The use of a self-affirmation intervention and group therapy to increase psychological help-seeking

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The use of a self-affirmation intervention and group therapy to increase psychological help-seeking

by

Andrew Jacob Seidman

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Psychology (Counseling Psychology)

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The student author, whose presentation of the scholarship herein was approved by the program of study committee, is solely responsible for the content of this dissertation. The Graduate College will ensure this dissertation is globally accessible and will not permit alterations after a degree is conferred.

Iowa State University

Ames, Iowa

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ABSTRACT

The self-stigma of seeking help is a significant barrier to utilizing psychotherapy (Vogel, Wade, & Haake, 2006). Self-stigma may also impair therapeutic factors from emerging during the therapy process itself (Kendra, Mohr, & Pollard, 2014). In order to manage fears of negative reactions, clients may conceal painful emotions, interfering with therapeutic work (Corrigan & Rao, 2012). This may help explain why the majority of clients only attend one session (Center for Collegiate Mental Health, 2018). Research has provided evidence for the ability of a self-affirmation intervention to reduce self-stigma and, via an indirect effect, increase anticipated benefits and decrease anticipated risks of self-disclosure among clients about to meet for a psychotherapy intake (Seidman, Lannin, Heath, & Vogel, 2018). However, research is needed to examine if this intervention influences actual behaviors in a therapy session. In addition, there is no known research on its effect on post-session perceptions of therapy or openness to continued help-seeking. This study tested the utility of a self-affirmation intervention to improve group therapy process variables (e.g., cohesion) and increase openness to continued help-seeking (i.e., less public stigma, self-stigma, increased attitudes and intentions). This study also sought to replicate and extend upon findings from a previous study (Wade et al., 2011), which demonstrated that attending a single session of group therapy reduces self-stigma compared to a waitlist condition.

Keywords: self-affirmation; group therapy; self-stigma; cohesion; help-seeking
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CHAPTER 1
INTRODUCTION

One in six American adults (44.7 million) are currently living with a mental illness (National Institute of Mental Health, 2017). Surprisingly, only 43.1% of those afflicted seek professional psychological help - young adults (18-25 years old) utilize treatment at the lowest rates (~35%). A comprehensive review of the efficacy of psychotherapy has demonstrated its ability to treat a diverse set of mental health concerns (Wampold & Imel, 2015). In addition, psychotherapy services are becoming increasingly available on college campuses (Center for Collegiate Mental Health, 2018). This raises the question: what is stopping college students from seeking help?

When considering professional help, people typically encounter numerous barriers, including, but not limited to: provider availability, insurance restrictions, and financial barriers (Kessler et al., 2001). People may also endorse low levels of positive attitudes towards professional help, viewing it as a waste of time and ineffective (Vogel, Wester, & Larson, 2007). However, research has consistently implicated one barrier as most prominent: the self-stigma of seeking help (e.g., Vogel, Wade, & Haake, 2006; Vogel et al., 2017). The self-stigma of seeking help, or the negative self-judgment that one feels for utilizing professional psychological services, is an internalization of the public stigma of seeking help (Lannin, Vogel, Brenner, & Tucker, 2015; Vogel, Bitman, Hammer, & Wade, 2013). Public stigma consists of negative perceptions of help-seekers in society, including stereotypes of them as socially awkward, insecure, incompetent, and having poor control of their emotions (Hammer & Vogel, 2017; Sibicky & Dovidio, 1986).
One reason that self-stigma may act as a barrier to seeking help is that the shame of acknowledging one’s mental health concerns and potential need for help impairs one’s self-esteem (Corrigan, Bink, Schmidt, Jones, & Rüsch, 2016). Individuals who pursue (or consider) psychological help are likely to be labeled as a “help seeker,” rendering them vulnerable to the associated negative societal stigma (Corrigan, 2004; Link et al., 1989). Per Goffman (1963), this label encompasses their identity. Self-stigma appears to threaten a holistic understanding of self: individuals with mental health concerns may develop an identity that is strongly defined by their illness (Yanos, Roe, & Lysaker, 2010). People who endorse high levels of self-stigma appear to agree with publicly held stereotypes and turn these negative attitudes inwards (Corrigan & Watson, 2002). Self-stigma is positively related to elevated levels of shame (Hasson-Ohayon et al., 2012), less disclosure of psychological distress to close others (Vogel et al., 2006), lower beliefs in the likelihood of recovery (Corrigan et al., 2016), and impaired perceptions of one’s self-efficacy to achieve life goals (Rüsche et al., 2006). As such, self-stigma not only interferes with help-seeking, but also impairs other elements indicative of one’s quality-of-life, leading to exacerbated psychological distress and increased vulnerability to further deterioration.

Although self-stigma is a clear barrier to seeking help, people may still utilize psychotherapy while endorsing shame about doing so (Corrigan, Druss, & Perlick, 2014). That is, self-stigma does not stop at the therapy room door; it may also impact key elements of the psychotherapy process. This may be because people tend to manage self-stigma concerns (i.e., fear of embarrassment or judgment) via avoidance and secrecy (Corrigan & Rao, 2012). Clients may engage in a variety of behaviors to avoid self-disclosing concerns more intimately linked to their presenting problems, including keeping secrets from their therapist (Baumann & Hill, 2016) or self-promoting one’s competencies and achievements (Frühauf, Figlioli, Oehler, & Caspar,
Although these behaviors are self-protective in that they seek to temporarily manage a client’s fear of judgment, they likely interfere with the processes that are implicated in positive client outcomes.

There is a continued debate as to which mechanisms of psychotherapy are most responsible for successful client outcomes (see Wampold & Imel, 2015, for a review). However, there is considerable evidence that suggests that the relationship between the therapist and client \((\text{working alliance})\) is a main curative factor (Wampold & Imel, 2015), responsible for as much as 7.6% of the effect of individual psychotherapy (Horvath, Del Re, Flückiger, & Symonds, 2011). Therapist empathy, which facilitates the working alliance, is also a notable predictor of group psychotherapy outcomes (Elliott, Bohart, Watson, & Greenberg, 2011). However, this relationship is only one of many relationships in group psychotherapy that affects one’s experience: members also develop relationships with other members \((\text{cohesion}; \text{Burlingame, Strauss,} \text{& Joyce, 2011})\). Cohesion has been identified as a prized element of the psychotherapy process by clients (Pan & Lin, 2004) and its importance is supported in clinical outcome research; meta-analytic results with 40 studies over a four-decade period suggested a medium effect of cohesion on group therapy outcomes \((r = .25; \text{Burlingame et al., 2011})\). Clients also develop perceptions of group engagement, conflict, and avoidance \((\text{i.e.}, \text{group climate}; \text{Mackenzie, 1983})\). A positive group climate has been shown to be predictive of client success (Theobald McClendon & Burlingame, 2011). Overall, it is the relationship that heals – or, in the case of group, the \text{relationships} (Burlingame, Fuhriman, & Johnson, 2002). They are so important that, according to Rutan & Stone (2001), group therapists should seek to establish a preliminary working alliance immediately upon meeting, even before providing group-related logistical information.
Although there is limited research on the extent of how self-stigma impacts therapeutic relationships, Kendra, Mohr, & Pollard (2014) provided evidence that the self-stigma of having psychological problems was linked with a poorer therapist-client working alliance. Similar research has demonstrated that self-stigma has an indirect effect on session outcomes via perceptions of the therapeutic working alliance (Owen, Thomas, & Rodolfa, 2013). If clients do not perceive a positive relationship with their therapist, it is likely that they will endorse reduced feelings of trust and safety (Horvath & Greenberg, 1989). Without trust, clients may feel less comfortable self-disclosing painful emotions and experiences (Shapiro, 1991). Self-disclosure is critical in psychotherapy, facilitating successful client outcomes, such as decreased client-reported stress and symptomology (Kahn, Achter, & Shambaugh, 2001). Research has demonstrated the relationships between self-disclosure and perceptions of session depth (Kahn, Vogel, Schneider, Barr, & Herell, 2008) and attachment to one’s therapist (Saypol & Farber, 2010). The importance of safety translates to group therapy settings as well: increased perceptions of the working alliance with one’s therapist have been related to increased perceptions of one’s amount of self-disclosure (Robak, Kangos, Chiffriller, & Griffin, 2013).

However, if self-stigma is not managed, and clients feel shame for needing professional help, it may interfere with developing healthy therapeutic relationships. These findings may help explain recent research that has found that increased levels of self-stigma predict attending less behavioral health care sessions (Seidman, Wade, Vogel, & Armistead-Jehle, 2019) and treatment dropout (Britt, Jennings, Cheung, Pury, & Zinzow, 2015).

To the degree that self-stigma impairs therapeutic processes and contributes to early dropout, it is critical to help psychotherapy clients manage these negative self-judgments. According to self-affirmation theory (Steele, 1988), all individuals have a self-system, or an
internal mechanism that helps people maintain favorable views of the self (i.e., as adequate, stable, and competent). Like all systems, the self-system seeks to preserve homeostasis; stimuli that threaten one’s feelings of self-worth activates defense mechanisms to neutralize the threat and avoid potential damage. For example, individuals may derogate others who provide threatening feedback about one’s self (Sherman & Cohen, 2006) or avoid self-relevant information if it is perceived as threatening (Kang et al., 2017).

As people seek to avoid feelings of inferiority, they naturally limit their exposure to situations in which these feelings can be triggered. Psychotherapy, although useful, can be threatening to one’s positive view-of-self; at one level, seeking help can be conceptualized as the act of deciding whether or not to self-disclose a problem to someone else (Keith-Lucas, 1994; Vogel & Wester, 2003). Meeting with a professional mental health therapist may threaten one’s feelings of self-reliance and individualism (Hoyt, Conger, Valde, & Weihs, 1997). Given the ubiquity of public stigma (Corrigan & Watson, 2002), people may have to contend with how they will maintain a positive self-conception (i.e., as competent) now that they are engaging in an act so intimately linked with stereotypes of incompetence and inadequacy (Hammer & Vogel, 2017). As such, people may simply avoid psychotherapy to avoid these threats.

Beyond providing a framework for understanding why seeking help is threatening, self-affirmation theory also provides guidance to help reduce the self-threat associated with it (Steele, 1988). Via the administration of a self-affirmation intervention, people are given the opportunity to reflect on one’s prized personal values and character strengths. Typically, participants are asked to complete a series of tasks in which they first rank the personal importance of certain values or character strengths; after, they complete a writing task in which they explain how this value or character strength brings meaning and purpose to life (McQueen & Klein, 2006).
Through this process, people experience a bolstering of the self-system (Steele, 1988). Research has proposed a multitude of ways to operationalize this process (Howell, 2017), yet the general consensus is that people begin to see themselves in a more expansive way – that is, not only defined by one characteristic (Cohen & Sherman, 2014). After completing a self-affirmation intervention, an individual may experience decreased resistance and increased openness to otherwise threatening feedback (e.g., that one is distressed and should consider talking to a therapist) or behavior (e.g., meeting with a therapist) because it will only represent a threat to a part of the person, instead of the person as a whole. Self-affirmation may enable individuals to see the self from a more global perspective, placing the threat more in a holistic context, which will enable the self-system to maintain homeostasis (e.g., as competent) while the person engages in a potentially risky behavior (Sherman et al., 2014).

Self-affirmation interventions have a well-documented ability to reduce defensive processing of self-relevant information (e.g., van Koningsbruggen, Das, & Roskos-Ewoldsen, 2009) and avoidance of threatening health behaviors (e.g., receiving feedback about disease vulnerability; Howell & Shepperd, 2012). Recent research at the intersection of brain biology and psychology has suggested that self-affirmation reduces the startle-eyeblink response (Crowell, Page-Gould, & Schmeichel 2015), a basic defense to threatening stimuli, suggesting that it may buffer the self from perceived threat at a physiological level. These neutralized threat responses facilitate tangible outcomes: multiple reviews of the literature and meta-analyses have documented their utility in increasing attitudes and intentions towards healthy behaviors, and the actual behavior itself (e.g., Harris, Kane, van Koningsbruggen, & Sheeran, 2015; Sheeran, Klein, & Rothman, 2017; Sweeney & Moyer, 2015).
The wealth of findings that suggest the utility of self-affirmation interventions for physical health behaviors recently spurred a nascent yet emerging line of research testing their effects in the domain of psychological health behaviors – namely, the process of seeking psychotherapy. For example, Lannin, Guyll, Vogel, & Madon (2013) have demonstrated its ability to reduce self-stigma among a sample of distressed undergraduate students. Additionally, through this reduction, the authors provided evidence of a positive indirect effect on willingness to seek help. Similar research has suggested that self-affirmation is useful in improving beliefs about the utility of psychotherapy and increasing intentions to seek help among distressed adults (Lannin, Vogel, & Heath, 2017) and intentions among undergraduate student Veterans (Seidman, Wade, et al., 2018).

