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Investigating Relations Regarding the Religious Ought, Ideal, and Actual Self Using a Relational Density Theory Approach

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INVESTIGATING RELATIONS REGARDING THE RELIGIOUS OUGHT, IDEAL, AND ACTUAL SELF USING A RELATIONAL DENSITY THEORY APPROACH

A Master's Thesis

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In Partial Fulfillment

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Master of Science, Psychology

By

Kam Barker

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ABSTRACT

Religiosity may produce positive outcomes (e.g., greater life satisfaction, hope, and optimism) or negative outcomes (e.g., psychological distress), especially if the individual's identity is in conflict (Koenig, 2001). This distress, as explained by self-discrepancy theory, is caused by inconsistency between the self-concept (attributes the individual believes they currently possess) and the self-guides, consisting of the 'ought' self (attributes the individual believes they ought to -or should- possess) and the 'ideal' self (attributes the individual desires to possess) (Higgins, 1987). Exploring stimulus relations related to these 'selves' using a relational density framework (Belisle & Dixon, 2020) may provide insight regarding relational networks, including the three versions of the self, agitation-related emotions, and their antonyms. In the present study, I utilized a multidimensional scaling procedure (MDS) to consider both a general life outlook and a religious outlook. I analyzed this data, comparing the relations between general life and religious outlooks, as well as comparing the differences for highly religious, religious, and non-religious participants. Findings showed differences did occur when the religious context was specified, indicating that religion (or lack of religion) does affect the way in which the participants relate to each of their identities. The life in general context produced a tight cluster of negative affect terms and a cluster of positive affect terms. The ought, ideal, and actual self clustered closest to or within positive affect terms. When religious context was applied, the positive affect terms became less dense. When comparing religiosity levels of participants, notable differences among the nature and density of identity-based relations were observed. Non-religious participants demonstrated the most religious identity clarity, followed by highly religious participants. Religious individuals had the least identity clarity and were the group who related most to negative affect.

KEYWORDS: Relational Density Theory, Relational Frame Theory, Self-Discrepancy Theory, religion, ought, ideal, actual

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INTRODUCTION

As many as seventy-six percent of Americans have reported that they identify with a specific religious faith. Religion has been associated with both positive and negative outcomes (Jones, 2021). Positive outcomes frequently manifest as better morale, greater feelings of life satisfaction and happiness and other manifestations of well-being, along with fewer depressive symptoms (Koenig, 2001). With adolescents and emerging adults, religion and spirituality are associated with lower risky behavior, less underage alcohol consumption, decreased marijuana use, decreased smoking, diminished deviant behavior, less depressive symptoms, and greater self-esteem (Yonker et al., 2012). Religion has also been shown to increase positive coping skills in individuals with an intrinsic religious orientation (Ysseldyk et al., 2011).

These positive outcomes may result from the increased social support given by the congregation, a positive world view from a higher being directing life and belief that the universe was created for them, positive emotions coming from deep states of meditation, prayer, or communal worship, better coping by having a social network and a higher power to turn to in times of distress, and greater self-regulation skills gained from practicing self-control in relation to avoiding sin (Pargament & Lomax, 2013; Koenig, 2001). Positive outcomes are also related to marital stability, a positive worldview, purpose and direction in life, and a sense of control over life events (2001). Furthermore, there is evidence supporting the idea that strength of conviction correlates with positive outcomes, with the greatest outcomes belonging to those with the strongest level of conviction (Weber et al., 2012).

Despite these possible positive outcomes, religion can also contribute to negative outcomes, resulting in psychological distress (Mannheimer & Hill, 2015). Psychological distress

is most likely to occur when the individual experiences negative religious coping, or "spiritual struggles." These struggles can be manifested as "divine, or troubled relationships with God," occurring when someone believes that God has abandoned them or is punishing them for behavior that is considered sinful or lacking (Ellison et al., 2013, p. 215). It can also be manifested when someone struggles with religious doubt related to the hypocrisy or malfeasance of leaders or congregation members, scientific discoveries, technological advances, numerous other factors (2013), or perhaps a lack of confidence in religious teachings or lack of belief in how religious texts are interpreted by the religion. Spiritual struggles relating to doubt and inconsistencies may lead to depression, anxiety, guilt, and shame (Weber & Pargament, 2014; Yousaf & Gobet, 2013). Spiritual struggles also arise when someone contravenes group norms by not living up to the standards of the group, despite having a strong conviction in the faith (Mannheimer & Hill, 2015) or when they encounter negative interactions in religious settings (Ellison & Lee, 2010). All of these outcomes are proportionate to how religious the individual was before the spiritual struggles emerged, with the most religious individuals feeling the most distress. In a study by Ellison et al., individuals who identified themselves as being "very religious" and ranked themselves high on spiritual struggles were associated with the highest levels of depression, anxiety, phobia, and somatization (2013, p. 223-224).

With a potentially large swing between the positive and negative outcomes of religion, it is important to learn more about what creates or contributes to the negative outcomes, and how those negative outcomes can be reduced. This study is designed to help facilitate a better understanding of the role that language and identity play on an individual's life outlook and whether their religious perspective affects that view. This study will focus on understanding the negative outcomes of religion as a means of understanding the suffering that occurs as a result.

This study will also investigate whether the level of religiosity one has can affect how they relate to negative and positive stimuli.

Spiritual Struggles and Psychological Distress

Spiritual struggles have been associated with mental health struggles, including higher levels of guilt, shame, anxiety, paranoia, depression, and nonspecific psychological distress, and a lower quality of life (Mannheimer & Hill, 2015; Lee et al., 2014). These struggles can lead to a loss of community if the spiritual struggles results in a decrease in church attendance or service opportunities or rejection from the congregation, threatening the social identity of the individual and the support they receive from the religious community. These negative outcomes can be categorized into three areas of distress: 1) loss of coping strategies; 2) loss of community support or social identity, and 3) loss of personal identity.

Loss of Coping Strategies. As religion can support the development of self-regulation and positive coping skills, when an individual experiences spiritual struggles, they may question the value of those skills and feel uncertain as to the effectiveness of the strategies they previously relied on. Ellison et al. identifies this as the loss of cognitive and emotional resources resulting from struggles one has with their belief system (2013). For example, someone who relied heavily on prayer to cope with daily challenges may no longer seek guidance or comfort from a God whose existence they now doubt. This could also result in a sense of lost protection if the individual feels that God is punishing them or is no longer concerned with them. Additional outcomes could be a lack of positivity relating to the outside world, or a possible loss in direction or purpose in life (2013).

Loss of Community Support. Where activity in or with a religious group may create an

opportunity for communal worship and corollary opportunities for social networking, deviation from activity or involvement can restrict these benefits. Spiritual struggles relating to doubt are one reason someone might deviate from the group. For example, perceived incompatibility with more "stalwart" congregants, resulting from these doubts, could influence someone to withdraw from those relationships. Some religious groups might exacerbate this distress by discouraging or stigmatizing the outward expression of doubt, which can add feelings of guilt, remorse, shame, and embarrassment (Ellison et al., 2013). In other words, adherents could be timid about sharing their doubts, leaving them feeling isolated, withdrawn, or rejected from the religious community.

Even more overtly, deviation from the congregation occurs when someone disregards or violates expectations, rules, or norms established by the religion (Mannheimer & Hill, 2015). Members of the religion are expected to follow these cultural norms or guidelines and may be monitored formally or informally by the religious community. Spiritual struggles feasibly create situations where individuals no longer follow all the norms of religion, or inversely, spiritual struggles may develop when one does not adhere to the norms. Accordingly, members of the community who fall short of these expectations are likely to experience psychological distress, depressive symptoms, and anxiety (Mannheimer & Hill, 2015), as well as "informal social sanctions in the form of gossip, criticism, or even ostracism" from community members (Ellison & Lee, 2010, p. 501). These negative interactions can trigger uncertainty related to their behavior, motivation, and identity, leaving individuals wondering if they are deserving of the sanctions (2010), potentially lowering their self-confidence or self-esteem, and creating a chasm between the congregation and themselves.

Loss of Personal Identity. Highly religious individuals embed religious expectations and structural values into their sense of identity, both individually and as part of the community

(Ellison et al., 2013). When one questions these beliefs and ideals, it can threaten this sense of identity. Spiritual struggles may change the relationship the individual has with the teachings they once agreed with, expectations of the community, or their relationship with God tied to their sense of self. The outcome of these changes leaves the individual vulnerable to feelings of hypocrisy when their beliefs or actions no longer line up with those of the community, or leave them vulnerable to feelings of inauthenticity if they act in a way that matches the community but goes against internal states. This state of inauthenticity, defined as feeling as if one is an imposter, challenges the sense of self and produces feelings of moral distress, discomfort, and exhaustion (Gino et al., 2015).

It is apparent in existing literature that, for most of the adult population, spiritual struggles are associated with poorer mental health (Ellison & Lee, 2010) and there is a need for clinicians to attend to these struggles (Bockrath et al., 2022). Interventions targeting spiritual struggles tend to be implicit (using broad or general spiritual practices and techniques without approaching the specific religion) or explicit (using specific language to target cognitions, emotions, and behaviors causing the distress) (Sherman et al., 2015). Implicit interventions include activities like meditation practices, while explicit interventions include cognitive restructuring with specific spiritual content, prayer interventions targeting their relationship with God, and practices to target symptoms such as avoidance behaviors (2015). Most of the literature regarding these interventions is related to populations struggling with posttraumatic stress disorder (2015). There remains a need to study interventions that target spiritual struggles for the general population, including ways that allow space for the client to explore identity changes that emerge due to religious doubting.

