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Promoting Existential Connection: Development and Evaluation of a Workshop to Reduce Existential Isolation

Abby E. Costello

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PROMOTING EXISTENTIAL CONNECTION:
DEVELOPMENT AND EVALUATION OF A
WORKSHOP TO REDUCE EXISTENTIAL ISOLATION

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Psychology

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This research had three goals. First, it aimed to replicate previous research that has uncovered relationships between existential isolation and psychological and physical health. Second, it examined gender in the context of existential isolation. Finally, it aimed to create a workshop designed to reduce existential isolation, and to evaluate its effectiveness.

The research was comprised of three phases. Phase 1 was an online survey. During this phase, participants completed self-report measures assessing existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, perceived social support, depression, self-concealment, overall physical health, and interpersonal isolation.

In Phase 2, the Existential Connection Workshop was administered. The two-hour workshop included several possible interventions for reducing existential isolation, including existential isolation psychoeducation, universality, validating emotions, authenticity, and two I-sharing experiences. To assess the effectiveness of the interventions at reducing existential isolation, participants completed a survey assessing existential isolation and related constructs immediately after the workshop.

Phase 3 was another online survey that was identical to the Phase 1 online survey. The goal of this phase of the research was to examine changes in existential isolation and related variables that may have occurred between Phase 1 and Phase 3 of the research.

Positive correlations were found between existential isolation and generalized anxiety, depression, self-concealment, and interpersonal isolation. Negative correlations were found between existential isolation and autonomy, competence, relatedness, life satisfaction, performance self-esteem, appearance self-esteem, perceived social support, and overall physical health. There were no observed relationships between existential isolation and social anxiety or social self-esteem. Results indicated that the correlations were similar for males and females. Gender differences emerged only in the correlation between existential isolation and performance and social self-esteem. Results also indicated that male participants exhibited significantly higher levels of existential isolation than female participants did. Finally, the results of the study provided only minimal support for the effectiveness of the workshop at reducing existential isolation. Contrary to prediction, participants' responses indicated that participation in the Existential Connection Workshop did not impact generalized anxiety, social anxiety, autonomy, competence, or relatedness.

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CHAPTER I

INTRODUCTION

“Half the time I don’t know what they’re talking about; their jokes seem to relate to a past that everyone but me has shared. I’m a foreigner in the world and I don’t understand the language.”

Jean Webster

Existential isolation refers to a feeling of complete, experiential separation between oneself and others (Yalom, 1980). Yalom (1980) stated that it is impossible for any individual to know how another person experiences the world around them. People can search for clues that another individual shares their experiences; however, people can never enter the mind of another individual to find out whether they actually have shared the same experience. This inability of humans to share experiences causes people to feel existentially isolated (Yalom, 1980).

Humans have developed a variety of defense mechanisms to help keep their feelings of existential isolation from the fore of their consciousness. For example, *the false consensus effect*, the tendency for people to overestimate the number of people who share their beliefs and attitudes, demonstrates a way in which humans decrease their feelings of existential isolation (Ross, Greene, & House, 1977). Of course, not all people are equally able to keep their feelings of existential isolation at bay. Some people are better able to decrease their feelings of existential isolation than others.

Considering that feelings of existential isolation may vary considerably among people, Pinel, Long, Murdoch and Helm (2017) have recently developed the Existential Isolation Scale (EIS) to assess feelings of existential isolation. This scale is a helpful tool for evaluating differences in severity of existential isolation. Findings from this research provided evidence for

the internal consistency, convergent validity, and discriminant validity of the EIS. Additionally, the research indicated that scores on the EIS remained stable over a two-week period, attesting to its test-retest reliability. Pinel et al.'s (2017) research also examined the possibility of a gender difference in levels of existential isolation and investigated the scale's convergent validity separately for males and females. There were similar patterns of correlations for both genders; however, results indicated that males reported higher levels of existential isolation than females.

Other research on existential isolation indicates that this construct is related to psychological and even physical health. Specifically, Costello and Long (2014) found that higher levels of existential isolation are related to higher levels of depression, generalized anxiety, and self-concealment, and lower overall physical health. Moreover, existential isolation relates to autonomy, competence, relatedness, and measures of prosocial harmony (Pinel, Long, Murdoch, Johnson, & Helm, 2013). Pinel et al. (2013) found that individuals who were more existentially isolated had lower levels of autonomy, competence, and relatedness than individuals low in existential isolation. Additionally, people high in existential isolation had a lower sense of community and endorsed fewer prosocial values.

In summary, the existing research indicates that existential isolation may have wide-ranging implications for psychological wellbeing, physical health, and interpersonal connections. These research findings underscore the need for researchers to continue investigating this phenomenon.

The current research involves three foci. First, it sought to replicate previous research that found a relationship between existential isolation and psychological and physical health variables. Second, it examined the connection between gender and existential isolation. And,

third, it aimed to develop an Existential Connection Workshop designed to reduce existential isolation, and to evaluate the effectiveness of that workshop.

Replicating the Relationship Between Existential Isolation and Psychological and Physical Health Variables

One focus of the current research involved seeking to replicate correlations between existential isolation and variables indicative of psychological and physical health that have been identified in previous research. Costello and Long's (2014) research demonstrated a relationship between existential isolation and psychological stressors and physical health. They had participants complete a series of self-report measures that assessed existential isolation, depression, generalized anxiety, social anxiety, self-concealment, and physical health. Results demonstrated that existential isolation was positively correlated with depression, generalized anxiety, social anxiety, and self-concealment. The results also indicated that existential isolation was negatively correlated with overall physical health. Research has also demonstrated that higher levels of existential isolation are negatively related to autonomy, competence, and relatedness (Pinel, Long, Johnson, & Riggs, 2014) and self-esteem (Pinel et al., 2017). Replication of these findings would attest to the reliability of the relationship between existential isolation and these constructs.

Examining Gender in the Context of Existential Isolation

The second focus of the current research was to examine gender in the context of existential isolation. Pinel et al.'s (2017) research indicated that males experience higher levels of existential isolation than females do. Therefore, an important component of the current research was to assess possible gender differences both in examining the correlates of existential isolation and during the Existential Connection Workshop. Elucidating the role of gender in the

experience of existential isolation may provide valuable information that would point the way toward a better understanding of the etiology and possible treatment of existential isolation.

Existential Connection Workshop

The final goal of the current research was to create a workshop designed to reduce existential isolation, and to evaluate its effectiveness. Although research has yet to clarify the causes of existential isolation, the workshop was comprised of brief interventions formulated to target what the researcher views as some of the likely causes of existential isolation.

Undergraduate students with a range of levels of existential isolation participated in the Existential Connection Workshop. Existential isolation and related variables, including generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, perceived social support, depression, self-concealment, overall physical health, and interpersonal isolation, were measured before the workshop and again after the workshop. These scores were compared to a group of control participants, who did not take part in the Existential Connection Workshop. It was hypothesized that, after taking part in the Existential Connection Workshop, participants would exhibit lower levels of existential isolation, improvement in related psychological variables, and better physical health, compared to the control group.

Although research demonstrates that high levels of existential isolation are related to problematic outcomes, interventions geared toward reducing existential isolation appear to be largely absent from the literature. The workshop presented here was a hopeful first step toward an intervention that can reduce existential isolation. Addressing ways to reduce existential isolation may be of great benefit, considering that everyone experiences this feeling at times. It may be especially helpful for those who experience a high degree of existential isolation and want to reduce those feelings.

CHAPTER II

LITERATURE REVIEW

Within the field of psychology, human beings' need to connect with other people has been contemplated by many theorists. For example, Freud (1930) posited that humans need interpersonal contact as a result of their sex drive and the connection that forms between parents and their offspring. Additionally, when formulating his hierarchy of needs, Maslow (1943) placed the needs for belonging and love in the middle of his hierarchy. He posited that needs for belonging and love would be met after meeting basic needs (food, thirst), but before the needs of self-actualization and esteem (Maslow, 1943). Additionally, Bowlby's (1969) attachment theory clearly describes humans' need to form interpersonal connections; Bowlby (1969) stated that adults' need for attachment derives from their need to obtain a connection similar to the one they had as an infant with their parents, especially their mother. The theorists who have explained humans' need to form and maintain relationships are numerous in the psychology literature, thus suggesting the importance of connection.

Human beings' desire to connect with others appears to have an evolutionary basis, as social bonds have both reproductive and survival benefits (Baumeister & Leary, 1995). Adults who form social attachments have an increased probability of mating and creating offspring to carry on their lineage. Additionally, being a member of a social group provides protection. Hunting large animals, fighting enemies, sharing food, and helping care for offspring are all benefits of group membership that increase an individual's chances for survival (Baumeister & Leary, 1995). Because of the survival benefits of group membership, the process of evolution may have led to humans having internal mechanisms that cause them to want to belong in groups and form relationships with other individuals. Baumeister and Leary (1995) posited that an

inclination to orient to other humans, a tendency to experience emotional distress when there is a lack of social connection, and a predisposition to experience positive affect when engaged in social contact are all examples of the mechanisms that humans have adapted through evolution to promote belonging.

Because humans have a strong need to belong and form connections with other individuals, a need that appears to have deep evolutionary roots, this raises questions about people who perceive themselves as lacking connections with other individuals. When trying to understand the experiences of people who are enduring isolation, Yalom (1980) argued that it is important to understand what form of isolation a person is experiencing.

Types of Isolation

In Yalom's (1980) practice of existential psychotherapy, he noted three varieties of isolation: interpersonal, intrapersonal, and existential.

Interpersonal Isolation

Interpersonal isolation results from a lack of social connection with other individuals; this is literal isolation when a person does not have a satisfactory amount of social contact (Yalom, 1980). An example of interpersonal isolation is when a person moves to a new area of the country, does not know anyone, and, therefore, rarely interacts with other people. Yalom (1980) stated that interpersonal isolation is often experienced as loneliness. Some individuals suffer from interpersonal isolation or loneliness because they do not have important social skills (Yalom, 1980), like how to conduct a conversation that enables them to build relationships with other people. These individuals may have trouble attending to others' nonverbal cues and struggle with initiating and maintaining conversation with other individuals (France, 1984). Additionally, someone can experience interpersonal isolation because they have conflicted

feelings toward being intimate with others (Yalom, 1980). A person may not want to become close with other individuals because they do not want to share personal aspects of themselves, thus leading them to alienate themselves from interpersonal interaction. Finally, interpersonal isolation can occur because of a personality style, like schizoid, which makes it difficult for someone to gain interpersonal connection (Yalom, 1980). The DSM-5 (American Psychiatric Association, 2013, p. 652) stated that an essential feature of schizoid personality disorder is a “pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal settings.” Therefore, one of the diagnostic symptoms of schizoid personality disorder is interpersonal isolation (Martens, 2010).

Additionally, research suggests that interpersonal isolation can negatively influence physical health. Cohen, Doyle, Skoner, Rabin, and Gwaltney (2007) hypothesized that people with more social ties would resist infection from a common cold more effectively than people with fewer social ties. Cohen et al. (2007) assessed participants’ social ties using The Social Network Index, which examines twelve types of social relationships. Then participants were given nasal drops that had one of two rhinoviruses and were monitored to see if they developed symptoms of a common cold. Results indicated that people with more diverse social networks were less susceptible to common colds than those with less diverse social ties. Additionally, Cacioppo et al. (2002) found that individuals who were more socially isolated had more sleep dysfunction and more cardiovascular activation than participants who were less socially isolated. Taken together, these studies suggest that interpersonal isolation may be related to physical health problems (Cohen et al., 2007; Cacioppo et al., 2002).

Intrapersonal Isolation

Unlike interpersonal isolation, intrapersonal isolation results from “isolated aspects within one’s own psyche” (Pinel, et al., 2013, p. 4). Intrapersonal isolation happens when a person is not in touch with their own private experiences (Yalom, 1980). Intrapersonal isolation includes situations where a person is separated from a part of themselves. For example, feminist psychologists argue that some men are disconnected from the feminine aspects of themselves (Jones-Smith, 2012), and this disconnect illustrates intrapersonal isolation. Symptoms commonly associated with intrapersonal isolation include indecisiveness and lack of awareness of one’s authentic desires and wishes (Yalom, 1980).

Additionally, intrapersonal isolation can include those cases when someone distances themselves from the emotional component of a memory (Yalom, 1980). A person can remember the cognitive dimension of a memory, but the affective aspect of the memory is sequestered. In more severe and extreme cases, a split can manifest in people as dissociative identity disorder. Dissociative identity disorder is defined by the “disruption of identity characterized by two or more distinct personality states” (American Psychiatric Association, 2013, p. 292). Dissociative identity disorder is frequently associated with traumatic events or overwhelming experiences, such as abuse occurring in childhood. A history of abuse may be associated with an unconscious defense where someone splits from the emotional component of memories to protect themselves, and in extreme cases, this type of intrapersonal isolation can result in people developing dissociative identity disorder.

Existential Isolation

As described above, both interpersonal and intrapersonal isolation can be detrimental to a person's well-being, and existential isolation can also negatively affect a person's life.

Existential isolation represents a distinct form of isolation where people feel alone in their experiences, as though no one understands the way in which they perceive, interpret, and react to the world (Yalom, 1980). Existential isolation is a fundamental, universal aspect of the human condition. Because each individual's experience of the world occurs entirely within themselves, two people can never directly share their experiences of the world with each other. It is impossible for a person to know how another person experiences a stimulus. Any stimulus a person encounters is filtered through their own sense organs, schemas, and perceptual processes (Pinel et al., 2013). For example, when a person smells a fragrance, this stimulus is filtered through their olfactory nerves. Consequently, one can never know how that particular scent smells to another person because they cannot use another person's olfactory nerves to filter the smell. Two people can attempt to describe the smell to each other in an effort to share the experience; however, they can never know for sure that they are experiencing the smell in the exact same way. Most people do not feel existentially isolated all of the time, but certain situations can remind people of their existential isolation.

Importantly, existential isolation and interpersonal isolation are separate constructs. People can feel existentially isolated even when they are feeling interpersonally connected. For example, individuals can experience existential isolation in the presence of family and friends, such as at a large Thanksgiving dinner when a family member makes a toast that everyone thinks is meaningful except for one member of the family, who thinks that the toast is silly. A person

can be surrounded by close others and feel as if no one is experiencing, interpreting, or reacting to the world around them in the same way as they are.

The construct of existential isolation is supported by the cognitive psychology literature regarding development of a theory of mind (Baron-Cohen, 2000). Someone who has developed theory of mind recognizes that their experience of a stimulus does not necessarily match another person's experience. They recognize that there is a lack of transparency between two individuals' experiences. The development of theory of mind can be connected with increases in existential isolation (Pinel, Long, Johnson, & Riggs, 2014). Once children develop an understanding of theory of mind, they begin to understand the existential separation between all humans. Once theory of mind develops, a person's understanding of how their mind may operate differently from others increases, and this makes them more susceptible to feelings of existential isolation. A great amount of research has been conducted to examine the age at which theory of mind develops and there appears to be debate between researchers about whether it exists before the age of three (Wellman, Cross, & Watson, 2001). Unfortunately, it is unknown when existential isolation begins to develop or where it derives from because no research has been conducted that studies existential isolation at different ages. However, it is theorized that feelings of existential isolation may begin around the time that theory of mind begins to arise.

Baumeister and Leary (1995) stated that belonging is a core basic need of all humans. Other researchers have argued that belief validation is another core basic need of all humans (Solomon, Greenberg, & Pyszczynski, 1991; Swann, 1996). However, as Pinel and colleagues (2006) point out, feeling existentially isolated makes it difficult for a person to fulfill either of these basic needs. People enduring feelings of existential isolation do not believe that other people are interpreting experiences in the same manner that they interpret them; therefore, it is

hard for them to validate their beliefs (Pinel et al., 2006). Additionally, highly existentially isolated people can have difficulty feeling connected to other human beings because they believe that other people do not have similar experiences (Pinel et al., 2006). That existential isolation interferes with people's ability to meet these important needs may explain its link to psychological health (Costello & Long, 2014).

Differences in severity of existential isolation. Pinel et al. (2013, p. 6) stated that “our psychological foundation could crumble should our existential isolation remain at the fore of our consciousness.” If someone always thinks about how they are experientially separate from other individuals, then they may never feel connected to another person and they may never feel confident in their beliefs and perceptions of the world. So why is it that not everybody is walking around depressed by their knowledge and experiences of existential isolation? Humans have developed mechanisms that help reduce their experiences of existential isolation and help them feel connected to other individuals. For example, people tend to spend time with other people who they believe are likely to have similar phenomenological states, such as people with similar religious beliefs, activities, and education levels (Byrne, 1971). People believe that those who share their beliefs are likely to share their experience or understanding of a situation (Pinel et al., 2004, 2006). Pinel et al. (2004, 2006) stated that people who frequently encounter others with whom they believe they share subjective experiences will likely feel less existential isolation.

Furthermore, Ross et al.'s (1977) research on the false consensus effect provides evidence of a cognitive mechanism that helps people ignore the reality of existential isolation. The false consensus effect is a cognitive bias that leads people to overestimate the number of people who hold the same beliefs and attitudes as themselves. When people overestimate the

number of people who hold their beliefs, then their experiences of existential isolation are reduced. Believing that many people interpret the world in the same way as they interpret it, even if this is not actually the case, helps them feel a sense of existential connection. These mechanisms – surrounding ourselves with similar others and the false consensus effect – help keep existential isolation at bay, but they may be more effective, or more easily utilized, for some people than others.

Existential isolation scale. Noting that feelings of existential isolation may vary from one person to another, Pinel et al. (2017) developed a self-report measure to assess this construct. In establishing the construct validity of the Existential Isolation Scale, Pinel et al. (2017) found moderate correlations between existential isolation and measures of interpersonal isolation, such as loneliness (.34) and alienation (.32). The positive correlations suggest that the scale taps into separation; however, the moderate size of the relationships suggests that the scale does not primarily assess interpersonal isolation. The scale is assessing a different type of isolation.

Gender differences in existential isolation. Using the Existential Isolation Scale, Pinel et al. (2017) found that males report more existential isolation than females. A reason for this difference may derive from stereotypes about gender and the pressure to fulfill those beliefs. In the United States, cultural stereotypes suggest that males should be independent and emotionally disconnected, whereas females should be nurturing, passive, and in-tune with their own and other people's emotions (Simon & Nath, 2004). These stereotypes may encourage males to avoid experiences that would cause feelings of existential connectedness with other people, which in turn, may increase existential isolation. Drawing from Pinel et al.'s (2017) finding of higher levels of existential isolation in males than females, a focus of the current project was to examine the role that gender might play in existential isolation in the data collected here.

Existential isolation's relationship to psychological and physical health. Yalom (1980) indicated that many people suffer from existential isolation, although many of them do not recognize this difficulty on their own. Yalom (1980) stated that many of the interpersonal challenges that people endure are a result of the fact that there is an inescapable separation that exists between all people; no matter what someone does to connect with another person, they will never be able to fully connect. Feelings of existential isolation can lead people to feel like they can never really be connected to other people, and this feeling of inescapable disconnect may have negative psychological consequences for some people. The more someone feels that their experiences are separate from other people's experiences, the more mental health struggles they may endure.

Costello and Long's (2014) research supports the notion that existential isolation is related to psychological stressors. They had undergraduate students complete a series of self-report measures that examined existential isolation, depression, generalized anxiety, social anxiety, self-concealment, and physical health. Results indicated that existential isolation was positively correlated with depression, generalized anxiety, social anxiety, and self-concealment. Higher levels of existential isolation were related to higher levels of these psychological constructs. The research also indicated that existential isolation was negatively correlated with overall physical health. Higher levels of existential isolation were related to overall worse physical health. Furthermore, results from partial correlations suggested that many of the correlations, including those between existential isolation and depression, generalized anxiety, self-concealment, and physical health, remained statistically significant after controlling for interpersonal isolation. These results suggest that existential isolation has a unique relationship

with psychological and physical health correlates beyond the variance contributed by interpersonal isolation (Costello & Long, 2014).

In related research, Pinel et al. (2014) theorized that existential isolation may interfere with people's ability to meet their needs for autonomy, competence, and relatedness. Results indicated that people who were more existentially isolated had lower levels of autonomy, competence, and relatedness than people low in existential isolation. Moreover, as part of their validation of the Existential Isolation Scale, Pinel et al. (2017) assessed the relationship between existential isolation and self-esteem. Results indicated that higher levels of existential isolation were connected with low self-esteem.

Drawing from Yalom's (1980) theorizing and from the empirical findings presented above (Costello & Long, 2014; Pinel et al. 2014; Pinel et al., 2017), it seems that existential isolation is associated with physical and psychological struggles. An important goal of the current project was to replicate these empirical findings: Costello and Long's (2014) finding that existential isolation is linked to troublesome psychological and physical health correlates, Pinel et al.'s (2014) finding that more existential isolation is related to lower levels of autonomy, competence, and relatedness, and Pinel et al.'s (2017) finding that higher levels of existential isolation are related to low self-esteem. Replication of these findings would attest to the reliability of the relationship between these variables and existential isolation.