Decreasing barriers to psychotherapy is important, but there is no known research that has examined its effect on the psychotherapy process itself. However, recent research (Seidman, Lannin, Vogel, & Heath, 2018) has demonstrated the ability of this intervention to reduce self-stigma, and via an indirect effect, increase positive expectations of self-disclosure and reduce negative expectations among participants presenting for a psychotherapy intake. Although increasing positive expectations of the psychotherapy process is important, there is no known research that has examined the utility of these interventions to improve participants’ experience of the psychotherapy session itself. It is plausible that, although expectations improve, within-session behavior stays the same: that is, individuals do not disclose any more than they would otherwise or engage in less avoidance behaviors. However, the opposite is also possible: a self-affirmation intervention may be able to elicit more sharing in a group psychotherapy session, fostering increased perceptions of group relationships (e.g., cohesion, alliance). Additionally, self-affirmation may predict increased openness to continued help-seeking after just one session.
Although research has demonstrated that self-stigma does decrease after just one session of group psychotherapy (Wade, Post, Cornish, Vogel, & Tucker, 2013), self-stigma still appeared to be a problem; out of a total possible 50 points, participants still reported notable levels of self-stigma ($M = 25.3$, $SD = 7.3$). Its further reduction would be critical to facilitate improved openness to help-seeking, as similar levels of self-stigma have been associated with reduced interest in psychotherapy services (Lannin, Vogel, Brenner, Abraham, & Heath, 2016). Future research is needed to examine how to further “boost” the effects of a one-time group session. Specifically, can preceding a session with a self-affirmation intervention lead to improve perceptions of group relationships? Additionally, can it increase openness to future help-seeking?
CHAPTER 2
LITERATURE REVIEW

“While the stranger is present before us, evidence can arise of his possessing an attribute that makes him different from others in the category of persons available for him to be, and of a less desirable kind – in the extreme, a person who is quite thoroughly bad, or dangerous, or weak. He is thus reduced in our minds from a whole and usual person to a tainted, discounted one. Such an attribute is a stigma, especially when its discrediting effect is very extensive; sometimes it is also called a failing, a shortcoming, a handicap. It constitutes a special discrepancy between virtual and actual social identity.” (Goffman, 1963, p. 11-12).

Multiple definitions for stigma exist, yet all contain a common theme: a mark of shame (Hinshaw & Cicchetti, 2000). The stigmatization process has a long history. Initially, one’s stigma was communicated via physical markings; signs marking a certain attribute of a person (i.e., criminal, traitor) were cut or burned into the body (Hinshaw, 2007). Through this, society was alerted to the undesirable status of an individual or group. As corporal punishment became increasingly criminalized, the main methodology of stigmatization transitioned to psychological in nature, including elements of stereotyping, prejudice, and discrimination (Corrigan & Watson, 2002).

There is a notable body of literature that has identified the societal consequences of having a mental illness. That is, beyond the psychological effects inherent to one’s illness, individuals who are labeled as having a mental health concern must also contend with a range of associated costs, including, but not limited to: being seen as less human than others (Martinez, Piff, Mendoza-Denton, & Hinshaw, 2011), difficulty obtaining and maintaining employment (Stuart, 2006), societal preferences to not have them marry into one’s family (Barry, McGinty, Pescosolido, & Goldman, 2014), and limited levels of social support (Kranke, Floersch, Townsend, & Munson, 2009).
These negative effects are additive, exacerbating the presenting mental health concern by cutting off coping resources, which may otherwise buffer the negative effects of living with a diagnosis (Comer & Comer, 2017), ultimately making the individual increasingly vulnerable to further clinical deterioration. Via the loss of these resources, the stigmatized individual may begin to fulfill core mental health stereotypes (e.g., aimless, isolated), facilitating further justification of these stereotypes and perpetuating their presence in society. This process may suggest why research has suggested that stigma can be more dangerous than the disorder itself (Corrigan & Matthews, 2003).

Although these effects are far-reaching, research has provided justification for why stigma may be so deleterious. First, there are multiple stigmas; Corrigan & Watson (2002) provide a framework to understand the four primary stigmas: (1) the public stigma of mental illness, (2) the self-stigma of mental illness, (3) the public stigma of seeking psychological help, and (4) the self-stigma of seeking psychological help. In addition to providing a paradigm to understand stigma, the authors propose that individuals must also contend with multiple elements respective to each stigma: stereotypes, prejudice, and discrimination. Stereotypes act as a heuristic in social situations, facilitating impression and expectation formation based on social grouping (i.e., that someone with a mental health concern is automatically unstable and violent; Corrigan, 2004; Hamilton & Sherman, 1994). Prejudice entails a cognitive element (i.e., a stereotype), yet also consists of an affective element – in response to a person with mental illness, an individual may feel fear and desire distance (Allport, 1954; Corrigan & Watson, 2002). Ultimately, prejudice fosters discrimination (i.e., exclusion), the behavioral component of stigma.
Understanding Stigma

**Public stigma of mental illness and seeking help.** Negative perceptions of individuals with a mental health diagnosis constitute the *public stigma of mental illness*. Public stigma is maintained in the public sphere; analyses of film and print involving topics related to people with a mental illness suggest three main stereotypes: 1) they are “homicidal maniacs,” 2) they have “childlike perceptions of the world,” and 3) they are “rebellious, free spirits” (Corrigan & Watson, 2002, p. 36). Each stereotype activates a prejudicial and discrimination component. For example, when perceiving individuals with a mental illness as violent, people tend to respond with feelings of fear and desire to exclude the feared individual. Similarly, perceiving them as childlike inspires benevolence and perhaps condescension. Finally, stereotypes of people with a mental illness as rebellious and free can inspire authoritarianism behavior, framing the individual as irresponsible. Through these processes, people with a mental illness are labeled and separated into an outgroup (Link & Phelan, 2001).

In contrast, the *public stigma of seeking help* encompasses negative perceptions of people who actually engage in the help-seeking process (e.g., express desire for help, attend psychotherapy). This concept is correlated with the public stigma of mental illness (Tucker et al., 2013). However, as it is possible to be experiencing a mental health concern yet not engage in help; these stigmas have factorial independence. Additional research has corroborated these findings; individuals who have depression are rated as more emotionally stable than those who are depressed and seek help for their depression (Ben-Porath, 2002). As such, the stigmatizing implications of seeking help also demand attention.

In a creatively designed study, Sibicky & Dovidio (1986) tested how stereotypes of help-seekers influenced social interactions. Participants were either randomized to be “perceivers” or
"targets" in a brief study about how people become acquainted with one another. Participants in the perceiver condition were told that their conversational partner (target) either was recruited from a local counseling clinic or from a psychology course – targets were unaware of their designation. Perceivers who spoke with targets who were presented as counseling clients rated them less favorably (e.g., more awkward, less competent) than those who believed they spoke with a psychology student. Additionally, external judges rated the perceivers’ social behavior as less favorable towards “clients” (e.g., less enthusiastic, more artificial). Targets who were presented as clients corroborated these judgments, reporting that they were less comfortable in the conversation and beliefs that they were perceived less accurately by their conversational partner. The judges also observed behavioral cues for these feelings, indicating that “clients” acted less open, secure, social, and competent than their student counterparts. Recently, Hammer & Vogel (2017) provided further evidence that help-seekers are stereotyped as incompetent, cowardly, unstable, and oversensitive.

**Self-Stigma of Mental Illness and Seeking Help**

Analogous to the differentiation of public stigma, Corrigan & Watson (2002) also suggest the presence of two self-stigmas: the *self-stigma of mental illness* and the *self-stigma of seeking help*. The self-stigma of mental illness refers to negative self-judgments one has for having a mental health concern (Corrigan, Watson, & Barr, 2006). The self-stigma of seeking help refers to similar judgments, yet specific to the behavior of seeking professional psychological services to address a concern (Vogel et al., 2006).

Although self-stigma exists within a person, it is internalized via public messages about help-seekers; research using cross-lag analysis has demonstrated that public stigma is a stronger temporal predictor of self-stigma than self-stigma of public stigma (Vogel et al., 2013). Corrigan
et al. (2006) proposes a stepwise process in the development of self-stigma based off of previous work related to the consequences of societal labeling (Link, 1987; Link, Cullen, Struening, Shrout, & Dohrenwend, 1989; Link & Phelan, 2001). First, individuals must be aware of stereotypes (i.e., public stigma). Then, they must agree with these stereotypes, which renders them vulnerable to the internalization process. Self-stigma is exacerbated when people apply these views to themselves (e.g., “I am incompetent because of my mental health concern/help-seeking behavior). This concurrence elicits the final stage in the process: a decrease in self-esteem.

This decrease in self-esteem is especially dangerous. According to Corrigan et al. (2016), individuals who have increased levels of self-stigma become vulnerable to asking themselves: “why try?” Essentially, one’s feelings of worthiness and capability to achieve goals are impaired, facilitating a wide-range of negative outcomes (see Livingston & Boyd, 2010, for a review). In their meta-analysis, the authors demonstrated significant relationships between increased self-stigma and loss of self-esteem, feelings of empowerment, hope, social support/integration, and quality of life (Livingston & Boyd, 2010). Increased self-stigma was also related to worse symptomatology and treatment adherence. Additionally, there is evidence of longitudinal relationships, suggesting that self-stigma is related to increased amount of future diagnoses, shame, and lower self-esteem (Livingston & Boyd, 2010). One can easily imagine that, due to how increased self-stigma renders one vulnerable to other negative processes (i.e., fear that others will see them as a burden, belief that they cannot hold a job), that it facilitates a self-fulfilling prophecy, further exacerbating clinical symptomatology.

The self-stigma of seeking help, although similar, has factorial independence from the self-stigma of mental illness (Tucker et al., 2013). For example, only the self-stigma of seeking
help was positively related to feelings of self-blame for depressive symptoms, suggesting lower levels of perceived control over one’s mental health concern. That is, although having a mental health concern may not be a choice, seeking help is, and thus may render a person more vulnerable to negative self-directed feelings. Additionally, unlike the self-stigma of having a mental illness, the self-stigma of seeking help explained more variance in attitudes and intentions to utilize psychological services among two samples: distressed undergraduate students and community members with a self-reported history of mental illness, suggesting that it is more detrimental to the likelihood of meeting with a mental health professional. Additional research has corroborated these findings, providing evidence that the self-stigma of seeking help has a stronger relationship with intentions to seek help than does the self-stigma of having a mental illness (Lannin et al., 2015).

The self-stigma of seeking help has been consistently implicated as a more proximal barrier to help-seeking attitudes and intentions than public stigma (Bathje & Pryor, 2011; Vogel et al., 2007, 2017). Meta-analytic research has identified the self-stigma of seeking help as having the largest effect size ($r = -.63$) on help-seeking attitudes compared to public stigma, anticipated risks, and self-concealment strategies (Nam et al., 2013). The effect of societal labeling (e.g., as a help-seeker) is one reason why the self-stigma of seeking help may be such a deterrent to utilizing psychological services (Corrigan et al., 2006; Link et al., 1989). However, Link et al. also propose that, if unlabeled (via not considering/seeking help), people are able to avoid the aforementioned processes and must only manage negative effects due to the mental health concern(s) themselves. Corrigan & Matthews (2003) suggest that the desire to avoid the help-seeker label is most responsible for the effect of stigma on mental health care utilization.
The research is clear: self-stigma is a notable barrier to seeking help. Given its impact on the anticipated benefits and risks of self-disclosure (Vogel et al., 2006; Vogel et al., 2007), it is conceivable that self-stigma also impairs the psychotherapy process itself. That is, it is unlikely that self-stigma only impacts attitudes and intentions to seek counseling. In addition, it may also “leak” out in the therapy room itself and hinder curative factors of the treatment process.

**Psychotherapy and the Role of Group**

Psychotherapy is typically referred to in the context of individual services (Slocum, 1987). However, group psychotherapy has forged its own way, gaining some measure of popularity for two main reasons: it is less financially burdensome than individual psychotherapy (Paturel, 2012) and meta-analytic research has suggested that it is just as effective (Burlingame, Strauss, & Joyce, 2011; McRoberts, Burlingame, & Hoag, 1998). Given the amount of individuals in a typical group (i.e., 6-8; Yalom & Leszcz, 2005), this service also offers therapists the opportunity to reach more clients.

Just as the practice of individual psychotherapy is replete with a rich history of theoretical orientations, so too has group psychotherapy taken different forms, including, but not limited to: self-help groups (e.g., Alcoholics Anonymous), psychoeducational groups, and psychotherapy groups. One type of psychotherapy group is the *interpersonal process group*. The main difference between a process group and others is the focus on the “here-and-now” (Yalom & Leszcz, 2005, p. 121). The here-and-now refers to the processes unraveling in the present moment of the group. This is in contrast to the problems that occur outside of the immediate moment (e.g., historical incidents in one’s life).

The roots of this type of group can be primarily traced to Kurt Lewin’s use of T-groups (training groups) in the 1940s. Initially, psychologists sought to help ameliorate tension among
different ethnic and cultural groups by facilitating discussion groups in which members shared problems they had previously encountered. Group members eventually learned that the staff met after to discuss group dynamics and processes. Intrigued, they requested to be present. At these post-session meetings, the staff encouraged members to reflect and give feedback regarding their analyses, which facilitated dialogue about their interpersonal behavior and its effect on others. Soon, the facilitators realized the importance of experiential learning, or reflecting on the complexities of group interaction. This revelation sparked a focus on the importance of the “here-and-now,” as opposed to the “then-and-there.”

