely believed to play a role in the development of suicidal thoughts (Shneidman, 1998; Lester, 1997, Bryan et al., 2013; Brown et al., 2009). However, researchers have yet to examine shame as a possible mediator of the relationship between SOC and suicidal thinking. Doing so will not only provide more information about the mechanism by which SOC intervenes on suicidal thinking, but will provide valuable insight into the ways in which SOC acts as a protective quality generally. Findings will also provide further evidence to the growing body of research linking shame to suicidal thoughts and behaviors. Additionally, the association between SOC and shame has not been widely researched, pointing to another area of research to which this study would be contributing.

Findings of the proposed study could have implications for suicide prevention interventions on college campuses. SOC, while widely considered a relatively stable trait, is hypothesized to be somewhat fluid in early adulthood (Antonovsky, 1987), and researchers have found that an individual's SOC level can be influenced via intervention. Griffiths (2010) found that when a group of mental health service users were given training on employment opportunities, their SOC increased. Langeland et al. (2007a) have conceptualized a 16-week talk therapy group which they believe will promote SOC in participants. Particularly relevant to the

college student population, Davidson, Feldman, and Margalit (2012) designed an intervention that yielded marked increases in SOC in a first-year college student sample. This could provide a useful starting point for developing suicide prevention interventions that address SOC on college campuses.

LIMITATIONS

Potential limitations to the proposed study exist and are worthy of mention. The first concerns the self-report nature of the study. Self-report studies are dependent upon the respondent's ability to answer honestly and accurately, and may be subject to response bias. Studies have found that numerous factors can influence subjective Likert scale responses, such as reference group effects (Heine, Lehman, Peng, & Greenholtz, 2002), question wording and context (Schuman & Presser, 1981), and language abilities (Schwarz, 1999).

Additionally, the self-report measures used in this study ask students to report their thoughts, feelings, and reactions at the time of their "falling short of standards" experience. This allows for the possibility that distance from the point in time might result in an inaccurate representation of the thoughts and feelings they were experiencing. The open-ended "falling short of standards" prompt is intended to prime students and evoke the emotions and experience of that experience, and this should help the students respond with accuracy. Additionally, both SOC and ISS scales show high temporal stability (Eriksson & Lindstrom, 2005; del Rosario & White, 2006), which suggests that students' SOC and ISS levels are not likely to differ greatly from the time of the "falling short of standards" experience to the time of the study. However, it is still possible that students' temporal distance from the experience could result in psychological distance that might exacerbate already existing issues regarding the subjectivity of self-report measures.

Second, it is expected that the severity of students' "falling short of standards" experiences will vary widely, and the level of subjective distress that results from that experience

will vary as well. It is likely that some students' experiences will be insufficiently severe to push them towards suicidal thinking, even if they are predisposed to this type of thinking and might have progressed on toward stages three and four of escape theory under different circumstances. Past studies have addressed this issue by generating a prime that is assumed to be universally distressing (e.g., failure to find a job after college, Chatard & Selimbegovic, 2011), but the intent of the researcher in the proposed study is to allow for a broad range of experiences and generate open-ended responses, which would provide fodder for future qualitative analyses and recognize the diversity of experiences that may be experienced as "falling short of standards" for an individual.

To address this potential issue, adding a single-item Likert scale measure of distress was considered and then rejected, since it is likely that an individual's perceived distress would be strongly negatively correlated with SOC, and controlling for distress could possibly confound results or inflate the Type II error rate of the study. Additionally, the addition of an objective scale that assigns a distress value based on life events encountered, such as the one developed by Holmes and Rahe (1967), was considered; however, these scales have been shown to be inadequate in objectively measuring distress caused by life events, with studies showing that the stress experienced due to a given event may vary widely depending on the individual (Lester, Leitner, & Posner, 1983). Therefore, while the issue of varying levels of severity may influence the power of the analyses in the study by increasing the level of variance in variables of interest, no estimate of distress will be used in this study.