Isolation

Research on isolation has tended to focus mostly on the interpersonal variety. Baumeister and Leary's (1995) belongingness hypothesis asserts that "human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships" (Baumeister & Leary, 1995, p. 497). Empirical research

supports this hypothesis, indicating that human beings are motivated to form and maintain attachments with other individuals (Baumeister & Leary, 1995). The need to belong seems to be related to cognitive processes, emotional patterns, behaviors, and health (Baumeister & Leary, 1995). Consequently, when individuals are denied the ability to form interpersonal connections, like when they are ostracized by other humans, there can be negative consequences in these realms.

Ostracism

Ostracism happens when an individual is excluded from or ignored by a social group (Wesselmann, Nairne, & Williams, 2012). Williams' (1997) model of ostracism indicates that ostracism, compared to other forms of damaging interpersonal behaviors, strongly threatens four essential human needs: sense of belonging, self-esteem, control, and meaningful existence. Ostracism stops an individual from having a sense of belonging because the individual is being denied connection with other human beings. Additionally, it appears that ostracism includes feelings of punishment; ostracized individuals tend to feel as if they did something wrong to cause their exclusion from the group, which then diminishes their self-esteem. Additionally, ostracized individuals report loss of control because they feel unsure of the reasons behind the ostracism. Ostracized individuals cannot obtain any type of reaction from others because they are being ignored. These individuals feel a lack of control because they cannot make other individuals interact with them and do not know how to improve their situation. Finally, ostracized individuals feel a loss of a meaningful existence because they lack any social interaction; without social interaction, a person can begin to understand what it would be like if they did not exist (Williams, 1997).

Bastian and Haslam (2010) stated that, because feelings of belonging are imperative to human beings, when an individual is excluded from a social group, they can experience it as an exclusion from human connection or humanity in general. Bastian and Haslam (2010) reported that people who were experiencing ostracism from a group perceived themselves as less human. From an evolutionary standpoint, it makes sense that ostracized people may feel dehumanized because humans have always been social creatures who depend on other individuals for their survival. Therefore, when an individual is ignored by a group, their fulfillment of essential human needs, like belonging and self-esteem, diminishes.

Experimental manipulation of ostracism. The ball toss paradigm has been used to study ostracism. The ball toss paradigm involves three people tossing a ball back and forth to each other (Williams & Sommer, 1997). However, the actual research participant is unaware that the other two members of the group are confederates and are following a pre-determined script for how to toss the ball. In a typical ball toss experiment, the participant is excluded from the ball toss after a few throws and never gets the ball thrown to them again. Research indicates that it only takes a few minutes of being excluded from the ball toss to produce negative emotions in the participant, like anger and sadness (Williams & Sommer, 1997).

The effects of ostracism have also been examined in experiments via the cyberball paradigm, a computerized version of the ball toss paradigm (Williams, Cheung, & Choi, 2000). In the cyberball paradigm, participants engage in a virtual ball toss game and the participant believes he or she is playing with two other participants who are sitting at computers in other locations. During the first few minutes of the game, the participant is included in the cyberball tosses; however, after a few minutes, they are excluded. Similar to the ball toss results, ostracism in the online game creates significant increases in negative emotions, like sadness and anger, and

lowers levels of individuals' four essential human needs: belonging, self-esteem, control, and meaningful existence (Williams, Cheung, & Choi, 2000).

Social Exclusion

In addition to the literature on ostracism, an independent literature on social exclusion has also developed. Although the two constructs are similar, they are also separable. Social exclusion is a broader construct than ostracism and is defined as “all phenomena in which one person is put into a condition of being alone or is denied social contact” (Blackhart, Nelson, Knowles, & Baumeister, 2009, p. 270). This includes instances where a person has not tried to form a bond but has still been excluded. Ostracism is frequently treated as a specific form of social exclusion and refers to a refusal of social interaction when an individual attempts to interact (Blackhart et al., 2009).

Experimental manipulation of social exclusion. Researchers have created multiple ways to empirically examine social exclusion. One research approach includes experimentally administered social rejection. A participant is led to believe that other people in the experiment have rejected them as a social interaction partner (Stillman et al., 2009). In this type of procedure, the participants engage in a group get-acquainted conversation and then create a list of the two members with whom they would like to work in a group for the next task. Through random assignment, some participants are given information that no one wanted to work with them in the group task (Baumeister, Brewer, Tice, & Twenge, 2007).

Another approach to inducing social exclusion in an experiment entails having two participants exchange information about themselves in preparation to engage in a shared task. Following the discussion, participants are told that the shared task was cancelled. They are told that the task was cancelled either because their partner suddenly remembered they had a previous

engagement or because the partner had a negative reaction to information the participant disclosed and chose not to engage in the experiment any further. In this design, all of the participants end up alone; however, in one condition, the experiment ends due to a personal rejection (Baumeister et al., 2007).

Another approach that is used to examine the experience of social exclusion focuses on individual differences in self-reported chronic loneliness. In a loneliness study, the research uses feelings of exclusion outside of the study for the assessment of exclusion; therefore, no laboratory manipulation is implemented (Stillman et al., 2009). Stillman et al. (2009) argue that this approach has greater external validity than laboratory experiments that manipulate social exclusion.

Social exclusion and aggression. Research suggests that social exclusion is related to aggressive behavior (Twenge, Baumeister, Tice & Stucke, 2001). Twenge et al. (2001) manipulated social exclusion in a series of studies by telling participants that they would end up alone later in life or that other participants had rejected them. Results indicated that both of these manipulations caused participants to act more aggressively, compared to participants in control conditions who were not excluded. In two of the experiments, participants who were excluded gave a more negative job evaluation against a person who excluded them. Additionally, excluded participants “blasted” a target with a higher level of an aversive sound than participants who were not excluded. This was the case when the target was someone who insulted them and when the target was someone whom they had never met. These findings provide evidence that social exclusion causes increases in aggression (Twenge et al., 2001).

Additionally, school shootings, an extreme form of aggression, seem to be related to feelings of social exclusion. Leary, Kowalski, Smith, and Phillips (2003) stated that nearly all of

the school shootings perpetrated by a student who shot their classmates were done by students who were severely rejected and excluded by their classmates. This finding suggests the possible serious aggressive consequences that can result from social exclusion.

Social exclusion and prosocial behaviors. Research also indicates that social exclusion can reduce individuals' prosocial behaviors (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). Across a series of studies, Twenge et al. (2007) manipulated social exclusion by telling participants that they would end up alone later in life or that the other study participants had rejected them. Results indicated that both forms of social exclusion caused decreases in a broad array of prosocial behaviors. Specifically, participants who were socially excluded donated less money to a student fund, were less helpful after a mishap (when someone accidentally spilled pencils on the floor), were less willing to volunteer for additional lab experiments, and cooperated less in a mixed-motive game with another participant. Additionally, Twenge et al. (2007) found that the results were mediated by feelings of empathy for others. Specifically, social exclusion impaired participants' empathic understanding of others, and any proclivity to help them was weakened.

Social exclusion and self-regulation. Furthermore, social exclusion appears to reduce people's ability to self-regulate (Baumeister, DeWall, Ciarocco, & Twenge, 2005). Social exclusion caused participants to lose self-control on various measures. Baumeister and colleagues (2005) caused some participants to feel socially excluded by having them anticipate a lonely future life. These participants were then less able to make themselves drink a healthy but bad-tasting drink. In another experiment, to induce the experience of social exclusion, the researchers had participants believe that no one wanted to work with them. The results indicated that the socially excluded participants then ate more cookies than other participants. In additional

studies, Baumeister and colleagues (2005) found that excluded participants displayed less persistence on a frustrating task and had impaired performance on an attention control (dichotomous listening) task. This research suggests that social exclusion can be harmful to excluded individuals because it can cause self-defeating behavior patterns that can have negative consequences (Baumeister et al., 2005).

Social exclusion and physical pain. Social exclusion appears to be related to physical pain. DeWall and Baumeister (2006) found that social exclusion caused participants to lose their sensitivity to pain; after experiencing social exclusion, participants' pain thresholds and pain tolerance increased significantly. Consequently, Baumeister et al. (2007) suggested that a first reaction to social exclusion could be a type of numbness that desensitizes the person. A physical injury causes a release of opioids that helps an organism continue to function despite the pain of their injury. This can allow an organism to escape a crisis situation after being hurt, like a soldier escaping a battlefield after being wounded. If social exclusion is thought of as the psychological equivalent of a physical injury, then it makes sense that social exclusion would evoke an increase in pain tolerance because that could help a person get away from an experience of social exclusion (Baumeister et al., 2007).

Drawing from these findings linking social exclusion and physical pain, DeWall et al. (2010) hypothesized that acetaminophen, a physical pain suppressant that works through the central neural mechanism, would decrease both behavioral and neural responses to social exclusion. They examined whether acetaminophen would reduce pain from social rejection like it does for pain caused by physical injury. In two experiments, DeWall et al. (2010) had participants take either acetaminophen or placebo daily for three consecutive weeks. After the three weeks, participants engaged in a social exclusion task (cyberball) during an fMRI scan.

Results indicated that acetaminophen reduced self-reports of social pain. Additionally, acetaminophen reduced neural responses to social rejection in the brain areas usually associated with social pain and affective parts of physical pain. Consequently, the results supported the notion that acetaminophen decreases behavioral and neural reactions to social exclusion. The results suggest overlap between social and physical pain, and highlight the fundamental nature of social connection for humans (DeWall et al., 2010).

Perceived Social Support

Similar to ostracism and social exclusion, social support focuses on the degree to which a person is interpersonally connected with other individuals. Originally, the idea of social support was based on actual helping behaviors that are received by a person during a time of difficulty or stress; however, more recently, researchers have stated that social support is primarily based on perception, a person's cognitive appraisal of being supported, not actual behaviors (Ross, Lutz, & Lakey, 1999). Perceiving oneself as supported by others appears to be more important than received social support, the actual behaviors enacted by another individual (Ross et al., 1999).

Feeling socially supported by friends and family appears to have many positive consequences, such as lower depression and generalized anxiety (Zimet, Dahlem, Zimet, & Farley, 1988), and fewer physical health symptoms (Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Pearson (1986) indicated that it is a universal truth that social support is valuable for both psychological and physical well-being; social support acts as a buffer to the negative effects of stress. Ross et al. (1999) stated that people who are high in perceived social support tend to have a better memory for supportive behaviors than people who are low in perceived social support. Additionally, people who are high in perceived social support tend to believe that a behavior is

more supportive than do people who are low in perceived social support; the same behavior will thus be rated differently based on a person's level of perceived social support.

When people believe that they have social support, they believe they are socially connected to other individuals. Social support reflects the concept of interpersonal connection, and is the opposite of social exclusion. Perceived social support allows people to feel as though they are included, supported, and connected to other human beings. Of the different types of isolation (intrapersonal, interpersonal, and existential) presented by Yalom (1980), perceived social support is most akin to interpersonal isolation. Someone with high perceived social support should have low feelings of interpersonal isolation. Perceived social support is based on the interpersonal connections people believe that they have in their life; it is the extent to which they believe they are socially connected with other human beings. People who feel socially excluded are likely to perceive a lack of social support.

Research on Existential Isolation

It is important to note that existential isolation is fundamentally different from ostracism, social exclusion, and perceived social support. Ostracism is characterized as a form of exclusion from a social group; in cases of ostracism, a person is actually being ignored by a group of people. An ostracized person is experiencing interpersonal isolation (Wesselmann et al., 2012). Social exclusion is defined as all instances when a person is left alone and denied social contact. Social exclusion includes all times that people are interpersonally isolated, even instances when a person has not tried to form a bond (Blackhart et al., 2009). Like ostracism, social exclusion creates feelings of interpersonal isolation. Perceived social support is based on a person's cognitive appraisal of help and social resources available to them from other individuals (Ross,

Lutz, & Lakey, 1999). Whereas ostracism and social exclusion are types of interpersonal isolation, social support entails interpersonal connection.

In contrast to interpersonal isolation, existential isolation does not necessarily include any form of exclusion from a group, whether deliberate or not. Existential isolation is defined as feeling alone in the way one perceives or reacts to the world (Yalom, 1980). An important feature of existential isolation is that people can have experiences of existential isolation even when they are surrounded by many people or when they are included in the social group. In fact, existential isolation frequently occurs in the presence of other people; the existentially isolated individual feels that they are interpreting an event differently than all the other people around them (Yalom, 1980). For example, a person can feel existentially isolated in a movie theater when the majority of the audience is laughing at a joke that the individual does not interpret as funny. That individual may feel as if they interpreted the scene from the movie differently than everyone else in the theater. The isolation experienced when someone is existentially isolated is different than the isolation that an ostracized individual endures. Offering empirical support for this distinction between existential isolation and interpersonal isolation, Pinel et al. (2017) found positive, but only moderately sized, correlations between existential isolation and measures of interpersonal isolation, including alienation (.32) and loneliness (.34). The positive correlations indicate that all of the measures assess feelings of separation; however, the moderate size of the relationship between existential isolation and the measures of interpersonal isolation suggests that existential isolation involves a qualitatively different experience than interpersonal isolation. In contrast, there was a strong, positive relationship between alienation and loneliness (.78), suggesting that they assess similar feelings of interpersonal isolation.

Pinel et al. (2014) theorized that existential isolation may interfere with people's ability to meet their basic needs, and that, with their own needs unsatisfied, they would be less able to contribute to prosocial and interpersonal harmony. To examine these possibilities, the researchers assessed existential isolation, basic need satisfaction (defined as autonomy, competence, and relatedness; Deci & Ryan, 2000), and measures of prosocial and interpersonal harmony. Results indicated that people who were more existentially isolated had lower levels of need satisfaction than people low in existential isolation. Additionally, people high in existential isolation had a lower sense of relatedness to their communities and endorsed fewer prosocial values. Moreover, as predicted, need satisfaction mediated the link between existential isolation and prosocial/interpersonal harmony.

Furthermore, in another study, Pinel et al. (2014) found that highly existentially isolated people reported feeling more rejected when they were excluded, regardless of the social environment of the rejection. Additionally, when people high in existential isolation were included, they did not obtain benefits, like meaningfulness and control, in the same manner that people low in existential isolation obtained the benefits. These studies exemplify how existential isolation seems to diminish people's feelings of relatedness and inclusion, both with other individuals and the broader community (Pinel et al., 2013).

Existential isolation is also related to belief validation. Pinel et al. (2014) found that existential isolation negatively impacts people's confidence in their conceptions of reality. Specifically, individuals high in existential isolation were less confident of their interpretations of a potentially racist interaction than individuals low in existential isolation. Additionally, in a study examining existential isolation and interpretation of inkblots, results indicated that the more existentially isolated people were, the more difficulty they had seeing other people's

interpretation of the inkblots (Long & Costello, 2015). Both of these studies suggest that people who are high in existential isolation may struggle to meet their need for belief validation. These individuals feel alone in their interpretations and may lack confidence in their beliefs.

Goals of the Current Research

The research that has accumulated thus far indicates that existential isolation is fundamentally different from ostracism, social exclusion, and perceived social support. Due to its uniqueness, research to understand existential isolation is necessary, and the current research was conducted to gain a better understanding of this construct. Specifically, this research had three goals: 1) to replicate the previous research indicating a connection between existential isolation and psychological and physical health, 2) to examine gender in the context of existential isolation, and 3) to develop a workshop aimed at reducing experiences of existential isolation and test the effectiveness of the workshop at meeting this objective.

Replicating the Relationship Between Existential Isolation and Psychological and Physical Health Variables

The first goal of this research was to replicate previous findings of connections between existential isolation and constructs that are indicative of psychological and physical health. Costello and Long (2014) had 247 undergraduate students complete a series of self-report measures that examined existential isolation, depression, generalized anxiety, social anxiety, self-concealment, and physical health. Results indicated that existential isolation was positively correlated with depression, generalized anxiety, social anxiety, and self-concealment. The research also indicated that existential isolation was negatively correlated with overall physical health. In related research, Pinel et al. (2014) theorized that existential isolation may interfere with people's ability to meet their needs for autonomy, competence, and relatedness. To examine

this possibility, the researchers assessed existential isolation and autonomy, competence, and relatedness in a sample of 576 participants. Results indicated that people who were more existentially isolated had lower levels of autonomy, competence, and relatedness than people low in existential isolation. As part of their validation of the Existential Isolation Scale, Pinel et al. (2017) assessed the relationship between existential isolation and self-esteem in a sample of 347 participants. Results indicated that higher levels of existential isolation were connected with low self-esteem.

Although the sample sizes in these previous studies were sufficiently large, building on the recent emphasis in psychology on replicability (Nosek & Laken, 2014), the present research offered an opportunity to determine whether new research would uncover additional evidence to support the existence of these relationships. Thus, in the present research, a large number of participants were invited to complete a series of self-report measures examining existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, performance self-esteem, social self-esteem, appearance self-esteem, depression, self-concealment, and physical health. A measure of life satisfaction was included, too, to examine whether existential isolation is related to overall perceptions of one's life.

Additionally, this research sought to replicate previous research that distinguished existential isolation from interpersonal isolation. Pinel et al. (2017) found positive, but only moderately sized, correlations between existential isolation and measures of interpersonal isolation, including alienation (.32) and loneliness (.34). The positive correlations indicate that all of the measures assess feelings of separation; however, the moderate size of the relationship between existential isolation and the measures of interpersonal isolation suggests that existential isolation involves a qualitatively different experience than interpersonal isolation. A measure of

interpersonal isolation was included here, as well. However, previous research has not examined the relationship between existential isolation and social support. A measure of social support was included here to test the prediction that, because social support is more closely tied to interpersonal connection/isolation than it is to existential connection/isolation, social support and existential isolation would not show a strong relationship.

Gender and Existential Isolation

Another goal of the present research was to examine gender in the context of existential isolation, because previous research has found that males experience higher levels of existential isolation than females do (Pinel et al., 2017). The present research investigated whether the finding of greater existential isolation among males than females would be replicated here. It also investigated whether the relationship between existential isolation and any of the psychological and physical health variables measured here was moderated by gender. Additionally, the present research investigated characteristics of the women and men who took part in the Existential Connection Workshop, along with their behaviors in the workshop and their reactions to the workshop.

Development and Evaluation of the Existential Connection Workshop

A growing literature indicates that people with high existential isolation are struggling in various facets of their lives: psychologically, interpersonally, and physically (Costello & Long, 2014; Pinel et al., 2017; Pinel et al., 2014; Yalom, 1980). Previous research suggests that it is possible to reduce existential isolation, at least temporarily, with brief laboratory manipulations (Mayo, 2015; Pinel et al., 2014). Thus, the third and most important goal of the current research was to develop a workshop that aimed to reduce existential isolation in participants, and to evaluate the effectiveness of the workshop. The workshop was multi-faceted, and included a

variety of components designed to target what the researcher views as some of the likely causes of existential isolation. Drawing from the literature in both social and clinical psychology, the workshop included a variety of elements that were theorized to reduce existential isolation. The current research also assessed the effectiveness of the workshop at reducing existential isolation and improving related outcomes compared to a control condition.

I-sharing. One way to decrease people's experiences of existential isolation is through increasing the occurrence of I-sharing. Pinel et al. (2004) defined I-sharing as sharing an immediate subjective experience, such as a reaction, interpretation, or perception. Pinel et al. (2004) suggest that the ideal evidence for I-sharing occurs when two or more people react identically and simultaneously to the same stimulus. Two people laughing at the same joke while watching a television show together or crying at the same time during a sad story are examples of I-sharing. I-sharing can occur between two people or in large groups of people; for example, in a movie theater when a large group of people laugh at the same joke in the movie. However, it is important to note that, because people can never truly verify that another person has shared their experience, I-sharing always reflects an inference.

The term I-sharing comes from William James' (1890) identification of two components of the self: the Me and the I. The Me refers to the objective or known self. The Me is relatively stable and includes everything that people know about themselves: personality, memories, hobbies, political affiliation, etc. While the Me is usually stable, it is possible for the Me to change when new information is added or people become aware of a new characteristic of themselves. When people share objective qualities with another person, this would be referred to as Me-sharing (Pinel et al., 2006). For example, two people who both identify as Christian would Me-share because of the objective similarity between them.

Unlike the Me, or objective self, the I is the subjective part of the self. In contrast to the stable Me, the I is constantly changing in response to its environment, as it thinks, reacts, understands, and perceives the world around it. James (1890) called these shifting subjective states the “stream of consciousness.” I-sharing has occurred when two people share an identical experience and a person thinks that their stream of consciousness has fused with someone else’s stream of consciousness (Pinel et al., 2006). Examples of I-sharing could include two people saying the same thing at the same time or two people seeing the same image in a cloud.