In an interpersonal process group, discussing the here-and-now is considered of paramount importance; Yalom & Leszcz (2005) suggest “as long as you persistently direct the group from the nonrelevant, from the then-and-there, to the here-and-now, you are operationally correct” (p. 162). This may be because these conversations facilitate the connectedness, safety, and trust needed to do therapeutic work. When members re-enact relationship patterns in the group environment, a here-and-now focus allows them to give and receive feedback about how they are perceived by others, which may be especially helpful because many clients are referred to group because of relationship-related problems. A recent nationwide survey of college counseling centers revealed that the six prevailing psychological concerns among students are related to anxiety (23.3%), depression (18.8%), a specific relationship problem (7.6%), stress (5%), interpersonal functioning (4.2%), and family (4.2%; Center for Collegiate Mental Health, 2018). Even for clients who do not present specifically for interpersonal problems, mood and anxiety disorders have interpersonal manifestations, ranging from (but not limited to): irritability amongst others, avoidance behaviors, difficulties being assertive, trust issues, and problems setting healthy boundaries (Johnson, 2009; Teyber & Teyber, 2016). These concerns are
common primary areas of work in group psychotherapy, and thus suggest the appropriateness of

group referrals for many college students.

**What Makes Group Work?**

Although comparable in efficacy, group has been theorized to have different curative

factors than individual psychotherapy (Yalom & Leszcz, 2005). Given the presence of multiple

members in a group, each group is unique. However, researchers have attempted to distill the

complexity of the group experience. Yalom & Leszcz (2005) provide a list of the 11 main

curative factors in this psychotherapy setting: 1) instillation of hope, 2) universality, 3) imparting

information, 4) altruism, 5) the corrective recapitulation of the primary family group, 6),
development of socializing techniques, 7) imitative behavior, 8) interpersonal learning, 9) group

cohesion, 10) catharsis, and 11) existential factors. Researchers have examined their relationship

with group outcomes; in a review of the literature, Fuhriman, Drescher, Hanson, Henrie, &

Rybicki (1986) note the overall value of interpersonal learning, catharsis, insight, and cohesion

in predicting client outcomes. However, Fuhriman et al. (1986) claim that interpersonal learning

spanned across all factors; that is, “interpersonal learning, as defined by Yalom’s and our items,
is the format or structure in which all curative factors occur” (p. 198).

Interpersonal learning may underlie these group curative factors because their emergence

relies on the formation and maintenance of relationships. The therapeutic relationships that

emerge in a group setting have been noted as the primary change mechanisms of group

psychotherapy (Burlingame, Theobald McClendon, & Alonso, 2011). Poor relationship

development may be partly responsible for findings that approximately one-fifth of all clients

who begin psychotherapy quit prematurely (Swift & Greenberg, 2012). In fact, the majority of

clients only attend one session (Center for Collegiate Mental Health, 2018).
Group relationships have been conceptualized primarily with attention to two factors: *structure* and *quality* (Burlingame et al., 2002; Krogel et al., 2013). Structurally, researchers have proposed that there are three types of relationships: member-leader, member-member, and member-group (group as a whole). Given the emphasis on a positive group climate (e.g., feelings of engagement), much of the literature has focused on the influence of member-group relationships (Burlingame et al., 2002). However, another way to conceptualize the therapeutic relationship is to focus on its quality. According to Burlingame et al., there are four primary variables that represent this higher-order factor: *working alliance, group cohesion, group climate, and empathy*.

Although varying schools of psychotherapy have attempted to provide a conceptualization for what drives client change, there is a considerable amount of research that has suggested that the working alliance is at least a fundamental precondition to change, if not the primary agent of it (Wampold & Imel, 2015). Bordin (1979) conceptualized the working alliance as consisting of the client’s bond with the therapist, and agreement about both the tasks and goals of therapy. The working alliance has been suggested to be integral in facilitating a safe climate for therapeutic self-disclosure; client perceptions of safety and congruence with the therapist (e.g., involving the goals of therapy) may instill positive expectations, hope, and willingness to endure the sometimes-painful process of psychotherapy (Horvath & Greenberg, 1989; Wampold & Imel, 2015). A meta-analysis involving almost 200 studies and over 14,000 clients suggested a medium effect size (Cohen’s $d = 0.57$) of alliance on outcome; higher ratings of the working alliance were associated with decreased depression scores, fewer symptoms, and less dropout (Horvath, Del Re, Flückiger, & Symonds, 2011). Although much of the outcome
research has focused on the working alliance in individual treatment, this relationship still plays a role in group therapy.

In group, the working alliance may also be conceptualized as *vertical cohesion* (Burlingame et al., 2011). Research has found that increased client-rated perceptions of the working alliance in group were associated with symptom reduction, perceptions of reaching one’s goals in therapy, and overall life satisfaction (Abouguendia, Joyce, Piper, & Ogrodniczuk, 2004). Even early assessments of the relationship between the therapist and client in group are predictive; after just one session, increased working-alliance perceptions predicted a decrease in symptoms assessed in the next session (Norton & Kazantzis, 2016). The higher the level of working alliance at the beginning of therapy, the better the outcome, and as the alliance improves, so do outcomes (Piper, Ogrodniczuk, Lamarche, Hilscher, & Joyce, 2005). One reason this may be the case is that a bond with the therapist may lay and maintain the ground for therapeutic work: increased perceptions of the working alliance have been found to be related to increased perceptions of one’s self-disclosure in group (Robak, Kangos, Chiffriller, & Griffin, 2013). The bond among the group therapist and members has been linked to increased client perceptions of session depth and smoothness, in addition to reduced post-session self-stigma (Wade et al., 2011).

Although the working alliance has clear relationships to group therapy outcomes, its presence is complicated by other curative factors (i.e., relationships with other members). These member-member and member-group relationships exist in a horizontal direction, and are commonly referred to as *group cohesion* (Burlingame et al., 2011). Though related, they are different – member-member bonds are more influential on cohesion, just as therapist-client bonds are to the working alliance (Gillaspy, Wright, Campbell, Stokes, & Adinoff, 2002).
Group cohesion has been conceptualized in multiple ways. Yalom & Leszcz (2005) describe cohesion as the “esprit de corps”, (p. 55), or the shared spirit and morale amongst members. Theorists have also viewed cohesion as reflecting levels of interpersonal attraction to the other members (Stokes, 1983), mutual stimulation (Piper, 1983), and the sense of connection that allows therapeutic work to emerge (Kottler, 1994). Clients appear to explicitly value cohesion; members rank it as the most important therapeutic factor of their group experience compared to other factors (Pan & Lin, 2004). According to Yalom & Leszcz (2005, p. 55) “members of a cohesive group feel warmth and comfort in the group and a sense of belongingness; they value the group and feel in turn that they are valued, accepted, and supported by other group members.” Without cohesion, members feel less safe, impairing the working capacity of the group. Ultimately, this limits the opportunity for members to acquire and integrate a more nuanced understanding of interpersonal relationships into their social behavior.

Research has corroborated the theorized relationships between cohesion and the success of group psychotherapy; a meta-analysis of over 40 studies from a period of 4 decades suggested a medium effect of cohesion on client outcomes ($r = .25$; Burlingame et al., 2011). Cohesion has been linked to higher member attendance (Ogrodniczuk, Piper, & Joyce, 2006), group-level collective self-esteem (Marmarosh, Holtz, & Schottenbauer, 2005), member-member empathy (Braaten, 1990) and increased symptom reduction (Dinger & Schauenburg, 2010). For some, even imagining group-level connectedness is healing; research has shown that anticipated levels of cohesion are associated with client improvement (Mackenzie, 1994). Researchers have noted cohesion as existing at both the individual level (i.e., individual feelings of connection to the group; Gaston & Marmar, 1983) and a group-level phenomena (i.e., group-as-a-whole; MacKenzie, 1983; Wilson et al., 2008). Cohesion is predictive across a variety of factors,
including treatment settings, age groups, theoretical orientation, and diagnostic elements. However, Burlingame et al. (2011) provide evidence suggesting cohesion-outcome relationships show larger effect sizes if members are younger, have 5-9 members, or have therapists utilizing interpersonal orientations.

Although cohesion captures the bondedness and attachment within the group, group climate differs in that it measures one’s overall perception of the group environment (Marmarosh & Van Horn, 2011). A prominent conceptualization of group climate was provided by MacKenzie (1983), who suggested that members perceive engagement, conflict, and avoidance amongst each other. These factors are collaborative, making the group climate an “interactional product of interpersonal and group forces” (Theobald McClendon & Burlingame, 2011, p. 165). Levels of group engagement reflect feelings of cohesion and self-disclosure (Kivlighan & Tarrant, 2001; MacKenzie, 1983). In a summary of the literature on group climate, Theobald McClendon & Burlingame (2011) review the relationship between each aspect and group process and outcome; the authors suggest that engagement has a strong relationship with both, conflict has a moderate and moderate-to-strong relationship respectively, and avoidance has the weakest relationships. A positive group climate has been found to predict positive outcomes, including increased self-understanding (Tschuschke & Green, 2002), reduced symptoms and improved psychosocial functioning (Ogrodniczuk & Piper, 2003; Phipps & Zastowny, 1988).

Finally, client perceptions of empathy have been suggested to be a core component of successful psychotherapy (Rogers, 1975). Empathy, according to Truax, Wargo, & Silber (1966), enables therapists to enter the private world of clients, facilitating a moment-to-moment understanding. Through perceptions of empathy, clients may feel safe to disclose painful feelings (Shapiro, 1991; Stone & Whitman, 2001). Inversely, when therapists appear less attuned to their
clients, clients may become more defensive and resistant to therapist-initiated interventions (Patterson & Forgatch, 1985). This clearly will interfere with important therapeutic work; research has demonstrated that client-perceived empathy facilitates healthy affect regulation (Prosser, 2007). Malin & Pos (2015) found that client-rated perceptions of empathy predicted increased observer-rated levels of client emotional processing. In a group setting, both the therapist and members have the opportunity to respond to disclosures with empathy, which facilitates group cohesion (Abernethy, Tadie, & Tilahun, 2014). As such, empathy facilitates within-group social learning into the client’s outside world (Yalom & Leszcz, 2005).

Although empathy may be considered to be an undercurrent of the working alliance, cohesion, and positive group climate (e.g., Bordin, 1979; Burlingame et al., 2002, 2011; Feller & Cottone, 2003), the American Psychological Association Task Force on Evidence-Based Therapy Relationships (Norcross & Wampold, 2011) has noted it as a unique evidence-based element of the psychotherapeutic relationship, a recommendation based on years of empirical research studying its effect. Elliott, Bohart, Watson, and Greenberg (2011) conducted a comprehensive meta-analysis of 59 studies with over 3000 clients and found a moderately strong relationship ($r = .31$) between empathy and psychotherapy outcome. Furthermore, Elliott et al. note that empathy is slightly more predictive of positive outcome in group therapy than in individual settings.

Clients may perceive varying levels of therapist empathy throughout the course of therapy, but its immediate presence is critical; therapists rated by observers as having higher levels of empathy during the first session of therapy were more likely to have clients reporting higher perceptions of the working alliance (Malin & Pos, 2015). Additionally, client perceptions of empathy account for significant variance in working alliance scores in longer term treatment.
(Horvath & Greenberg, 1989; Pos, Greenberg, & Warwar, 2009). These findings may help explain why clients who perceive more empathy are less likely to drop out of therapy (Burns & Nolen-Hoeksema, 1992). Additionally, clients who report increased levels of empathy report higher self-esteem and their therapists rate them as making more progress (Kurtz & Grummon, 1972). Kurtz and Grummon also found that independent judges rated these clients as making more positive personality changes. Empathy also has a longstanding influence, possibly because of the way it facilitates healthy self-esteem development (Rogers, 1975); in a study of problem drinkers, empathy accounted for 25% of outcome variance two years after treatment was over (Miller & Baca, 1983; Miller, Taylor, & West, 1980).

A review of the group psychotherapy literature notes the working alliance, group cohesion, group climate, and empathy as predictors of successful client outcomes (Burlingame et al., 2011; Elliott et al., 2011; Marmarosh & Van Horn, 2011; Piper et al., 2005). However, there is marked overlap between group constructs (Johnson et al., 2005; Theobald McLeod & Burlingame, 2011). For example, a wealth of theoretical and empirical research has demonstrated a relationship between cohesion and climate (e.g., Burlingame et al., 2002; Johnson et al., 2005, Kivlighan & Lilly, 1997). In fact, some researchers use the GCQ as a measure of cohesion (Burlingame et al., 2001; Deane, Mercer, Talyarkhan, Lambert, & Pickard, 2012) as MacKenzie (1981), creator of the GCQ, suggests that engagement is equivalent to cohesion. Krogel et al. (2013) has noted that not all group studies simultaneously examine relationship elements together, but among those that have, cohesion and alliance appear to be the most paired. Among these studies (Gillaspy, Wright, Campbell, Stokes, & Adinoff, 2002; Joyce, Piper, & Ogrodniczuk, 2007; Lorentzen, Sexton, & Hoglund, 2004; Marizali, Munroe-Blum, & McCleary 1997), alliance was noted as a stronger predictor. However, Crowe & Grenyer (2008)
suggest the opposite: after 16 weeks of group psychotherapy, early measures of alliance did not predict a decrease in symptomatology, but cohesion did. Similarly, Taft, Murphy, King, Musser, and DeDyn (2003) found that cohesion and therapist (but not client) ratings of the working alliance predicted decreases in psychological and emotional abuse among violent men referred to group cognitive-behavioral therapy.

Overall, Marmarosh and Van Horn (2011) note that, although cohesion and alliance are related, they are unique aspects of group psychotherapy and demonstrate different relationships with outcomes. Although group members may sooner and more safely develop cohesion amongst each other if they perceive a healthy working alliance with the therapist, members may still be able to form relationships without feeling as connected to the group leader(s). These mixed findings may be explained by a range of elements, including: client, diagnostic, treatment, and therapist factors, and are further complicated by varying definitions and measures. Regardless, Burlingame et al. (2002) suggest measuring all of these variables simultaneously.