A third limitation to the proposed study lies in the generalizability of results. Because participants in this study will be limited to undergraduate students at the University of Texas at Austin, results from the study may not generalize to a broader college student population. As an additional consideration, because the proposed study relies on correlational methodology, one will not be able to infer causation from the results. If a significant indirect effect of shame on the

relationship between SOC and distress and suicidality continuum scores is found, this will not necessarily imply that high SOC causes low shame, which causes low scores on the continuum. This has implications for interventions one might implement on a college campus—even if a significant negative relationship is found between SOC and suicidal thoughts, it should be noted that increasing an individual's SOC may not cause a decrease in that individual's distress and suicidality continuum score.

FUTURE DIRECTIONS

Findings from the proposed study could lead to several areas of further exploration. The question of whether a college student's SOC can be positively influenced, along with the question of whether increasing an individual's SOC can decrease their suicidal thinking, should be further investigated through intervention studies. Future research should also be conducted to further validate the distress and suicidality continuum as a valid and reliable measure of progressive suicidal thoughts, as well as to continue to explore the links between SOC and suicide and shame and suicide from a continuum-based perspective on suicidality. Additionally, because of the limited research that exists on the topic, further research should be done to better understand the relationship between SOC and shame.

The open-ended responses in the data provide material for qualitative analyses that could be conducted in order to gain more insight into the nature and severity of participants' "falling short of standards" experience. This will inform future interventions and campus initiatives. Additionally, a well-executed content analysis could also serve to mitigate the issue of the variance in severity of participants' "falling short of standards" experiences by providing nuanced information about the degree of distress experienced by participants.

Past studies have suggested that the pathways by which SOC is developed, and the ways through which SOC is expressed, may differ among cultural groups (Bowman, 1997), and that levels of SOC differ among cultural groups and explain stress reactions differently (Braun-

Lewensohn & Sagy, 2011). The same holds true for shame, as it is brought about and manifests differently across cultures and identities (Lewis, 1992). As such, the mechanism by which SOC protects against suicidal thinking via shame may vary by cultural group, and cultural group differences in the relationships between SOC and suicidality, SOC and shame, and shame and suicidality all merit further investigation.

The proposed study seeks to provide information that could improve overall campus mental health and decrease suicide rates on college campuses, by identifying a quality of self, SOC, that contributes to the development of mental health and protects against the development of internalized shame and suicidal thoughts. It is the hope of the researcher that the current study will provide a helpful framework for understanding college student suicide, as well as provide useful information with which to identify future directions of research that should be explored regarding protective qualities of self, shame, and suicide.

Appendices

APPENDIX A: DEMOGRAPHICS QUESTIONNAIRE

- 1) What is your age?
- 2) What is your grade classification?
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior
 - e. Other, please specify:
- 3) What is your religious or spiritual preference?
 - a. None
 - b. Agnostic
 - c. Atheist
 - d. Buddhist
 - e. Christian
 - f. Catholic
 - g. LDS
 - h. Protestant
 - i. Hindu
 - j. Jewish
 - k. Muslim
 - 1. Native American Religion
 - m. Unitarian or Universalist
 - n. Other, please specify:
- 4) With the understanding that these categories might be limiting, how do you typically describe yourself?
 - a. African American, of African descent, African, of Caribbean descent, or Black
 - b. Asian or Asian American (e.g., Chinese, Japanese, Korean)
 - c. Caucasian, White, of European descent, or European (including Spanish)
 - d. Hispanic, Latino or Latina (e.g., Cuban American, Mexican American, Puerto Rican
 - e. Middle Eastern or East Indian (e.g., Pakistani, Iranian, Egyptian)
 - f. Native American (e.g., Dakota, Cherokee) or Alaskan Native
 - g. Native Hawaiian or other Pacific Islander (e.g., Samoan, Papuan, Tahitian)
 - h. Other, please specify:
- 5) How do you identify?
 - a. Male
 - b. Female
 - c. Transgender
 - d. Other, please specify:

- 6) How would you describe your sexual orientation?
 - a. Heterosexual
 - b. Gay or Lesbian
 - c. Bisexual
 - d. Questioning
 - d. Other, please specify:
- 7) What is the approximate total combined household income of your primary caregiver(s)?
 - a. Less than 10,000
 - b. 10,000 -14,999
 - c. 15,000 -24,999
 - d. 25,000 -49,999
 - e. 50,000 –74,999
 - f. 75,000 –99,999
 - g. 100,000 –149,999
 - h. 150,000 or more
- 8) What is the highest level of education completed by your parent(s) or significant caregiver(s)?
 - a. Did not complete high school
 - b. Finished high school or high school equivalent
 - c. Some college
 - d. Associate's degree or technical training certificate
 - e. Finished college
 - f. Some graduate or professional school after college
 - g. Finished graduate or professional school (e.g., masters or doctoral degree)
 - h. Not sure

APPENDIX B: "FALLING SHORT OF STANDARDS" PROMPT

Think back to a time in the past year to an experience in which your circumstances fell far below an important standard that had been set. This could be due to a recent stressor or setback, or due to high expectations that were set by yourself, important others, or society. This experience should be the most severe "falling short of standards" experience you can remember from the past year.

Please write for at least five minutes about your experience, and to try to provide as much detail as possible, including a detailed description of the feelings or thoughts you experienced during and/or after the experience.

APPENDIX C: DISTRESS AND SUICIDALITY CONTINUUM

Please think back to the "falling short of standards" experience you described. During and in the time following the "falling short of standards" experience, did you have any thoughts similar to the following? Please select "yes" for all thoughts that apply.

YES NO 1) "This is all just too much"

YES NO 2) "I wish this would all end"

YES NO 3) "I have to escape"

YES NO 4) "I wish I was dead"

YES NO 5) "I want to kill myself"

YES NO 6) "I might kill myself"

YES NO 7) "I will kill myself"

YES NO 8) I did not have any thoughts like these

APPENDIX D: INTERNALIZED SHAME SCALE

DIRECTIONS: Think back to the experience upon which you wrote and reflected. Read each statement carefully and circle the number to the left of the item that indicates the frequency with which you found yourself feeling or experiencing what is described in the statement immediately following your experience. Use the scale below. Please try not to omit any items.

1=Never	
2=Seldom	
3=Sometimes	
4=Frequently	
5=Almost Alv	ways
1. I feel	like I am never quite good enough.
2. I feel	somehow left out
3. I thin	k that people look down on me.
4. All in	all, I am inclined to feel that I am a success.
5. I scol	d myself and put myself down.
6. I feel	insecure about others' opinions of me.
7. Comp	pared to other people, I feel like I somehow never measure up.
8. I see	myself as being very small and insignificant.
9. I feel	I have much to be proud of.
	el intensely inadequate and full of self-doubt.
11. I fee with me	el as if I am somehow defective as a person, like there is something basically wrong
12. Whe	en I compare myself to others I am just not as important.
13. I hav	ve an overpowering dread that my faults will be revealed in front of others.
14. I fee	el I have a number of good qualities.
15. I see	e myself striving for perfection only to continually fall short.
16 I thi	nk others are able to see my defects

17. I could beat myself over the head with a club when I make a mistake.
18. On the whole, I am satisfied with myself.
19. I would like to shrink away when I make a mistake.
20. I replay painful events over and over in my mind until I am overwhelmed.
21. I feel I am a person of worth at least on an equal plane with others.
22. At times I feel like I will break into a thousand pieces.
23. I feel as if I have lost control over my body functions and my feelings.
24. Sometimes I feel no bigger than a pea.
25. At times I feel so exposed that I wish the earth would open up and swallow me.
26. I have this painful gap within me that I have not been able to fill.
27. I feel empty and unfulfilled.
28. I take a positive attitude toward myself.
29. My loneliness is more like emptiness.
30. I feel like there is something missing.