Many of the above manifestations of spiritual struggles leave the identity of the

individual affected, threatening their perceived understanding of who they are. Individuals with self-concept clarity, or a state where one's beliefs are "clearly and confidently defined, internally consistent, and stable" have higher self-esteem and greater psychological well-being (Usborne and Taylor, 2010, p. 883). In contrast, low clarity of identity is associated with poor psychological adjustment (2010). In addition to a personal identity, when someone adheres to a religion and embodies those religious principles, they also achieve a cultural identity. Furthermore, when that religion involves being part of a larger congregation of followers, a collective identity is likewise achieved. These identities allow adherents to rely on cultural and collective values, norms, and behaviors to define their identity and reduce personal uncertainty (2010). When these standards are questioned due to religious doubts, a strained relationship with God or the congregation, or feelings of inauthenticity, the clarity of that identity becomes muddled, threatening the individual's perception of who they are. Personal, cultural, and collective identities, and the potential effects of adjustments to these identities, should be considered when developing or implementing interventions to reduce the negative outcomes occurring from spiritual struggles. For example, an intervention directing a person with spiritual struggles to detach from their congregation could greatly (and negatively) impact the person's sense of cultural or collective identity.

Self-Concept, Self-Guides, and Self-Discrepancy Theory

There are several theories on how identity relates to psychological distress. E. Tory Higgins's Self-Discrepancy Theory (1987) describes identity as self-concept, a perpetual assessment of the kind of person an individual believes they actually are and the kind of person an individual believes that others think they are. The self-concept (or the "actual self")

encompasses the individual's moral sensibilities, attitudes, values, and traits they currently possess as well as the moral sensibilities, attitudes, values, and traits others recognize them to hold. This self-concept is then augmented by self-guides, the "ideal self" representing hopes, aspirations, and wishes, and the "ought self" imposing a sense of duty, obligation, or responsibility (1987). These self-guides can be incarnated by the self or by others, such as a parent, spouse, close friend, religious pastor, or established cultural norms.

All three versions of the self (actual, ideal, and ought) are merely verbal events created as a way of categorizing someone's existence. Each 'self' encompasses ideas, words, concepts, and thoughts resulting from one's experience and interaction with others in their environment. These selves are given life as the individual takes in language and routes each idea, word, thought, or concept into the various versions of themselves, whether it be actual—believing they currently hold that trait, ideal—describing a version of themself they desire to become, or ought—constructed by the person's sense of duty, obligation, or responsibility towards others (Higgins et al., 1994).

Self-Discrepancy Theory states that individuals are "motivated to reach a condition where our self-concept matches our personally relevant self-guides" (Higgins, 1987, p. 321). When this match does not occur, discrepancies between the actual self and the ideal or ought self can lead to cognitive dissonance, manifest as irritating and uncomfortable emotions relating to the differing versions of the self (Akpan, 2018). Varying degrees of negative emotions may be evoked depending on where the dissonance lies. The larger the discrepancy between the actual self and the self-guides, the more emotional distress the individual will suffer. When dissonance occurs between the actual self and either the ideal or ought self, and is based on the individual's own desires, most people experience unfulfilled hopes or wishes, creating disappointment and

dissatisfaction, leaving the individual more vulnerable to guilt, self-contempt, and uneasiness (Higgins 1987). When dissonance occurs between the actual self and the ideal or ought self, and is based on others' expectations, the resulting emotions may include fear, shame, embarrassment, resentment, or other downcast feelings (1987). This discrepancy may also lead to reduced self-esteem, or even an expectation of receiving some type of punishment (1987).

For someone with moderate to high levels of religiosity, their self-concept and self-guides would be strongly influenced by the language of their religion. The actual self would represent behaviors and beliefs they have personified from the teachings and culture of their religion. The religious ideal self might represent desired versions of their future self, such as embodying the traits of their God or reaching a state that qualifies for exaltation in an afterlife. The religious ought self might represent the individual's perception of who they should be based on the dogma of their religion, the judgment of their religious community, or their view of what they believe [God] wants them to be. Under self-discrepancy theory, spiritual struggles would create a discrepancy between the self-concept and religious self-guides, resulting in cognitive dissonance proportionate to the degree of the discrepancy.

Evidence suggests this is even more significant for religious individuals in the LGB(TQIA+) community. For members of the LGB community, interpersonal/behavioral prejudice and discrimination from religious leaders or the general religious population can be a negative experience that leads to additional psychological distress and less wellbeing (Szymanski & Carretta, 2020). People who are moderately or highly religious are also vulnerable to internalizing negative messages, such as religious teachings condemning LGB inclination, creating internal conflict, and contributing to poor psychological health (2020). LGB individuals may struggle with integrating their religious and sexual identities (2020), and many tend to reject

their religious identities when forced to choose between them. These additional religious struggles can underscore the discrepancy between the actual self and the religious ought self and lead to higher levels of distress in religious members of the LGB community.

Religious individuals who recognize inconsistencies between their self-concept and their religious self-guides are more likely to feel stronger negative emotions, such as guilt and shame, than those resulting from general cognitive dissonance (Yousaf & Gobet, 2013), likely due to increased alienation from God and congregational dissatisfaction (Murray & Ciarrocchi, 2007). Shame and guilt occur when behaviors or thoughts conflict with the moral standards of the individual, as defined by either the self or others (Tangney et al., 1998). Murray and Ciarrocchi (2007) distinguish between the two emotions by defining guilt as the "negative affect after engaging in a specific egregious action" and shame as "all-encompassing negative feelings about the self" (p. 23). In other words, guilt focuses on behavioral acts and shame focuses on the identity of the self (2007).

Shame and Guilt

Shame and guilt have been identified as "key emotions" that religious people feel relating to their mental health and sexuality (Yousaf and Gobet, 2013, p. 6). Religious people are prone to feel cognitive dissonance when they act in a way that runs afoul of religious norms (Mannheimer & Hill, 2015*)* and become motivated to realign those behaviors to reduce the discomfort (Akpan, 2018). However, spiritual struggles might create a situation where realigning those behaviors is no longer desired, increasing guilt and leading to discouragement (Weber & Pargament, 2014).

Shame is a contributor to many negative outcomes including aggression, anger, disregard

for others, substance abuse, and a multitude of other psychological symptoms, including depression (Murry & Ciarrocchi, 2007). Those experiencing shame may feel lower self-worth and have less empathy (2007). When experiencing shame, self-judgement results in an assessment that falls short of standards the person is using for judgement (Tangney et al., 1998). Shame can result in sensations of feeling small or exposed and a desire to hide or avoid others or situations where they may be seen (1998).

Reducing Discrepancies

To reduce the discrepancies between the self-concept and the self-guides, the distance between the identities needs to decrease. Smaller discrepancies are related to greater self-esteem and more positive emotions such as happiness and cheerfulness (Mason et al., 2019). Distance (and dissonance) is reduced as people move their actual self "as close as possible" to their desired end state (Higgins et al., 1994, p. 276).

Higgins proposed the way to reduce this discrepancy is to behave in a way that either matches those self-guides more closely (approaching) or avoids behaviors that either do not lead closer to the self-guide or lead away from the self-guide (avoiding) through self-regulation (Higgins et al., 1994). For example, if a person's religion directs that (x behavior) is sinful, a person may avoid (x behavior) consistently to feel more aligned with the self-guide. These strategies are effective at reducing certain discomfort — but only when the end state is a desired version of the self. Some ought selves, including religious ought selves, may actually be undesired end states. For example, an ought self-directed by religious decrees might involve the individual being married, having children, acting heterosexual, etc., resulting in an end state that conflicts with their inner sense of authenticity.

Another reason why an ought self might lead to an undesirable end state occurs when the various ought selves disagree with each other. Most individuals find themselves belonging to more than one society or culture, resulting in a need to "negotiate multiple, possibly competing, norms" relating to their identity (Usborne and Taylor, 2010, p. 884). These competing norms create situations where it is impossible to reach every end-state dictated by the ought selves, leaving the individual in a constant state of dissonance as some states are inherently mutually exclusive.

To reduce discrepancies in these situations, the end states dictated by the various self-guides need to be re-evaluated. This can be done by clarifying the self-concept to only include self-states that reflect the authentic identity. In addition, multiple religious and cultural identities should be integrated to reflect the actual self, thereby increasing psychological well-being (Usborne & Taylor, 2010).

Dissonance can also be decreased by strengthening the religious identity in a way that increases conviction levels. Some studies have demonstrated that religious identity alone is associated with higher levels of well-being (Ibrahim & Gillen-O'Neel, 2018), or plays a mediating role between religious practice and psychological well-being (Greenfield & Marks, 2007). This could be the case because a secure religious identity is less associated with the various ought selves that are instituted by the congregation and others, and instead reflects the desires and wishes of the individual and their personal relationship with their religion. These conceptualizations provide a means by which to interpret the experience of individuals' experiences with religion and identity, however, to effectively address challenges to wellbeing some individuals experience, specific approaches need to be examined.