Given the importance of these processes in securing successful client outcomes, group researchers have proposed that leaders engage in many behaviors to increase their presence. For example, Morran, Stockton, and Whittingham (2004) propose that leaders promote safety and facilitate cohesion by energizing and involving group members. Chapman, Baker, Porter, Thayer, and Burlingame (2010) proposed a tripartite model of desired group leader behaviors, encompassing 1) group structuring, 2) verbal interaction, and 3) creating and maintaining an emotional climate. These recommendations are valuable in that they help shape leadership behaviors. However, although the effects of these behaviors are intended to influence the group, their implementation is largely predicated on one person. Therefore, it is also important to understand how clients contribute to the therapeutic relationship.
**Self-Disclosure and the Therapeutic Relationship**

As cohesion is operationalized as the “we-ness” present in a group session (Yalom & Leszcz, 2005), it is apparent that the development of this curative factor relies on participation. The working alliance, empathy, and an overall group climate additionally rely on therapist-client and member-member interaction. Overall, client self-disclosure is a core process of psychotherapy. Research has corroborated its importance, demonstrating that self-disclosure facilitates successful client outcomes; those who tend to talk about distressing emotions report greater well-being than those who tend to conceal (Kahn & Hessling, 2001). In addition, higher levels of self-disclosure during counseling have been associated with decreased client-reported stress and symptomology at termination (Kahn, Achter, & Shambaugh, 2001).

Beyond providing content for discussion, self-disclosure facilitates relationships in the therapy room. After just one meeting, increased client perceptions of the working alliance were associated with disclosing more information about their personal history and sociocultural background (Nakash, Nagar, & Kanat-Maymon, 2015). In longer-term settings, increased disclosure in therapy is related to attachment to one’s therapist (Saypol & Farber, 2010) and higher levels of affective and verbal expression (Gaston, 1992). When there is disclosure, deeper therapeutic work can emerge; increased perceptions of self-disclosure have been related to higher levels of session depth (Kahn, Vogel, Schneider, Barr, & Herell, 2008).

Inversely, clients who endorse concealment behaviors report impaired perceptions of their relationship with their counselor (Baumann & Hill, 2015; Farber & Hall, 2002). Similarly, in therapist-client dyads where clients endorse secret-keeping, both parties report lower perceptions of the working alliance compared to dyads in which clients do not (Kelly & Yuan, 2009). This may be because clients who are focusing on managing self-stigma and shame
concerns may be spending energy on avoidance behaviors that could otherwise be used to facilitate productive processes in therapy (Hill, Gelso, & Mohr, 2000).

As noted earlier, Yalom & Leszcz (2005) propose that here-and-now interactions are critical for clients to acquire a complex affective and cognitive understanding of their socializing patterns. Slavin (1993) substantiated these claims through findings that here-and-now disclosures were the strongest predictor of group cohesion ratings behind feelings of attraction to other members. In fact, there-and-then disclosure was the only variable not related to cohesion ratings. As such, group therapists typically focus on eliciting feelings of inclusion among members by encouraging self-disclosure (American Group Psychotherapy Association, 2007; Wheelan et al., 2003). This happens as early as the first session which represents a unique stage of group psychotherapy development during which emerging bonds are formed (Tuckman, 1965). In fact, Rutan & Stone (2001) propose that the establishment of a working alliance should take precedence over every other task, even logistical factors of group (i.e., time, location).

Although revealing personal information is integral to psychotherapy, clients commonly report self-disclosure concerns and fear of rejection and criticism as common barriers to seeking group psychotherapy (Piper, 2008; Schechtman & Kiezel, 2016). Ormont (1956) suggested that “asking a patient to venture into a group is often tantamount to asking him to return to his original family constellation with all its accompanying trauma, terror, and personal tragedy” (p. 844). As MacKenzie (1997) suggested, the first stage of group formation consists of engagement behaviors (e.g., self-disclosure, interaction). Self-disclosing to a therapist is already perceived as risky (Vogel & Wester, 2003), but disclosing to a therapist and a group of strangers in the first session may feel even more dangerous (Parcover, Dunton, Gehlert, & Mitchell, 2006). However, without disclosure, therapeutic relationships may not emerge. In group therapy settings, lower
ratings of the working alliance were related to decreased perceptions of one’s amount of self-disclosure (Robak et al., 2013).

As noted by Johnson (2009), it may be especially important to find ways to facilitate self-disclosure among undergraduate populations, as many students may not have fully developed the skills critical for group therapy (Chickering & Reisser, 1993). Researchers have recommended providing orientation meetings prior to beginning group, in which counselors set norms and discuss expectations (Johnson, 2009; Rutan & Stone, 2001). Parcover et al. (2006) recommend helping clients identify the interpersonal components affected by their presenting concerns. However, little research exists on the use of other interventions designed to increase client disclosure and perceptions of the therapeutic relationship. However, research has demonstrated that pre-group levels of self-esteem predict increased rates of self-disclosure, empathy towards group members, and openness to feedback (Shea & Sedlacek, 1997). Therefore, reducing self-stigma and improving a group member’s self-esteem may be useful in facilitating self-disclosure in therapy.

Self-Stigma in the Counseling Room

As discussed, self-stigma has a notable adverse impact on help-seeking attitudes, intentions, and behavior (Lannin et al., 2016; Vogel et al., 2007, 2017). As the salience of stigma increases as an individual takes more steps towards help-seeking (Corrigan et al., 2014), self-stigma may also impairs psychotherapy processes. Therefore, “getting in the door” does not guarantee that primary psychological help-seeking barriers such as stigma disappear. Instead, its effect may be two-fold: impacting both the process of seeking help itself (e.g., attitudes towards seeking therapy) and the actual experience of psychotherapy.
Increased self-stigma is related to higher levels of shame, self-blame, and feelings of self-inadequacy (Tucker et al., 2013). As such, clients endorsing more negative self-judgments for seeking help may be less forthcoming regarding their presenting concerns within the counseling room (Corrigan & Rao, 2012), possibly to avoid the pain of disclosure and anticipated judgment from a therapist. Although these behaviors are self-protective, they may interfere with the treatment process. Recent research has provided evidence that client self-stigma is negatively related to therapeutic engagement (Kendra, Mohr, & Pollard, 2014) and the therapist-client working alliance (Owen, Thomas, & Rodolfa, 2013). Similar research has found that therapists of clients who endorse higher stigma for seeking help report lower perceptions of the working alliance (Nakash, Nagar, & Levav, 2014). Kendra et al. (2014) has suggested that initial levels of self-stigma are negatively related to early working alliance ratings, suggesting that early perceptions of self-stigma may interfere with healthy counselor-client relationship development. Additionally, Owen et al. (2013) found that self-stigma has a negative indirect effect on session outcomes through its impact on the working alliance. Findings regarding the impact of self-stigma on the working alliance are troubling, given its robust influence on the success of psychotherapy (Wampold & Imel, 2015).

Although self-stigma levels are similar for both individual and group psychotherapy (Shechtman, Vogel, & Maman, 2009), it is possible that concerns about self-disclosure consequences are elevated in a group setting and would thus have significant negative relationships with positive group processes. However, research has not corroborated this – in the only known study testing relationship between self-stigma and therapeutic relationships in group, Wade et al. (2011) found that pre-session levels of self-stigma, although related in the expected directions, were not significantly related to perceptions of the working alliance, session depth or
smoothness, or group engagement. This finding is surprising, yet may be explained by procedural elements. Self-stigma is relatively stable in a non-help seeking context (i.e., when reported in a non help-seeking, “everyday” situation; Vogel et al., 2006), yet may become exacerbated when the concept of seeking psychotherapy is more salient (Corrigan et al., 2014).

As such, initial levels of self-stigma (not measured immediately before the session) may not have accurately reflected participant’s feelings right before actually meeting. However, when self-stigma levels were assessed post-session, they had a significant negative relationship with session depth (Wade et al., 2011). This can be explained two ways: 1) the more a client perceives session depth, the more they may feel understood, challenging self-stigmatizing assumptions that they were shamed or rejected for their attendance. Or, 2) the presence of self-stigma and a positive psychotherapy experience can elicit cognitive dissonance, eliciting motivation to either reduce self-stigma or discount the depth of the session. However, given the affective experience associated with session depth, it may be more natural for clients to focus on reducing self-stigma.

Although this study did not find that pre-session levels of self-stigma were related to perceptions of the group, it did provide evidence for the importance of therapeutic relationship variables in facilitating openness to continued help-seeking. Wade et al. (2011) found that increased perceptions of the working alliance and session depth after one session of group were related to increased intentions to seek help. Although the effect of session depth became non-significant in the final step of a hierarchical linear regression, the impact of the working alliance and self-stigma remained predictive. Wade et al. suggested that the relationship shared between session depth and intentions may be accounted for by the relationship between depth and self-stigma, providing evidence that depth is more related to self-stigma, and self-stigma to intentions. Additionally, the desire to continue seeking group therapy was related to greater
session depth, but surprisingly not with the working alliance. It is possible that participants reporting increased levels of session depth perceived this depth as related to the interactions with other group members given the less active role of therapists in the group setting. With continued attendance and therapist-client interactions, working alliance may re-emerge as a predictor of client outcomes.

Even though self-stigma did not appear to influence treatment processes, its presence after one session still negatively predicted future help-seeking (Wade et al., 2011). Given the extent of the literature linking self-stigma and openness to help (e.g., Vogel et al., 2006, 2017), and the burgeoning evidence linking self-stigma and treatment processes (Kendra et al., 2014; Nakash et al., 2015; Owen et al., 2013), research should heed the call from Kendra et al. to assist clients in reducing their self-stigma during the treatment process.

**Self-Affirmation Theory and Openness to Threat**

One reason seeking psychological help may be so threatening is that it can impair a person’s ability to maintain favorable self-views. According to Steele (1988), all people have a self-system, which is a psychological mechanism that helps people maintain positive self-conceptions (e.g., as competent, stable, and adequate). The self-system has been conceptualized as a psychological “immune system” (Gilbert, Pinel, Wilson, Blumberg, & Wheetley, 1998; Steele, 1988). Like our physical immune system, it helps maintain homeostasis and health; analogously, it seeks to protect the self when there is risk of harm to one’s positive self-conceptions. Lazarus (1991) notes how self-image threats influence negative thoughts, feelings, and bodily responses. Physiologically, people facing self-image threat experience increased blood pressure (Blascovich, Spencer, Quinn, & Steele, 2001) and heart rate (Mendes, Blascovich, Lickel, & Hunter, 2002). In response, people typically engage in thought
suppression and denial (Johns, Inzlicht, & Schmader, 2008) and derogation of others (vanDellen, Campbell, Hoyle, & Bradfield, 2011) to soothe these reactions and restore homeostasis.

Given the stereotypes associated with help-seekers (Corrigan et al., 2014; Hammer & Vogel, 2017; Vogel et al., 2006), considering seeking psychotherapy may elicit cognitive dissonance, threatening the maintenance of a positive self-view (e.g., “How can I be in control of my life if I need to rely on someone else to help me with my problems?”). As a result, people may seek to limit their exposure to situations in which this self-threat is evoked; this may contribute to low engagement with mental health information. In a study of military personnel, participants who reviewed a brochure about mental health symptoms and therapy did so for less than 30 seconds on average (Wade, Cornish, & Vogel, 2013). Recent research from Lienemann & Siegel (2016) demonstrated that individuals with higher levels of depression report increased feelings of state reactance (i.e., anger and negative cognitions) towards public service announcements about depression. This reactance mediated the relationship between symptomatology and help-seeking attitudes, suggesting that those who may need it the most are the most likely to avoid relevant information.

However, not all information about psychotherapy is externally delivered (e.g., via an advertisement, brochure) - when individuals are experiencing psychological distress, they may contemplate their need for professional psychological services. During this process, it is likely that self-threat is similarly elicited. Given the salience of one’s distress, per Steele (1988), the self-system should identify the potential for therapy as an immediate threat, and concurrently activate defensive strategies (i.e., cognitive attempts to minimize distress, derogation of psychotherapy users) to neutralize the threat and restore a positive self-conception (Sherman & Cohen, 2014).
These defenses, although undoubtedly somewhat adaptive in that they seek to immediately soothe self-threat to help maintain positive self-views, also impair long-term change (vanDellen et al., 2011). If a person is unable to tolerate the acknowledgment of painful negative emotions (e.g., “I have really felt down for the past few weeks”) it is unlikely that they will sustain engagement enough with the topic to facilitate change (“…and I think maybe I should consider talking to a professional about it.”) As elucidated in recent findings (e.g., Lienemann & Siegel, 2016), interventions designed to increase use of psychotherapy services, even if tailored to the population, can be threatening. When the self-system is activated, the likelihood of intervention success is severely impaired.