Pinel and colleagues (2004) proposed that I-sharing reduces existential isolation. When people perceive that their phenomenological state has merged with someone else’s, they feel a sense of existential connection, even if it is only for that moment when they I-share. Having I-shared means that during that instance, they were not alone in their experience, they were not existentially isolated. Even if the two people have not actually experienced the moment identically, the perception of having I-shared should reduce feelings of existential aloneness (Pinel et al., 2014). In addition to offering a sense of existential connection, I-sharing should eliminate the previously discussed threats to the needs for belief validation and connectedness that are caused by the experience of existential isolation (Pinel et al., 2004, 2006).

I-sharing increases liking. Pinel and colleagues (2006) demonstrated that I-sharing increases liking. They found that people liked objectively dissimilar individuals with whom they I-shared with more than people they did not have an I-sharing experience. Specifically, subjective similarity was a better indicator of liking than objective similarity because I-sharing increased feelings of liking more than Me-sharing. For example, in a series of scenario studies, Pinel et al. (2006) asked participants to imagine interacting with two other students: one from their hometown and one from another country. This was the manipulation of objective similarity,

or Me-sharing; the student from the same hometown was objectively similar to participants, and the student from another country was objectively different from participants. Then Pinel et al. (2006) manipulated whether the participant I-shared with the objectively similar person or the objectively different person. In one study, the I-sharing experience involved laughing (or not laughing) in response to the same joke; in another study, the I-sharing experience involved sharing a reaction (either love or hate) toward the same musical group. Participants preferred the I-sharer over the non-I-sharer, regardless of whether they were objectively similar to or different from that person.

More recently, Pinel and Long (2012) examined whether I-sharing improves liking for members of a salient outgroup. In the first experiment, results indicated that people preferred an I-sharer who did not share their gender over a non-I-sharer who did share their gender. This preference held true even for participants with a strong gender identity, who might be expected to favor members of their gender in-group. In the second experiment, people preferred an I-sharer who did not share their sexual orientation over a non-I-sharer who did share their sexual orientation. This preference for the I-sharer held true even when participants learned about their partner's sexual orientation immediately before completing the liking measures. This finding suggests that people prefer an I-sharer who is objectively different from them even when those objective differences are salient. Thus, I-sharing may offer a qualitatively different form of similarity that allows people to find subjective overlap with one another while still maintaining an awareness of objective differences that exist between them (Pinel & Long, 2012).

I-sharing is especially appealing to those high in existential isolation. If, as theorized, I-sharing can serve as an antidote to existential isolation, then people with high existential isolation should be especially responsive to I-sharing. To test this prediction, Pinel et al. (2004)

manipulated existential isolation by having participants recall one of three types of memories: a time when they felt out of touch with the people around them or felt alone in a crowd (existential isolation condition), a time when they were bored (negative control condition), or their morning routine (neutral control condition). Then participants completed an online communication task where they exchanged information with a partner. In the Me-sharing task, participants selected traits to describe themselves, and then learned that their partner had described themselves with the same traits as they did or with different traits. The I-sharing task involved word associations. For each trial, participants read a word stem and then selected a way to complete it. They learned that their partner completed these word associations the same way that they did or differently than they did. Results indicated that participants in the existential isolation condition preferred the I-sharer over the Me-sharer. In contrast, participants in the negative and neutral control conditions preferred the Me-sharer over the I-sharer.

In another study, Pinel et al. (2006) primed some participants with feelings of existential isolation by asking them to vividly recall a time when they felt disconnected from the people around them. Other participants underwent a boredom prime or a neutral prime. Then Pinel et al. (2006) manipulated whether participants interacted with an I-sharer who was objectively dissimilar from them or a non-I-sharer who was objectively similar to them. They found that participants primed with existential isolation preferred the I-sharer over the non-I-sharer. However, participants in the comparison conditions, who had not undergone the existential isolation prime, did not display this preference for the I-sharer.

In addition to the studies that have manipulated existential isolation to observe its effects on liking for I-sharers, other research has measured existential isolation for this same purpose. Pinel and Long (2012) incorporated a measure of existential isolation in a study that examined

the effects of I-sharing versus value-sharing on liking. They had participants interact with an I-sharer who did not share their values, and a non-I-sharer who did share their values. Highly existentially isolated individuals preferred the I-sharer over the value-sharer. However, people low in existential isolation preferred the value-sharer over the I-sharer.

In another study, Pinel et al. (2014) found that participants low in existential isolation preferred a non-I-sharer who was objectively similar to them over an I-sharer who was objectively different from them. However, people high in existential isolation preferred the I-sharer who was objectively different from them over the non-I-sharer who was objectively similar to them. Additionally, participants high in existential isolation had higher performance self-esteem after an I-sharing experience. These results show how important I-sharing experiences can be for people who are highly existentially isolated; it appears that these experiences can have positive interpersonal and psychological effects.

I-sharing reduces existential isolation. If I-sharing is particularly appealing to people who are high in existential isolation, this may suggest that I-sharing has the power to reduce existential isolation. This possibility has been investigated in previous research. In two studies, Pinel et al. (2014) examined whether I-sharing increased feelings of subjective similarity and liking among people high in existential isolation. Results indicated that I-sharing moments increased the extent to which existentially isolated individuals liked and felt subjectively similar to their I-sharing partner, even when that person had noticeable objective differences from themselves. The findings on subjective similarity are of particular importance here, because feeling subjectively similar to another person means believing that they interpret and react to things in a similar manner. Subjective similarity can be conceptualized as a proxy for existential

connection, as increasing perceptions of subjective similarity should lead to a reduction in existential isolation.

In her investigation of the individual and interpersonal function of inside jokes, Mayo (2015) conceptualized inside jokes as a form of I-sharing. Mayo (2015, p. 48) defined an inside joke as “a reference to a previously shared experience that is designed to elicit a humor response from the *insiders*, a select group of people who were present during the initial experience.” Mayo (2015) posited that inside jokes may represent a humorous and motivated form of I-sharing. Specifically, inside jokes “reflect a purposeful merging of a humorous state of mind and recall a previously shared experience” (Mayo, 2015, p. 9). Moreover, Mayo expected that inside jokes would cause the same effects as I-sharing: namely, increased liking for the person with whom one shares an inside joke, and reduced existential isolation.

In a study that examined the connection between inside jokes and I-sharing, Mayo and Long (2014) found that personal liking of inside jokes was negatively correlated with existential isolation, thus suggesting the possibility that appreciating inside jokes may decrease feelings of existential isolation. In addition, participants read a series of scenarios that involved inside jokes. Some participants completed the existential isolation measure before reading these inside joke scenarios, and others completed it afterward. Participants who rated their experiences of existential isolation after reading the inside joke scenarios reported significantly more existential isolation than participants who rated their existential isolation before reading them. Observing other people’s inside jokes but not being included in them increased participants’ existential isolation. Just as sharing experiences is expected to reduce existential isolation, it appears that failing to share experiences, or *not* I-sharing, can increase existential isolation.

To study inside jokes as they happen in real time, Mayo (2015) created an inside joke between participants and a partner in an involving, high-impact, laboratory experiment. She found that, similar to the consequences of I-sharing, inside jokes increase liking for and perceptions of subjective similarity to the inside joker (Mayo, 2015). Importantly for the research proposed here, she also found that inside jokes reduce feelings of existential isolation. This research offers support for the notion that one way to decrease feelings of existential isolation is through shared subjective experiences.

Research suggests that I-sharing offers people an experience of existential connectedness, even if it is just for an instance. Moreover, it seems that I-sharing can be an especially powerful experience for people with high levels of existential isolation (Pinel & Long, 2012; Pinel et al., 2004; Pinel et al., 2006; Pinel et al., 2014). Creating an instance of I-sharing for existentially isolated individuals may be an effective intervention that helps to reduce feelings of existential isolation. Therefore, it was determined that creating a shared experience among participants would be an important component of the workshop presented here.

Improving empathic accuracy. In addition to a lack of I-sharing, another possible reason why people with high levels of existential isolation may feel as if they are interpreting the world differently from other individuals may stem from difficulty accurately understanding other people's emotional experiences and communicating with them about their feelings. In other words, people high in existential isolation may struggle with empathic accuracy. Ickes (1993) defined empathic accuracy as the ability to infer the feelings, thoughts, and intentions of another person. To gain a better understanding of empathic accuracy, it is important to understand the three phases that comprise empathy. The first phase of empathy is empathic understanding (Barrett-Lennard, 1981). Empathic understanding is the ability to correctly understand the

feelings or thoughts of another individual. The second phase, empathic expression, includes the capacity to communicate these inferred thoughts and feelings in a manner that matches the experience of the other individual (Barrett-Lennard, 1981). Finally, the third phase, empathic communication or received emotion, is the dialectical component of the empathy process; this is when the second person responds to the first person's understanding of their emotional experience (Barrett-Lennard, 1981). Empathic accuracy could be successful or not at each phase. However, training on empathic accuracy would be most important during the first and second phases. The third step is less important for training someone to improve their empathic accuracy because it focuses more on the receiver, not the person appraising the feelings.

Research supports the idea that empathic accuracy can be improved through practice and feedback. At pre-test, Barone et al. (2005) instructed graduate level psychology students to view parts of a videotaped therapy session and infer the feelings and thoughts of the client. The students' inferences were compared to the thoughts and feelings reported by the clients to assess the students' pre-test levels of empathic accuracy. Then, during the semester, students practiced inferring thoughts and emotions by participating in role-plays. Following the role-plays, students in the experimental group received immediate feedback about the accuracy of their inferences. Students in the control condition were not given feedback on their inferences following their role-plays. Although both groups had increased their levels of empathic accuracy at post-test, participants in the feedback condition displayed greater accuracy at inferring thoughts and feelings than those in the control group. While it is unclear the nature of the feedback that was given to the students, the results suggest that obtaining feedback about accuracy of inferences helps students to improve their empathic accuracy.

Empathic accuracy revolves around the ability to understand other people's emotions (Ickes, 1993). Although no existing work has examined a possible connection between existential isolation and empathic accuracy, related work has examined a similar construct: emotional contagion. Emotional contagion is the degree of emotional mimicry and synchronization to others' emotions (Doherty, 1997). Costello and Long (2015) assessed whether a relationship exists between existential isolation and emotional contagion. Results indicated a significant negative correlation between the two constructs; higher levels of existential isolation related to less emotional contagion. This finding suggests that the more disconnect people perceive between their own experiences and others' experiences, the less able they are to match others' emotions. Additionally, after controlling for social support, a significant negative correlation between existential isolation and emotional contagion remained. This finding indicates that there is a unique relationship between existential isolation and emotional contagion beyond the variance contributed by social support. Further, this finding offers additional empirical support for the distinction between existential isolation and interpersonal isolation.

This study also offers some intriguing findings regarding gender differences. First, men reported more existential isolation than women, a finding that corresponds with other research (Pinel et al., 2017). Results from this study also revealed a significant difference between men and women in their degree of emotional contagion, with men reporting significantly less emotional contagion than women. Men appear to have a harder time than women understanding and mimicking others' emotions. It is hypothesized that men's difficulty with understanding and mimicking emotions could be connected to societal pressures for men to not show emotions (Simon & Nash, 2004). Males may be encouraged to disconnect from their emotions, which may make it more difficult for them to understand and mimic the emotional experience of others. Men

having a harder time than women understanding others' emotions may make them feel alone in their experiences and contribute to higher levels of existential isolation.

Providing education and training on empathic accuracy should reduce existential isolation for several reasons. First, it is theorized by the researcher that if existentially isolated people improve their empathic accuracy, then they may realize that other people are perceiving, interpreting, and reacting to the stimuli around them in the same way as they are. Once these individuals have a better understanding of other people's thoughts and feelings, they may realize that their experiences are not that different from other people's experiences. Recognizing that other people share their experiences more frequently and to a greater degree than they previously believed should reduce their feelings of existential isolation. Second, being able to accurately identify others' experiences and communicate that understanding may help existentially isolated individuals to become more expressive about their own experiences. As a person becomes better at accurately articulating others' emotional experiences, they may grow more confident about their ability to express their own emotional experiences. When people express their own emotional experiences authentically, they may find that others validate and share those experiences. The third reason why improving empathic accuracy may reduce existential isolation draws on the link between existential isolation and emotional contagion. If empathic accuracy training improves the ability to mimic others' emotions, then that increase in synchronized emotions may make people feel more like they are sharing other people's experiences, which may reduce existential isolation. For all of these reasons, it was expected that increasing the ability of existentially isolated individuals to understand and match the emotions of other people might help to reduce their feelings of existential connection.

Validating others' emotions. Individuals high in existential isolation report feeling like other people do not interpret or react to experiences in the same way as they react to them (Yalom, 1980; Pines et al., 2017). As previously discussed, some people suffer more from existential isolation than others and this may be due to difficulty identifying other people's perspectives. If existentially isolated people have trouble seeing another person's perspective, then they will have difficulty determining whether that person's perspective or interpretation is similar to their own. In a study examining existential isolation and interpretation of inkblots, results indicated that the more existentially isolated people were, the more difficulty they had seeing other people's interpretation of the inkblots (Long & Costello, 2015). Learning how to validate other people's experiences could reduce existential isolation, by helping people to see one another's perspectives, and therefore to share one another's perceptions, interpretations, and even reactions to the world around them.

Linehan (1993) developed Dialectical Behavioral Therapy (DBT) for the treatment of borderline personality disorder. DBT has been established as the treatment of choice for features of borderline personality disorder; specifically, the components of DBT are helpful for reducing impulsivity, emotional dysregulation, self-harm, interpersonal problems, and suicidal behaviors (Stoffer et al., 2012). One important facet that is included in DBT is the use of validation. Linehan (1993) defined validation as the process "to conform or strengthen what is relevant, true, or effective about a response, be it a thought, emotion, physical sensation, or action. Validation requires empathy (the accurate understanding of the person's experience), but validation also includes the communication that the person's response makes sense."

Linehan (1997) argued that validation and empathy have two important similar characteristics, but also have an important difference. One similarity is that empathic expression

is inherently validating because when a person acknowledges the emotional state of another person, they are suggesting that they understand those feelings. Second, validation always includes recognition and acknowledgment of another person's experience, which is empathic understanding. However, validation and empathic expression have one key difference. In empathic expression, a person only communicates inferred thoughts and feelings with another individual. In contrast, when a person validates another person, they are communicating that they heard what the person said and that the person's feelings or behaviors are inherently valid (Linehan, 1997).

Linehan (1997) included validation as an important component of the treatment for patients with borderline personality disorder, and it is argued here that the steps in the validation process could be helpful for people experiencing existential isolation. People with high levels of existential isolation may have difficulty seeing other people's perspectives and interpretations, as Long and Costello (2015) discovered in their investigation of existential isolation and inkblot interpretation. Validation training may help people with high existential isolation take other people's perspectives and better understand their interpretations, leading to a reduction in existential isolation. Another reason that validation training may reduce existential isolation stems from Linehan's (1997) point that validation helps build the relationship between the client and the therapist. When the therapist validates the client, the client feels understood and feels that their experiences are valid, and the client begins to feel closer to the therapist. The therapist then gains the positive reinforcement of seeing that their use of validation is creating change in the client and improving their relationship. It is hypothesized that if existentially isolated individuals improve their ability to validate other individuals, then their relationships with other people may improve. As other people feel validated by an existentially isolated person, they will

grow to trust them and want to be closer with them, which could help foster relationships. Both people end up feeling closer to each other. If those feelings of closeness lead them to spend more time together, they will have increased opportunities to share experiences, again leading to a decrease in existential isolation.

Linehan (1997) broke down validation into six different levels that help therapists improve their skills at validating other people's emotions. Learning these steps of validation may help existentially isolated individuals better understand others' perspectives and validate others' emotions. The levels of validation make an ambiguous, conceptual idea (validation) concrete and specific. Being able to convey the steps of validation assists with training people how to validate other individuals. The first step is for individuals to be open and present. In this level, individuals are encouraged to stop what they are doing, lean forward in conversation, and show they are paying attention. Individuals should listen carefully, hear the facts, and ask pertinent questions. It is important that people hear all of the information before forming an opinion. The second level of validation is exhibiting accurate reflection. Individuals need to communicate to the person that they have heard what they are saying accurately and without bias. The third level of validation is guessing unstated feelings or reading between the lines. In this level, an individual formulates a hypothesis about what they think the other person is trying to articulate. The fourth level of validation considers past history or biology; an individual should let a person know that their behavior makes sense based on their past experience. Recognizing how the past influences a person's thoughts and emotions in the present shows a higher level of understanding. The next level includes validating in terms of present events and the way that most people would react. This includes communicating that others would have a similar response, if they would; this helps people feel less isolated in their experiences. At this level of validation, it is also important to

avoid shaming or sending a message that the individual is defective. However, it is also important not to normalize a behavior that is not actually normal. The final stage of validation is radical genuineness; this means that an individual should be completely genuine with the individual whom they are attempting to validate. It is important to not marginalize or talk down to the person in a vulnerable state. However, it is also important to not treat the individual as if they are fragile or are not capable of handling the situation (Linehan, 1993).

It is hypothesized that existentially isolated people will benefit from learning validation skills and gaining a better understanding of other people's perspectives. As existentially isolated people become more aware of how to validate other people's experiences, their levels of existential isolation should reduce. They will begin to validate others' perspectives, and therefore be able to share others' perceptions, interpretations, and even reactions to the world around them.

Universality. Yalom (2005) stated that when people enter therapy, they often believe that they are the only person who has experienced the struggles they are enduring. They often believe that they are the only one who has had unacceptable or troublesome thoughts, problems, or impulses. Of course, it is true that to some extent, each person's experiences are unique; however, Yalom (2005) argued that because of some people's extreme isolation, they have an inflated sense of the uniqueness of their experiences. This isolation stops these individuals from having opportunities to confide their struggles with one another, leading to a lack of validation and acceptance from other individuals. Supporting Yalom's perspective, Costello and Long (2014) found that existential isolation was positively correlated with self-concealment. Individuals high in self-concealment express reluctance about revealing personal information to other individuals (Larson & Chastain, 1990). Costello and Long's (2014) results suggest that

people with higher levels of existential isolation may be less likely to confide their struggles with other individuals, leaving them further isolated.

Individuals' belief that their experiences are unique and that no one else has ever experienced their struggles is what makes group therapy so powerful. In a therapy group, clients' feelings that they are alone in their experiences are often disconfirmed. Being a member of a group helps people see that what they are going through is universal and that they are not alone in their experiences (Yalom, 2005). Yalom (2005) argued that increasing awareness of universality is a key feature that makes group therapy successful and therapeutic. As people begin to realize that they are not alone in their struggles, they begin to improve.

According to Yalom's (2005) principle of universality, there are no human behaviors or thoughts that another person has not experienced. Even though humans' problems can be complex, there are certain common similarities between all people. Universality helps individuals feel like they are not different from other people and they do not feel as alone in their struggles and experiences. As people become more aware of the universality of experiences, they become more comfortable because they know they are not different from other people.

People with high levels of existential isolation feel alone in their experiences, as though no one else can understand the way that they perceive, interpret, and react to the world around them (Yalom, 1980). It seems that the therapeutic principle of universality could assist people who are struggling with feelings of existential isolation. Feeling alone in their experiences is something that many people struggle with in their lives (Yalom, 1980); however, people with feelings of existential isolation may believe that they are the only ones struggling with these feelings. When people feel alone in their experiences, they often do not know that this experience is existential isolation. Furthermore, people experiencing existential isolation often

are unaware that other people also sometimes feel alone in their interpretations of the world around them. Therefore, education on existential isolation may be helpful in reducing those feelings. Discussing the common experience of existential isolation may help individuals feel less alone in their experiences. One human can never know exactly what another human experiences; therefore, most people have experienced existential isolation at some point in their lives (Yalom, 1980). Learning that others experience existential isolation too points out a shared experience, which should reduce feelings of existential isolation. Additionally, learning that they are not alone in their experience of existential isolation should make those feelings less threatening. For these reasons, it was determined that helping participants see that they are not the only person who experiences existential isolation would be an important component of the workshop. As participants begin to see that they are not unique in their experience of existential isolation, they may begin to see that they are not as alone in their experiences and interpretations of the world as they might have thought.

Authenticity. Rogers (1957) hypothesized that there are three necessary and sufficient therapeutic conditions that lead to personality change in a client: unconditional positive regard, empathy, and genuineness. Unconditional positive regard is the concept that the therapist accepts the client without any conditions. For example, a therapist would not put a condition of worth on the client, such as liking a client only if they behave in a certain manner. Empathy is understood as the therapist having an accurate understanding “of the client’s awareness of his own experience” (Rogers, 1957, p. 99). The concept of empathy relates to the previously discussed concepts of empathic accuracy and validation. As people increase their ability to effectively empathize with another individual, then their ability to effectively validate another person’s experiences should also improve. Finally, the last necessary component for therapeutic change is

genuineness or authenticity. Genuineness in the therapeutic relationship means that the therapist is “deeply themselves” in their relationship. The therapist should have self-awareness and be free to express themselves; they should not present a façade. The therapist’s authenticity improves the therapeutic alliance with the client and facilitates the client’s personality change.