Theories for Consideration

One approach to analyzing the verbal events that are related to the three versions of the self is Relational Frame Theory (RFT; Hayes et al., 2001). RFT is an approach to human language and cognitions identifying that individuals interact with the world by "framing events relationally," wherein they "arbitrarily relate stimuli regardless of what they look, smell, feel, taste, or sound like" (Hughes & Barnes-Holmes, 2015, p. 148). These relational frames allow novel ideas to relate to stimuli already encountered, allowing people to respond in a way that is informed by their previous history. For example, when new idea "X" is contacted, the individual will relate the new idea to one that currently exists along a number of different forms of related families (2015). The most common frame families, and the relations most likely to result when relating "X" to existing frames are: coordination (X is the same as A), opposition (X is the opposite of A), comparison (X is larger/smaller/wider/etc. than A), spatial relations (X is above/below/next to/etc. A), temporal relations (X comes after/before/etc. A), deictics (X is here and A is there/etc.), hierarchy (X is an attribute of A/etc.), and conditional (if X then A) (2015; Montoya-Rodriguez et al., 2017). Multiple relational frames can be simultaneously derived as a way of relating ideas to each other, creating a vast network of relational frames throughout someone's life.

These frames are intertwined by religion, especially for those that are highly religious, by categorizing the values, beliefs, and norms of the religion into frames such as true, right, good, righteous, acceptable, etc., and implementing these frames into their self-concept. For example, individuals might categorize incoming stimuli into oppositional frames of "ought" or "not-ought" where ought = good, and not-ought = bad. Perhaps the religious ought self feels a responsibility to get married and have children, based on expectations of their religion. The

relational networks they engage in may produce relations such as getting married is good and having children is good, while being single is bad and not having children is bad. The literal interpretation of the stimuli married, children, single, good, and bad leaves little space to examine the details within the context of the situation. What if one's ideal and religious ought selves include a desire to get married and have children, but the actual self has not found anyone to marry? Or, what if despite being married, assuming conceiving outside of marriage does not align with this person's religious ought self, they struggle with infertility? The literal interpretation would mean that they are bad because they were not able to be married or were not able to bear children. Further, the congregation might enhance these frames by celebrating weddings and births, announcing them in meetings or in church bulletins, greeting families at church more robustly or overtly than singles, and purposefully —or even inadvertently— enhancing the frame of "married with kids is good" (and the individual is therefore the opposite of this).

One who is rigidly attached to their self-concept may rely on these verbal conceptualizations of the [self-guide/self-concept] to dictate how they respond to these descriptions; whereas someone who responds to this language in a more flexible way may see relational frames of "marriage" and "kids" as "good" but without personalizing the inverse to mean that "unmarried" or "childless" is "bad." For the rigidly attached, establishing new relational frames, or elaborating relational networks with less rigidity may impact the function of these, therefore reducing the impact of these relations on an individual's responding.

Highly religious people regularly participate in rituals of their faith such as praying, reading scripture, or donning religious clothing. Repetitive adherence to these rituals reinforces relational frames pertaining to their belief system. As such, someone who is highly religious

would have abundant and dense relational networks connecting many aspects of their life with their religion. Relational Density Theory (RDT) is a useful approach in understanding how the strength of these relations affects the self-concept. RDT is a quantitative extension of RFT that states that networks containing more relations (relational volume) that are stronger (relational density) will be more resistant to change (Belisle & Dixon, 2022). Belisle and Clayton (2021) extended RFT identifying relations that are resistant to a disruptor (relational mass) and relations that are close together (relational gravity), predicting that relations with high mass may increase believability of new information and relations with relational gravity are more likely to merge. This theory could help explain why some threats to the self-concept create more dissonance than others by identifying clusters of networks that are intertwined with the self-concept. An analytic approach to evaluating the strength of relations is the Multidimensional Scaling Procedure (MDS). MDS procedures involve looking at the similarities of stimuli in two multidimensional scales, comparing the relationship between items and allowing them to be visually mapped (Hout et al., 2013). Visual mapping allows the relations between each stimulus to be quantified, wherein "similar items are located proximal to one another, and dissimilar items are located proportionately further apart" (2013, p. 93). This general framework has been supported in research encompassing gender relations (Sickman et al., (Under Review), relations related to race (Belisle et al., (Under Review)), and sexual orientation relations (Lee et al. (In Preparation)).

MDS could be a useful approach when analyzing relations regarding identity through the lens of Self Discrepancy Theory by providing an evaluation of how strong or dense one's relational networks are regarding their ought or ideal self and their self-concept. These might include reviewing the relationship between all versions of the self (actual, ideal, ought) and the

emotional outcomes that occur when there is a large discrepancy between them and their opposite emotions. Applying RDT to this analysis would show what stimuli cluster together, creating more dense relational frames, and perhaps those that are most likely involved in psychological distress one experiences regarding their religious identity.

The purpose of the present study is to apply an RDT framework to an analysis of relational networks of stimuli referring to the actual, ideal, and ought selves and various positive and negative affect terms, and an examination of the differences in responding between groups of individuals who report higher and lower degrees of religiosity. This study will look at how the relations regarding the identity of the individual differ as participants are instructed to consider their experience in two distinct contexts: their life experience in general and their experience with religion.

METHOD

Participants

This study was approved by the university Institutional Review Board on February 25, 2023 (See Appendix). Participants were recruited either in a class approved by the course instructor (in person or through email) or through the experimental system (online) of the psychology participation pool. Students received extra credit for completing the study at the discretion of their professors; no other compensation was provided in this study. All participants provided informed consent to participate in the study and reserved the right to decline participation or to participate then withdraw from the study at any point without penalty.

A total of 66 graduate and undergraduate students participated in this study. Of those, nine were excluded for not completing at least fifty percent (50%) of the multidimensional scaling items. An additional participant was excluded for not completing the Central to Religiosity-15 Scale, leaving a total of 56 participants. Participants ranged in age from 18-47 with a mean age of 22. Participants identified as female/woman (49), male (4), and non-binary (3). Participants identified with a variety of religions and race/ethnicities, the most common being white (49) and Christian (15). More details for participants' identified gender, race/ethnicity, and religion are included in Table 1.

Materials

The study was administered online via the survey software Qualtrics (Qualtrics, Provo, UT) using a customized research package developed by the research team for the purposes of this study. Qualtrics is a secured software accessed through the university system and the study

link was only accessible to those who were provided the distribution link, or to those who had access via the SONA webpage. The survey software automatically collects the data from each participant and can be downloaded by the research team for analysis. Demographic questions were presented after all other tasks to prevent any priming effects and included a series of questions related to age, gender, race/ethnicity, and religion.

Table 1. Participant demographics.

Characteristics	Included Population (*n*)
Identified Gender	
Female/Woman	49
Male	4
Nonbinary	3
Identified Ethnicity	
Asian/Pacific Islander	3
Black	1
Hispanic	2
Indian American	1
White/Caucasian	49
Identified Religion	
Agnostic	5
Atheist	5
Baptist	1
Catholic	9
Christian	15
Hinduism	1
Lutheran	1
Methodist	1
Muslim	2
N/A/Non-Religious/Other	13
Orthodox	1
Pagan	1
Unitarian Universalist	1

The multidimensional scaling procedure included presentation of a series of word-word

pairings containing every permutation of 17 textual stimuli for a total of 153 pairwise comparisons. Descriptor words were taken from E. Tory Higgins' Theory of Self-Discrepancy (1987), to obtain terms that were likely to be related to one's experience of discrepancy among identities, specifically words that describe dejection and agitation related emotions (disappointment, shame, embarrassment, guilt, self-contempt, and uneasiness). In addition, the researchers identified antonyms for each of the dejection and agitation-related emotions to include in the procedure (achievement, happiness, approval, calm, self-esteem, and comfortable). A neutral term (indifferent) and an arbitrary symbol (⌘) were included to operate as neutral stimuli to compare to the positive and negative emotion words. Finally, phrases to indicate three identities of the self (myself (actually – here and now), myself (ideally), and myself (as I ought to or should be) were included in the MDS procedure. For each pair of words, participants rated the strength of each relation on a scale of 1 (no relationship) to 10 (strong relationship) and the data was analyzed with a multidimensional scaling procedure using Statistica software as described by Belisle and Clayton (2021).

The self-report measure for pre- and/or post-assessment included the Central to Religiosity-15 Scale (CRS-15; Huber & Huber, 2012). The CRS-15 was chosen to measure the level of religiosity of each participant, categorizing each participant into "non-religious," "religious," and "highly religious" groups (p. 720). Participants were asked fifteen questions relating to their experience with their religion and instructed to "rate how true each statement is" next to one of four different scales, each a 5-point to 8-point Likert scale ranging from (1) never/not at all to (5) very often/very much so/more than once a week/several times a day.

PROCEDURE

The following will introduce the experimental progression of the present study and will be broken down into three phases: defining identity, multidimensional scaling procedures (MDS 1 and MDS 2), and a self-report measure.

Phase 1: Defining Identity

Participants begin the study by answering three questions relating to their identity. Individuals were instructed to briefly describe how they identify their actual, ideal, and religious ought selves with the following prompts: "Briefly describe your identity as it exists today, in the here and now (your actual self)," "Briefly describe your identity as you wish it to be (your ideal self).," and "Briefly describe your identity as you feel obligated to be (your ought self)." Participants were given space to respond with as much information as they desired.

Phase 2: Multidimensional Scaling Procedures (MDS 1 and 2)

Next, participants were randomly presented with the first of two Multidimensional Scaling (MDS) procedures. Each presentation of the MDS procedure included instructions to respond in terms of the participants' experience in specific contexts (life in general and religion). In the MDS portion of the study, the software was programmed to present an array of adjectives relating to Self-Discrepancy Theory (Higgins, 1994) as well as their opposites, neutral stimuli, and stimuli representing the three identities described in Phase 1. Participants were presented with the following instructions for the pairing task:

Instructions: During this phase of the study, you will be judging how closely related or unrelated words and phrases are to one another. Because people judge things in different ways, there are no right or wrong answers. We are interested in finding out how you as an individual compare these stimuli. You will be shown two words or a word and a phrase surrounding a sliding scale. Using the sliding scale, you will rate how closely the two items are related. 1 indicates the words/stimuli are not at all related. 10 indicates the words/stimuli are the same. You will rate the relatedness of all pairs presented on the screen before progressing to the next screen. You will be given up to 10 minutes to complete all relations.