Beyond providing a framework to understand the relationship between self-threat and defensive attitudes and behaviors, self-affirmation theory also provides a blueprint to understand how people can maintain a positive self-conception in the face of threatening information. According to Sherman & Cohen (2006), three pathways exist for this to occur: the first (accommodation pathway) occurs when a person acknowledges the accuracy of the threatening information and accommodates it by engaging in a behavior designed to address the concern. In the context of psychological help seeking, a person would need to agree that the salient feedback is accurate (e.g., “I do need to open up about what I am going through”) and decide to take steps towards this behavior (e.g., scheduling an appointment). Acting in ways consistent with this pathway in the context of feedback relevant to one’s psychological concerns is unlikely, as the act of seeking help is typically threatening to one’s sense-of-self (Fischer, Nadler, & Whitcher-Alagna, 1982). When self-threat is perceived, people commonly engage the second pathway (defensive) to self-soothe – activation of this pathway has two possible outcomes: 1) if threat management is possible, people seek to preserve the key message (e.g., need for help) yet
reframe the context (e.g., my need for help can lead me to a better life instead of making me feel inadequate in the moment). However, this is also difficult, as the core message can still be threatening. In turn, the alternative outcome is likely: 2) responding with defensiveness (e.g., dismissal, avoidance, denial).

The final pathway (*self-affirmation*) is possibly the best of both worlds, combining opportunities for the maintenance of positive self-conceptions and adaptive behavioral change. By affirming self-resources alternative and unrelated to the threat prior to its presentation, people are able to attain a bolstered self-concept, realizing that one’s self-worth does not solely rely on perceived performance in one specific domain. In other words, self-affirmation promotes a spreading-of-self process – when reflecting on values and character strengths not immediately relevant to help-seeking (e.g., “I value curiosity, which has helped me live a rich life”), people may feel less threatened by feedback that suggests that they could benefit from help (e.g., “…and I also have been feeling more down than usual, and maybe need to talk to someone”).

Essentially, this process enables self-system maintenance by placing the threat in a more global context-of-self; self-affirmation facilitates the maintenance of a positive self-image while also allowing for openness to threatening information (Unzueta & Lowery, 2008). Howell (2017) provides a review of the multiple explanations offered to account for the success of these interventions: maintained self-esteem (Critcher & Dunning, 2015), positive other-directed feelings (Crocker, Niiya, & Mischkowski, 2008), and self-compassion (Lindsay & Creswell, 2014). In addition, research has suggested that self-affirmation helps people view behaviors at higher construal levels (i.e., ends as opposed to means; Schmeichel & Vohs, 2009) and broaden their view-of-self so as to reduce perceptions of threat (Sherman et al., 2013). Regardless of proposed mechanism, it appears that, without feeling self-affirmed prior to the presentation of
threat, people may have less immediate access to positive self-views, providing less resources to buffer the immediate self-threat of seeking help – ultimately increasing the likelihood of defensive responses.

Researchers have developed interventions grounded in this theory to increase openness to threatening information and behavior. One of the most common ways of helping people maintain positive self-conceptions and reduce activation of the psychological immune system is through a structured self-affirmation intervention. A typical self-affirmation intervention begins by asking participants to rank, in order of personal importance (i.e., 1 = *Most important*, 6 = *Least important*), a list (or, lists) of values, including science/pursuit of knowledge, social life/relationships (Sherman, Nelson, & Steele, 2000) and tradition, openness to change, and self-direction (Schwartz et al., 2012). Participants may also rank the importance of character strengths (e.g., curiosity, bravery; Peterson & Seligman, 2004), which are the traits through which values are expressed (Park & Peterson, 2009). After, participants are asked to write about why this value is important to them, instructing them to reflect on how it may help them live a meaningful life.

Self-affirmation interventions have been tested extensively to improve health-related attitudes and behaviors (e.g., Epton, Harris, Kane, van Koningsbruggen, & Sheeran, 2015; Sheeran, Klein, & Rothman, 2017; Sweeney & Moyer, 2015). Broadly, it achieves this by reducing the perceived threat of an activity and increasing openness to alternative viewpoints - in doing so, avoidance is assumed to naturally decrease. In a novel study, Cohen, Aronson, & Steele (2000) found that participants who reported strong favorable or unfavorable beliefs towards capital punishment reported more positive attitudes towards evidence that challenged their initial attitudes after a self-affirmation intervention than unaffirmed participants. Similar
research (Correll, Spencer, & Zanna, 2004) has demonstrated that self-affirmation helps people engage with information in a less biased manner without disengaging or minimizing the issue. This openness may facilitate increased objectivity and sustained engagement; Kessels, Harris, Ruiter, & Klein (2016) recently demonstrated that self-affirmed smokers paid more attention to smoking risk information than non-affirmed participants. This may be because self-affirmation interventions enable people to acknowledge the increased personal relevance of threatening information without increasing avoidance of it (Harris, Mayle, Mabbott, & Napper, 2009). In line with this hypothesis, Howell & Shepperd (2012) demonstrated the utility of a self-affirmation intervention to increase openness (via opting to receive risk-feedback) to learning about one’s vulnerability to a specific medical disease.

This openness may enable people to become aware of the skills they have to deal with the potential threat, ultimately increasing intentions to engage in healthy behaviors. This may be because self-affirmation may help people think of actions in relationship to their desired end-state (Wakslak & Trope, 2009). For example, self-affirmed smokers reported increased intentions to restrict cigarette use, and increased feelings of control and self-efficacy around doing so (Harris et al., 2009). Self-affirmation interventions have been used to increase a variety of other healthy behaviors, including condom purchasing among sexually active undergraduate students (Sherman et al., 2000) and fruit and vegetable consumption among individuals struggling to meet the recommended daily portion minimum (Harris et al., 2014). Self-affirmation may also be useful for individuals experiencing impaired feelings of self-efficacy; Churchill, Jessop, Green, & Harris (2018) demonstrated that individuals reporting low beliefs in their ability to maintain a diet reported increased feelings of self-control after a self-affirmation intervention. Given the consequences of self-stigma (Corrigan et al., 2014; Vogel et al., 2006), it
may be especially important to help individuals reporting higher levels of self-stigma gain feelings of self-control around the process of seeking help.

There is evidence that suggests that the utility of self-affirmation interventions is linked to their ability to tap into an actual self-system that regulates defense mechanisms, sometimes at levels below awareness. Research from the field of biopsychology (Carver & White, 1994; Gray, 1981) has implicated the behavioral-inhibition system (BIS) in regulating responses to perceived threats. One way that the BIS does so is through its impact on the startle-eyeblink mechanism, a reflex amplified in response to potential harm and mediated by the amygdala (Davis, 1992). In a recent study, Crowell et al. (2015) demonstrated that among non-affirmed participants, BIS sensitivity predicted the magnitude of the response. However, there was no relationship among affirmed participants, suggesting that the self-affirmation intervention severed the connection. This finding suggests that, regardless of predisposition to fear and avoidance, a self-affirmation intervention is powerful enough to soothe one’s need to defend.

Recent research (Falk et al., 2015) has provided evidence that completing a self-affirmation intervention increases activity in the ventromedial prefrontal cortex (VMPFC), a region which has been implicated in processing information related to the self, positive valuation, and healthy behavior change. Additionally, this study found that increased activity predicted increased decline in sedentary behavior a month later. Additional research (Kang et al., 2017) has found evidence for the ability of self-affirmation to solely target threat; findings demonstrated attenuated amygdala reactivity among a sample of sedentary adults in response to self-relevant health messages (i.e., how lack of activity can shorten lifespan), but found no effect on generic messages that were designed to not be threatening.
Overall, comprehensive reviews of the impact of self-affirmation interventions seem to consistently point in one direction: self-affirmation interventions increase openness to physical help-seeking behaviors (e.g., Epton, Harris, Kane, van Koningsbruggen, & Sheeran, 2015; Sheeran, Klein, & Rothman, 2017; Sweeney & Moyer, 2015). As such, it is worthwhile to examine their utility in the context of psychological help-seeking.

**Self-Affirmation and Seeking Psychological Help**

Given the wealth of research that has demonstrated the effects of self-affirmation on physical health help-seeking behaviors, Lannin et al. (2013) sought to test its effects in the domain of mental health help-seeking. Participants were randomized to either complete a self-affirmation intervention or rank jellybean flavors as a control task before reading a brochure about therapy. Findings from this study demonstrated that self-affirmation reduced the self-stigma of seeking help, and via a positive indirect effect, increased willingness to seek psychotherapy among a sample of distressed undergraduate students. Among a sample of distressed adults recruited from MTurk, Lannin et al. (2017) did not replicate the previous findings regarding self-stigma, but provided evidence that completing a self-affirmation task before being exposed to therapy information lead to increased perceptions of anticipated growth from psychotherapy and intentions to seek help. In addition, this study found that participants in the self-affirmation condition perceived the mental health psychoeducation as less threatening and reported lower levels of negative reactive emotions (i.e., irritable). Recently, Seidman, Wade, et al. (2018) tested the effects of a similar task preceding a brief mental health psychoeducation intervention among a sample of student Veterans. Results suggested its ability to increase intentions to seek help both immediately post-intervention and a week after, providing longitudinal evidence of its ability to maintain openness to threatening behavior.
These findings provide preliminary evidence that self-affirmation interventions may increase openness to psychological help-seeking. However, these studies may represent a “sandbox” test of this intervention, as the interventions were completed in a non help-seeking context. That is, participants either completed this study in a research lab (Lannin et al., 2013) or remotely from their computer (Lannin et al., 2017, Seidman, Wade, et al., 2018). According to Corrigan et al. (2014), the self-stigma of seeking help increases in salience as people take steps towards becoming a client; negative self-judgments for seeking help are likely less activated in situations not related to psychotherapy utilization (Link et al., 1989). Even though both samples from Lannin et al. (2013, 2017) met clinical cut-off criteria for clinical distress, the labeling process is more salient when one engages with the mental health care system (Link et al., 1989). Although participants reported clinically relevant levels of distress, it is possible that self-stigmatizing reactions to the idea of seeking help were less accessible at the time of the study, and thus more malleable to change. Therefore, it is possible that these findings although promising, are limited in their external validity. Examining the impact of a self-affirmation task on actual psychotherapy processes may be an appropriate next step for this field.

Preliminary evidence does exist to suggest the utility of a self-affirmation intervention in a clinical setting. Among a sample of participants presenting for a psychotherapy intake, Seidman, Lannin, et al. (2018) found that a self-affirmation intervention was successful in reducing self-stigma. In addition, there was a positive indirect effect (via self-stigma) on increased anticipated benefits of self-disclosure and a negative indirect effect on anticipated risks. This is a finding that deserves additional attention, as it provides evidence that self-affirmation may do more than immediately reduce self-stigma or increase intentions; self-affirmation may also increase positive expectations and reduce negative expectations of self-
disclosure. No data were collected on behaviors during the intake, so future research is needed to examine if self-affirmation can actually facilitate more self-disclosure during sessions. In a group setting, it is possible that affirmed participants will develop therapeutic relationships earlier, facilitating a more positive group experience and openness to future help compared to individuals who complete a session of group not preceded by a self-affirmation intervention.

**The Need for Future Research**

Self-stigma continues to be a significant barrier to psychological care (Vogel et al., 2017). Moreover, recent research has implicated self-stigma in impairing processes within the counseling room, such as the working-alliance relationship (Kendra et al., 2014; Owen et al., 2013), a significant predictor of positive client outcomes (Wampold & Imel, 2015). Clients who develop better working alliances with their therapist engage in more self-disclosure (Robak et al., 2013), a fundamental ingredient for successful psychotherapy. Without self-disclosure, it is unlikely that other important components of the therapeutic relationship (e.g., cohesion, group climate, alliance, empathy; Burlingame et al., 2002, 2011) will emerge. In turn, clients may experience ambivalent or negative feelings towards group therapy and discontinue. Given the high-rate of dropout (Center for Collegiate Mental Health, 2018), additional research is needed on ways to increase positive experiences of psychotherapy.

Although research has provided evidence that just one session of group counseling is able to reduce self-stigma (Wade et al., 2011), its presence post-group still predicted decreased intentions to seek future help. Additionally, the additive factor of therapist self-disclosure, a common method used to improve the working alliance (Horvath & Greenberg, 1989) did not account for additional variance in stigma reduction or future help-seeking attitudes or intentions. As such, additional research is needed to understand ways to improve the working alliance as
early as possible during the counseling relationship. Self-affirmation interventions reduce psychological help-seeking barriers (Lannin et al., 2013, 2017; Seidman, Wade, et al., 2018) and can improve disclosure expectations among clients about to meet for an intake session (Seidman, Lannin, et al., 2018). However, no known research has examined the impact of this intervention on the actual psychotherapy process itself.

The Present Study

The purpose of this study is twofold. First, I sought to replicate and expand on previous work (Wade et al., 2011) by testing if one session of group counseling reduces stigma (public, self) and increases attitudes and intentions by adding a control group comparison. I also sought to continue examining the impact of self-affirmation on barriers to psychological care. Specifically, this is the first known study to test the effects of a self-affirmation intervention on psychotherapy process and outcome variables. Given the impact of self-affirmation on perceptions of self-stigma and disclosure expectations among individuals presenting for a psychotherapy intake (Seidman, Lannin, et al., 2018), it is possible that self-affirmation facilitates increased self-disclosure and perceptions of therapeutic relationships as immediately as in a first session. As such, the present study seeks to examine the effect of self-affirmation on in-session behavior and relational experiences of a one-time group counseling meeting. Finally, this study will examine if self-affirmation has an interactive effect with group therapy on post-therapy stigma (public, self), attitudes, and intentions.

Hypotheses

**Hypothesis 1:** Participants who complete one session of group psychotherapy will report less stigma (public and self) and increased attitudes and intentions relative to the waitlist condition.
Rationale for Hypothesis 1: There is a large body of literature that has demonstrated the utility of group contact to normalize help-seeking behavior (Corrigan & Penn, 1999). Wade et al. (2011) has demonstrated that attending one session of group psychotherapy is associated with reduced ratings of post-session self-stigma.