Lambert’s (1992) research on therapy outcomes and factors that contribute to change indicated that common factors, including genuineness, account for 30 percent of clients’ therapeutic outcomes. Authenticity allows for a collaborative process and strong alliance between the therapist and client and this is more important to positive outcomes in therapy than which theory of change (CBT, psychodynamic) is implemented (Lambert, 2013).

The research indicates that a therapist’s genuineness is powerful for creating change because it improves the relationship between the therapist and client. For example, Jung, Wiesjahn, Rief, and Lincoln (2015) investigated the specific therapist factors that explain the therapeutic alliance in cognitive behavioral therapy for psychosis. All therapist characteristics (empathy, genuineness/authenticity, positive regard, competence, and convincingness) were positively related to the patients’ rating of the alliance. However, results indicated that the therapist’s perceived authenticity was the strongest predictor of the therapeutic alliance in the study. In a population with increased levels of paranoia, the fact that genuineness was so important for the therapeutic alliance supports the notion that being authentic is important for building relationships and connections.

The research on the importance of authenticity in the therapeutic relationship is helpful for informing research designed to reduce existential isolation. Highly existentially isolated individuals report feeling alone in their experiences, as though no one understands the way they perceive the world around them (Yalom, 1980). The research indicates that being authentic in a

therapy relationship helps improve the connection between the two individuals in the relationship (Lambert, 1992; Lambert, 2013; Jung et al., 2015). Consequently, it is hypothesized that existentially isolated individuals may decrease their experiences of existential isolation if they improve their ability to be genuine in their relationships. The more that people can genuinely express their emotions, the more other people may feel connected to them. Furthermore, authenticity means accurately reflecting and communicating their experiences, which should help them discover points of similarity between their own and other people's experiences. It is difficult – if not impossible – for people to realize that they have shared a perception, reaction, or interpretation if they do not express their perceptions, reactions, and interpretations genuinely.

Leary (2003) indicated that people's ability to be authentic is tied to their social connection. When people exhibit their true selves and feel as if other people accept them, they become more comfortable revealing their authentic self in future situations. However, when people feel existentially isolated, they may feel different from other people and less comfortable being their authentic self. Trying to be authentic can cause anxiety for many people because it means expressing one's true self and being vulnerable to other people's reactions (Kernis & Goldman, 2006). It can be hurtful to express one's authentic self and be rejected by others. It is hypothesized that this fear could cause people who feel existentially isolated to not communicate their true feelings or interpretations because they worry that those feelings and interpretations will differ from those of other people. However, if existentially isolated individuals were more open about their experiences, they may realize that other people will validate their experiences and express similar experiences. If existentially isolated individuals conceal their experiences, how will they ever discover that other people may have similar experiences?

As discussed previously, increasing existentially isolated people's ability to validate others may reduce existential isolation because it will help them to better understand others' perspectives. Additionally, learning how to validate others' experiences may increase existentially isolated people's ability to be authentic in their relationships, because authenticity is a component of validating others' experiences. If existentially isolated people get better at understanding others' experiences and are genuine in their validation, then authenticity may increase and existential isolation may decline. Increasing authenticity is hypothesized to help in the reduction of existential isolation.

Components of the Existential Connection Workshop

I-sharing

I-sharing has been theorized as an effective way of reducing existential isolation (Pinel et al., 2006), and research supports the role that I-sharing may play in reducing existential isolation (Mayo, 2015; Pinel et al., 2014). Therefore, the workshop included the component of two shared experiences. The shared experiences involved watching two video clips that were expected to elicit humor in the participants. Pilot testing of video clips was performed to ensure that the selected videos would elicit humor in participants. One hundred thirty-three undergraduate students watched 20 video clips and rated how humorous they found each video. The highest rated videos were selected for the workshop. Humor is a powerful emotion that, when shared, can spark feelings of I-sharing (Mayo, 2015; Pinel et al., 2006). The component of shared experiences in the workshop was hypothesized to immediately reduce existential isolation.

Existential Isolation and Universality

Yalom (1980) stated that many people do not know about existential isolation and when they are struggling, do not realize that they are experiencing existential isolation. Consequently, education about existential isolation and discussion about experiences of existential isolation were important for the workshop. It was expected that this discussion would be helpful in promoting the idea of universality. Many people feel alone in their experiences; therefore, naming their experience as existential isolation and realizing that other people have similar experiences was hypothesized to be helpful for the participants. Yalom (2005) stated that an understanding of the universality of struggles in group therapy is a key component in producing change. Extrapolating from the context of group therapy to the context of the workshop, it was expected that helping participants comprehend the universality of existential isolation would lead to a reduction in their existential isolation.

Authenticity

As previously mentioned, increasing authenticity was hypothesized to reduce existential isolation because as people are more authentic, they may realize that others are having similar experiences. Additionally, it was theorized that authenticity has reinforcing effects. When people are authentic and another person relates to that true experience, then they are more likely to continue to be authentic. During the workshop, participants were asked to describe an experience of existential isolation from their own lives. They were encouraged to be authentic when describing the experience, and they received positive reinforcement for their authenticity from the other participants or from the workshop leader.

Validation and Empathic Accuracy Training

Validation training geared toward educating people on how to validate other people's experiences and emotions was another component of the workshop. Linehan's (1993) DBT has been successful in the treatment of borderline personality disorder and an important component of that treatment is validation. Validation is important in therapy because it improves relationships and people's ability to recognize other people's points of view. Improving validation skills for existentially isolated individuals should have the same effect. If someone experiencing existential isolation learns to validate others, then they should be able to connect with others in a more effective manner. It was hypothesized that, by learning to validate others, workshop participants would gain a better understanding of other people's experiences, which would improve their empathic accuracy, and allow them to see that their experiences are not that different from other people's experiences.

Summary of the Research

In summary, the present research contained three important foci. The research aimed to replicate previous research that has uncovered relationships between existential isolation and psychological variables and physical health. The research also examined gender in the context of existential isolation. Finally, the final focus was to create a workshop designed to reduce existential isolation, and to evaluate its effectiveness.

CHAPTER III

METHOD

Brief Overview of the Research Methodology

The current research was comprised of three phases. Phase 1 was an online survey. During this phase, participants completed self-report measures assessing existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, perceived social support, depression, self-concealment, overall physical health, and interpersonal isolation. Phase 1 helped address all three goals of the research. One of the goals of the research was to replicate the previous research examining the relationship between existential isolation and psychological and physical health correlates (Costello & Long, 2014; Pinel et al., 2014; Pinel et al., 2017). Phase 1 examined this goal by recruiting a large sample of participants and inviting them to complete measures of existential isolation and relevant psychological and physical health variables. Additionally, the online survey addressed the goal of examining gender in the context of existential isolation in two ways. It sought to replicate the previously observed gender difference in existential isolation (Pinel et al., 2017). It also assessed the relationship between existential isolation and the correlates separately for men and women to determine whether gender moderated any of the relationships. Finally, Phase 1 served as the pre-test measurement of the variables that were hypothesized to be influenced by participation in the Existential Connection Workshop. With the pre-test measurement, it was possible to examine whether workshop participants experienced any changes on these variables from before the workshop to after the workshop.

In Phase 2, the Existential Connection Workshop was administered. The two-hour workshop included several possible interventions for reducing existential isolation, including

existential isolation psychoeducation, universality, validating emotions, authenticity, and two I-sharing experiences. To assess the effectiveness of the interventions at reducing existential isolation, participants completed a survey assessing existential isolation and related constructs immediately after the workshop. This phase of the research addressed two goals of the research. It sought to determine whether the workshop was effective at reducing existential isolation and improving related outcomes among participants. It also sought to examine the role that gender might play in reactions to the workshop.

Phase 3 was another online survey that was identical to the Phase 1 online survey. Any participant who completed Phase 1 was eligible to complete Phase 3. The goal of this phase of the research was to examine changes in existential isolation and related variables that may have occurred between Phase 1 and Phase 3 of the research. The intent was to recruit a sample of participants who participated in the workshop, and a sample of participants who did not participate, to assess changes over time in the two groups.

Phase 1: Replicating the Relationship Between Existential Isolation and Psychological and Physical Health Variables

Aims

Phase 1 contained three important aims. The research aimed to replicate previous research that has uncovered relationships between existential isolation and psychological variables and physical health. The research also examined gender in the context of existential isolation. Finally, the final aim for Phase 1 was to create a pre-test measurement of the variables that were hypothesized to be influenced by participation in the Existential Connection Workshop.

Participants

Pre-screen. During the semester of data collection, the Existential Isolation Scale (EIS; Pinel et al., 2017) was included in the pre-screening survey administered to all members of the General Psychology research participation pool. All students who completed the pre-screening survey were eligible to participate in the study.

Existential isolation was measured on a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). For the 557 participants who completed the EIS during the pre-screening, there was a mean score of 5.03. The minimum score was 2.2 and the highest reported score was 8.0.

Participant characteristics. Four hundred and one undergraduate students participated in Phase 1. The sample consisted of 177 males (44.1%), 223 females (55.6%), and one transgender individual (.2%). Participants were between the ages of 18 and 29 with an average age of 18.92 years ($SD = 2.30$), and they identified their ethnicity as Caucasian (79.8%), Black (9%), Latino (2.7%), Asian American (2.2%), and Biracial (4.2%); some participants (2.1%) chose not to identify their ethnicity. More than 50 percent of the participants reported moderate to high levels of existential isolation (indicating a score greater than 4.5) during the Phase 1 measurement of existential isolation.

Procedure

Participants chose to participate in the online survey by signing up for the study on the research participation website where all active psychology studies are posted. Participants completed self-report measures assessing the following constructs: existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, perceived social support, depression, self-concealment, overall physical health,

interpersonal isolation, and demographics. They were administered these assessments via an online survey after providing their informed consent (Appendix J). Participants received a debriefing form (see Appendix L) after completing the self-report measures.

Measures

Existential isolation. The focus of this research was existential isolation; therefore, participants completed the Existential Isolation Scale (Pinel et al., 2017), which contains six items that assess the extent to which the individual feels alone in their experiences. This measure demonstrated acceptable internal consistency (Phase 1 $\alpha = .77$; Phase 2 $\alpha = .63$; Phase 3 $\alpha = .79$). Participants rated their agreement with each statement; for example, “Other people usually do not understand my experiences” and “I usually feel like people share my outlook on life” (reverse scored). All items were answered using a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). See Appendix A for the complete list of questions.

Generalized anxiety. Research has documented a positive correlation between existential isolation and generalized anxiety (Costello & Long, 2014). To assess generalized anxiety, participants completed the 20 state-oriented items from the Spielberger (1989) State-Trait Anxiety Measure (Phase 1 $\alpha = .93$, Phase 2 $\alpha = .95$; Phase 3 $\alpha = .92$). Only the items assessing state anxiety were included because it was hypothesized that a state measure would be more sensitive to changes produced by the workshop. Participants responded to these items on a Likert scale ranging from 1 (not at all) to 9 (very much). An example of an item on this scale is: “I worry too much over something that really doesn’t matter.” See Appendix B for the complete list of questions.

Social anxiety. Research indicates that there is a positive correlation between existential isolation and social anxiety (Costello & Long, 2014). To assess social anxiety, participants completed the Liebowitz Social Anxiety Scale (Fresco et al., 2001). This measure has excellent reliability (Phase 1 alpha = .96; Phase 2 alpha = .97; Phase 3 alpha = .97). It contains 24 items that assess both performance anxiety and social situation anxiety. Participants rated their level of fear regarding situations like “Participating in small groups” and “Being the center of attention.” Participants responded to these items on a Likert scale ranging from 1 (not at all) to 9 (very much). See Appendix C for the complete list of questions.

Autonomy, competence, relatedness, and life satisfaction. Pinel et al. (2014) reported that existential isolation is negatively correlated with basic needs, including autonomy, competence, and relatedness (Ryan & Deci, 2000). To assess these constructs, participants completed a measure that includes sample items from Gagne (2003) and additional items developed by Costello and Long (2014). Four items assess autonomy (e.g., “I feel like I can decide for myself how to live my life”; Phase 1 alpha = .81; Phase 2 alpha = .76; Phase 3 alpha = .84). Four items assess competence (e.g., “I am effective at getting things done”; Phase 1 alpha = .72; Phase 2 alpha = .55; Phase 3 alpha = .70). Four items assess relatedness (e.g., “I have meaningful relationships with others”; Phase 1 alpha = .63; Phase 2 alpha = .67; Phase 3 alpha = .76). In addition, this measure included seven items written by Costello and Long (2014) to assess overall life satisfaction (e.g., “I am happy with my life”; Phase 1 alpha = .91; Phase 2 alpha = .91; Phase 3 alpha = .88). Participants responded to these items on a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). See Appendix D for the complete list of questions.

Self-esteem. Pines et al. (2017) found that existential isolation is negatively correlated with self-esteem. To assess self-esteem, participants completed the State Self-Esteem Scale (Heatherton & Polivy, 1991). The State Self-Esteem Scale is a 20-item self-report measure that examines global self-worth. The scale includes three subscales that assess performance self-esteem (e.g., “I feel confident in my abilities”; Phase 1 $\alpha = .83$; Phase 2 $\alpha = .81$; Phase 3 $\alpha = .79$), social self-esteem (e.g., “I am worried about whether I am regarded as a success or failure”; Phase 1 $\alpha = .86$; Phase 2 $\alpha = .82$; Phase 3 $\alpha = .84$), and appearance self-esteem (e.g., “I feel satisfied with the way my body looks right now”; Phase 1 $\alpha = .87$; Phase 2 $\alpha = .89$; Phase 3 $\alpha = .87$). Participants responded to these items on a Likert scale ranging from 1 (not at all) to 9 (very much). See Appendix E for the complete list of questions.

Perceived social support. Perceived social support represents an individual’s cognitive appraisal of the social assistance and resources available to them from other individuals (Ross, Lutz, & Lakey, 1999). Considering that a moderate positive correlation exists between existential isolation and interpersonal isolation, and that social support is a form of interpersonal connection, a measure of perceived social support was included to assess the possibility that perhaps a moderate negative correlation between existential isolation and social support may exist. To assess perceived social support, participants completed the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988). This is a 12-item self-report measure that had good reliability (Phase 1 $\alpha = .93$, Phase 2 $\alpha = .97$; Phase 3 $\alpha = .92$). Participants responded to these items (e.g., “My family really tries to help me”) on a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). See Appendix F for the complete list of questions.

Depression. Previous research has discovered a positive association between existential isolation and depression (Costello & Long, 2014). To assess depression, participants completed the Center for Epidemiological Studies Depression Scale, CES-D (Radloff, 1977). This measure had good reliability (Phase 1 alpha = .84; Phase 3 alpha = .84; depression was not assessed at Phase 2). It contains 20 items and participants report how often they have felt or behaved in a manner consistent with symptoms of depression during the last week. For example, “I was bothered by things that usually don’t bother me” and “I had restless sleep” are two items on the scale. Participants responded to these items on a Likert scale ranging from 1 (not at all) to 9 (very much). See Appendix G for the complete list of questions.

Self-concealment. Costello and Long (2014) determined that people who experience higher levels of existential isolation seem to be at an increased risk for engaging in self-concealment. Therefore, participants completed the Self-Concealment Measure (Larson & Chastain, 1990), which contains 10 items that assess the extent to which participants conceal from others personal information that they perceive as distressing. This measure had good reliability (Phase 1 alpha = .90; Phase 3 alpha = .92; self-concealment was not assessed at Phase 2). Participants indicated agreement with the items; for example, “I have an important secret that I have not shared with anyone” and “Some of my secrets have really tormented me.” Participants responded to these items on a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). See Appendix H for the complete list of questions.

Overall physical health. Research indicates that existential isolation is related to lower overall physical health (Costello & Long, 2014). To assess physical health, participants answered the following question: “In a physical sense, how healthy do you feel right now?” Participants responded to this question on a Likert scale ranging from 1 (not at all) to 9 (very healthy).

Interpersonal isolation. Existential isolation is a different phenomenon than interpersonal isolation (Yalom, 1980; Pinel et al., 2017), and Costello and Long's (2014) research indicates that existential isolation has a unique relationship with psychological and physical health correlates beyond the variance contributed by interpersonal isolation. However, research has found a moderate positive correlation between existential isolation and interpersonal isolation (Pinel et al., 2017). To assess interpersonal isolation, participants completed three items from the UCLA Loneliness Scale (Russell, 1996) that appear to tap into "pure" interpersonal isolation without including aspects of existential isolation. The selected items included: "How often do you feel a lack of companionship?", "How often do you feel part of a group of friends?" (reversed), and "How often do you feel you can find companionship when you want it?" (reversed). Participants responded to these items on a Likert scale ranging from 1 (never) to 9 (always). This measure had adequate reliability (Phase 1 alpha = .74; Phase 3 alpha = .76; interpersonal isolation was not assessed at Phase 2).

Demographics. Participants completed a demographics questionnaire. Participants answered questions about their age, gender, and race/ethnicity. See Appendix I for the complete list of questions.

Phase 2: Existential Connection Workshop

Aims

The Existential Connection Workshop was designed to reduce existential isolation. The aims for Phase 2 were to implement the workshop, and to evaluate its effectiveness at reducing existential isolation and improving related outcomes.

Participants

Eligibility criteria. The Existential Connection Workshop was geared toward people with high existential isolation, and it was designed to reduce their feelings of existential isolation. Because the workshop was designed to target people with high existential isolation, the original research plan indicated that only participants with high existential isolation would be eligible to participate. When the Existential Connection Workshop was initially made available, only those students whose existential isolation scores on the pre-screening survey were in the top half of the range of scores that were reported were eligible to sign up. Approximately 25 workshop sessions were advertised for potential participants; however, the majority of the sessions did not fill and had to be cancelled. Due to difficulty recruiting participants with high existential isolation scores, the study was eventually made available to everyone who completed the pre-screening survey.

Workshop sessions. It was initially decided to recruit eight participants per session because six to eight people is usually the ideal number for group discussions (Yalom, 2005). Additionally, Levine and Moreland (1998) stated that people prefer small groups when interaction is important to the purpose of the group. Fiske (2010) stated that as groups get larger, members of the group become unhappy. Therefore, a small group that encourages interactions was chosen for the workshop. It was expected that, with eight participants signed up for each session, there would still be an adequate number of participants to run a meaningful workshop if some of the participants failed to attend. Because of difficulty with recruitment, however, the size of the group required to run a session was eventually reduced to three. Each workshop was conducted with single-sex groups. It was expected that single-sex groups would allow participants to be more forthcoming and authentic in the group discussion. For

example, research has shown that women with substance use disorders reported feeling safer, embracing all aspects of themselves, having their needs met, feeling intimacy, empathy, honest, and more group cohesion when they were in a single-sex group compared to a mixed-sex group (Greenfield, Cummings, Kuper, Wigderson, & Koro-Ljungberg, 2013). Of the 25 advertised workshop sessions, only four had enough participants sign up to allow them to be conducted. Two of these sessions were for females, and two were for males. Three participants attended each of the workshops for females. Four participants attended the first workshop for males, and seven attended the second workshop for males.

Workshop participants. Seventeen undergraduate students participated in the workshop. The sample consisted of 11 males (64.7%) and six females (35.3%). Participants were between the ages of 18 and 21 with an average age of 18.82 years ($SD = .81$), and they identified their ethnicity as Caucasian (76.5%), Black (11.8%), and Biracial (11.2%).

Procedure

At the start of the workshop, participants came into the laboratory in groups of three to seven, where an experimenter greeted them, provided an overview of the study, and administered the informed consent form (See Appendix K). The same experimenter conducted every workshop. The experimenter was a female, advanced clinical psychology doctoral student with knowledge about existential isolation, and with experience in leading group sessions and therapeutic interventions.

Following completion of the informed consent procedure, participants engaged in two ice breaker activities to try to build rapport and make them feel more comfortable. The first ice breaker activity was a name tag activity where participants wrote their name and drew a few pictures of things that they liked on their name tag. Each participant then introduced themselves

and explained what they drew on the name tag. This activity is often used in group therapy to help build rapport between participants. In the second ice breaker activity, the participants were asked to think of someone, real or fictional, whom they identified as being similar to themselves. Then each participant was asked to share with the group whom they thought was similar to them and why.

Existential isolation psychoeducation. After the ice breaker activities, each participant was asked to write a short essay describing a time when they felt like they reacted differently than other people around them to a situation. After they were finished writing, an introduction to the workshop was delivered; participants were told that they would obtain skills to help reduce their feelings and experiences of existential isolation. Additionally, psychoeducation about existential isolation was delivered by the experimenter. Existential isolation was defined for the group and examples of existential isolation were described. The experimenter led a discussion between the participants about their experiences of existential isolation. During the discussion, the participants were asked to draw on the essay they wrote describing an experience when they reacted differently to a situation than the others around them did. The discussion included the following questions and statements: Can you identify having this experience? How does this sort of experience make you feel? How do you handle such experiences? Describe a time when you had a similar reaction to another person and how that made you feel. Describe a time when you had a different reaction than other people and how that made you feel. Are there certain times when you feel more existentially isolated than other times? Do you want to change your level of existential isolation and/or the amount of time you experience existential isolation?