APPENDIX E: SENSE OF COHERENCE – ORIENTATION TO LIFE QUESTIONNAIRE

1. When you tall	to people, d	o you have the	feeling that the	ey don't und	erstand you?	
1 2		3	4	5	6	7
Never				Alw	ays have this fe	eling
2. In the past, whyou have the fee	-	o do something	g which depend	led upon coo	operation with ot	thers, did
1 2		3	4	5	6	7
Surely wouldn't	get done			-	ely would get do	ne
3. Think of the p feel closest. How				aily, aside fr	om the ones to v	vhom you
1 2		3	4	5	6	7
You feel that the	ey're strange	rs		You	know them ver	y well
4. Do you have t	he feeling tha	at you don't rea	ally care about	what goes or	n around you?	
1 2		3	4	5	6	7
Very seldom or 1	never				Very	often
5. Has it happend thought you knew	-	that you were	surprised by th	e behavior o	of people whom	you
1 2		3	4	5	6	7
Never happened					Always happ	pened
6. Has it happen	ed that people	e whom vou co	unted on disan	pointed vou	?	
1 2		3	4	5	6	7
Never happened					Always happ	pened
7. Life is:						
1 2		3	4	5	6	7
Full of interest					Completely	routine
8. Until now you	ır life has had	·				
1 2	ir irro rias riac	3	4	5	6	7
No clear goals of	r purpose at a	.11			y clear goals and	d purpose
9. Do you have t	he feeling th	at vou're heing	treated unfairly	v?		
1 2	no reening the	3	4	y : 5	6	7
Very often		-	-	-	Very seldom	or never
J					5 5 5 1 4 5 1 1	, 51

10. In the past ten years your life has been:

1 2	3	4	5	6	7
Full of changes without your knowing what will happen next			Compl	etely consiste	ent and clear
11. Most of the things y	ou do in the futur	re will prob	ably be:		
1 2 Completely fascinating	3	4	5	6 Dea	7 dly boring
12. Do you have the fee 1 2 Very often	ling that you are 3	in an unfam 4	niliar situation and 5	6	what to do? 7 ldom or never
13. What best describes 1 2 One can always find a solution to painful things in life	how you see life 3	: 4	5 There is things in	6 10 solution to life	7 painful
14. When you think about 1 2 Feel how good it is to be alive	out your life, you 3	very often: 4	5 Ask your	6 self why you	7 exist at all
15. When you face a dit 1 2 Always confusing and hard to find	ficult problem, the 3	ne choice of 4	5	6 lways comple	7 etely clear
16. Doing the things yo 1 2 A source of deep pleasu	3	4	5 A sour	6 ce of pain and	7 d boredom
17. Your life in the futu 1 2 Full of changes without knowing what will happen next	re will probably 1 3	e: 4	5 Complete	6 ely consistent	7 and clear
18. When something un 1 2 "To eat yourself up" about it	pleasant happene 3	ed in the pas	5	6 ok that's that,	7 I have to live

19. Do you ha	ve very mixed-	up feelings and	l ideas?			
1 Very often	2	3	4	5	6 Very seldon	7 n or never
20. When you 1 It's certain tha you'll go on feeling good	2	that gives you a	a good feeling: 4		6 hat something voil the feeling	7 will
21. Does it has 1 Very often	ppen that you h 2	have feelings in	side you would 4	rather not fee	el? 6 Very seldon	7 n or never
22. You antici 1 Totally withou meaning or pu	2 ut	personal life in 3	the future will 1 4	5	6 of meaning and	7 purpose
23. Do you the 1 You're certain there will be	2	rill always be po	eople whom yo 4	5	o count on in the 6 You doubt there	7
	ppen that you h	ave the feeling	that you don't	know exactly	what's about	to
happen? 1 Very often	2	3	4	5	6 Very seldon	7 n or never
• • •	ons. How often	_	character – son his way in the p 4		6	losers) in 7 ry often
1 You overestin	2	3	nerally found the	5 You	6 saw things in the	7 he right
27. When you you have the f		fficulties you as	re likely to face	in important	aspects of you	r life, do

You will always succeed in overcoming the difficulties					You won't succeed in overcoming the difficulties			
28. How oft daily life?	en do you	have the feeling	that there's li	ttle meaning in	the things you	do in your		
1	2	3	4	5	6	7		
Very often					Very se	ldom or never		
29. How oft	en do you	have feelings that	at you're not s	ure you can kee	ep under contro	1?		
1	2	3	4	5	6	7		
Very often					Verv se	ldom or never		

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