Hypothesis 2: There will be an additive effect, in which participants who complete both the self-affirmation and group therapy session will report less stigma (public and self) and increased attitudes and intentions relative to the group-only and control condition.

Rationale for Hypothesis 2: Self-affirmation tasks have demonstrated utility in reducing barriers to seeking help (Lannin et al., 2013, 2017; Seidman, Wade, et al., 2018; Seidman, Lannin, et al., 2018). It is possible that, when combined with the stigma-reducing effect of group therapy (Wade et al., 2011), its effects on the relevant help-seeking variables may be superior to group-only and waitlist.

Hypothesis 3: Participants who complete the self-affirmation intervention prior to the group therapy session will engage in more self-disclosure relative to the group-only condition.

Rationale for Hypothesis 3: Because self-affirmation interventions are expected to help individuals transcend self-image concerns (Crocker et al., 2008) and increase the positive expectations of self-disclosure (Seidman, Lannin, et al., 2018), participants in the self-affirmation intervention may disclose more information about themselves during group.

Hypothesis 4: Participants who complete the self-affirmation intervention prior to the group therapy session will report greater levels of cohesion, engagement, bond, and empathy relative to the group-only condition.

Rationale for Hypothesis 4: Because self-affirmation interventions help to reduce self-image concerns and increase the positive expectations of self-disclosure (Seidman, Lannin, et al.,
2018), participants in the self-affirmation condition will experience less barriers to engagement in therapy, resulting in greater cohesion, group climate, working alliance, and perceived empathy than participants in the group-only condition.
CHAPTER 3

METHODS

Participants

The study was approved by the IRB at Iowa State University in August 2018 (see Appendix A). Between August 2018 and February 2019, I recruited undergraduate students who had access to SONA, an online research database, to a two-timepoint study. Participants accessed the Time 1 survey online via Qualtrics. Overall, the link was accessed 633 times. Participants were removed for the following reasons: did not provide informed consent (n = 15), did not meet inclusion criteria due to history of suicidal ideation (n = 78), did not provide any usable data/did not provide a unique ID to allow tracking (n = 97), or were duplicate attempts (n = 19). When I removed duplicate attempts, I retained their initial data. This resulted in a final sample of 417 participants who participated in Time 1. There were no differences between participants who only completed Time 1 vs. those who participated in both timepoints on relevant demographics (i.e., age, previous therapy experience) or baseline levels of help-seeking variables.

Overall, 192 participants attended 34 unique group sessions at Time 2 (48% retention rate). We were unable to link the data of 3 individuals to their Time 1 participation due to inconsistent unique ID reporting but retained their ratings of group outcomes. We excluded Time 2 data from participants who failed an attention check (n = 7), acknowledged not reading the pre-group orientation literature (n = 3), or participated in the study twice (n = 3). Additionally, we excluded one group from our analyses that consisted of seven participants. This group was excluded due to the presence of numerous outliers on a variety of group relationship variables; the group therapist corroborated the uniqueness of this group, describing it as going “horribly.” Two of the seven participants (22%) who failed an attention check were part of this group,
suggesting disproportionate presence of low participant involvement and one had data not able to be linked to Time 1.

Our final sample consisted of 172 participants in 33 groups. Our analyzed data consists of 72 participants in the group-only condition (n = 14 groups), 66 participants in the self-affirmation plus group condition (n = 12 groups), and 34 participants in the group-waitlist condition (n = 7 groups). The average group consisted of 5.21 participants (SD = 1.50, Range = 3 – 8). There were no differences between participants in the different conditions on relevant demographics (i.e., age, previous therapy experience). A One-Way Analysis of Variance (ANOVA) revealed one difference between groups related to help-seeking variables; participants in the self-affirmation condition reported lower levels of Time 1 public stigma (M = .94, SD = .65) than participants in the waitlist condition (M = 1.33, SD = .59), F(2, 166) = 3.92, p = .02.

Descriptive statistics regarding demographic factors only describes, at most, 169 participants, due to missing Time 1 data of the 3 previously mentioned individuals. The sample was predominantly college-aged (M = 19.19, SD = 2.31, Range = 18–43). The majority of participants identified as female (N = 118; 68.6%) and White (N = 148; 86%). See Table 1 for more information.

Table 1

*Demographic Variables.*

<table>
<thead>
<tr>
<th></th>
<th>Self-affirmation + Group</th>
<th>Group-only</th>
<th>Group-waitlist (control)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>19.62</td>
<td>18.93</td>
<td>18.88</td>
<td>19.19</td>
</tr>
<tr>
<td>SD</td>
<td>3.52</td>
<td>1.30</td>
<td>1.05</td>
<td>2.31</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>49 (74.2%)</td>
<td>45 (62.5%)</td>
<td>24 (70.6%)</td>
<td>118 (68.6%)</td>
</tr>
<tr>
<td>Male</td>
<td>17 (25.8%)</td>
<td>25 (34.7%)</td>
<td>9 (26.5%)</td>
<td>51 (29.7%)</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>55 (83.3%)</td>
<td>66 (91.7%)</td>
<td>27 (79.4%)</td>
<td>148 (86%)</td>
</tr>
</tbody>
</table>
Table 1. (continued)

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
<th>Time 3</th>
<th>Time 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic or Latinx</td>
<td>2 (3%)</td>
<td>3 (4.2%)</td>
<td>3 (8.8%)</td>
<td>8 (4.7%)</td>
</tr>
<tr>
<td>Black or African-American</td>
<td>2 (3%)</td>
<td>N/A</td>
<td>1 (2.9%)</td>
<td>3 (1.7%)</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>5 (7.6%)</td>
<td>N/A</td>
<td>1 (2.9%)</td>
<td>6 (3.5%)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (1.5%)</td>
<td>1 (1.4%)</td>
<td>N/A</td>
<td>2 (1.2%)</td>
</tr>
<tr>
<td>Multiracial</td>
<td>1 (1.5%)</td>
<td>N/A</td>
<td>1 (2.9%)</td>
<td>2 (1.2%)</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>57 (86.4%)</td>
<td>64 (88.9%)</td>
<td>29 (85.3%)</td>
<td>151</td>
</tr>
<tr>
<td>Bisexual</td>
<td>5 (7.6%)</td>
<td>4 (5.6%)</td>
<td>1 (2.9%)</td>
<td>10</td>
</tr>
<tr>
<td>Gay/Lesbian</td>
<td>2 (3%)</td>
<td>2 (2.8%)</td>
<td>1 (2.9%)</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>1 (1%)</td>
<td>N/A</td>
<td>2 (5.9%)</td>
<td>2</td>
</tr>
</tbody>
</table>

Measures

Help-seeking variables.

**Public stigma.** The Stigma Scale for Receiving Psychological Help scale (SSRPH; Komiya, Good, & Sherrod, 2000) was used to measure perceptions of public stigma towards individuals who seek professional psychological help. The SSRPH is a 5-item self-report scale consisting of items such as “People tend to like less those who are receiving professional psychological help.” Items are rated on a 4-point Likert scale (0 = Strongly Disagree, 3 = Strongly Agree). Higher mean scores suggest higher perceptions of public stigma. Perceptions of public stigma have been linked to decreased emotional openness and attitudes (Komiya et al., 2000) and lower intentions to seek help for interpersonal concerns (Vogel et al., 2005). Research has provided evidence for its internal consistency via Cronbach’s alpha (.72; Komiya et al., 2000). Internal consistency via Cronbach’s alpha was 0.79 at Time 1 and 0.77 at Time 2.

**Self-Stigma.** The Self-Stigma of Seeking Help scale (SSOSH; Vogel et al., 2006) was used to measure negative self-judgments for seeking professional psychological help. The SSOSH is a 10-item self-report scale. A sample item is “Seeking psychological help would make me feel less intelligent”. Items are rated on a 5-point Likert scale (1 = Strongly Disagree, 5 =
Strongly Agree), and five items are reverse-scored. Higher mean scores suggest higher self-stigma. Research has demonstrated the criterion-related validity of the SSOSH via negative relationships with anticipated benefits of self-disclosure to a therapist and attitudes and intentions towards seeking help (Vogel et al., 2006). There is also good evidence for its psychometric properties, demonstrating internal consistency via Cronbach’s alpha (.91) and 2-month test-retest reliability ($r = .72$) (Vogel et al., 2006). Internal consistency via Cronbach’s alpha was 0.85 at Time 1 and 0.85 at Time 2.

Help-seeking attitudes. The Mental Help Seeking Attitudes Scale (MHSAS; Hammer, Parent, & Spiker, 2018) was used to measure attitudes towards seeking professional psychological help. The MHSAS is a 9-item self-report measure. The question stem reads: “If I had a mental health concern, seeking help from a mental health professional would be…”. Items are rated using a bipolar semantic differential scale on a 7-point Likert scale from 3 to 3, with 0 representing “undecided.” Sample items are “useless-useful”; “healing-hurting”; and “disempowering-empowering.” Participants are asked to mark the circle that best represents their opinion; if they thought seeking help would be extremely useless, they would mark the “3” circle closest to “useless.” Per author instructions, the survey was designed to translate these scores from 1 to 7. All five positive-negative directionally-valenced items (i.e., healing-hurting) are reverse scored, so that a “1” becomes a “7.” Higher mean scores suggest more positive help-seeking attitudes. Hammer et al. has demonstrated evidence for the convergent validity of the MHSAS, which exhibits negative relationships with self-stigma and anticipated disclosure risks, and positive relationships with anticipated disclosure benefits and intentions to seek help. The MHSAS appears to have strong internal consistency via a range of Cronbach’s alpha scores (.93-
Internal consistency via Cronbach’s alpha was 0.88 at Time 1 and 0.89 at Time 2.

**Help-seeking intentions.** The Mental Help Seeking Intentions Scale (MHSIS; Hammer & Vogel, 2013) was used to measure intentions to seek professional psychological help. The MHSIS is a 3-item scale that examines the degree to which a person would try, intend, and plan to seek professional psychological help if they were experiencing a mental health concern. Items are rated on a 7-point Likert scale respective to each step of help-seeking (i.e., intend, 1 = Extremely unlikely, 7 = Extremely likely; try, 1 = Definitely false, 7 = Definitely true; plan, 1 = Strongly disagree, 7 = Strongly agree). A sample item is “If I had a mental health concern, I would intend to seek help from a mental health professional.” Higher mean scores suggest higher levels of intentions to seek help. Hammer & Spiker (2018) have provided evidence of its ability to predict future help-seeking behavior over the following three months with ~70% accuracy and of its internal consistency via Cronbach’s alpha (.94). Internal consistency via Cronbach’s alpha was 0.93 at Time 1 and 0.94 at Time 2.

**Self-disclosure.**

**Distress disclosure.** The Distress Disclosure Index (DDI; Kahn & Hessling, 2001) was used as a covariate to measure tendencies to disclose psychological distress. We included this measure as a covariate in order to control for the spectrum of self-disclosure styles so as to further isolate the effect of the self-affirmation intervention. The DDI is a 12-item scale. A sample item is “When something unpleasant happens to me, I often look for someone to talk to.” Items are rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Six items are reverse-scored, and higher mean scores indicate increased disclosure tendencies. Kahn & Hessling (2001) have provided evidence of positive relationships between the DDI and measures
of self-disclosure and social support, and negative relationships with a measure of self-concealment. The scale has also demonstrated strong internal consistency (.93; Kahn & Hessling, 2001). Internal consistency via Cronbach’s alpha was 0.93.

**In-session self-disclosure.** The Group Therapy Experience Scale – Self Disclosure subscale (GTES; Hunter, Gomez, Ankarlo, Kirz, & Norbury, 1996; Marziliano, Pessin, Rosenfeld, & Breitbart, 2018) was used to measure perceived quality and quantity of participant self-disclosure. The GTES – Self Disclosure subscale is a 6-item self-report scale. A sample item is “I revealed a great deal about myself in the group.” Items are rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), and three items are reverse-scored. Higher mean scores suggest increased perceived quality and quantity of self-disclosure. Research has demonstrated positive relationships between the self-disclosure subscale and amount of group attendance yet poor evidence for its reliability via a Cronbach’s Alpha of .64 (Marziliano et al., 2018). However, due to its content and predictive validity, this measure was deemed most appropriate for study purposes. Internal consistency on the 6-item subscale via Cronbach’s alpha for our sample was .62. I removed three items (see Appendix D) which exhibited poor fit indices, yielding a final 3-item scale with a Cronbach’s alpha of 0.70.

**Group process variables.**

**Perceptions of group-level cohesion.** The Cohesiveness subscale from the Intervention Group Experiences Scale (GES-C; Wilson et al., 2008) was used to measure perceived cohesion at the group level. The GES-C is originally an 8 item measure. I removed the item: “The group is a good place to make friends,” as group leaders how relationships in group may differ from relationships outside. Items are rated on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree). Wilson et al. has demonstrated relationship between this scale and perceptions
of group orderliness and levels of constructive activity. In addition, it has been linked to improved group attendance and social well-being. The authors have provided evidence for its internal consistency via Cronbach’s alpha (.87; Wilson et al., 2008). Internal consistency via Cronbach’s alpha was 0.81.