Universality. Following the discussion of existential isolation, the experimenter shifted focus to the concept of universality. Universality was defined as the notion that there is no human action or thought that lies outside the experience of another person; there is no experience that another human has never encountered (Yalom, 2005). This discussion centered on the idea that even if a person feels alone in their experiences, they are not the only person to have felt this way. This component of the workshop was intended to normalize the experience of existential isolation and help the participants realize that other people endure these difficulties. Additionally, it was expected that this discussion would help the participants feel less threatened by their experiences of existential isolation. Knowing that other people experience existential isolation too should help participants realize that it does not have to be a disconcerting experience. Becoming aware that other people have similar experiences of existential isolation should help participants feel like they are not odd or an outcast and stop them from blaming themselves for not fitting in with other people.

Validating emotions. Following the discussion on universality, the workshop focused on validating others' emotions and increasing participants' ability to convey their own emotions to other people. Psychoeducation about why it is important to validate the emotions of other people was presented. Validating the emotions of other people shows that a person is paying attention to others and acknowledging their emotions and experiences. Additionally, validating another person's experiences helps an individual gain a better understanding of how another person is interpreting the world around them. When a person validates someone else's experience, they are recognizing that the person's experience is real and valuable. Participants learned that validating others will help them see other people's perspectives. Long and Costello (2015) found that more existentially isolated individuals had more difficulty seeing other people's interpretations of

inkblots. It was expected that validation training would help individuals recognize others' experiences, understand their perspectives, and then validate those perspectives. It was expected that this training would reduce existential isolation because understanding the emotional experiences of others would help participants share those experiences.

Following the psychoeducation, the components of validation were discussed. The components of validation include: acknowledging the other person's feelings, identifying the feeling, offering to listen, can include helping a person to label their feeling, being there for a person (physically and emotionally), feeling patient, and being accepting and nonjudgmental (Linehan, 1997). Linehan argued that these components of validation help people feel like their reactions and interpretations are understood by other people. Additionally, being able to validate another person's experience helps an individual feel connected to that person; effective validation helps strengthen relationships and helps people gain a clearer understanding of the other people in their lives (Linehan). Linehan's six helpful tips for validating another person's experience and emotions were delivered in the workshop (See Appendix O).

Authenticity. Following the validation discussion, the topic of the workshop shifted to participants' ability to convey their own emotions and experiences and to be more authentic in their relationships. This part of the workshop addressed the importance of conveying emotions and how improving the ability to convey emotions can help decrease feelings of existential isolation. Discussion about why the participants think communicating is important and how communication is related to feelings of existential isolation was facilitated by the leader. The discussion included the importance of authenticity and the idea that a person may feel more authentic if they are able to honestly communicate their experiences to other individuals (Yalom, 2005). The reinforcing effects of receiving positive feedback for being their true self were

explained. For example, people are more likely to continue to be authentic and express their true experience if they get positive feedback after expressing their experiences (Yalom, 2005).

After the education about the tips for validating another person and being authentic, each participant told the group about an experience that made them feel existentially isolated. This exercise allowed participants to practice what they learned about communicating their emotions authentically. After each person told the group about their experience of existential isolation, the other participants and the workshop leader tried to use the tips to validate the person's experience.

I-sharing experiences. Finally, the workshop included an I-sharing component. Because people who are experiencing a high degree of existential isolation feel alone in their experiences, sharing an identical, simultaneous experience with another person may be a potent way of reducing these feelings. Creating an experience where the participants would likely have the same reaction was of critical importance for the workshop; therefore, materials that would be likely to elicit a quick, automatic, affective reaction were considered to be ideal. Materials that elicit feelings of humor were selected.

Two shared experiences of humor were implanted in the workshop. Pilot testing was performed to identify two videos that were certain to elicit humor in a sample of undergraduate students. In the pilot testing, 133 undergraduate students were shown 20 humorous videos and were asked to rate how funny they thought each video was on a Likert scale ranging from 1 (not funny at all) to 9 (very funny). The two videos rated the funniest by female participants were selected for the female workshops and the two videos rated funniest by male participants were selected for the male workshops. The same video was rated the funniest by both males and females, so it was shown in both the male and female workshops (see Appendix P).

During the workshop, participants watched both video clips and were encouraged to convey their reactions as they were watching the clips so as to highlight the immediacy of the shared experience. It was expected that participants would have similar responses, and the participants did react similarly, with humor. After they revealed their reaction, participants were asked to discuss how it felt having similar reactions to other people in the group. It was expected that sharing the reaction of humor with several other people would be a powerful shared experience that would decrease feelings of existential isolation in the workshop participants. Some workshop participants indicated that they were aware when other members were laughing when they laughed, and felt comforted by having a similar reaction.

Immediate posttest. At the end of the workshop, participants completed the same assessment battery that they completed during Phase 1, including the same measures of existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, and perceived social support. However, the depression, self-concealment, physical health, and interpersonal isolation measures were not included during the immediate posttest because, as trait measures, it was not expected that they would be sensitive to recent changes produced by the workshop. In addition, the immediate posttest included a measure that asked participants to provide feedback on the workshop, the usefulness of the information, and their predictions about using the skills in their everyday life (see Appendix Q). Participants received a debriefing form (see Appendix M) after completing the assessments, and then they were thanked for their time and excused.

Phase 3: Online Survey

Aim

The aim of this phase of the research was to assess any changes in the measured variables from Phase 1 to Phase 3. The intent was to recruit a sample of participants who participated in the workshop, and a sample of participants who did not participate, to compare any observed changes over time in the two groups. Additionally, collecting data from people who did not participate in the workshop allowed for an examination of naturally occurring changes in these variables over the course of the semester.

Participants

Workshop participants. Four participants who completed the Existential Connection Workshop also completed Phase 3. The sample consisted of four males (100%) and zero females (0%). Participants were 19 years of age, and they all identified their ethnicity as Caucasian (100%).

Control participants. Sixty-one undergraduate students who did not take part in the Existential Connection Workshop participated in Phase 3. The sample consisted of 36 males (59%) and 25 females (41%). Participants were between the ages of 18 and 24 with an average age of 19.31 years ($SD = 1.40$), and they identified their ethnicity as Caucasian (73.8%), Black (9.8%), Latino (3.3%), Asian American (4.9%), and Biracial (4.9%). Some participants (3.3%) did not identify their ethnicity.

Procedure

A week after all the workshops concluded, all participants who participated in Phase 1 were eligible to participate in the Phase 3 online survey. After providing their informed consent (see Appendix J), participants completed the same assessments as at Phase 1, including measures

of existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, perceived social support, depression, self-concealment, overall physical health, and interpersonal isolation. After completing the survey, participants received a full debriefing (see Appendix N) describing the purpose of the research. Anyone who participated in Phase 1 or Phase 2 of the study but did not participate in Phase 3 was emailed the debriefing form so that they could learn about the purpose of the research.

Hypotheses

Replicating the Relationship Between Existential Isolation and Psychological and Physical Health Correlates

Positive correlations. It was hypothesized that existential isolation would be positively correlated with generalized anxiety, social anxiety, self-concealment, depression, and interpersonal isolation.

Negative correlations. It was hypothesized that existential isolation would be negatively correlated with autonomy, competence, relatedness, life satisfaction, performance self-esteem, social self-esteem, appearance self-esteem, overall physical health, and perceived social support.

Gender and Existential Isolation

Gender difference in existential isolation. It was hypothesized that male participants would report higher levels of existential isolation than female participants.

Gender as a potential moderator. It was hypothesized that gender would not moderate the relationship between existential isolation and the psychological and physical health correlates.

Examining the Effectiveness of the Existential Connection Workshop

Decrease in variables. It was hypothesized that participants in the Existential Connection Workshop would report lower levels of existential isolation, generalized anxiety, social anxiety, depression, and self-concealment after completing the workshop compared to their scores before the workshop.

It was hypothesized that participants in the Existential Connection Workshop condition would have lower levels of existential isolation, generalized anxiety, social anxiety, depression, and self-concealment compared to the participants in the control group at the end of the study.

Increase in variables. It was hypothesized that participants in the Existential Connection Workshop would report higher levels of autonomy, competence, relatedness, life satisfaction, self-esteem, and overall physical health at the end of the study in comparison to their scores before the workshop.

It was hypothesized that Existential Connection Workshop participants would report higher scores of autonomy, competence, relatedness, life satisfaction, self-esteem, and overall physical health compared to the control group after completing the study.

No change in two variables. Because the workshop was not intended to target interpersonal isolation, and because there was no expectation that workshop participants would form lasting relationships with one another, it was hypothesized that participants in the Existential Connection Workshop would report no change in perceived social support or interpersonal isolation after completing the workshop.

It was hypothesized that participants in the Existential Connection Workshop condition would report about the same amount of perceived social support and interpersonal isolation as participants in the control group, at the post-test measurement.

CHAPTER IV

RESULTS

The current research involved three foci. First, it sought to replicate previous research that found a relationship between existential isolation and psychological and physical health variables. Second, it examined the connection between gender and existential isolation. And, third, it aimed to develop an Existential Connection Workshop designed to reduce existential isolation, and to evaluate the effectiveness of that workshop.

Replicating the Relationship Between Existential Isolation and Psychological and Physical Health Variables

The purpose of these analyses was to examine the replicability of research findings indicating that existential isolation is positively correlated with depression, generalized anxiety, social anxiety, self-concealment, and interpersonal isolation (Costello & Long, 2014; Pinel et al., 2017), and negatively correlated with overall physical health, autonomy, competence, relatedness, and self-esteem (Costello & Long, 2014; Pinel et al., 2014; Pinel et al., 2017). The current study also included measures of life satisfaction and perceived social support, and it was expected that existential isolation would be negatively correlated with these variables. Using the data from the 401 participants who completed Phase 1, correlational analyses were performed to examine the relationship between existential isolation and each of these psychological and physical health variables.

As predicted, positive correlations were found between existential isolation and generalized anxiety, depression, self-concealment, and interpersonal isolation (see Tables 1 and 2). Negative correlations were found between existential isolation and autonomy, competence, relatedness, life satisfaction, performance self-esteem, appearance self-esteem, perceived social

support, and overall physical health. There were no observed relationships between existential isolation and social anxiety or social self-esteem. The results of the replication analyses supported Costello and Long's (2014) previous findings that existential isolation was positively related to depression, generalized anxiety, and self-concealment, and negatively associated with overall physical health. These results also support previous research that has found a positive correlation between existential isolation and interpersonal isolation, and a negative correlation between existential isolation and self-esteem, autonomy, competence, and relatedness (Pinel et al., 2014; Pinel et al., 2017).

Examining Gender and Ethnicity in the Context of Existential Isolation

One of the main foci of the research was to examine gender in the context of existential isolation. Therefore, the current analyses examined whether there was a gender difference in existential isolation. The analyses also assessed whether gender moderated the relationship between existential isolation and the psychological and physical health correlates. Additionally, analyses were performed to examine the relationship between existential isolation and ethnicity. Specifically, analyses were performed to examine whether white participants and non-white participants reported different levels of existential isolation. Additionally, analyses were performed to determine whether ethnicity moderated the relationship between existential isolation and the psychological and physical health variables.

Phase 1 Analyses: Gender in the Context of Existential Isolation

Pinel et al. (2017) found that males experience higher levels of existential isolation than females do. Similar to Pinel et al.'s (2017) finding, results indicated that there was a significant difference in levels of existential isolation between male participants ($M=4.94$) and female

participants ($M = 4.56$) at Phase 1, $t(398) = .568, p = .001$. Replicating this finding suggests that there may be a widespread, reliable gender difference in existential isolation.

The research allowed for an examination of gender in the context of existential isolation by examining whether gender might moderate the correlation between existential isolation and any of the psychological and physical health correlates assessed here. To investigate this, correlations between existential isolation and all of the psychological and physical health variables were performed separately for males and females. Additionally, the Fisher r -to- z transformation was performed to determine whether gender moderated the relationship between existential isolation and any of the psychological and physical health variables. To see the correlations for all the participants in Phase 1, and separately for male participants and female participants, see Table 1.

Results indicated that the correlations between existential isolation and generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, appearance self-esteem, social support, depression, self-concealment, overall physical health and interpersonal isolation were similar for males and females. The only statistically significant difference between males and females was the correlation between existential isolation and performance self-esteem. There was a significant negative correlation between existential isolation and performance self-esteem for the female participants. However, there was no relationship between existential isolation and performance self-esteem for the male participants. Additionally, there was a marginally significant difference between males and females concerning social self-esteem. Female participants indicated a significant negative relationship between existential isolation and social self-esteem. There was no relationship between existential isolation and social self-esteem for the male participants. Gender role stereotypes may be related to why there is no relationship

between existential isolation and performance and social self-esteem for males. It is hypothesized that in society, males may be encouraged to have self-confidence from within, and may not be as pressured to obtain approval from other people for their self-confidence. There may be more pressure for females to gain acceptance from others; therefore, if females are perceiving things differently from the people around them (high existential isolation), they may also have less self-esteem because they are not obtaining the perceived external connection that may make them feel positively about themselves. Females high in existential isolation may not feel they are obtaining the external praise that increases their self-esteem.

Phase 1 Analyses: Ethnicity in the Context of Existential Isolation

Pinel et al.'s (2013) research found a difference in existential isolation according to ethnicity; white participants reported lower levels of existential isolation compared to those in underrepresented ethnic groups. However, in the current research, results indicated that there was no significant difference in existential isolation scores between white and non-white participants, $t(399) = -1.13, p = .257$.

The next set of analyses examined the correlations between existential isolation and psychological and physical health variables separately for white participants and non-white participants. Additionally, the Fisher r -to- z transformation was performed to determine whether ethnicity moderated the relationship between existential isolation and any of the psychological and physical health variables. Due to the limited number of minority participants, it was impossible to conduct correlations for each racial group separately. Therefore, all participants who did not identify as white were grouped together in order to conduct the correlations. To see the correlations for all participants in Phase 1, and separately for white participants and non-white participants, see Table 2.

Results indicated that almost all of the correlations between existential isolation and psychological and physical health variables were similar for whites and non-whites. The only statistically significant difference occurred for the correlation between existential isolation and social support. White participants indicated a statistically significant negative correlation between existential isolation and social support. However, non-white participants showed no correlation between existential isolation and social support.

Examining the Effectiveness of the Existential Connection Workshop

Another important focus of the research was to examine whether the Existential Connection Workshop was effective at reducing existential isolation and improving related outcomes. Several approaches were used to test the effectiveness of the workshop. First, workshop participants' responses to the Phase 1 online survey were compared to their responses on the paper-and-pencil questionnaires they completed directly after completing the workshop at Phase 2. Second, control participants' responses at Phase 1 were compared to their responses at Phase 3 to establish whether there were any significant changes for participants who did not engage in the workshop. Third, workshop participants' changes in responses from Phase 1 to Phase 2 were compared to control participants' changes in responses from Phase 1 to Phase 3 to determine whether there were any significant differences in changes between the two groups. Finally, workshop participants were asked to complete a feedback questionnaire at the end of the Existential Connection Workshop to indicate feedback about the workshop, and their responses were examined.

Workshop Participants: Comparing Phase 1 Responses to Phase 2 Responses

The Existential Connection Workshop was designed to reduce existential isolation and improve related outcomes for participants. To test the workshop's effectiveness at meeting these objectives, participants' responses on the Phase 1 online survey were compared to their responses on the Phase 2 questionnaire that they completed immediately after participating in the workshop. These analyses involved a series of repeated measures ANOVAs. Existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, and perceived social support were treated as dependent variables in the analyses. Depression, self-concealment, physical health, and interpersonal isolation were not included in the Phase 2 questionnaire because they are trait-oriented measures and immediate changes based on participation in the workshop were not expected.

Existential isolation. Workshop participants' existential isolation scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated that there was no significant difference in existential isolation scores from Phase 1 to immediately following the workshop, $F(1, 16) = 2.56, p = .129$. However, closer examination of the means indicated that existential isolation scores did show some reduction from Phase 1 ($M = 4.95$) to Phase 2 ($M = 4.53$). Although not a statistically significant difference, the trend was in the expected direction, offering cautious optimism that it may be possible for such a workshop to help reduce levels of existential isolation.

Generalized anxiety. Workshop participants' generalized anxiety scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated no change in generalized anxiety, $F(1, 16) = .729, p = .41$.

Social anxiety. Workshop participants' social anxiety scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated no change in social anxiety, $F(1, 16) = 2.87, p = .60$.

Autonomy. Workshop participants' autonomy scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results from the ANOVA indicated no change in autonomy, $F(1, 16) = .252, p = .622$.

Competence. Workshop participants' competence scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated no change in competence, $F(1, 16) = .056, p = .816$.

Relatedness. Workshop participants' relatedness scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results from the ANOVA indicated no change in relatedness, $F(1, 16) = .000, p = 1.00$.

Life satisfaction. Workshop participants' life satisfaction scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated no change in life satisfaction, $F(1, 16) = .627, p = .440$.

Performance self-esteem. Workshop participants' performance self-esteem scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated that there was no significant difference in performance self-esteem scores from Phase 1 to immediately following the workshop, $F(1, 16) = 2.56, p = .129$. However, closer examination of the means indicated that performance self-esteem scores did show some increase from Phase 1 ($M = 6.20$) to Phase 2 ($M = 6.72$). Although not a statistically significant difference, the trend was in the expected direction, offering cautious

optimism that it may be possible for a workshop like this to help improve levels of performance self-esteem.

Social self-esteem. Workshop participants' social self-esteem scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated that there was no significant difference in social self-esteem scores from Phase 1 to immediately following the workshop, $F(1, 16) = 2.76, p = .116$. However, closer examination of the means indicated that social self-esteem scores did show some increase from Phase 1 ($M = 5.39$) to Phase 2 ($M = 6.02$). Although not a statistically significant difference, the trend was in the expected direction, offering cautious optimism that it may be possible for a workshop like this to help increase levels of social self-esteem.

Appearance self-esteem. Workshop participants' appearance self-esteem scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated that there was no significant difference in appearance self-esteem scores from Phase 1 to immediately following the workshop, $F(1, 16) = 2.57, p = .128$. However, closer examination of the means indicated that appearance self-esteem scores did show a trend of increasing from Phase 1 ($M = 5.31$) to Phase 2 ($M = 5.78$).

Perceived social support. Workshop participants' perceived social support scores from the Phase 1 online survey and from the Phase 2 questionnaire were submitted to a repeated measures ANOVA. Results indicated no change in perceived social support, $F(1, 16) = .720, p = .409$.

Summary. Although no statistically significant differences were found for any of the variables, the results indicated that existential isolation, performance self-esteem, social self-esteem, and appearance self-esteem showed trends in the expected directions. Existential

isolation scores showed a trend of decreasing from Phase 1 to Phase 2. Performance self-esteem, social self-esteem, and appearance self-esteem showed a trend of increasing from Phase 1 to Phase 2.

Control Participants, Comparing Phase 1 Responses to Phase 3 Responses

The next set of analyses examined the responses that control participants provided on the Phase 1 online survey and the Phase 3 online survey. The goal of these analyses was to examine possible changes among participants who did not take part in the Existential Connection Workshop, from early in the semester to late in the semester. A series of repeated measures ANOVAs were performed, and existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, perceived social support, depression, self-concealment, physical health, and interpersonal isolation were treated as dependent variables in the analyses.

Existential isolation. Control participants' existential isolation scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in existential isolation, $F(1, 60) = 7.00, p = .406$.

Generalized anxiety. Control participants' generalized anxiety scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in generalized anxiety, $F(1, 60) = 1.09, p = .301$.

Social anxiety. Control participants' social anxiety scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated that there was a marginally significant increase in control participants' social anxiety scores from Phase 1 ($M = 3.79$) to Phase 3 ($M = 4.12$), $F(1, 60) = 3.12, p = .083$. These results suggest that control subjects

who did not participate in the workshop tended to experience an increase in social anxiety over the course of the study.

Autonomy. Control participants' autonomy scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in autonomy, $F(1, 60) = 1.16, p = .286$.

Competence. Control participants' competence scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in competence, $F(1, 60) = .640, p = .427$.

Relatedness. Control participants' relatedness scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated that there was a significant decrease in control participants' relatedness scores from Phase 1 ($M = 7.11$) to Phase 3 ($M = 6.62$), $F(1, 60) = 8.54, p = .005$. These results suggest that participants who did not participate in the workshop experienced a decrease in feelings of relatedness over the course of the study.

Life satisfaction. Control participants' life satisfaction scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated that there was a marginally significant decrease in control participants' life satisfaction scores from Phase 1 ($M = 6.68$) to Phase 3 ($M = 6.45$), $F(1, 60) = 3.47, p = .067$. These results suggest that participants who did not participate in the workshop tended to experience a decrease in life satisfaction over the course of the study.