Participants were then given a prompt based on the MDS procedure that was randomly assigned to them. Participants were randomly presented one of the two prompts: "Please respond the relatedness of these pairs in terms of your experience with religion" or "Please respond to the relatedness of these pairs in terms of your general life experience."

Following this screen and instruction, participants were presented with pairs of textual stimuli such as "Disappointment" and "Myself (Actually - Here and Now)" with a scale from 1-10 above a sliding marker. Participants would move the sliding marker anywhere between the numbers to represent how related or unrelated the words and phrases were. The curser for each of the scales was automatically pinned in the center of the scale to reduce likelihood of skewing results toward one end of the scale. Participants would then use their mouse/touchpad to click and slide the marker to the desired number to indicate stimuli relatedness. This process was repeated until all combinations were presented to obtain a value of relational similarity for each pairing. A time constraint of 10 minutes was given to complete all pairings, which were divided among three pages in the online survey and presented in a random order to each participant. When the time passed, the task automatically progressed to the next page. If participants completed all items in less than 10-minutes, they were able to procedure to the next page. The time was displayed to the participants at the top of the screen.

After completing the first MDS procedure, participants repeated the process with a second MDS procedure. Participants were given the same instructions and the remaining contextual prompt (i.e., life in general or religion). The values taken from this scaling were then used to complete the MDS procedure described in the results section.

Phase 3: Self-Report Measures

Following the MDS procedures, participants were presented with the Central to Religiosity-15 Scale (CRS-15; Huber & Huber, 2012). The items were presented on one page in the online survey using the parameters described in the materials section. After completing the self-report measure, participants were asked to answer a sequence of demographic questions. The demographics portion included questions related to age, gender, race/ethnicity, and religion. Finally, participants were presented with a message that thanked them for their time.

RESULTS

The data from both the life experience context and the religious context were analyzed in various ways using a MDS analysis in Statistica and various outputs from this analysis. These analyses focused on comparisons among the identity of the selves, life experience and religious experience contexts, and the differences in responding among non-religious, religious, and highly religious participants based on their CRS-15 scores.

Identities. Prior to the MDS procedure, participants were asked to briefly describe their identity in terms of their actual, ideal, and ought self. Participants gave varied open-ended answers. A sample of these responses is included in Table 2.

Multidimensional Scaling Analyses. The responses from all participants' data were analyzed using the program Statistica to create graphs in a two-dimensional geometric space ("geospace") for each contextual frame. These geospaces provide a quantitative representation of the degree of relatedness between each stimulus included in the MDS; the internal consistency of the data is evaluated using a reported 'stress' score which is derived from the participants' data and the model generated from the data and plotted on a Shepherd diagram. Each stimulus included in the analysis (e.g., "Disappointment" or "Myself (ideally)") is plotted within the geospace, and the x and y coordinates for each stimulus can be used to analyze the relative distance in dimensional units between and among stimuli. Both visual and quantitative analyses were used to analyze the participants' responses from the MDS output. Our analyses included grouping participants' responses based on the context specified (general life experience and religion) and degree of reported religiosity (non-religious, religious, or highly religious).

Life Experience and Religious Context. Figure 1 represents the geospace for the

Table 2. Open ended responses from select participants descriptions of selves.

Identity	Sample Responses
Actual Self	"I am a work in progress. I am working on myself and become a happier and healthier individual physically and mentally. I am actively trying to build my resume and gain experience while trying to balance a relationship and school. I am on track to becoming who I want to be though."
	"I am a 21-year-old white woman who lives at home with her parents. I work as an RBT and am single. I am in grad school as an accelerated student."
	"I am a student, hard worker, teacher, aunt, sister, daughter, friend, and a girlfriend. I am a Christian, more specifically identifying as Methodist. I am smart, I am kind, and I am open minded. I deal with a lot of anxiety and depression, which causes a strain on how I view myself and I often cannot see the positives in myself. I see myself as over-dramatic, annoying, and I think I am a bother to most people."
Ideal Self	"My ideal self would be more energetic and passionate about things. I would never procrastinate and I would give my all in everything I do. I would eat better, practice healthier habits, exercise more, and spend time with a support system rather than by myself. I would also prioritize being productive and getting tasks done every day rather than taking so much time to relax and be lazy. I think my ideal self would also be more secure in my relationships and with myself."
	"I wish to be the best clinician, a wife, mother, loving, kind, balanced, secure in my life and happy, the best version of myself."
	"I wish to be smarter and maybe work a little harder. I wish I had a perfect body and straighter teeth. I wish I had more experiences in life and was a little more adventurous."
Ought Self	"I feel like I need to be a good student, hard worker, and perfect friend. I feel like I ought to be someone my parents are proud of."
	"I feel like I need to be a dedicated stay at home rather than pursuing my own career and life outside of motherhood. I feel I need to be a strong Christian even if that's not what I believe in. I feel that I am supposed to be this certain version of myself that I do not feel aligned with."
	"I am comfortable in all of my identities except my religion. My family is all Christian, and I feel a lot of pressure to stay a Christian since I was raised Lutheran for many years. I am no longer happy with the religion, and I only want to rejoin to make my family happy."

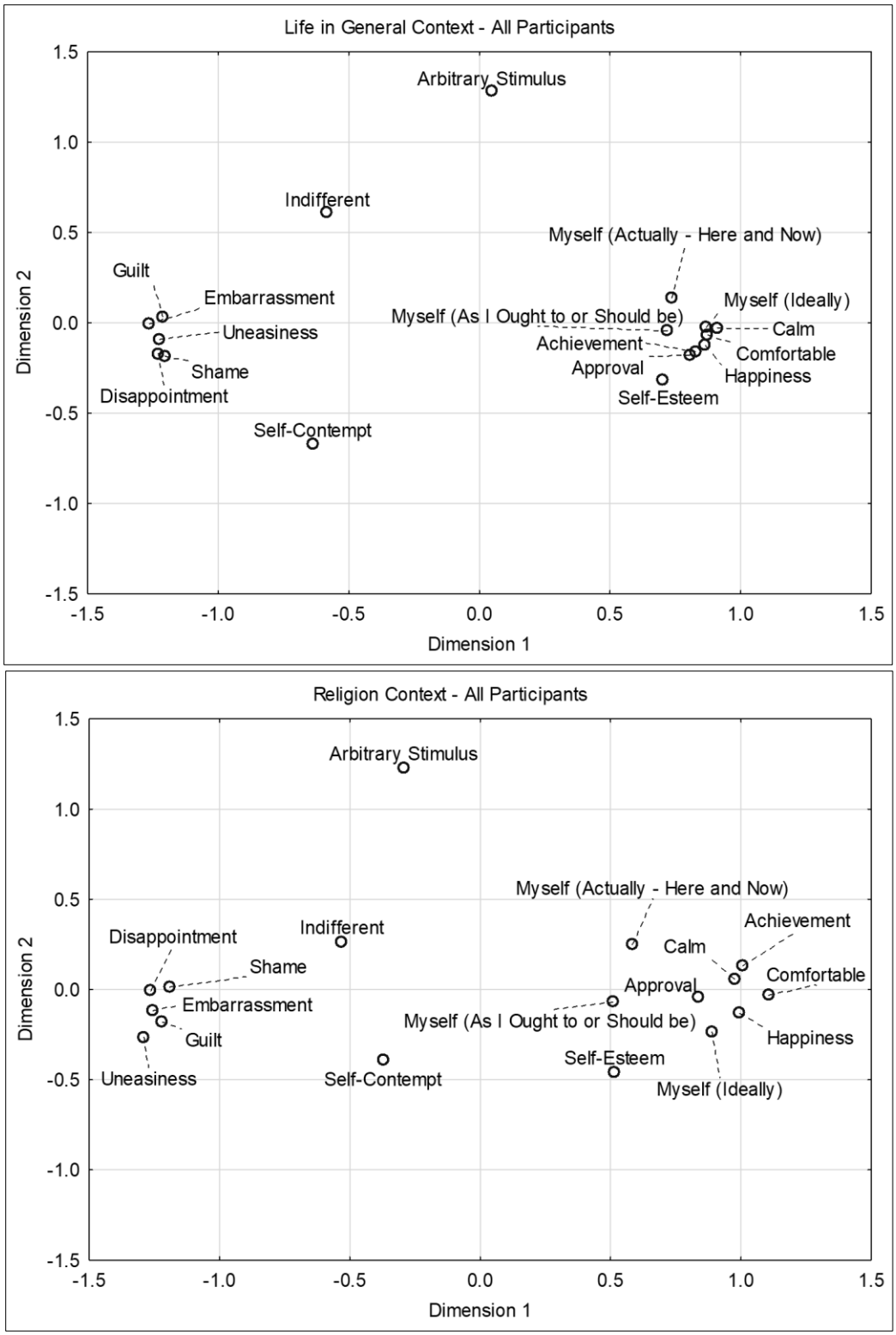

Figure 1. Multidimensional scaling results representing the general life experience context geospace (top) and religious context geospace (bottom).

collective responses from all participants for the MDS procedure from both a life in general context and religious context. Stress scores were used to determine if the model generated would be included in the analysis. In general, a stress score below 0.13 indicates a low stress model, or adequate consistency between the model and the obtained distances. For the life in general context, a stress score of 0.06 was obtained and for the religious context a stress score of 0.06 was obtained. Table 3 shows the mean distance in dimensional units between each stimulus and groups of stimuli representing positive affect terms, negative affect terms, myself (actually, here and now), myself (ideally), myself (as I ought to or should be), and the neutral stimuli. The Shepherd diagram for each context is presented in Figure 2.