*Group climate.* The Group Climate Questionnaire-Short Form (GCQ-SF; MacKenzie, 1983) was used to measure perceptions of the therapy group climate. The GCQ-SF is a 12-item self-report measure that includes three subscales with five items measuring engagement, four items measuring avoidance, and three items measuring conflict. A sample item for the engagement subscale is “The members tried to understand why they do the things they do, tried to reason it out.” A sample item for the avoidance subscale is “The members avoided looking at important issues going on between themselves.” A sample item for the conflict subscale is “The members rejected and distrusted each other.” Items are rated on a 7-point Likert scale (0 = *Not at all*, 6 = *Extremely*). Higher mean scores for each subscale suggest higher levels of engagement, avoidance, and conflict. The GCQ-SF is the most commonly used measure of group climate (Johnson et al., 2005) and has demonstrated strong psychometric properties, with internal consistencies via Cronbach’s alpha of .94, .92, and .88 for the engagement, avoidance, and conflict subscales, respectively (Kivlighan & Goldfine, 1991). Internal consistencies for our sample via Cronbach’s alpha were 0.73, 0.41, 0.49, respectively, suggesting adequate levels of reliability only for the measure of group engagement. Analyses of both the avoidance and conflict subscales suggested no possible improvements to Cronbach’s alpha resulting from item deletion. Due to their low levels of reliability, we did not conduct further analyses using these measures.
**Bond with therapist.** The Bond subscale from the Working Alliance Inventory – Short Form (WAI-S; Tracey & Kokotovic, 1989) was used to measure perceptions of participant bond with the group therapist. The WAI-S is a 12-item scale; there are three subscales. The Bond subscale consists of 4 items rated on a 7-point subscale (1 = *Strongly Disagree*, 7 = *Strongly Agree*). A sample item is “I believe the therapist likes me.” For the purpose of this study, I made partial modifications to the items (i.e., “I believed the group leader liked me.”) Higher scores suggest increased perceptions of a positive bond with the therapist. Although the WAI-S also includes Task and Goal subscales, I excluded these items, as members typically do not formulate specific tasks or goals for therapy after one session. Ratings of client-therapist bond after just one session have demonstrated relationships with perceptions of session depth and smoothness (Wade et al., 2011). In the same study, internal consistency was demonstrated via Cronbach’s alpha of .86. Internal consistency via Cronbach’s alpha for our sample was 0.89.

**Empathy.** The Empathic Understanding subscale from the Barrett-Lennard Relationship Inventory (BLRI; Barrett-Lennard, 1986) was used to measure client perceptions of empathy. The subscale consists of 16 items; a sample item is “My therapist always knows exactly what I mean.” For the purpose of this study, I made partial modifications to the items (e.g., “My group leader seemed to always know exactly what I meant.”) Due to limited time with the group leader, participants may have been unable to answer certain items (e.g., “The group leader does not realize how sensitive I am about some things we discuss”). In these cases, participants were asked to respond to these items based off of their judgments regarding how they imagine the group leader might act. Items are rated on a 6-point Likert scale (-3 = *Strongly Disagree*, 3 = *Strongly Agree*), with higher mean scores suggesting higher perceptions of empathy. The BLRI is one of the most commonly used measures of client-rated empathy and is related to measures of
therapist-rated presence (Geller, 2001) and with observer-rated measures of empathy expressed by a therapist (Watson & Prosser, 1999, 2002). It has been used to measure perceptions of therapist empathy after just one session; ratings predicted future symptom reduction through an indirect effect on the working alliance (McClintock, Anderson, Patterson, & Wing, 2018). Research has provided evidence for its internal consistency via Cronbach’s alpha (.84) and test-retest reliability (.83; Stone, 2006). Internal consistency via Cronbach’s alpha was 0.80.

Procedures

**Time 1.** Participants initially viewed information regarding this study ("A Group Counseling Experience: Part 1") in the SONA system. Upon clicking the project page, participants accessed the online survey hosted on Qualtrics, which opened with the consent form. After providing consent, participants were asked to sign up for another SONA study entitled “A Group Counseling Experience: Part 2” in the following two weeks. This study was conducted at Network Community Counseling Services, a research lab and mental health clinic located on campus.

If none of the available times worked, participants were asked to complete the current survey and return to SONA at a later date to sign up for Time 2. After, participants completed questionnaires that assessed their levels of public stigma, self-stigma, attitudes towards psychotherapy, and intentions to seek psychological help. They also completed a measure of distress disclosure tendencies. Then, participants reported general demographic information and created a unique ID (combination of last 4 digits of cell phone number and the numerical value representing their month of birth). Upon completion, participants were thanked and reminded about the second part of the study, and granted 1 credit for participation.
**Time 2.** For the second part of the study, participants attended a research session at Network Community Counseling Services. Prior to each session, the researcher used a random number generator (1-5) to randomly assign the group to one of three conditions 1) self-affirmation and group therapy, 2) group therapy-only, or 3) group waitlist condition (control). Both group conditions were given two numbers in the random generator, and the control condition was given one in order to increase sample size in the groups. Participants signed up for two-hour windows, and were told that they would not know if they were in a group therapy condition until they had completed several pages of paperwork upon arrival. Regardless of condition, upon arrival, participants were escorted to a group therapy room together which contained an extra chair for the group therapist (even in the control condition). Administrative assistants provided participants with printed surveys.

For the control condition, participants completed measures of help-seeking (i.e., public stigma, self-stigma, attitudes, intentions) in the group room together. Once they completed the questionnaire, they were directed to open a folder, which informed them that they had been randomized to the waitlist condition, and if interested, were able to complete the group therapy experience at a later time. They were then provided with a debriefing.

**Self-affirmation condition (SA).** In the self-affirmation condition (see Appendix B), participants were first asked to complete three rank-ordering tasks assessing the personal importance of certain values and character strengths (1 = *Most important*, 6 = *Least important*). After the first two rank-ordering tasks are completed, participants were asked to carry forward their #1 choice from each list, and then asked to re-rank their importance (1 = *Most important*, 2 = *Not as important*). The values and strengths provided for the affirmation task were chosen for their consistency with self-transcendence, which has been linked with increased openness to
others and decreased emotional reactivity (Crocker et al., 2008; Kang et al., 2017). See Table 2 for a frequency count of the top-ranked values and strengths.

Table 2

*Frequency Count of Top-Ranked Values and Character Strengths.*

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>2 (1.2%)</td>
</tr>
<tr>
<td>Curiosity</td>
<td>6 (3.5%)</td>
</tr>
<tr>
<td>Fairness</td>
<td>4 (2.3%)</td>
</tr>
<tr>
<td>Gratitude</td>
<td>6 (3.5%)</td>
</tr>
<tr>
<td>Hope</td>
<td>4 (2.3%)</td>
</tr>
<tr>
<td>Humility</td>
<td>2 (1.2%)</td>
</tr>
<tr>
<td>Humor</td>
<td>1 (0.6%)</td>
</tr>
<tr>
<td>Kindness</td>
<td>16 (9.3%)</td>
</tr>
<tr>
<td>Love</td>
<td>22 (12.8%)</td>
</tr>
<tr>
<td>Love/Curiosity*</td>
<td>1 (0.6%)</td>
</tr>
<tr>
<td>Teamwork</td>
<td>1 (0.6%)</td>
</tr>
<tr>
<td>Zest</td>
<td>1 (0.6%)</td>
</tr>
</tbody>
</table>

*Note.* * = One participant combined their top-two chosen values into one value.

After completing the ranking task, participants were asked to write for at least seven minutes about why this value is important to them and how it brings purpose to their life. They were told to use their phone or clock in the room as a timer. Participants were asked not to proceed until the seven minutes were up to promote equivalent self-affirmation “dosing.” The entire self-affirmation intervention was designed to take 10 minutes.
Upon completion, participants read a printed brochure information about group therapy (see pre-group orientation below and Appendix C) and then participated in a session of group therapy (see group therapy intervention below). After the group session had finished, participants were handed surveys and completed measures related to perceptions of group (i.e., cohesion, climate, alliance, empathy) and their self-disclosure experience (i.e., perceived levels of self-disclosure). Then, participants completed the help-seeking measures (i.e., public stigma, self-stigma, attitudes, intentions). Upon completion, participants were directed to open a folder which provided them with a debriefing.

**Group-only condition (GO).** Participants in the group therapy only condition read the same group therapy brochure before the session began. After the session was over, they completed the same measures as the self-affirmation condition. They were debriefed in the same way.

**Group interventions.**

**Pre-group orientation.** Upon completing the initial measures, participants read a concise background of what to expect in group therapy created by the researcher (see Appendix C). Participants were provided with information related to group structure and common themes. The brochure mainly focused on how group may help members learn how to better relate to others. Additionally, participants read about research examining the efficacy of group, in addition to its ability to help people experiencing clinical distress (or not). Therapists monitored the group behavior via video camera, and when all members put down the brochure, the group therapy leader entered the room and began.

**Group therapy intervention.** The group therapy session was held for a 75-minute period. The therapist, blinded to study hypotheses, began by introducing him or herself to the group,
discussing confidentiality and its limits, and providing examples of topics commonly discussed (e.g., interpersonal issues, academic concerns). They also noted that no one is required to share. The group therapist discussed the importance of the “here-and-now” in group therapy and asked participants to try to stay attuned to and share about their own emotional experience, their experience of others, and their experience of the overall group dynamic.

Per guidelines from Johnson (2009), the therapist began each group by asking all participants to introduce themselves (first-name only) and rank and share their present level of anxiety 1 (No anxiety) to 10 (Very anxious). Then, the group leader invited participants to share as they wish, consistently seeking to orient the participants to intrapersonal, interpersonal, and group-level processes throughout the session. With 10 minutes left in the session, the group leader transitioned the group into a “check-out” during which members reflected on the experience as a whole.

**Group therapists.** All therapists (n = 4) were graduate students enrolled in a doctoral program in counseling psychology. Therapists primarily identified as female (75%). Therapists were recruited from a group of advanced practicum students enrolled in a group practicum course in which they received weekly supervision and training from Nathaniel G. Wade, a licensed psychologist. All students had previously completed a group counseling course and had experience co-leading or observing process groups. The therapists all employed a variety of theoretical orientations in their work (i.e., cognitive behavioral, emotion-focused, interpersonal process). However, all therapists were previously trained in and adhered to an interpersonal process orientation for the purpose of this study. Weekly supervision was dedicated to monitor issues related to therapist adherence and any related issues.
Power Analysis

As the group waitlist condition was only included to add a control group element for purposes of replication of earlier work by Wade et al. (2011), I conducted a power analysis in G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) to examine the sample size necessary to find a medium effect size ($d = .51$; Wade et al., 2011) of the group therapy intervention on self-stigma change over time. Given the test-retest reliability of self-stigma ($r = .72$; Vogel et al., 2006), our analysis indicated the need for a sample size of 105 participants. I also conducted a power analysis to determine the sample size necessary between the therapy-only and self-affirmation condition. There is no known research that has demonstrated the effect of self-affirmation on any of these group processes. Therefore, I utilized the effect size of self-affirmation on perceived growth from counseling ($d = .35$; Lannin et al., 2017). G*Power 3.1 suggested a sample size of 180 participants.
CHAPTER 4

RESULTS

Descriptive Statistics

Correlations between Time 1 and Time 2 measures for participants in the self-affirmation and group-only condition are shown in Table 3. Correlations between Time 1 and Time 2 measures for participants in the waitlist-condition are shown in Table 4.

Table 3

Correlations between Variables for Waitlist Condition.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. T1_SSRPH</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. T1_SSOSH</td>
<td>.32</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. T1_MHSAS</td>
<td>.23</td>
<td>-.30</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. T1_MHSIS</td>
<td>-.37*</td>
<td>-.56**</td>
<td>.13</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. T2_SSRPH</td>
<td>.58**</td>
<td>.40**</td>
<td>-.03</td>
<td>-.30</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. T2_SSOSH</td>
<td>.34</td>
<td>.67**</td>
<td>-.25</td>
<td>-.67**</td>
<td>.34</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. T2_MHSAS</td>
<td>.14</td>
<td>-.20</td>
<td>.52**</td>
<td>.16</td>
<td>-.06</td>
<td>-.43*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. T2_MHSIS</td>
<td>-.12</td>
<td>-.39*</td>
<td>.10</td>
<td>.68*</td>
<td>.05</td>
<td>-.63*</td>
<td>.19</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Gender</td>
<td>-.06</td>
<td>-.16</td>
<td>-.24</td>
<td>.15</td>
<td>-.002</td>
<td>-.005</td>
<td>-.08</td>
<td>-.03</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. TxHx</td>
<td>-.03</td>
<td>-.19</td>
<td>.04</td>
<td>.15</td>
<td>.21</td>
<td>-.21</td>
<td>-.05</td>
<td>.21</td>
<td>-.18</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>11. DDI</td>
<td>-.07</td>
<td>-.25</td>
<td>-.03</td>
<td>.42*</td>
<td>-.16</td>
<td>-.22</td>
<td>-.06</td>
<td>.22</td>
<td>.10</td>
<td>.17</td>
<td>-</td>
</tr>
<tr>
<td>M</td>
<td>1.32</td>
<td>2.54</td>
<td>6.06</td>
<td>4.66</td>
<td>1.27</td>
<td>2.49</td>
<td>5.69</td>
<td>4.73</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note. T1 = Time 1, T2 = Time 2. SSRPH = Social Stigma Scale for Receiving Psychological Help (Komiya et al., 2000); SSOSH = Self-Stigma of Seeking Help scale (Vogel et al., 2006); MHSAS = Mental Help Seeking Attitudes scale (Hammer et al., 2018); MHSIS = Mental Help Seeking Intentions Scale (Hammer & Vogel, 2013); Gender (0 = female, 1 = male); TxHx = Previous use of talk therapy services (0 = no, 1 = yes); DDI = Distress Disclosure Index (Kahn & Hessling, 2001)

* = p < .05, ** = p < .01, *** = p < .001
Analytic Strategy

Data were analyzed primarily using SPSS Version 25.0. I conducted multi-level regression analyses (when able, see below) with group members nested within groups. Prior to conducting my main analyses, I conducted null (random intercept) models and obtained intraclass correlations (ICC) to determine if there were evidence for within-group dependence on the outcome variables. When the random intercept models converged, we obtained ICC’s. Following recommendations from previous research, we decided to conserve the group term even in situations where ICC < .1 to reduce the likelihood of Type 1 and Type 2 errors (Baldwin, Murray & Shadish, 2005; Kenny, Mannetti, Pierro, Livi, & Kashy, 2002). Although this approach reduces power, it is appropriate because it is more conservative.