Performance self-esteem. Control participants' performance self-esteem scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated that there was a significant decrease in control participants' performance self-esteem

scores from Phase 1 ($M = 6.26$) to Phase 3 ($M = 5.98$), $F(1, 60) = 6.25$, $p = .015$. These results suggest that participants who did not participate in the workshop experienced a decrease in performance self-esteem over the course of the study.

Social self-esteem. Control participants' social self-esteem scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated that there was a marginally significant decrease in participants' social self-esteem scores from Phase 1 ($M = 5.45$) to Phase 3 ($M = 5.18$), $F(1, 60) = 3.407$, $p = .070$. These results suggest that participants who did not participate in the workshop tended to experience a decrease in social self-esteem over the course of the study.

Appearance self-esteem. Control participants' appearance self-esteem scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in appearance self-esteem, $F(1, 60) = .002$, $p = .968$.

Perceived social support. Control participants' perceived social support scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in perceived social support, $F(1, 60) = .946$, $p = .335$.

Depression. Control participants' depression scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in depression, $F(1, 60) = .005$, $p = .943$.

Self-concealment. Control participants' self-concealment scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in self-concealment, $F(1, 60) = .000$, $p = .985$.

Physical health. Control participants' physical health scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in physical health, $F(1, 60) = .401, p = .529$.

Interpersonal isolation. Control participants' interpersonal isolation scores from the Phase 1 and Phase 3 online surveys were submitted to a repeated measures ANOVA. Results indicated no change in interpersonal isolation, $F(1, 60) = 2.09, p = .153$.

Summary. Results indicated that there were significant decreases in control participants' relatedness and performance self-esteem scores from Phase 1 to Phase 3. There were also marginally significant decreases in life satisfaction and social self-esteem, along with a marginally significant increase in social anxiety scores.

Comparing Changes in Workshop Participants (from Phase 1 to Phase 2) and Control Participants (from Phase 1 to Phase 3)

The original data analysis plan for examining the effectiveness of the Existential Connection Workshop at reducing existential isolation and improving related outcomes called for conducting a series of ANOVAs with condition (workshop, control) as a between-participants factor and timing (Phase 1, Phase 3) as a repeated-measures factor. Unfortunately, recruiting participants for the workshop was more difficult than expected, and very few of those who participated in the workshop took part in the Phase 3 online survey ($N=4$). Rather than leave out these analyses, workshop participants' Phase 2 responses were substituted. While this is not an ideal or equivalent comparison, it was decided that using workshop participants' Phase 2 data would be necessary because there was not enough data collected from workshop participants at Phase 3 to carry out the planned analyses. To assess the effects of the Existential Connection Workshop, a series of repeated measures ANOVAs was conducted comparing the

Phase 1 responses of workshop and control participants to workshop participants' Phase 2 responses and control participants' Phase 3 responses. For these analyses, the term "post-test" will be used to refer to workshop participants' Phase 2 responses and control participants' Phase 3 responses. Existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, self-esteem, and perceived social support were treated as dependent variables in the analyses. Depression, self-concealment, physical health, and interpersonal isolation were not included in these analyses because measures of these constructs were not included in the Phase 2 questionnaire. They were left out of the Phase 2 questionnaire because they are trait-oriented measures that were not expected to be sensitive to immediate changes occurring as a result of participating in the Existential Connection Workshop.

Existential isolation. Existential isolation scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .07, p = .795$. There was no main effect of timing, $F(1, 76) = .87, p = .353$. However, there was a marginally significant interaction between condition and timing, $F(1, 76) = 2.98, p = .088$. Examining this interaction more closely, there was no change in existential isolation among control participants from Phase 1 ($M = 4.75$) to post-test ($M = 4.88$), $F(1, 76) = .72, p = .398$. Among workshop participants, although the change in existential isolation from Phase 1 ($M = 4.95$) to post-test ($M = 4.53$) was not statistically significant, $F(1, 76) = 2.26, p = .137$, the trend was in the predicted direction, suggesting the possibility that a workshop of this nature may hold some promise for reducing existential isolation.

Generalized anxiety. Generalized anxiety scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .000, p = .993$. There was no main effect of timing, $F(1, 76) = .16, p = .694$. Finally, there was no interaction between condition and timing, $F(1, 76) = 1.76, p = .188$.

Social anxiety. Social anxiety scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .18, p = .669$. There was no main effect of timing, $F(1, 76) = .07, p = .789$. Finally, there was no interaction between condition and timing, $F(1, 76) = 1.76, p = .189$.

Autonomy. Autonomy scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .05, p = .833$. There was no main effect of timing, $F(1, 76) = .01, p = .937$. Finally, there was no interaction between condition and timing, $F(1, 76) = .88, p = .353$.

Competence. Competence scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .07, p = .786$. There was no main effect of timing, $F(1, 76) = .36, p = .549$. Finally, there was no interaction between condition and timing, $F(1, 76) = .01, p = .924$.

Relatedness. Relatedness scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .14, p = .710$. There was no main effect of timing, $F(1,$

76) = 1.73, $p = .193$. Finally, there was no interaction between condition and timing, $F(1, 76) = 1.73, p = .193$.

Life satisfaction. Life satisfaction scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .07, p = .799$. There was no main effect of timing, $F(1, 76) = .02, p = .886$. However, there was a marginally significant interaction between condition and timing, $F(1, 76) = 2.90, p = .093$. Examining this interaction more closely, there was no change in life satisfaction among workshop participants from Phase 1 ($M = 6.54$) to post-test ($M = 6.81$), $F(1, 76) = 1.09, p = .300$. Among control participants, however, there was a marginally significant decrease in life satisfaction from Phase 1 ($M = 6.67$) to post-test ($M = 6.45$), $F(1, 76) = 2.79, p = .099$. These results suggest the possibility that a workshop of this nature may hold some value in combatting decreases in life satisfaction.

Performance self-esteem. Performance self-esteem scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .88, p = .352$. There was no main effect of timing, $F(1, 76) = .71, p = .401$. However, there was a significant interaction between condition and timing, $F(1, 76) = 8.55, p = .005$. Examining this interaction more closely, there was an increase in performance self-esteem among workshop participants from Phase 1 ($M = 6.20$) to post-test ($M = 6.72$), $F(1, 76) = 4.97, p = .029$. Among control participants, in contrast, there was a *decrease* in performance self-esteem from Phase 1 ($M = 6.26$) to post-test ($M = 5.60$), $F(1, 76) = 4.54, p = .036$. These results suggest that the workshop may improve a person's confidence in their own abilities.

Social self-esteem. Social self-esteem scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = 3.96, p = .379$. There was no main effect of timing, $F(1, 76) = 1.15, p = .286$. However, there was a significant interaction between condition and timing, $F(1, 76) = 7.03, p = .010$. Examining this interaction more closely, there was an increase in social self-esteem among workshop participants from Phase 1 ($M = 5.39$) to post-test ($M = 6.02$), $F(1, 76) = 4.44, p = .038$. Among control participants, there was a marginally significant *decrease* in social self-esteem from Phase 1 ($M = 5.50$) to post-test ($M = 5.18$), $F(1, 76) = 2.85, p = .095$. These results offer evidence that the workshop may help improve social self-esteem for participants.

Appearance self-esteem. Appearance self-esteem scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = 2.81, p = .481$. There was no main effect of timing, $F(1, 76) = 2.53, p = .116$. Finally, there was no interaction between condition and timing, $F(1, 76) = 2.42, p = .124$.

Perceived social support. Perceived social support scores were submitted to a 2 (condition: workshop, control) X 2 (timing: Phase 1, post-test) ANOVA with repeated measures on the second factor. There was no main effect of condition, $F(1, 76) = .57, p = .45$. There was no main effect of timing, $F(1, 76) = .05, p = .817$. Finally, there was no interaction between condition and timing, $F(1, 76) = 1.34, p = .251$.

Summary. These results suggest that the Existential Connection Workshop may have some potential benefits, such as reducing existential isolation, and increasing performance self-esteem and social self-esteem. Unfortunately, the results from participants who did not take part

in the workshop also reveal that undergraduate students may experience deficits across the course of a semester in the areas of life satisfaction, performance self-esteem, and social esteem.

Workshop Feedback Questionnaire

In addition to the analyses described above, another approach for assessing the effectiveness of the workshop comes from participants' reflections on its value. At the conclusion of the workshop, participants completed a feedback questionnaire (Appendix Q). They responded to three items on a Likert scale ranging from 1 (strongly disagree) to 9 (strongly agree). For the item, "I found the existential isolation workshop useful," the mean response was 6.42 (SD = 2.27). For the item, "I am likely to use the skills I learned in the workshop in my everyday life," the mean response was 6.41 (SD = 2.03). For the item, "I learned something in the existential isolation workshop," the mean response was 7.12 (SD = 2.12). Finally, participants were invited to provide any feedback about what they liked and did not like about the workshop. See Appendix R for those responses.

Examining Factors That May Influence People's Willingness to Participate in the Existential Connection Workshop

People can benefit from a workshop only if they are interested and willing to sign up for and attend it. As this was the first implementation of the workshop, it is important to consider factors that may have influenced potential participants' willingness to take part. This issue is examined from a variety of angles in the following paragraphs.

Comparing Participants Who Chose to Participate in the Workshop and Participants Who Chose Not to Participate.

A series of independent samples t-tests were conducted to determine whether there were any differences between workshop participants and control participants at Phase 1. Results indicated that there was a marginally significant difference between workshop participants' self-concealment scores ($M = 3.06$) and control participants' self-concealment scores ($M = 3.92$), $t(79) = -1.881, p = .064$. Control participants indicated more self-concealment than workshop participants. However, results indicated that there were no other differences between the workshop participants and control participants in regard to any of the other dependent measures.

Approaching this question in a slightly different way, a second set of independent samples t-tests was conducted to examine possible differences at Phase 1 between participants who chose to engage in the Existential Connection Workshop and participants who did not sign up to participate in the workshop. Results indicated that the only difference between these two groups was regarding their reported levels of self-concealment, $t(399) = -2.021, p = .044$. Participants who chose to engage in the workshop reported less self-concealment ($M = 3.06$) than participants who did not participate in the workshop ($M = 4.00$). No other differences were found between the participants who engaged in the workshop and the participants who did not.

Comparing Male and Female Workshop Participants

The next set of analyses examined whether there were any differences at Phase 1 between the male and female participants who took part in the workshop at Phase 2. A series of independent samples t-tests were conducted. Results indicated no significant differences between male and female workshop participants in regard to existential isolation, generalized anxiety, social anxiety, autonomy, competence, relatedness, life satisfaction, performance self-esteem,

social self-esteem, appearance self-esteem, perceived social support, depression, self-concealment, physical health, or interpersonal isolation.

Comparing Female Workshop Participants and Female Control Participants

A series of independent samples t-tests were conducted to assess for differences at Phase 1 between the females who participated in the workshop and the females who were members of the control group. The only difference that was found between the two groups was in regard to their reported level of self-concealment, $t(29) = -2.434$, $p = .021$. Results indicated that female workshop participants ($M = 2.43$) reported significantly less self-concealment than female control participants ($M = 4.13$).

Comparing Female Workshop Participants and Female Participants Who Completed Phase 1 Only

The next series of analyses examined whether there were any differences at Phase 1 between the female workshop participants and the females who completed only Phase 1 of the study. A series of independent samples t-tests were conducted. Results indicated that the only difference was in level of self-concealment, $t(221) = -1.919$, $p = .056$. Female workshop participants reported significantly lower self-concealment scores ($M = 2.43$) than females who completed only Phase 1 ($M = 4.00$).

Comparing Male Workshop Participants and Male Control Participants

The next series of analyses examined whether there were any differences between the male workshop participants and the males who were members of the control group. A series of independent samples t-tests indicated that there were no differences between the male workshop participants and the male control participants on any of the dependent measures.

Comparing Male Workshop Participants and Male Participants Who Completed Phase 1 Only.

The next series of analyses examined whether there were any differences at Phase 1 between the male workshop participants and the males who completed only Phase 1 of the study. A series of independent samples t-tests indicated that there were no differences between the male workshop participants and the male participants who completed only Phase 1 on any of the dependent measures.

Summary

The analyses presented above sought to determine whether there were any differences in the personal characteristics of the participants who took part in the Existential Connection Workshop and those who did not take part. Of the variables that were measured, the only one for which a difference emerged was self-concealment. Moreover, gender analyses revealed that the relationship between self-concealment and workshop participation was limited to females. Females who participated in the workshop had lower levels of self-concealment than females who chose not to participate in the workshop. In contrast, for males, there was no difference in self-concealment for those who participated in the workshop and those who did not participate.

CHAPTER V

DISCUSSION

Overview of Research Goals

Existential isolation is the degree to which an individual feels that no one else perceives the world in the same way as they do (Pinel et al., 2006; Pinel et al., 2017). Yalom (1980) indicated that many of the interpersonal challenges that people endure are a result of the fact that there is an inescapable separation that exists between all individuals. No matter what a person does to connect with another person, they will never be able to completely connect. Feelings of existential isolation can lead people to feel like they can never really be connected to other people, and this feeling of inescapable disconnect may have negative psychological consequences. Higher levels of existential isolation are related to higher levels of depression, generalized anxiety, and self-concealment (Costello & Long, 2014). Furthermore, higher levels of existential isolation are connected to lower overall physical health (Costello & Long, 2014). Existential isolation is also negatively related to autonomy, competence, and relatedness (Pinel et al., 2014) and self-esteem (Pinel et al., 2017). One of the goals of the present research was to investigate the reliability of these findings by replicating these correlations between existential isolation and psychological and physical health variables in a new sample of research participants.

Previous research has also demonstrated higher levels of existential isolation in men than women (Pinel et al., 2017; Costello & Long, 2015). The second goal of the current research was to examine gender in the context of existential isolation. Specifically, this research sought to: 1) determine whether the gender difference in existential isolation would be replicated here; 2) determine whether existential isolation would correlate differently with any of the psychological

and physical health variables for men compared to women; and 3) examine whether men and women would respond differently to the Existential Connection Workshop.

Although previous research has demonstrated that high levels of existential isolation are related to problematic outcomes, there is a lack of research examining interventions geared toward reducing existential isolation. The third goal of the current research was to develop a workshop aimed to reduce existential isolation and improve related outcomes. The research also assessed the effectiveness of the workshop at meeting these objectives.

Overview of Research Findings

Replicating the Relationship Between Existential Isolation and Psychological and Physical Health Variables

The replication analyses supported Costello and Long's (2014) findings that existential isolation is positively related to depression, generalized anxiety, and self-concealment. The results also replicated Costello and Long's finding that existential isolation is negatively correlated with overall physical health. Additionally, the current results replicated Pinel et al.'s (2014) finding that existential isolation is negatively correlated with autonomy, competence, and relatedness. Pinel et al.'s (2017) research indicated that there is a relationship between higher levels of existential isolation and lower levels of self-esteem, and the current research also shows that existential isolation is negatively correlated with both performance self-esteem and appearance self-esteem. However, they did confirm Pinel et al.'s (2017) finding of a correlation between existential isolation and interpersonal isolation, and its converse, social support. These results also reveal that existential isolation is negatively associated with life satisfaction. These findings provide more evidence that there is a relationship between existential isolation and troublesome psychological constructs.

Examining Gender and Ethnicity in the Context of Existential Isolation

The results from the current research supported Pinel et al.'s (2017) finding that males experience higher levels of existential isolation than females do. When examining the correlations between existential isolation and psychological correlates separately for males and females, most of the correlations were the same for both genders. However, the results indicated that there was a negative correlation between existential isolation and performance self-esteem for females. There was no relationship between existential isolation and performance self-esteem for male participants. This suggests that females who reported higher levels of existential isolation indicated lower performance self-esteem, but this was not the case for males. Results also indicated that female participants reported a negative correlation between existential isolation and social self-esteem; the male participants did not exhibit any relationship between existential isolation and social self-esteem. Both of these findings suggest that existential isolation seems to be connected to multiple aspects of self-esteem for females but not for males. Existential isolation may be more related to how females view themselves than it is for males. It is hypothesized that females may be socialized to obtain or evaluate their self-esteem based on their perception of others' appraisal. It is believed that men may not be as encouraged to derive their thoughts about themselves from acceptance from other individuals. If so, then the lack of connection and validation that characterize existential isolation may have more problematic consequences for women's self-esteem than for men's.

One of the planned analyses for the research involved examining outcomes of the Existential Connection Workshop separately for male and female participants. Unfortunately, there was not enough power to conduct these analyses. However, anecdotally, males and females appeared to have very different reactions to the Existential Connection Workshop. The female

participants were much more willing to discuss their experiences of existential isolation and engage in discussion during the workshop. The majority of the male participants appeared uncomfortable speaking during the workshop, and frequently denied having experiences of existential isolation.

The results indicated that there was no difference in levels of existential isolation for white participants and non-white participants. Moreover, the results indicated that most of the correlations between existential isolation and physical and psychological constructs were the same for white participants and non-white participants. However, a difference was found between white participants and non-white participants concerning social support. There was a significant negative correlation between existential isolation and social support for white participants, and there was no correlation between these constructs for non-white participants. Feeling alone in one's experiences seems to relate to less perceived social support for white individuals but not for non-white individuals. This may be an interesting area for future research to explore.

Examining the Effectiveness of the Existential Connection Workshop

An important focus of the research was to develop a workshop that aimed to reduce existential isolation in participants, and to evaluate the effectiveness of the workshop. The workshop was multi-faceted, and included a variety of components designed to target what the researcher views as some of the likely causes of existential isolation. Drawing from the literature in both social and clinical psychology, the workshop included a variety of elements that were theorized to reduce existential isolation. The components of the workshop included: existential isolation psychoeducation, universality, validating skills, authenticity, and two I-sharing

experiences. The current research also assessed the effectiveness of the workshop at reducing existential isolation compared to a control condition.

The results of the study provide a little support for the effectiveness of the workshop at reducing existential isolation. Among participants who took part in the Existential Connection Workshop, there was a trend for existential isolation to decrease following attendance at the workshop, although this decrease was not statistically significant. In contrast, participants in the control group did not exhibit any change in existential isolation. These results suggest the possibility that a workshop of this nature could be helpful in reducing existential isolation.

Beyond existential isolation, it was hypothesized that the workshop would also improve other psychological and physical health outcomes. Specifically, it was hypothesized that the workshop would decrease levels of generalized anxiety, social anxiety, depression, and self-concealment. The workshop was expected to improve overall physical health, self-esteem, autonomy, competence, relatedness, and life satisfaction. It was hypothesized that the workshop would not alter perceived social support or interpersonal isolation.

Contrary to prediction, participants' responses indicated that participation in the Existential Connection Workshop did not impact generalized anxiety, social anxiety, autonomy, competence, or relatedness. Measures of depression, self-concealment, physical health, and interpersonal isolation were not included at Phase 2 because, as trait measures, they were not expected to be sensitive to recent changes; therefore, it was not possible to examine whether the workshop impacted these constructs.

However, the results of the study provided some support for the hypothesis that workshop participants would demonstrate an increase in self-esteem. Compared to control participants, whose self-esteem scores tended to decrease from Phase 1 to Phase 3, workshop participants'

performance and social self-esteem scores actually increased from Phase 1 to Phase 2. These results converge with the Phase 1 correlations indicating that existential isolation is negatively correlated with both performance and appearance self-esteem, and with Pinel et al.'s (2017) finding that existential isolation is negatively related to self-esteem. Taken together, these results suggest that efforts to reduce existential isolation may also have the potential to indirectly raise self-esteem.

Moreover, results indicated that workshop participation may have moderated the effect that the passage of time had on life satisfaction. Individuals who did not participate in the Existential Connection Workshop tended to report a decrease in life satisfaction over the course of the study, but individuals who did participate in the Existential Connection Workshop showed no change in life satisfaction. This suggests the possibility that participation in the Existential Connection Workshop may have acted as a protective factor against diminished feelings of life satisfaction.

Changes in the control group over the course of the semester. Although the hypotheses focused on the outcomes of the workshop, the data collected from the control participants also made it possible to look at naturally occurring changes in participants from early in the semester to later in the semester. While many of the variables remained stable over time, the results indicated that there were some troubling changes. Control participants endorsed a decrease in relatedness and performance and social self-esteem over the course of the semester. Additionally, they reported a marginally significant increase in social anxiety and a marginally significant decrease in life satisfaction. These results suggest that undergraduate students may be experiencing a variety of negative changes over the course of a semester. These changes may

correspond to increases in academic stress over the course of the semester, particularly as final exams approach.

Limitations

The present research had several important methodological limitations. One critical limitation was the small number of participants who chose to participate in the Existential Connection Workshop. The plan for data collection involved conducting three workshops with females and three workshops with males, with between five and eight participants in each workshop, with a final sample size between 30 to 48 participants. However, it was extremely difficult to get participants to sign up for the workshop. In an effort to conduct at least some workshops, the number of participants necessary to run a workshop was decreased to three participants, which helped fill some workshops. Despite the change in protocol to the number of participants, more than 20 scheduled workshops were cancelled due to not having at least three participants willing to participate. In total, two workshops with females were conducted with three participants in each, and two workshops with males were conducted with four participants in one and seven participants in the other. The total sample size of 17 participants in the workshop condition is much lower than desired and limited the study's statistical power. In addition, analyses examining gender differences in workshop outcomes were not able to be performed because of the small sample size. Therefore, it was not possible to determine whether the workshop impacted male and female participants differently.