Results were analyzed to observe differences in participants' responses between a life in general context and a religious context. Table 4 provides the differences between the actual self and the mean distance (md) to the negative affect terms (disappointment, shame, embarrassed, guilt, self-contempt, and uneasiness). The actual self was 8.2% more related to mean negative affect stimuli with a religious context (md = 1.75) than a life in general context (md = 1.91). The ideal self was 1.4% more related to mean negative affect stimuli with a religious context (md = 1.99) than a life in general context (md = 2.02). The ought self was 13.4% more related to mean negative affect stimuli with a religious context (md = 1.62) than a life in general context (md = 1.87).

Table 5 provides the differences between the self-concept (the actual self) and its distance (d) to the self-guides (the ideal and ought self). The actual self was 172% less related to the ideal self with a religious context (d = 0.57) than a life in general context (d = 0.21). The actual self was 178% less related to the ought self with a religious context (d = 0.41) than a life in general context (d = 0.18). Table 6 provides the differences between two specific negative affect terms:

Table 3. Mean distance in dimensional units of stimulus to items in Positive Affect (Pos), Negative Affect (Neg), Actual self (A), Ideal self (I), Ought self (O) and Neutral ([]) stimuli for the entire sample.

Life Experience Context								
	Disappoint-ment	Shame	Embar-assed	Guilt	Self-Contempt	Uneasi-ness	Achiev-ement	Happiness
Pos	2.06	2.04	2.10	2.05	1.56	2.06	0.09	0.09
Neg	0.21	0.21	0.24	0.25	0.69	0.20	1.97	2.01
A	1.99	1.97	2.00	1.95	1.59	1.97	0.31	0.29
I	2.10	2.08	2.13	2.08	1.64	2.09	0.14	0.10
O	1.95	1.93	1.98	1.94	1.50	1.95	0.16	0.17
[]	1.47	1.47	1.38	1.31	1.68	1.41	1.62	1.63
	Approval	Calm	Self-Esteem	Comfort-able	Actual	Ideal	Ought	Indifferent
Pos	0.10	0.14	0.21	0.11	0.31	0.14	0.18	1.61
Neg	1.95	2.06	1.85	2.02	1.91	2.02	1.87	1.01
A	0.33	0.24	0.45	0.25	X	0.21	0.18	1.40
I	0.17	0.04	0.34	0.04	0.21	X	0.15	1.59
O	0.16	0.19	0.27	0.15	0.18	0.15	X	1.46
[]	1.62	1.60	1.66	1.60	1.37	1.57	1.47	0.46
Religious Context								
	Disappoint-ment	Shame	Embar-assed	Guilt	Self-Contempt	Uneasi-ness	Achiev-ement	Happiness
Pos	2.18	2.11	2.17	2.14	1.32	2.21	0.26	0.23
Neg	0.27	0.27	0.23	0.24	0.77	0.29	2.13	2.10
A	1.86	1.79	1.88	1.85	1.15	1.94	0.44	0.56
I	2.16	2.10	2.15	2.11	1.27	2.18	0.38	0.15
O	1.77	1.70	1.77	1.73	0.94	1.81	0.54	0.49
[]	1.18	1.11	1.24	1.25	1.15	1.36	1.62	1.72
	Approval	Calm	Self-Esteem	Comfort-able	Actual	Ideal	Ought	Indifferent
Pos	0.23	0.22	0.55	0.25	0.52	0.30	0.47	1.50
Neg	1.95	2.09	1.64	2.21	1.75	1.99	1.62	0.79
A	0.38	0.44	0.71	0.59	X	0.57	0.33	1.11
I	0.20	0.31	0.44	0.30	0.57	X	0.41	1.50
O	0.33	0.48	0.39	0.60	0.33	0.41	X	1.09
[]	1.55	1.62	1.57	1.77	1.21	1.69	1.31	0.50

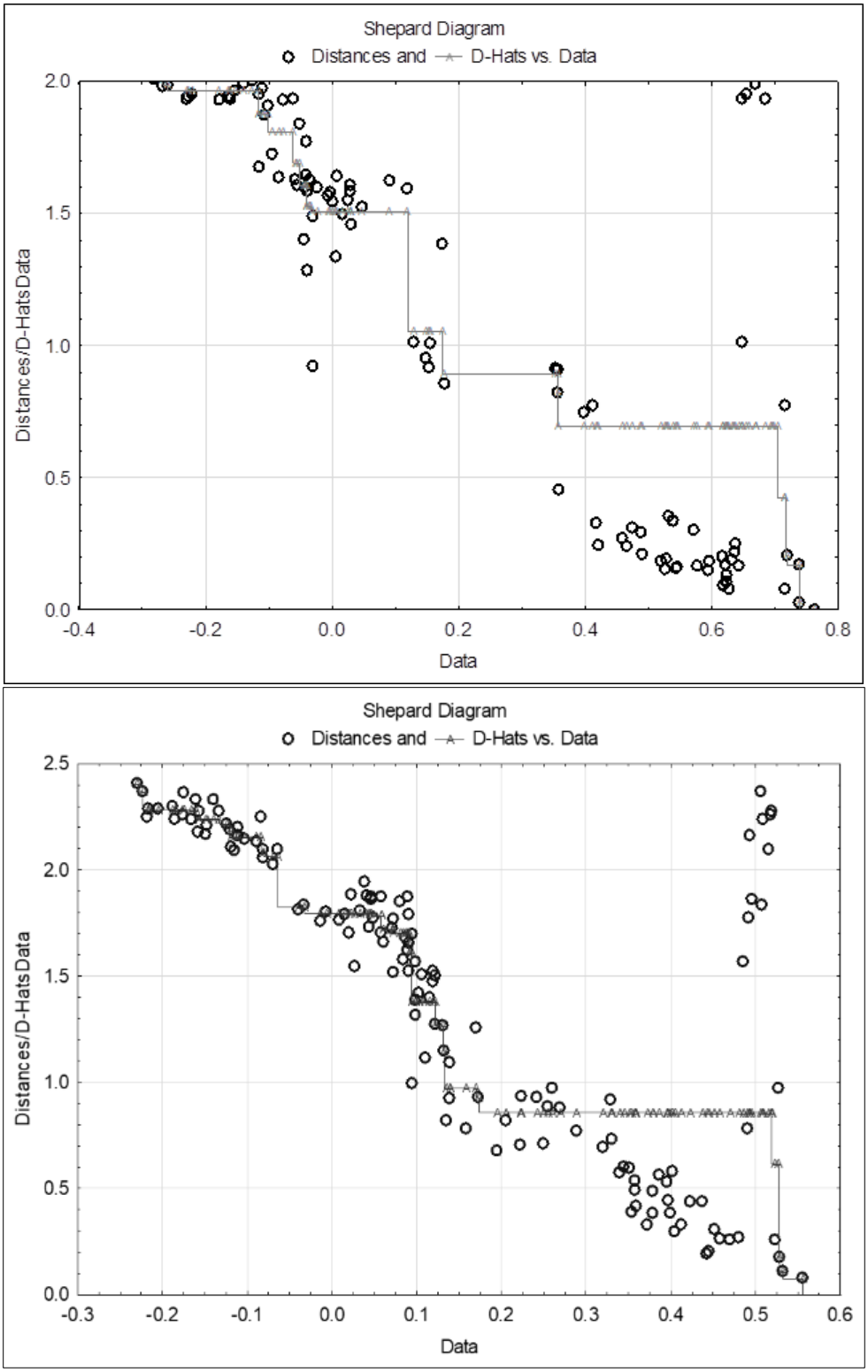

Figure 2. Shepherd's Diagrams for life in general (top) and religious context (bottom) for all participants.

Table 4. Context differences among the versions of the self and the mean distance to negative affect stimuli (Neg). Table shows the difference in distances for the life in general context and religious context.

Distances	Life in General Context (A)	Religious Context (B)	# Difference (A-B)	% of Relational Difference (A-B)/A	Interpretation
Actual Self to Neg	1.91	1.75	0.16	8.2%	The actual self was 8.2% more related to negative affect with a religious context.
Ideal Self to Neg	2.02	1.99	0.03	1.4%	The ideal self was 1.4% more related to negative affect with a religious context.
Ought Self to Neg	1.87	1.62	0.25	13.4%	The ought self was 13.4% more related to negative affect with a religious context.

Table 5. Context differences among the self-concept and the self-guides for the life in general context and religious context.

Distances	Life in General Context (A)	Religious Context (B)	# Difference (A-B)	% of Relational Difference (A-B)/A	Interpretation
Actual Self to Ideal Self	0.21	0.57	-0.36	-172%	The actual self was 172% less related to the ideal self when using a religious context.
Actual Self to Ought Self	0.18	0.41	-0.23	-178%	The actual self was 178% less related to the ought self when using a religious context.

Table 6. Differences in distance of identity stimuli to guilt and shame stimuli for the life in general context and religious context.

Distances	Life in General Context (A)	Religious Context (B)	# Difference (A-B)	% of Relational Difference (A-B)/A	Interpretation
Actual Self to Shame	1.97	1.95	0.02	1.0%	Actual self was 1% more related to shame in the religious context.
Actual Self to Guilt	1.79	1.85	-0.06	-3.4%	Actual self was 3.4% less related to guilt in the religious context.

guilt and shame. The actual self was 1% more related to the stimulus shame in the religious context (d = 1.95) than a life in general context (d = 1.97). The actual self was 3.4% less related to the stimulus guilt in the religious context (d = 1.85) than a life in general context (d = 1.79).

Religiosity Differences. Next, participants' data was grouped based on their scores on the CRS-15 scale for analysis. Based on scale results, 16 participants scoring between 1.00 and 2.00 were categorized as "non-religious," 33 participants scoring between 2.01 and 3.99 were categorized as "religious," and 7 participants scoring between 4.00 and 5.00 were categorized as "highly religious." Table 7 illustrates the breakdown of participants into these categories. The combined responses from all participants' data were analyzed as described above for each level of religiosity. Figures 3 and 4 represent the geospaces for each category as well as an enlarged section to aid visual analysis of the positive affect and identity stimuli. Figure 2 represents participants' religious context and figure 3 represents participants' life in general context. Stress scores were obtained as follows: highly religious (0.06), religious (0.04), and non-religious (0.06) for religious context; and highly religious (0.05), religious (0.07), and non-religious (0.05)

for life in general context.

Table 7. Grouping of participants based on CRS-15 scores.

Category	*n*	Range	Mean Score
Non-Religious	16	1.07 – 2.00	1.62
Religious	33	2.07 – 3.80	3.01
Highly Religious	7	4.00 – 4.80	4.45

Results were analyzed to consider differences that occurred among religiosity levels. Table 8 provides the differences between the actual self and the mean distance (md) to the negative affect terms (disappointment, shame, embarrassed, guilt, self-contempt, and uneasiness). When comparing the religious participants to highly religious participants, the actual self was 16.7% less related to mean negative affect stimuli with highly religious participants (md = 1.89) than religious participants (md = 1.62), the ideal self was equal distance (md = 2.02) with both highly religious and non-religious individuals, and the ought self was 41.4% less related to negative affect with highly religious participants (md = 1.95) than religious participants (md = 1.62). When comparing the religious participants to non-religious participants, the actual self was 21.0% less related to mean distance to negative affect stimuli with religious participants (md = 1.62) than non-religious participants (md = 1.96), the ideal self was 4% more related to mean negative affect stimuli with religious participants (md = 2.02) than non-religious participants (md = 1.94), and the ought self was 16.7% less related to negative affect with highly religious participants (md = 1.95) than religious participants (md = 1.62). When comparing the non-religious participants to highly-religious participants, the actual self was 3.7% less related to

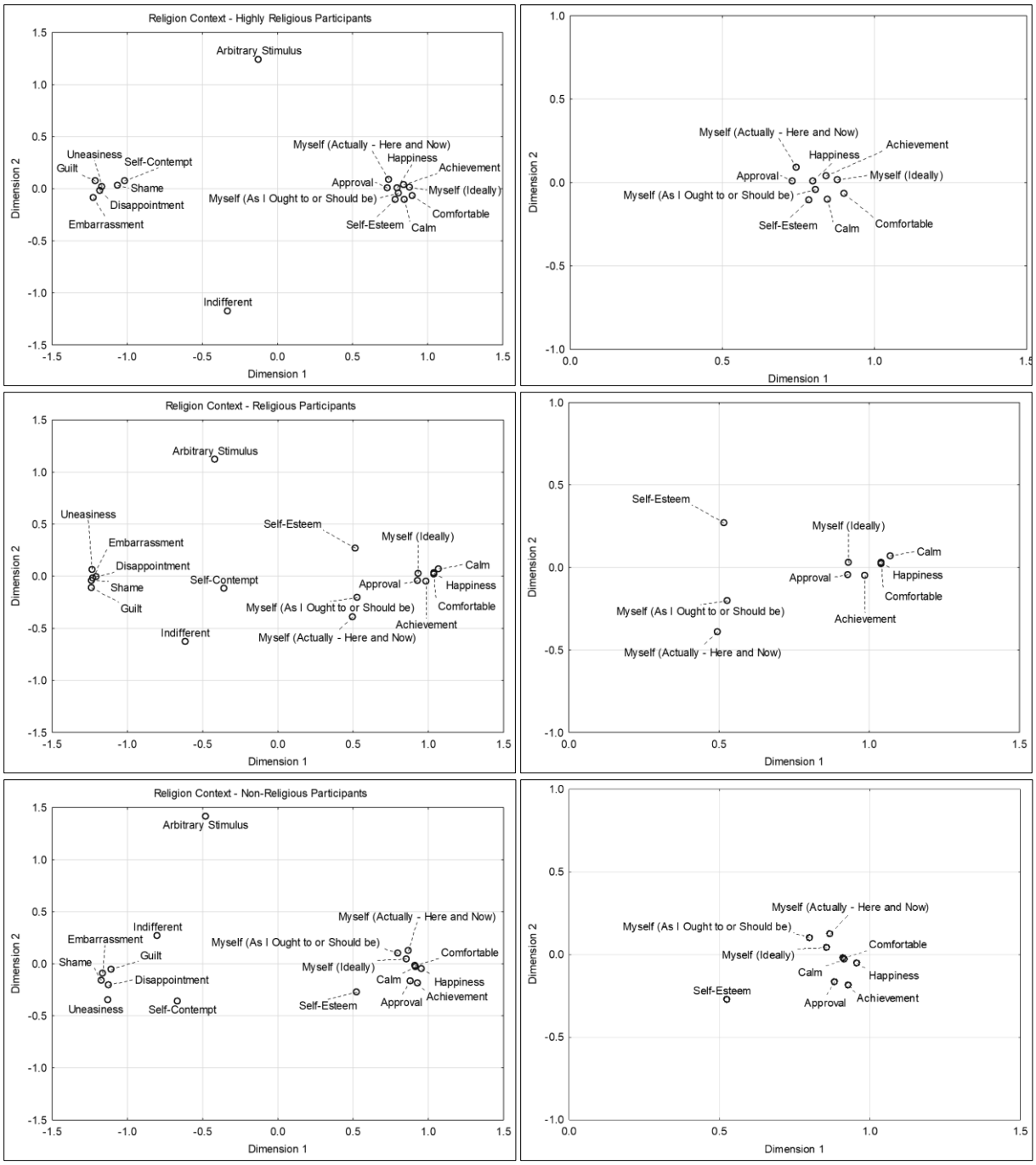

Figure 3. MDS 'geospace' results representing highly religious group (top left), religious group (middle left), and non-religious group (bottom left) for the religious context. Enlarged sections of positive affect networks are located to the right of each group with highly religious enlargement (top right), religious enlargement (middle right), and non-religious enlargement (bottom right).