Another limitation of the research was the inability to compare the workshop condition to the control condition at Phase 3. Unfortunately, only four workshop participants elected to participate in the follow-up assessment at Phase 3. Consequently, there was not enough power to make an adequate comparison to the control condition, which had 61 participants. Thus, to

compare the workshop condition to the control condition, workshop participants' data from Phase 2 (immediately following the workshop) was compared to the control group's Phase 3 data. Because participants' Phase 2 data was used, it was impossible to examine some of the dependent variables (depression, self-concealment, physical health, and interpersonal isolation) because they were not included in the Phase 2 questionnaire. This was not an ideal comparison because the assessments were not performed during the same period of time and cannot be considered an equivalent comparison. There is no way to determine whether the results from the workshop participants and the control group are different because the data were collected at different times.

The Existential Connection Workshop was originally intended to include participants who scored high on existential isolation during the pre-screen assessment. However, when the study was available only to people who scored in the moderate to high range on the existential isolation measure, none of the workshops filled. Due to these difficulties with recruitment, it was decided to make the study available to everyone who took the pre-screen assessment, regardless of their existential isolation score. Because the workshop became available to everyone, the people who attended the workshop may not have experienced existential isolation very often during their daily life. This is an important limitation of the study. As described above, there were indications that the workshop may have offered some small benefits for reducing existential isolation and improving self-esteem, but it cannot be assumed that these results would generalize to people who are highly existentially isolated. Additionally, due to the small sample size, there was not sufficient power to test whether existential isolation levels altered the effectiveness of the workshop.

Additionally, important goals of the workshop were to reduce experiences of existential isolation and for participants to have a positive experience in the workshop. Including participants with a range of existential isolation levels meant that the participants in any given workshop may not all have been highly existentially isolated. Consequently, an existentially isolated person could attend the workshop and be the only highly existentially isolated participant. Unfortunately, this was the case for one of the workshops that included three female participants. Two of the participants identified themselves as rarely having existentially isolating experiences and one participant stated that she frequently feels existentially isolated. The existentially isolated participant remarked that she felt existentially isolated during the workshop because she was the only participant who endorsed these experiences. Although the experimenter tried to reduce these feelings by sharing her own experiences of existential isolation, the participant may have left feeling more existentially isolated than when she came to the workshop. Clearly, this was not an intended goal of the study. Consequently, a major limitation of the study became the fact that the workshop was not conducted with the sample of participants for which it was designed.

The workshop was multi-faceted to include a variety of components designed to target what the researcher views as some of the likely causes of existential isolation. Because the workshop included multiple components, it is not possible to determine what parts of the workshop were helpful to the participants. It could be that all the components contributed to the small improvements that were observed or it could be that only one component helped. A questionnaire asking for feedback on the Existential Connection Workshop was included and one question asked about what aspects were useful or what aspects were not helpful. However, the feedback from the participants was limited. One participant indicated that it was helpful that the

experimenter explained what existential isolation is so that they could figure out whether they have experienced it. Another workshop participant indicated that obtaining skills for understanding and validating others' emotions was useful to them. This was the only feedback that was obtained about components of the workshop that were useful; none of the participants provided information about what was not helpful about the workshop. Consequently, it still remains unclear what aspects of the workshop were effective and necessary components. Without a dismantling study that examines each individual component of the study, it is impossible to know what parts are necessary.

Some Reasons for Cautious Optimism

Despite the important limitations described above, the study results did offer some reasons for cautious optimism about the potential value of conducting workshops such as the one presented here. One major goal of the research was to develop a workshop to reduce existential isolation. The results revealed a trend for workshop participants' existential isolation scores to decrease from the Phase 1 online survey to the Phase 2 questionnaire that took place immediately after the workshop ended. Although this trend did not reach statistical significance, it does point to the possibility that this workshop, or perhaps a modified version of it, may hold some promise for reducing existential isolation. Due to the small sample size, the current study suffered from low statistical power. It is possible that a new investigation that has more success with participant recruitment could discover a statistically significant reduction in existential isolation. The primary objective of the workshop was to reduce existential isolation and it is encouraging to see that the workshop may have impacted levels of existential isolation, at least in some small way.

In addition to reducing existential isolation, it was hypothesized that the workshop would have other positive outcomes. Specifically, it was theorized that the workshop would decrease generalized anxiety, social anxiety, depression, and self-concealment, and that it would increase self-esteem, autonomy, competence, relatedness, life satisfaction, and overall physical health. The workshop was not predicted to impact perceived social support or interpersonal isolation. While the results did not fulfill all of these expectations, there were trends indicating that the Existential Connection Workshop may have improved participants' performance, social, and appearance self-esteem. Thus, the workshop may have improved participants' thoughts about their intelligence, ability to do things well, and self-confidence, and decreased their anxiety about how other people view them (Heatheron & Polivy, 1991). One component of the workshop was designed to improve people's ability to be authentic. The training on authenticity may have boosted participants' views of themselves and decreased their concern about other people's evaluations.

Additionally, the results indicated that control participants, who did not engage in the Existential Connection Workshop, showed several deficits over the course of the study that were not observed in workshop participants. Specifically, control participants exhibited decreases in life satisfaction, relatedness, and performance and social self-esteem, and they exhibited an increase in social anxiety. In interpreting these results, it may be important to keep in mind that the study took place over the course of a semester. As a semester comes to a close, students may feel more stressed and overwhelmed. They may limit social interactions as they and their peers focus more attention on coursework. These changes may lead to the decreases in life satisfaction, relatedness, self-esteem, and the increase in social anxiety that were observed here. Because workshop participants either showed no change or showed improvement on these same variables,

it is hypothesized that the Existential Connection Workshop may have provided participants a protective factor against the typical stresses of the semester. It is possible that attending the workshop, learning how to connect better with other individuals, and gaining an understanding of existential isolation gave participants tools for maintaining their connections with others, their self-esteem, and their sense of life satisfaction. While the results did not indicate an improvement in the areas of life satisfaction, relatedness, or social anxiety for workshop participants, it is still a promising result that the workshop participants did not show the same decline over time as participants in the control group.

Although there were fewer positive results from the workshop than hypothesized, the results offered some reasons for cautious optimism and showed that there may have been some positive aspects and outcomes of the workshop. However, it is also essential to note that while there are positive aspects, it is unknown whether the workshop is responsible for these changes or what components of the workshop may have contributed to these changes. There were many limitations in the study, so the results need to be interpreted with caution.

CHAPTER VI

FUTURE DIRECTIONS

The current research had three major strengths. First, it offered a replication of correlational findings between existential isolation and psychological and physical health variables. Second, it examined gender in the context of existential isolation. Third, it was the first endeavor in creating an intervention for reducing existential isolation. The workshop was designed to include components that were theorized to reduce existential isolation. Regarding the first goal, the majority of the relationships between existential isolation and psychological and physical health correlates were confirmed in the present research. These findings attest to the reliability of these relationships and lend support to the importance of existential isolation as a construct that warrants further study. Regarding gender, the findings supported Pinel et al.'s (2017) research indicating that males report higher levels of existential isolation than females do. The results also indicated that the majority of the correlations between existential isolation and psychological and physical health correlates were the same for male and female participants. Regarding the third goal, the Existential Connection Workshop was created and implemented, and its effectiveness was evaluated. Although the evaluation of the workshop did not show it to be as effective as hoped, and although there were many obstacles encountered in the implementation of the workshop, a great amount of information was obtained through the experience of conducting the research and navigating the roadblocks that emerged.

Mixed-Sex Workshops

When creating the workshop, consideration was given to whether the workshops should be conducted with single-sex or mixed-sex groups. Single-sex groups were eventually chosen for the format of the workshop. Greenfield et al. (2013) found that women with substance use

disorders reported feeling safer, embracing all aspects of themselves, having their needs met, feeling intimacy, empathy, honest, and more group cohesion when they were in a single-sex group compared to a mixed-sex group. Therefore, it was hypothesized that single-sex workshops would allow participants to be more forthcoming and authentic during the group discussion. However, after the experience of running the workshops for the study, it is believed that running mixed-sex groups could have been more effective.

The majority of the workshop was based on group discussion; all of the components encouraged discussion and interaction among the participants. During the female workshops, group discussion occurred rather naturally. At the beginning of the workshop session, members were a little reticent to speak but seemed to open up following the ice breaker activities. The female participants were able to discuss experiences where they felt existentially isolated, and they appeared to connect well with other participants after they shared stories. The experimenter facilitated the discussion but never felt like she was the only member participating.

On the contrary, group discussion in the male workshops was extremely difficult, if not impossible at times. During the workshops, open-ended questions were asked to generate conversations and typically no one spoke or one person spoke with no follow-up from other workshop participants. During certain activities, some male participants verbally refused to participate. Additionally, this lack of participation and refusal seemed to influence the male participants who would have liked to speak. For example, after a male workshop session ended, one male participant shared with the experimenter that he frequently experienced existential isolation and would have liked to discuss his experiences in the workshop. However, he stated that because none of the other members would speak he did not feel comfortable sharing his

experiences with the group. He stated that he thought the workshop could have been very helpful to him if other members had been involved.

Male participants may have been less likely to discuss their experience of existential isolation in the group because males may not feel as comfortable sharing their experiences or emotions with other individuals. In the United States, cultural stereotypes suggest that males should be independent and emotionally disconnected, whereas females should be nurturing, passive, and in-tune with their emotions and other people's emotions (Simon & Nath, 2004). These stereotypes may encourage males to avoid acknowledging their experiences of existential isolation because of the pressure to remain emotionally disconnected. In fact, several of the male participants indicated that they have never had an experience of existential isolation. The male participants may have not wanted to speak because they were avoiding acknowledging these experiences or they may not have spoken because they felt a need to remain emotionally disconnected. Talking about their experiences of existential isolation and associated emotions may not fit into the male stereotype of how males should behave.

It is hypothesized that having a mixed-sex group may encourage male participants to engage in discussion. Although males may still wish to uphold their gender stereotypical behavior in the presence of females, they may be more inclined to speak if they hear other people sharing. The previously mentioned male participant may have been more comfortable speaking if females were also sharing their experiences. The male participants could not speak less than they did during the workshops; therefore, running a mixed-sex workshop could be an improvement, even if it just got one male to participate. Therefore, in future research, it is suggested that the workshop be run with mixed-sex groups.

Name of Study

Participants use an online system to sign up to participate in studies of their choosing. All of the studies that are being conducted are posted on this website. The current study was called “Existential Connection Workshop.” It was decided to use this name because the goal of the study was to improve participants’ ability to existentially connect with other individuals, and transparency about the purpose of the study was deemed important. Additionally, it was determined that focusing on existential connection, instead of existential isolation, portrayed the positive aspects of the workshop and displayed a more optimistic connotation. Including the word “isolation” in the title may have been seen as less inviting for potential participants. In addition to the title, there was a description of the study. The description was listed as: “This is a two hour workshop that will include various components geared toward helping people feel more connected to other individuals.” This description of the study was provided to help attract potential participants who wanted to gain these skills. One of the major issues with conducting the study was the difficulty with recruiting participants for the workshops. More than 20 workshops were posted that did not fill and had to be cancelled. When considering reasons why participants did not want to sign up for the workshop, the name of the workshop was one possible issue. It is possible that many of the eligible participants did not know what the term “existential connection” meant and were skeptical about participating in a study where they did not understand the name of the study. While the description of the study gave some indication about its purpose, it was still rather vague. The description may not have been enough to encourage potential participants to sign up. Consequently, in the future, if this study were to be conducted again, it is suggested that a different name for the workshop be created. Participants

may be more likely to participate in a workshop when they know what the title means and have a better idea of what may occur.

Elect to Participate

It is also important to consider who should be recruited for the study. Initially, this study was intended for people who were high in existential isolation. Due to recruitment issues, the eligibility limitation was eventually removed, and anyone could sign up for the workshop, regardless of their existential isolation score. When thinking about future participants for this study, it is believed that what seems most important is recruiting participants who want to make changes in their experiences regardless of their level of existential isolation; being high in existential isolation is less important than being motivated to change. Recruiting participants who experience existential isolation is not enough to see changes if they attend the workshop; participants have to be motivated to want to make changes to their levels of existential isolation. The workshop was difficult to conduct because the participants did not appear engaged or interested in making changes. Many of the participants, especially the males, stated that they only signed up for the workshop because they needed the research credits to fulfill their requirement and had no interest in participating.

The idea for the Existential Connection Workshop stemmed from a desire to develop a therapy group at a college counseling center for people high in existential isolation. The Existential Connection Workshop was a first step in determining if this would be a helpful intervention for people high in existential isolation. After running the study, it is clear that the reactions of the participants, most of whom did not want to be there, may not accurately represent people who want to reduce their feelings of existential isolation. The participants in the study were not seeking help because they were struggling with an issue. Consequently, how

these participants responded to the workshop could be different from people who are electing to get help by attending group therapy. Therefore, in the future, it is necessary to run this study with people who are seeking out assistance because they want to make changes. It would be ideal to run this workshop as group therapy at a college counseling center for people who are seeking treatment. These individuals may be more motivated to participate in the group activities and push themselves to make changes and use the suggested tips.

Is an Existential Connection Workshop Necessary?

Assumption of Desire to Reduce Existential Isolation

The development of the Existential Connection Workshop was based on the idea that people who are experiencing existential isolation want to reduce these experiences. Higher levels of existential isolation are related to higher levels of depression, generalized anxiety, and self-concealment, and lower overall physical health, as discovered by Costello and Long (2014), and as replicated in the current research. Pinel et al. (2017) assessed the relationship between existential isolation and self-esteem. Results indicated that higher levels of existential isolation were connected with low self-esteem, and the current research supported these findings. Pinel et al. (2014) found that individuals who were more existentially isolated had lower levels of autonomy, competence, and relatedness than individuals low in existential isolation, and the current research replicated these findings, as well. Based on these findings, it was assumed that people who are experiencing feelings of existential isolation would want to reduce these experiences in their lives. Consequently, the researcher assumed that determining ways to reduce experiences of existential isolation would be a worthwhile pursuit.

Stepping back for a moment, it is important to consider whether developing an intervention for existential isolation is a valuable endeavor. During the workshop, many

participants indicated that they had no interest in changing their experiences of existential isolation. One participant indicated that she liked interpreting her experiences differently from the people around her because she does not want to perceive events like other people; this participant stated that she liked being different. Additionally, the previously mentioned male participant explained that he experiences existential isolation frequently in his life. He indicated that it can be isolating when he has these experiences; however, he also reported that he likes being existentially isolated. He articulated that when he does connect with someone else and has the same interpretation, it is very meaningful to him because it is something that does not occur frequently. He stated that if he frequently felt existentially connected with others, then it would not be a special experience for him. The individuals that he feels existentially connected with are important to him because he genuinely feels that they understand him. This participant said that the workshop was helpful to him because he liked learning about existential isolation; however, the components of the workshop geared toward changing levels of existential isolation were not useful because he did not want to change that part of himself.

While these participants may not adequately represent all people with higher levels of existential isolation, it is important to consider whether reducing existential isolation is necessary. The feedback gathered during the workshop was mostly positive, with many people indicating that it was helpful to learn about the construct of existential isolation and to learn that there is a name for these experiences. Additionally, a few participants indicated that it was helpful to learn how to validate and understand others' perspectives better. However, none of the feedback suggested that it was helpful to learn how to decrease experiences of existential isolation.

Therefore, a workshop geared toward reducing existential isolation may not be necessary. A workshop that provides psychoeducation about existential isolation may be sufficient. The idea that some individuals may not want to reduce existential isolation suggests that a therapy group may be a better intervention. Existentially isolated individuals who are not satisfied with their experiences are the people who may want to make changes, and may choose to sign up for a therapy group that includes components for promoting existential connection.

Workshop and anxiety. As noted above, recruitment for this study was extremely difficult. Recruitment may have been difficult because people high in existential isolation may not want to participate in a social activity, like a workshop. Perhaps surprisingly, though, treatment for social anxiety is frequently delivered in a group format because it offers several advantages over individual treatment. Group therapies provide an environment for vicarious learning, support from other individuals with similar struggles, exposure to group situations, help to change distorted thinking, and a chance to become more comfortable around groups of people (Heimberg & Becker, 2002). Despite the effectiveness of group treatment for social anxiety, people with social anxiety may not seek it out, believing that a group modality may be uncomfortable for them.

People high in existential isolation frequently feel alone in their experiences, as though no one understands the way in which they perceive, interpret, and react to the world (Yalom, 1980). It is hypothesized that people who frequently feel existentially isolated may not want to sign up for a workshop where they will be surrounded by other people who may not understand the way they react to the world. Highly existentially isolated people may avoid situations that involve interacting with other people as a way to avoid the potential of having experiences of existential isolation. Therefore, when choosing among a variety of studies that they may sign up

for, existentially isolated people may choose a study that can be completed on the computer or alone with the experimenter. These options may be more attractive than a workshop that requires interaction with other individuals.

With these considerations in mind, when formulating an intervention for existential isolation, a workshop may not be the ideal structure to choose. Psychoeducation offered in an individualized format may be a more attractive option for existentially isolated individuals. In one of the workshops, a discussion about why existentially isolated people were not signing up for the workshop took place. One female participant indicated that she personally struggled with existential isolation and social anxiety, and stated that she felt nervous about attending the workshop. She stated in the beginning of the workshop that she felt very nervous and did not want to speak. She said that after the ice breaker activity she felt more comfortable; however, she wondered if other existentially isolated people would avoid the workshop completely because of anxiety about being around other people who may perceive things differently. This was an astute statement because existentially isolated people may have developed strategies, like avoidance, to decrease the likelihood of having existentially isolating experiences. People who are existentially isolated may have avoided this workshop, and may avoid any workshop, because it is a social situation. Supporting this idea, Costello and Long's (2014) research indicated a positive relationship between existential isolation and social anxiety; however, the current research did not replicate this finding. Due to the conflicting findings, it is unclear whether the social aspect of the workshop impacted enrollment in the study, but this may be something to consider in future research.

Creating an entirely different sort of intervention for existential isolation may be useful. Participants who struggle with social anxiety may feel more comfortable signing up for a study

that does not involve group interaction. A psychoeducational intervention delivered on the computer or in a one-on-one format with the researcher may be preferable. A lot of participants did sign up for the online survey phases of the current research, and many of them were existentially isolated. For Phase 1, more than 50 percent of the participants reported moderate to high levels of existential isolation (indicating a score greater than 4.5). Therefore, it seems that people who are experiencing existential isolation are willing to participate in an online survey format, thus suggesting this may have been a more comfortable experience for existentially isolated individuals.

Reflection

This project has advanced my understanding of existential isolation and research in this area in a variety of ways. After running this study and interacting with the participants who attended the workshop, it is important to ponder whether people with high levels of existential isolation want to reduce their levels of existential isolation. Costello and Long (2014) found that existential isolation was related to problematic psychological and physical health outcomes, and this evidence made me assume that people who experience high levels of existential isolation were suffering and want to change these experiences. However, it appears that some people who are experiencing existential isolation do not want to change these experiences and may not be suffering. More than one workshop participant indicated that they appreciated having a different outlook than other individuals and would not want to change their levels of existential isolation. Consequently, in future research it may be important to first explore whether existentially isolated individuals want to change their levels of existential isolation.

As previously mentioned, some workshop participants indicated that they appreciated having a different outlook than other individuals. Additionally, another workshop participant

indicated that a benefit of being existentially isolated was that the rarity of shared experiences made them appreciate shared experiences more when they occurred than they would if they happened frequently. I had never thought about these benefits of existential isolation until hearing about them from workshop participants. Upon further reflection, I believe there could be other positive effects of existential isolation. For example, I wonder whether existentially isolated individuals may be more respectful of other people's perspectives and better at not alienating others when they have different interpretations. If an individual constantly feels existentially isolated, they know how it feels to have a different perspective than the people around them. Therefore, if they encounter a situation when someone else has a different interpretation from the group, they may have a more sensitive reaction to this person and try to not make them feel alienated. A highly existentially isolated individual may be less judgmental of other people and may be able to have an authentic empathic interaction with someone else when they feel different. These characteristics could be very useful if an existentially isolated individual wanted a career focused on helping others. A therapist who can truly understand the experience of feeling different could connect more effectively with a client experiencing these types of struggles, compared to a therapist who does not understand this experience.