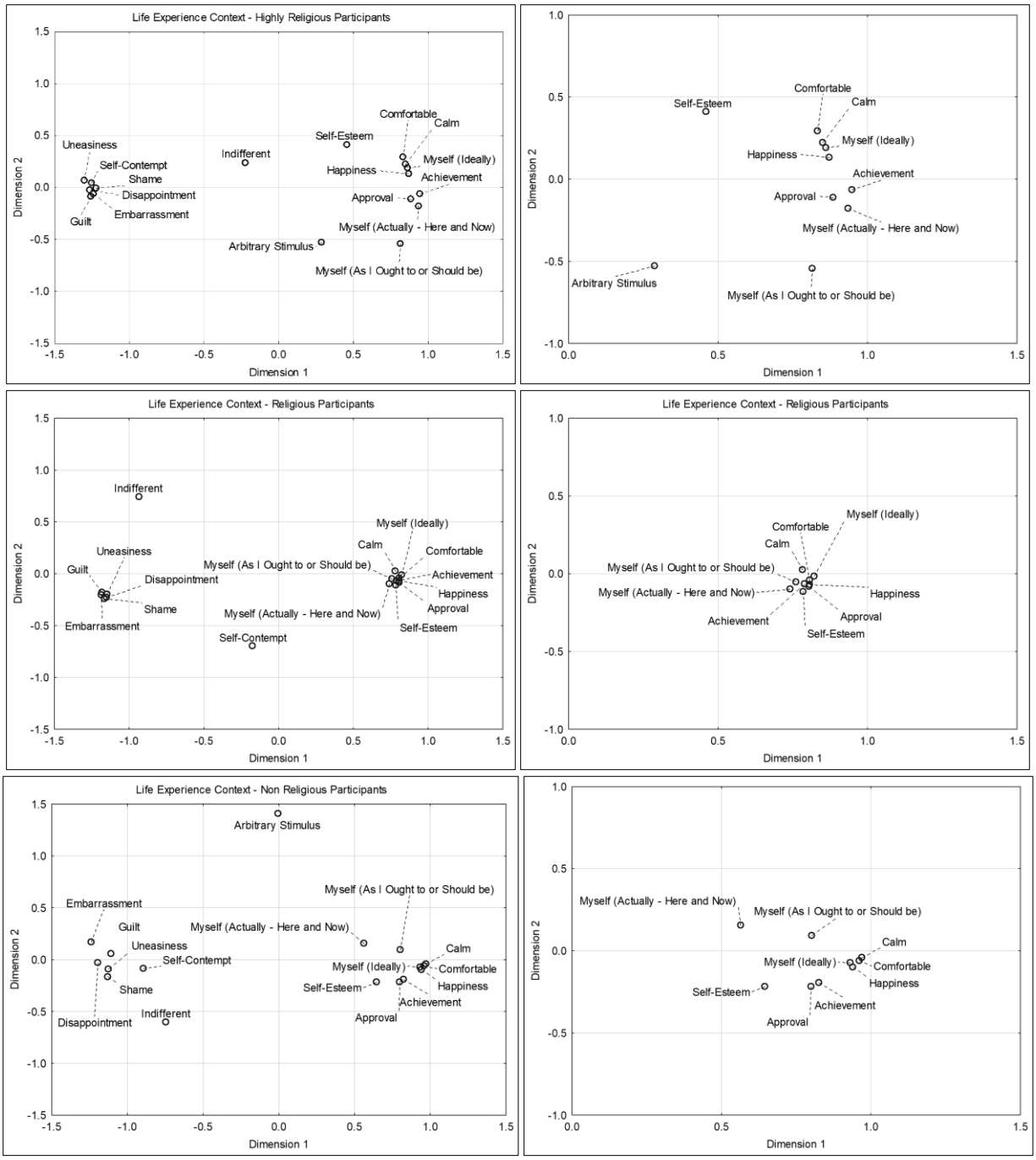

Figure 4. MDS ‘geospace’ results representing highly religious group (top left), religious group (middle left), and non-religious group (bottom left) for the life in general context. Enlarged sections of positive affect networks are located to the right of each group with highly religious enlargement (top right), religious enlargement (middle right), and non-religious enlargement (bottom right).

Table 8. Religious context distances between identity stimuli (actual, ideal, and ought) and the mean distance to negative affect stimuli (Neg).

Distances	Religious (R)	Highly Religious (HR)	# Difference (R-HR)	% Difference (R-HR)/R	Interpretation
Actual Self to Neg	1.62	1.89	-0.27	-16.7%	HR participants' actual self was 16.7% less related to negative affect than R participants.
Ideal Self to Neg	2.02	2.02	0.00	0.0%	HR and R participants' ideal selves were equally related to negative affect.
Ought Self to Neg	1.62	1.95	-0.67	-41.4%	HR participants' ought selves were 41.4% less related to negative affect than R participants.
	Religious (R)	Non-Religious (NR)	# Difference (R-NR)	% Difference (R-NR)/R	Interpretation
Actual Self to Neg	1.62	1.96	-0.34	-21.0%	NR participants' actual self were 21% less related to negative affect than R participants.
Ideal Self to Neg	2.02	1.94	0.08	4.0%	NR participants' ideal selves were 4% more related to negative affect than R participants.
Ought Self to Neg	1.62	1.89	-0.27	-16.7%	NR participants' ought selves were 16.7% less related to negative affect than R participants.
	Highly Religious (HR)	Non-Religious (NR)	# Difference (HR-NR)	% Difference (HR-NR)/HR	Interpretation
Actual Self to Neg	1.89	1.96	-0.07	-3.7%	NR participants' actual self were 3.7% less related to negative affect than HR participants.
Ideal Self to Neg	2.02	1.94	0.08	4.0%	NR participants' ideal selves were 4% more related to negative affect than HR participants.
Ought Self to Neg	1.95	1.89	0.06	3.1%	NR participants' ought selves were 3.1% more related to negative affect than HR participants.

mean distance to negative affect stimuli with non-religious participants (md = 1.96) than highly-religious participants (md = 1.89), the ideal self was 4% more related to mean negative affect stimuli with non-religious participants (md = 1.89) than highly religious participants (md =2.02), and the ought self was 3.1% more related to negative affect with non-religious participants (md = 1.89) than highly religious participants (md = 1.95).

Table 9 provides the differences between the self-concept (the actual self) and its distance (d) to the self-guides (the ideal and ought self). When comparing the religious participants to highly religious participants, the actual self was 75.0% more related to the distance of the ideal self with highly religious participants (d= 0.15) than religious participants (d= 0.60), and the actual self was 21.1% more related to the ought self with highly religious participants (d= 0.15) than religious participants (d= 0.19). When comparing the religious participants to non-religious participants, the actual self was 86.7% more related to the distance of the ideal self with non-religious participants (d= 0.08) than religious participants (d= 0.60), and the actual self was 63.2% more related to the ought self with non-religious participants (d= 0.07) than religious participants (d= 0.19). When comparing the highly religious participants to non-religious participants, the actual self was 46.7% more related to the distance of the ideal self with non-religious participants (d= 0.08) than highly religious participants (d= 0.15), and the actual self was 53.3% more related to the ought self with non-religious participants (d= 0.07) than highly religious participants (d= 0.15).

Table 9. Religious context distances among the selves for all three religious groups.

Distances	Religious (R)	Highly Religious (HR)	# Difference (R-HR)	% Difference (R-HR)/R	Interpretation
Actual Self to Ideal Self	0.60	0.15	0.45	75.0%	HR participants were 75% more related to their ideal self than R participants.
Actual Self to Ought Self	0.19	0.15	0.04	21.1%	HR participants were 21.1% more related to their ought self than R participants.
	Religious (R)	Non-Religious (NR)	# Difference (R-NR)	% Difference (R-NR)/R	Interpretation
Actual Self to Ideal Self	0.60	0.08	0.52	86.7%	NR participants were 86.7% more related to their ideal self than R participants.
Actual Self to Ought Self	0.19	0.07	0.12	63.2%	NR participants were 63.2% more related to their ought self than R participants.
	Highly Religious (HR)	Non-Religious (NR)	# Difference (HR-NR)	% Difference (HR-NR)/HR	Interpretation
Actual Self to Ideal Self	0.15	0.08	0.07	46.7%	NR participants were 46.7% more related to their ideal self than HR participants.
Actual Self to Ought Self	0.15	0.07	0.08	53.3%	NR participants were 53.3% more related to their ought self than HR participants.

DISCUSSION

The purpose of this study was to apply a Relational Density Theory framework to an analysis of relational networks of stimuli referring to the actual, ideal, and ought selves and various positive and negative affect terms. General results show a clustering of negative stimuli and positive stimuli with all three identities situated closer to the positive stimuli terms than the negative. Differences exist when participants were directed to respond to stimuli given a life in general context and a religious context as well as when viewing the differences between high, medium, and low levels of religiosity.

Participants were able to briefly describe three versions of themselves encompassing verbal relations of their actual, ought, and ideal selves. While some participants indicated that two or three of the identities were the same, most participants specified differences between their self-concept and their self-guides. Interestingly, participants often used language for their self-guides that was unachievable including terms such as: “perfect,” “best,” “always,” “most,” “everything,” and “ideal.” If participants are cognitively fused with those self-guides, or feel a rigid adherence to them, they are likely to feel cognitive dissonance when they do not live up to the impossible standards, as suggested in Self-Discrepancy Theory (Higgins, 1987). For example, with Self-Discrepancy Theory, negative affect such as fear and guilt might occur when one breaks their own rules of conduct (1987). Individuals with impossible rules of conduct, such as “I must be the perfect daughter” or “I must always be happy” are left feeling guilty when they fail to achieve that status, leaving the ideal or ought version of themselves less related to the actual self. This can become magnified when multiple versions of the ideal or ought self exist

that are unachievable.

Analyses including all participants were conducted to compare the strength of relations between the self-concept (the actual self in the here and now) and the self-guides (the self as they ought to or ideally desire to be). These verbal identities of the self were then related to terms representing negative stimuli, positive stimuli, and stimuli intended to remain neutral. For all groups, while generally stimuli clustered into positive and negative affect, the stimulus "self-contempt" tended to be more related to the positive affect terms than the other negative stimuli. The expression of self-contempt is considered a maladaptive emotion wherein individuals consider themselves inferior to others (Heim 2009). It is unknown why participants would rate that particular term as more related to the positive affect and identity stimuli. Perhaps when considering relationships some participants found that the word "self-contempt" was more related to the stimuli "self-esteem" due to having the same prefix. Or perhaps there were other relational frames drawn upon for those comparisons than the definition of the terms.

In another example, while the stimulus "indifferent" was chosen as a neutral term, it was discovered that the non-religious group found that stimulus to be more related to the negative affect terms when considering a religious context, possibly stating that their religious identity was indifferent to negative affect. If so, "indifferent" could be considered to summarize the emotional response towards having to contemplate a religious outlook while being non-religious. These differences showcase the complexity of language and relational frames, as well as the importance of considering nuance when selecting stimuli to include within the MDS procedure given that all relational distances are relative to one another within the analysis.

Primary Findings

Of the analyses conducted, particularly notable findings were identified in the areas of religious identity, religiosity, and shame and guilt.

Religious Identity. The differences that occurred when the religious context was specified indicate that religion (or lack of religion) does affect the way in which the participants relate to each of their identities. The life in general context produced a tight cluster of negative affect terms, apart from self-contempt. It also produced a tight cluster of positive affect terms, somewhat distant from self-esteem. For life in general the ideal self clustered with positive affect and the actual and ought self skewed slightly towards negative affect. When religious context was applied, the positive affect terms spread apart and became less dense. In the religious context, the actual self was 8.2% more related to negative affect and the ought self was 13.4% more related to negative affect (see Table 4). This variation in stimulus relation strength indicates the way we verbally interact with our identity can change in different contexts.

One way to interpret this is to conclude that participants became less able to achieve the ideal and ought versions of themselves when considering religion, causing the actual self to experience more distress. The religious self may exhibit more unachievable expectations, causing participants to relate more to disappointment, shame, embarrassment, and guilt. Perhaps religion left them feeling more uneasy due to these increased expectations. With Self-Discrepancy Theory, when people possess a discrepancy between the actual self and ought versions of the self, they violate prescribed responsibilities that other people expect from them (Higgins, 1987). These violations may be related with an expectation of sanctions from the religious community, from deity, or from religious leaders, leaving the individual more

vulnerable to agitation-related emotions (1987).

Religiosity. When comparing religiosity levels of participants, notable differences among the nature and density of identity-based relations were observed. Non-religious participants demonstrated the most religious identity clarity, with a cluster or network of stimuli that included all three identities and was distinct from other stimuli. This cluster possibly indicates that they have no ideal or expected versions of themselves relating to religion. This was not the case for their general life outlook, in which their ideal self clustered with the stimuli calm, comfortable, and happiness and their ought and actual self shifted away from that cluster and was more related to negative stimuli. These differences could indicate that for the non-religious group, the content of religion was less important to them than other aspects of their personality. This might be evidence of a more flexible relationship with the context of the stimuli.

For highly religious participants, a religious context resulted in one network encompassing the identity terms and positive affect terms. That cluster was less dense when viewed with a life in general context wherein the ideal self clustered with comfortable, calm, and happiness, while the actual self clustered with approval and achievement. The ought self did not cluster with the other positive affect terms based on visual analysis but was more closely related to the positive affect terms than negative affect terms. For this group self-esteem was more distant from positive affect and more related to the negative stimuli, possibly indicating that self-esteem increases when participants are engaged with their religion. This is in agreement with the meta-analytic review by Yonker, Schnabelrauch and DeHaan concluding religiosity was related to greater self-esteem (2012).

For religious participants, the three versions of the self did not cluster. Instead, the ideal self clustered with positive affect terms including approval, achievement, comfortable, happiness

and calm while the ought self, actual self, and self-esteem were more related to the negative stimuli. In contrast, this group had a tight cluster of identities and positive affect terms when considering a life in general context. This could indicate that a religious context created some cognitive dissonance in this group of participants, relating actual and ought versions of their self more with negative stimuli.

Self-Discrepancy Theory states that the availability of the discrepancy plays a role in the magnitude of the discomfort felt (Higgins, 1987). For non-religious individuals, activation of a religious ideal or ought self would be less frequent as they assert to rarely participate or think about religion. For highly religious individuals, expectations of the self might be reiterated regularly as they attend religious services or participate in prayer, study, or meditation towards religious values. Similarly, religious individuals who participated less rigorously with religion might feel more dissonance by steadily being reminded of religious practices they are not taking part in or working towards. These reminders of the distance between actual and ought versions of the self could be creating the shift towards the negative stimuli and the disbursement of the versions of the self.

Shame and Guilt. While shame and guilt have been identified as "key emotions" that religious people feel relating to their mental health and sexuality (Yousaf & Gobet, 2013, p. 6), this study did not produce any noticeable differences between shame and guilt verses other negative stimuli. As noted in Table 6, the distance between the actual self and shame with a life in general context was 1.97 and 1.95 with a religious context. Similarly, the distance between the actual self and guilt was 1.79 for life in general and 1.85 for a religious outlook. The lack of noticeable change could be because the other negative stimuli chosen for this study were also related with religion, or because guilt and shame did not verbally distinguish themselves from

other negative stimuli.

Implications

Conviction levels appeared to make an impact on religious identity when comparing the religious group with non-religious and highly religious groups. When considering the stimuli through a religious context, the high/low groups—nonreligious with CRS-15 scores of 1.00 – 2.00 and highly religious (or higher conviction) with CRS-15 scores of 4.00 – 5.00—had identities that were more related to each other, and the actual self was less related to negative stimuli. This differed for the religious group whose identities spread out and related more closely to negative stimuli. It would appear that the more one lived their religion/non-religion, the less they related their religious identity to negative stimuli such as guilt, shame, and embarrassment. This contributes to Weber and colleagues' (2012) conclusion that the strength of conviction levels plays a role in receiving positive outcomes from religion. It could be that the conviction levels of the religious group are decreased due to spiritual struggles, causing the individual to attend religious services and practices less enthusiastically and frequently to cope with those struggles.

Additionally, there was a pattern where the closer the self-concept was to the self-guides, the less those identities related with negative affect terms. For life in general context, the actual self was 0.21 away from the ideal self and 0.18 away from the ought self, and 1.91 away from negative affect. Comparatively, in the religious context, the actual self was 0.57 away from the ideal self, 0.41 away from the ought self, and 1.75 away from negative affect (see Tables 4 and 5). This indicates that compared to religious outlook, the identities for life in general context were more related while the actual self was less related to the negative stimuli. This preliminary

analysis may support Self-Discrepancy Theory indicating that the closer the self-concept is to the self-guides, the less cognitive dissonance the individual will experience (Higgins, 1987).

Differences were also discovered within positive affect terms for each context identity. For the life experience context, the ideal self was most related to calm and comfortable while the ought self was most related to comfortable and achievement. For the religious context, the ideal self was most related to happiness and approval while the ought was most related to approval and self-esteem. This might imply that for life in general people may desire their identity to be calm and comfortable but if they were to be their ought self they might achieve more. In comparison, for peoples' religious self they desire to be happy and approved by others but will have greater self-esteem if they do what is expected of them. This divergence in the self-guides might contribute to cognitive dissonance as the end goals diverge and individuals struggle with which competing norms, or end states, they desire to become (Usborne and Taylor, 2010).

Limitations

The convenience population was a limitation for this study. Participants were recruited through several psychology and religious classes at a midwestern university. While the sample taken was able to represent various religious perspectives, it was not as representative in other areas such as age, race/ethnicity, and a broader range of geographic representation. A higher number and more diverse population might add new information as age and culture are considered in the results. Expanding the population to include additional cultures might offer new information about competing versions of the ought self that were not considered within the original population or the role that culture plays with religious identity. Additional geographic regions might also allow for the consideration of the national culture on religion and whether

religious identities are as impactful in nations that do not have a priority to religious identity or in countries that have a specific religious identity. Further research should also include an analysis of spiritual struggles within religiosity to consider the impact it would have on verbal stimuli.

Future Directions

Future studies should investigate the impact these verbal relations have on religious and overall identity and whether distress is associated with verbal relations. Because the actual self was more related to negative stimuli when considering a religious frame, future studies could investigate the differences between identity in various locations rather than hypothetical contexts. One possibility might be to have participants consider their verbal relations within their place of worship to notice what changes occur within the literal context of religion. Teaming up with religious organizations to consider the mental health of participants could be beneficial in further researching why some individuals receive numerous positive benefits and why others receive numerous negative benefits – and why some receive both simultaneously.

It was noted during this study that for a life in general context, all three versions of the self were least related to the stimuli embarrassment. For the religious context, all three versions of the self were least related to the stimuli uneasiness. These details could be examined with more depth to determine what end states are desired for both contexts and if there is a way to reconcile them to be one flexible end state to reduce cognitive dissonance.

It was recorded that in the religious context, for the non-religious group all three versions of the identity clustered together and were the least related to the negative stimuli for all three groups. This could indicate that the Acceptance and Commitment Therapy process of self-as-context could be useful to as a means by which to reduce cognitive dissonance that occurs when

the self-concept and the self-guides do not match. Self-as-context allows individuals to have a flexible relationship with their identity, an understanding that they are one person that stays consistent even as attributes and situations alter. Interventions that target self-as-context should be explored as a potential solution to defuse verbal relations to reduce spiritual struggles and the identity crisis occurring from them.

Another factor to consider in future research is the impact of spirituality verses religiosity. King and Boyatzis describe spirituality as a "quest for meaning, satisfaction, and wisdom" (2015). Spirituality is a more personalized journey and may or may not lead to organized religion. As such, spirituality might play a differing role on identity than religiosity and should not be considered as one category. Future research should focus on whether spirituality affects social identity and whether the relational frames used to describe the spiritual self are affected in a similar manner.

CONCLUSION

Religion can produce both positive and negative outcomes for various reasons. When religion produces positive outcomes the individual may experience positive coping skills, less depression, diminished deviant behavior, a positive world view, and increased social support. However, when religion produces negative effects, the individual instead may suffer psychological distress and symptoms including anxiety, depression, guilt, shame, and somatization. These symptoms can be felt consecutively or concurrently. For that reason, it is important to research factors that create or contribute to this swing between positive and negative outcomes.

Verbal relations of the self-concept and self-guides contribute to a difference in reported experience between general life and religious life contexts, with a religious context increasing the relationship between the actual self and negative stimuli. Future investigations may examine ways to influence verbal relations to strengthen the positive relational frames that maintain or increase positive outcomes for religion and decrease the strength of verbal relations that lead to more negative outcomes. Discovering ways to reduce the dissonance that can occur when the actual self does not match the various self-guides might aide individuals in reconciling all verbal identities into one conceptualized version of the self, which in return may reduce the negative effects that religion can produce.

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APPENDIX

To:
Dana Paliliunas
Psychology

RE: Notice of IRB Approval
Submission Type: Initial
Study #: IRB-FY2023-353
Study Title: Investigating Relations regarding the Religious Ought and Actual Self using a Relational Density Theory Approach
Decision: Approved

Approval Date: February 25, 2023

This submission has been approved by the Missouri State University Institutional Review Board (IRB). You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented. Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB.

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), 21 CFR 50 & 56 (FDA), and 40 CFR 26 (EPA), where applicable.

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