Another hypothesized benefit of existential isolation is self-confidence. Workshop participants indicated that it was helpful to gain psychoeducation about existential isolation. They stated that it was helpful to have a label for their experiences, even though they may not want to change their level of existential isolation. The results from the study indicated that people who participated in the workshop tended to show increases in performance, social, and appearance self-esteem. It is possible that simply learning that existential isolation is real helped people to be more confident about their experiences and feel better about themselves. It is

hypothesized that someone who takes pride in having their own interpretations may also be someone who is confident and less concerned about other people's opinions. Someone who is highly existentially isolated may find it easier to be their authentic self in relationships. These individuals may appreciate being different and may not be afraid to show how they are different from other people. These people may feel less pressure to conform to others' beliefs and may feel more comfortable being their true self.

If individuals do express interest in changing their levels of existential isolation, it will be important for future research to really think about the best format for these interventions. As previously discussed, a workshop format may not be the best format to intervene with existentially isolated individuals because it may cause stress that prevents them from participating. A study that examines and compares different intervention forms (workshop, one-on-one session, online study) may be helpful to determine which mode may be most useful for people who are existentially isolated.

Although some individuals may not want to change their levels of existential isolation, it may be helpful to determine a way to reduce some of the negative psychological correlates related to existential isolation. A therapeutic intervention that focuses on the negative psychological experiences, as opposed to focusing on existential isolation, may be more useful. Costello and Long's (2014) research indicated that existential isolation was related to negative psychological variables, and those findings were replicated in the current research; however, no research has indicated that existential isolation causes these negative psychological outcomes. Consequently, an intervention focused on the psychological symptoms may be more useful than trying to change levels of existential isolation. For example, an established intervention for the treatment of depression, like cognitive behavioral therapy, could be used to treat an existentially

isolated individual who suffers with symptoms of depression. The therapist delivering the intervention would need to be careful to make sure that the interventions were geared at the psychological correlates, and not focused on changing the person's experiences of existential isolation. At the beginning of treatment, a clear discussion and documentation of the goals of treatment would be important to make sure that the therapist and existentially isolated individual are in agreement about the purpose of treatment. Additionally, throughout the course of treatment, the therapist should check in with the existentially isolated individual to make sure the intervention is geared toward the psychological symptoms. An interesting future study could examine highly existentially isolated individuals who endorse other psychological struggles. The study could examine the effectiveness of established treatments for the other symptoms, and determine whether, and to what extent, those treatments impact individuals' levels of existential isolation. This research could determine ways to help existentially isolated individuals while not changing their experiences of existential isolation.

As the experimenter, the most interesting aspect of running the study was when participants were able to identify experiences of existential isolation and share their feelings about those experiences. Consequently, I think a future qualitative study that involves an interview format to learn more about people's experiences of existential isolation could be extremely beneficial. More research to learn about experiences of existential isolation would be helpful for gaining a better understanding of what these experiences are like and whether people want to change these experiences. One of the major foci of this research was geared toward developing an intervention for existential isolation and evaluating its effectiveness; however, at the end of the study, I am left feeling uncertain whether an intervention for existential isolation is really necessary. Therefore, I think it would be important to obtain more detailed information

about how existential isolation impacts individuals and how people feel about their experiences of existential isolation. This study was based on assumptions of how existentially isolated individuals feel and I believe we need to take a step back and see if an intervention is justified.

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Appendix A

Existential Isolation Measure

1. I feel like people share my outlook on life.
2. I have the same reactions to things that other people around me do.
3. People around me react to things in our environment the same way I do.
4. I would like to seek out people who think about things in the same way I do.
5. People do not share my perspective.
6. I would like to spend time with only people who understand me.
7. I want other people to feel the way I do.
8. I want to find signs that other people share my experience of the world around me.
9. Other people do not understand my experiences.
10. I want to be with people who share my outlook on life.
11. People have the same “take” or perspective on things I do.
12. It is important to me to feel like other people experience the world in the same way I do.

Appendix B

Modified Spielberger State-Trait Anxiety Measure

Please think about how you generally feel as you answer the following questions.

1. I feel pleasant.
2. I feel nervous and restless.
3. I feel satisfied with myself.
4. I wish I could be as happy as others seem to be.
5. I feel like a failure.
6. I feel rested.
7. I am "calm, cool, and collected."
8. I feel that difficulties are piling up so that I cannot overcome them.
9. I worry too much over something that really doesn't matter.
10. I am happy.
11. I have disturbing thoughts.
12. I lack self-confidence.
13. I feel insecure.
14. I make decisions easily.
15. I feel inadequate.
16. I am content.
17. Some unimportant thought runs through my mind and bothers me.
18. I take disappointments so keenly that I can't put them out of my mind.
19. I am a steady person.
20. I get in a state of tension or turmoil as I think over my recent concerns and interests.

Appendix C

Liebowitz Social Anxiety Scale

Please rate the extent to which you would feel FEARFUL or ANXIOUS if you had to face the following situations RIGHT NOW:

1. Telephoning in public.
2. Participating in small groups.
3. Eating in public places.
4. Drinking with others in public places.
5. Talking to people in authority.
6. Acting, performing, or giving a talk in front of an audience.
7. Going to a party.
8. Working while being observed.
9. Writing while being observed.
10. Calling someone you don't know very well.
11. Talking with people you don't know very well.
12. Meeting strangers.
13. Urinating in a public bathroom.
14. Entering a room when others are already seated.
15. Being the center of attention.
16. Speaking up at a meeting.
17. Taking a test.
18. Expressing disagreement or disapproval to people you don't know very well.
19. Looking at people you don't know very well in the eyes.
20. Giving a report to a group.
21. Trying to pick up someone.
22. Returning goods to a store.
23. Giving a party.
24. Resisting a high pressure salesperson.

Appendix D

Basic Need Fulfillment Measure

I really like the people I interact with (from Gagne, 2003)
I feel a sense of belonging with others
I have meaningful relationships with others
There is no one I can turn to when I need help

I feel like I can decide for myself how to live my life (Gagne, 2003)
I am able to spend my time the way I want to
I choose goals that are meaningful to me
Other people tell me how to run my life

I often do not feel very capable (Gagne, 2003)
I am effective at getting things done
I am smart and knowledgeable
I am competent

I am happy with my life
My life is fulfilling
I enjoy my daily activities
I wish my life were different
I believe I can achieve my goals
I am proud of my accomplishments
I am satisfied with my life

Appendix E

State Self-Esteem Scale

This is a questionnaire designed to measure what you are thinking at this moment. There is of course, no right answer for any statement. The best answer is what you feel is true of yourself at the moment. Be sure to answer all of the items, even if you are not certain of the best answer. Again, answer these questions as they are true for you RIGHT NOW.

1. I feel confident about my abilities.
2. I am worried about whether I am regarded as a success or failure.
3. I feel satisfied with the way my body looks right now.
4. I feel frustrated or rattled about my performance.
5. I feel that I am having trouble understanding things that I read.
6. I feel that others respect and admire me.
7. I am dissatisfied with my weight.
8. I feel self-conscious.
9. I feel as smart as others.
10. I feel displeased with myself.
11. I feel good about myself.
12. I am pleased with my appearance right now.
13. I am worried about what other people think of me.
14. I feel confident that I understand things.
15. I feel inferior to others at this moment.
16. I feel unattractive.
17. I feel concerned about the impression I am making.
18. I feel that I have less scholastic ability right now than others.
19. I feel like I'm not doing well.
20. I am worried about looking foolish.

Appendix F

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

1-----2-----3-----4-----5-----6-----7

strongly disagree

strongly agree

1. There is a special person who is around when I am in need.
2. There is a special person with whom I can share my joys and sorrows.
3. My family really tries to help me.
4. I get the emotional help and support I need from my family.
5. I have a special person who is a real source of comfort to me.
6. My friends really try to help me.
7. I can count on my friends when things go wrong.
8. I can talk about my problems with my family.
9. I have friends with whom I can share my joys and sorrows.
10. There is a special person in my life who cares about my feelings.
11. My family is willing to help me make decisions.
12. I can talk about my problems with my friends.

Appendix G

CES-D Depression Measure

These questions ask how often you have had certain feelings or experiences during the last week.

1. Was bothered by things that usually don't bother me.
2. Did not feel like eating; my appetite was poor.
3. Felt that I could not shake off the blues even with help from my family and friends.
4. Felt that I was just as good as other people.
5. Had trouble keeping my mind on what I was doing.
6. Felt depressed.
7. Felt that everything I did was an effort.
8. Felt hopeful about the future.
9. Thought that my life has been a failure.
10. Felt fearful.
11. Had restless sleep.
12. Felt happy.
13. Talked less than usual.
14. Felt lonely.
15. Felt that people were unfriendly.
16. Enjoyed life.
17. Had crying spells.
18. Felt sad.
19. Felt that people dislike me.
20. Felt that I could not "get going."

Appendix H

Self-Concealment Measure

1. I have an important secret that I haven't shared with anyone.
2. If I shared my secrets with my friends, they'd like me less.
3. There are lots of things about me that I keep to myself.
4. Some of my secrets have really tormented me.
5. When something bad happens to me, I tend to keep it to myself.
6. I'm often afraid I'll reveal something I don't want to.
7. Telling a secret often backfires and I wish I hadn't told it.
8. I have a secret that is so private I would lie if anybody asked me about it.
9. My secrets are too embarrassing to share with others.
10. I have negative thoughts about myself that I never share with anyone.

Appendix I

Demographic Characteristics Measure

What is your gender?

How old are you?

Which term best describes your race/ethnicity?

- ☐ White
- ☐ Hispanic or Latino/a
- ☐ Black or African-American
- ☐ Asian or Asian-American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ American Indian or Alaska Native
- ☐ Biracial or Multiracial

Appendix J

Informed Consent Letter: Phase One and Phase Three

This is an online survey. We are interested in learning about people's self-views. Because you scored relatively high on a measure of existential isolation you are eligible to participate in this study. If you agree to participate in this study, you will be asked to complete a series of questions about yourself. The survey will take about half an hour to complete.

The answers that participants provide in this study will be completely confidential. At the end of the study, all participants' responses will be compiled and examined together. In other words, the responses that participants provide will be considered only in combination.

There are no known or expected risks associated with participating in this study. However, participants may find the study interesting, and may learn more about how psychological research is conducted.

Your participation in this study is completely voluntary. You may choose not to participate, in which case you should exit this survey now. If you do choose to participate, you may withdraw at any time by exiting the survey. You may also leave blank any question that you would prefer not to answer.

Participation in this study is worth 0.5 hours of experimental credit. If you would prefer not to participate in this research, this credit may be earned instead by participating in a different study and/or reading and reviewing scientific articles.

If you have any questions about this research, you may contact the researcher, Abby Costello, at A.E.Costello@iup.edu, and/or the project supervisor, Dr. Anson Long, by email at Anson.Long@iup.edu or by phone at 724-357-4523.

This study has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (phone: 724-357-7730).

By continuing on to the survey, you are providing your consent to participate.

Appendix K

Informed Consent Form: Phase Two

We are interested in learning about IUP students' experiences with existential isolation and helping reduce participants' experiences of existential isolation. Existential isolation refers to feeling alone in one's experiences, as though no one else can understand the way one perceives or reacts to the world. Because you scored relatively high on a measure of existential isolation and participated in Phase One of the study called "Information about Self," you are eligible to participate in this study. Participating in this study involves attending a workshop that will last about three hours.

The answers that participants provide in this study will be confidential. At the end of the study, all participants' responses will be compiled and examined together. In other words, the responses that participants provide will be considered only in combination.

There are no known risks associated with participating in this study. However, participants may find the study interesting, and may learn more about how psychological research is conducted.

Your participation in this study is completely voluntary. You may choose not to participate, in which case you should return this unsigned form to the experimenter. If you do choose to participate, you may withdraw at any time. You may also leave blank any question that you would prefer not to answer.

Participation in this workshop is worth 3 hours of experimental credit. If you would prefer not to participate in this research, this credit may be earned instead by participating in other research studies and/or reading and reviewing scientific articles.

If you have any questions about this research, you may contact the researcher, Abby Costello, at A.E.Costello@iup.edu, and/or the project supervisor, Dr. Anson Long, by email at Anson.Long@iup.edu or by phone at 724-357-4523.

This study has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (phone: 724-357-7730).

If you are willing to participate in this study, please read the statement below and print and sign your name.

Thank you for coming to the session today!

I have read the information provided on this form and I consent to participate in this study. I understand that my responses are confidential, and that I have the right to withdraw from the study at any time. I was offered an unsigned copy of this form to keep for my records.

Sign Name

Print Name

Date

Appendix L

Debriefing Form: Phase One Online Survey

Thank you for your participation! We are interested in a topic called existential isolation, which refers to feeling alone in one's experiences, as though no one else can understand the way one perceives or reacts to the world. Participating in this study makes you eligible for participating in a workshop geared toward reducing existential isolation. If you are interested in participating, please watch for sessions to be posted on the research participation website. Furthermore, this is a multi-phase study, and you have just participated in Phase One. A full debriefing of the study will be provided at Phase Three, the final phase. If you choose not to participate in Phase Two or Phase Three, a full debriefing will be emailed to you at the conclusion of Phase Three. If you have any questions about this research, please feel free to contact Abby Costello at A.E.Costello@iup.edu and/or Dr. Anson Long at Anson.Long@iup.edu

Appendix M

Debriefing Form: Phase Two Existential Connection Workshop

Thank you for your participation! We are interested in a topic called existential isolation, which refers to feeling alone in one's experiences, as though no one else can understand the way one perceives or reacts to the world. In the current study, we are examining whether the workshop you participated in helps to reduce participants' experience of existential isolation and improve well-being in a variety of ways. Participating in this study makes you eligible for participating in Phase Three of the study, which will be completed online. If you are interested in participating, please look for sessions to be posted on the research participation website. Furthermore, this is a multi-phase study, so a full debriefing of the study will be provided at the end of Phase Three, the final phase. If you choose not to participate in Phase Three, a full debriefing will be emailed to you at the conclusion of Phase Three. If you have any questions about this research, please feel free to contact Abby Costello at A.E.Costello@iup.edu and/or Dr. Anson Long at Anson.Long@iup.edu.

Appendix N

Debriefing Form: Phase Three

Thank you for your participation today! We are interested in a topic called existential isolation, which refers to feeling alone in one's experiences, as though no one else understands the way one perceives or reacts to the world. We are interested in developing ways to reduce existential isolation, and your participation will help us to investigate this important question. In this study, we conducted a workshop geared toward lowering existential isolation. Some participants took part in the workshop, and others were part of the control group. We expect that workshop participants may show a larger decrease in existential isolation than control group participants.

If you have feelings of existential isolation that you would like to talk with someone about, please contact IUP's Counseling Center at 724-357-2621.

If you have any questions about this research, please feel free to contact Abby Costello at A.E.Costello@iup.edu and/or Dr. Anson Long at Anson.Long@iup.edu.

If you are interested in learning more about research on existential isolation, please consult the following sources:

Pinel, E. C., & Long, A. E. (2012). When I's meet: Sharing subjective experience with someone from the outgroup. *Personality and Social Psychology Bulletin*, 38, 296-307.

Pinel, E. C., Long, A. E., Landau, M., Alexander, K., & Pyszczynski, T. (2006). Seeing I to I: A pathway to interpersonal connectedness. *Journal of Personality and Social Psychology*, 90, 243-257.

Yalom, I. D. (1980). *Existential psychotherapy*. New York: Basic Books.

Thank you again for your participation!

Appendix O

Tips for Validating Another Person's Experience or Emotions (Linehan, 1993)

- **Be open and present:** Stop what you are doing, lean forward, and show you are paying attention. Listen carefully, hear the facts, and ask questions. Make sure to take in all the information before forming an opinion or judging.
- **Accurate Reflection:** Communicate to the person that you have heard them accurately and without bias.
 - You can repeat what the person said
 - You can paraphrase.
 - These techniques show that you have been listening.
- **Reading between the lines/mindreading:** Formulate a hypothesis about what you think the other is trying to say.
 - You can also try to narrow down that they are saying by asking them questions or guessing and asking if you guess is accurate.
- **Validating in terms of personal history or biology:** Letting people know that their behavior makes sense based on their past experiences indicates that you understand.
 - Also, a person's physical problems can influence how they behave.
 - Making reference to their limitations shows understanding
- **Normalizing:** Communicating that others would have the same response is helpful, when you can authentically say this.
 - Avoid shaming or sending a message that someone is defective.
 - Don't normalize behavior that is not normal.
- **Radical Genuineness:** Be completely genuine.
 - Do not marginalize, condescend, and do not talk down to the person.
 - Do not treat the person as if they are fragile or any differently than you would treat another person in the same situation.

Appendix P

I-Sharing Experience

Bad NFL lip reading 2015: A video where football players are dubbed with bad lip reading.

<https://www.youtube.com/watch?v=OTRmyXX6ipU>

Bud Light commercial: A commercial for Bud Light that involves a dog biting someone's crotch to get a beer.

https://www.youtube.com/watch?v=A_FYXicWqVg

Mommy's Nose is scary: A video of a baby scared of a Mom blowing her nose.

<https://www.youtube.com/watch?v=N9oxmRT2YWw>

Appendix Q

Feedback on Workshop Questionnaire

1. I found the existential isolation workshop useful.

1-----2-----3-----4-----5-----6-----7-----8-----9
strongly disagree strongly agree

2. I am likely to use the skills I learned in the workshop in my everyday life.

1-----2-----3-----4-----5-----6-----7-----8-----9
strongly disagree strongly agree

3. I learned something in the existential isolation workshop.

1-----2-----3-----4-----5-----6-----7-----8-----9
strongly disagree strongly agree

4. Please provide any feedback about what you liked and did not like about the workshop. In particular, if you found any aspects of the workshop to be particularly helpful, please describe them here.

Appendix R

Open Ended Feedback on Existential Connection Workshop

1. The beginning I would just have them say their name their major and where they are from.
2. I enjoyed the experience. I also like the fact that I got to connect with people who feel the same way I do.
3. I liked how the instructor explained what existential isolation. It really helped me figure if I truly have it or not.
4. I feel as though this workshop would be helpful for someone who is feeling isolated and are willing to open up. If they are sort of to themselves then I think they may need something a little more intense to get them opened up and willing to talk to receive help.
5. I thought this was actually helpful and interesting to see how people are and interact with each other.
6. She was incredible, great job.
7. It helped me embrace thinking different.
8. It was interesting. The room was really hot.
9. I like that I could relate to this workshop. I also liked that I am able to get feedback and times on how to talk with someone I am having problems with.
10. In the start of the whole workshop I felt anxious with interacting with new people but liked how everyone was on the same almost exact level and it all worked out well, I calmed down.
11. It was very hot.
12. I am not necessarily a part of the existential isolation community. Abby was a good proctor.
13. I liked that we got to know each other a little.
14. Maybe have some more ice breakers at the beginning. It can be hard to open up when surrounded by strangers.
15. Mainly that other people didn't participate. I'm not usually the one to speak up but I feel like if other people gave their actual thoughts it would have been more interesting and I definitely would have engaged more.

Table 1

Existential Isolation Correlations for the Whole Sample, Males, and Females

	Whole Sample (N=401)	Males (N=177)	Females (N=223)
Depression	.28*	.29*	.32*
Generalized Anxiety	.30*	.36*	.30*
Social Anxiety	.09	.06	.17^
Self-concealment	.20*	.16^	.24*
Autonomy	-.13^	-.08	-.18^
Competence	-.17*	-.14^	-.21^
Relatedness	-.37*	-.32*	-.40*
Life Satisfaction	-.36*	-.39*	-.36*
Performance SE	-.16^	-.06	-.27*^
Social SE	-.09	-.01	-.20^~
Appearance SE	-.17*	-.17^	-.24*
Social Support	-.32*	-.30*	-.32*
Interpersonal Isolation	.28*	.25*	.33*
Health	-.19*	-.16^	-.29*

Note. The designation * indicates $p < .001$. The designation ^ indicates $p < .05$. The designation ` indicates that there is a statistically significant difference between the correlation for Males and Females at $p < .05$. The designation ~ indicates that there is a marginally significant difference between the correlation for Males and Females at $p = .057$.

Table 2

Existential Isolation Correlations for the Whole Sample, Whites, and Non-Whites

	Whole Sample (N=401)	Whites (N=320)	Non-Whites (N=73)
Depression	.28*	.27*	.28*
Generalized Anxiety	.30*	.31*	.35*
Social Anxiety	.09	.12^	-.07
Self-concealment	.20*	.22*	.14
Autonomy	-.13^	-.12^	-.23
Competence	-.17*	-.19*	-.10
Relatedness	-.37*	-.38*	-.36^
Life Satisfaction	-.36*	-.39*	-.28^
Performance SE	-.16^	-.17^	-.15
Social SE	-.09	-.11	-.03
Appearance SE	-.17*	-.20*	-.12
Social Support	-.32*	-.38*	-.12`
Interpersonal Isolation	.28*	.29*	.11
Health	-.19*	-.19*	-.21

Note. The designation * indicates $p < .001$. The designation ^ indicates $p < .05$. The designation ` indicates that there is a significant difference between the correlation for Whites and Non-Whites at $p < .05$. Not all participants identified their ethnicity; therefore, the number of Whites and Non-Whites does not add up to the total number of participants.