Linear mixed models were built with dummy-coded group comparisons: gender (0 = female, 1 = male). When analyzing variables for which I had respective pre-test measurements, the predictor was centered at the group mean. I also included measures of distress disclosure tendencies as a covariate. I excluded history of psychotherapy as a covariate due to its lack of relationships with variables of interest. Data were estimated via Restricted Maximum Likelihood Model (REML) and 10,000 iterations. In situations in which models failed to converge and intraclass correlation coefficients were all at or near-zero, secondary analyses were conducted using MPlus Version 8.2 (Muthén & Muthén, 2011) to determine ICC. These data were then analyzed using hierarchical linear regression, as there was no evidence for group-level clustering.

Hypotheses & Analyses

Hypothesis 1. Participants who complete one session of group psychotherapy will report less stigma (public and self) and increased attitudes and intentions relative to the waitlist condition.
Hypothesis 1 Analysis. To test hypothesis one, I conducted two multi-level regressions (an unconditional model and one with the variables of interest included) for each of the following variables: public stigma, self-stigma, attitudes toward help-seeking, and intentions to seek help. The main variable of interest “Group vs. No Group” examined the effect of group participation. Participants in the self-affirmation and group-only condition were coded as “1”, and participants in the waitlist condition were coded as “0”. The dependent measure assessed at Time 1 was centered and included in the model as a covariate as well as measures of distress disclosure tendencies and gender (0 = female, 1 = male). We excluded history of psychotherapy (0 = no, 1 = yes) as a covariate due to its lack of relationships with variables of interest.

Public stigma. The random intercept model converged for Time 2 public stigma, yielding a nonsignificant Wald’s Z = 0.44, p > .05. The ICC value was .03. I built a linear mixed model, which also converged, retaining a nonsignificant Wald’s Z = 0.62, p > .05. The ICC value was .05. Mixed model analyses revealed that, as expected, public stigma measured at Time 1 predicted Time 2 public stigma, γ = .61, SE = .05, t6) = 11.10, p < .001, 95% CI = [.50, .71]. Results suggested that Time 2 public stigma could not be explained by the group vs. no-group comparison, γ = -.01, SE = .10, t6) = -.10, p = > .05, 95% CI = [-.22, .20]. Neither distress disclosure tendencies nor gender predicted Time 2 public stigma.

Self-stigma. The random intercept model did not converge for Time 2 self-stigma. Secondary analyses using MPlus yielded an ICC of .006. Therefore, I conducted a hierarchical linear regression analysis (see Table 4). At Step 1, I entered the centered self-stigma variable measured at Time 1, which significantly predicted Time 2 self-stigma, β = .74, p < .001, 95% CI = [.61, .80]. At Step 2, I added the measure of distress disclosure tendencies, which significantly predicted self-stigma, β = -.16, p < .01, 95% CI = [-.19, -.04]. Gender did not explain additional
variance. Time 1 self-stigma was significant, $\beta = .68, p < .001$, 95% CI = [0.55, 0.75]. At Step 3, I added the group vs. no-group variable. Participants who attended group reported lower self-stigma than participants in the waitlist condition, $\beta = -.16, p < .01$, 95% CI = [-0.45, -0.15]. Time 1 self-stigma was significant, $\beta = .68, p < .001$, 95% CI = [0.55, 0.75] as was distress disclosure, $\beta = -.16, p < .01$, 95% CI = [-0.19, -0.04]. Gender was nonsignificant.

Table 4

Hierarchical Linear Regression Predicting Time 2 Self-Stigma.

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictors</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$B$</th>
<th>$SE_b$</th>
<th>$b$</th>
<th>$\beta$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td>.55***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time 1 Self-Stigma</td>
<td>.70</td>
<td>.05</td>
<td>.74***</td>
<td>.05</td>
<td>.68***</td>
<td>[.61, .80]</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td>.58***</td>
<td>.03**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time 1 Self-Stigma</td>
<td>.65</td>
<td>.05</td>
<td>.68***</td>
<td>.05</td>
<td>.68***</td>
<td>[.55, .75]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distress Disclosure</td>
<td></td>
<td>-.11</td>
<td>-.16**</td>
<td>.04</td>
<td>-.16**</td>
<td>[-.19, -.05]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td></td>
<td>.09</td>
<td>.06</td>
<td></td>
<td>.09</td>
<td>[.07, .24]</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td>.60***</td>
<td>.03**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time 1 Self-Stigma</td>
<td>.65</td>
<td>.05</td>
<td>.68***</td>
<td>.05</td>
<td>.68***</td>
<td>[.55, .75]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distress Disclosure</td>
<td></td>
<td>-.12</td>
<td>-.16**</td>
<td>.04</td>
<td>-.16**</td>
<td>[-.19, -.04]</td>
<td></td>
</tr>
</tbody>
</table>

Note. Time 1 Self-Stigma and Distress Disclosure centered at the group mean. Self-Stigma measured by the Self-Stigma Scale of Seeking Psychological Help (Vogel et al., 2006); Distress Disclosure measured by the Distress Disclosure Index (Kahn & Hessling, 2001); Gender (0 = female, 1 = male); Group vs. No Group (waitlist = 0, group-only, self-affirmation + group = 1)

$* = p < .05, ** = p < .01, *** = p < .001$
**Attitudes toward seeking help.** The random intercept model converged for Time 2 attitudes, yielding a nonsignificant Wald’s $Z = 0.78, p > .05$. The ICC value was .03. I built a linear mixed model, which failed to converge. Therefore, I conducted a hierarchical linear regression analysis (see Table 5). At Step 1, I entered the centered attitudes variable measured at Time 1, which significantly predicted Time 2 attitudes, $\beta = .46, p < .001$, 95% CI = [.33, .61]. At Step 2, I added distress disclosure tendencies and gender; neither explained additional variance in attitudes. Time 1 attitudes remained significant, $\beta = .46, p < .001$, 95% CI = [.32, .63]. At Step 3, I added the group vs. no-group variable. Participants who attended a session of group reported increased attitudes compared to participants in the waitlist condition, $\beta = -22, p < .01$, 95% CI = [.20, .82]. Time 1 attitudes remained significant, $\beta = .48, p < .001$, 95% CI = [.34, .64]. Gender and distress disclosure remained nonsignificant.

Table 5

**Hierarchical Linear Regression Predicting Time 2 Attitudes.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictors</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$B$</th>
<th>$SE_b$</th>
<th>$\beta$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Time 1 Attitudes</td>
<td>.45***</td>
<td>.00</td>
<td>.47</td>
<td>.07</td>
<td>.46***</td>
<td>[.33, .61]</td>
</tr>
<tr>
<td>Step 2</td>
<td>Time 1 Attitudes</td>
<td>.45***</td>
<td>.00</td>
<td>.47</td>
<td>.08</td>
<td>.46***</td>
<td>[.55, .75]</td>
</tr>
<tr>
<td>&amp; Distress Disclosure</td>
<td>-.001</td>
<td>.07</td>
<td>-.001</td>
<td>[-.14, .14]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; Gender</td>
<td>.02</td>
<td>.15</td>
<td>0.1</td>
<td>[-.27, .31]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>.51***</td>
<td>.05**</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Table 5. (continued)

<table>
<thead>
<tr>
<th></th>
<th>Time 1 Attitudes</th>
<th>Distress Disclosure</th>
<th>Gender</th>
<th>Group vs. No Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.49</td>
<td>-0.002</td>
<td>0.01</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
<td>(0.07)</td>
<td>(0.14)</td>
<td>(0.16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.02)</td>
<td>0.006</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.14)</td>
<td></td>
<td>(0.20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.14)</td>
<td></td>
<td>(0.82)</td>
</tr>
</tbody>
</table>

Note. Time 1 Attitudes and Distress Disclosure centered at the group mean. Attitudes measured by the Mental Health Help Seeking Attitudes scale (Hammer et al., 2018); Distress Disclosure measured by the Distress Disclosure Index (Kahn & Hessling, 2001); Gender (0 = female, 1 = male); Gender (0 = female; 1 = male); Group vs. No Group (waitlist = 0, self-affirmation + group, group-only = 1)

* = p < .05, ** = p < .01, *** = p < .001

Intentions to seek help. The random intercept model converged for Time 2 intentions, yielding a nonsignificant Wald’s Z = 0.91, p > .05. The ICC value was .06. I built a linear mixed model, which also converged, retaining a nonsignificant Wald’s Z = 0.80, p > .05. The ICC value was .05. Mixed model analyses revealed that, as expected, intentions to seek help measured at Time 1 predicted Time 2 intentions, γ = .63, SE = .05, t(6) = 11.65, p < .001, 95% CI = [.53, .74]. However, Time 2 intentions could not be explained by the group vs. no-group comparison, γ = .33, SE = .23, t(6) = 1.44, p = > .05, 95% CI = [-.14, .79]. Neither distress disclosure tendencies nor gender predicted Time 2 intentions.

Hypothesis 1 Summary. Analyses of Hypothesis 1 suggests the utility of a one-time group experience in reducing self-stigma and improving attitudes compared to a waitlist-control condition. There were no differences on measures of public stigma or intentions to seek help.

Hypothesis 2. There will be an additive effect, in which participants who complete both the self-affirmation and group therapy session will report less stigma (public and self) and increased attitudes and intentions relative to the group-only and control condition.
Hypothesis 2 Analyses.

To test hypothesis two, I conducted two multi-level regressions (an unconditional, or random intercept, model and one with the variables of interest included) for each of the following dependent variables: public stigma, self-stigma, attitudes toward help-seeking, intentions to seek help. The main variable of interest was intervention condition: self-affirmation plus group therapy (SA), group therapy only (GO), and the waitlist control group (WL). Intervention conditions were dummy-coded into two variables “SA vs. GO” (Self-Affirmation vs. Group-Only) and “WL vs. GO” (Waitlist vs. Group-Only). For the variable “SA vs. GO”, participants in the self-affirmation condition were coded as “1”, and participants in the remaining conditions (group-only, waitlist) were coded as “0”. For the variable “WL vs. GO”, participants in the waitlist condition were coded as “1”, and participants in the remaining conditions (self-affirmation, group-only) were coded as “0”. The dependent measure assessed at Time 1 was included in the model as a covariate as well as distress disclosure tendencies and gender. I excluded history of psychotherapy as a covariate due to its lack of relationships.

Public stigma. The random intercept model converged, yielding a nonsignificant Wald’s $Z = 0.44, p > .05$. The ICC value was .03. However, the mixed model failed to converge. Therefore, I conducted a hierarchical linear regression analysis (see Table 6). At Step 1, I entered the centered public stigma variable measured at Time 1, which significantly predicted Time 2 public stigma, $\beta = .67, p < .001, 95\% CI = [1.08, 1.22]$. At Step 2, I added the measures of distress disclosure tendencies and gender, which did not explain significant variance. Time 1 public stigma remained significant, $\beta = .65, p < .001, 95\% CI = [1.08, 1.22]$. At Step 3, I added the dummy-coded condition variables. Participants in the self-affirmation condition reported lower levels of public stigma than participants in the group-only condition, $\beta = -.16, p = .01$, ...
95% CI = [-.36, -.05]. There was no difference between the group-only condition and waitlist. Time 1 public stigma was significant, $\beta = .64, p < .001$, 95% CI = [.48, .70], and distress disclosure and gender were non-significant.

Table 6

Hierarchical Linear Regression Predicting Time 2 Public Stigma.

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictors</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$B$</th>
<th>$SE_b$</th>
<th>$\beta$</th>
<th>95% CI</th>
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</tr>
<tr>
<td></td>
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<td>.05</td>
<td>.67***</td>
<td>[.52, .73]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td>.47***</td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time 1 Public Stigma</td>
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<td>.05</td>
<td>.65***</td>
<td>[.50, .71]</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>.04</td>
<td>-.08</td>
<td>[-.13, .02]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
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<td>.08</td>
<td>.07</td>
<td>[-.06, .25]</td>
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<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td>.49***</td>
<td>.02*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time 1 Public Stigma</td>
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<td>.05</td>
<td>.64***</td>
<td>[.48, .70]</td>
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<td>[-.14, .02]</td>
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<td></td>
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<td>Gender</td>
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<td>.08</td>
<td>.06</td>
<td>[-.08, .23]</td>
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<tr>
<td></td>
<td>SA vs. GO</td>
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<td>.08</td>
<td>-.16*</td>
<td>[-.36, -.04]</td>
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<td></td>
<td>WL vs. GO</td>
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<td>.10</td>
<td>-.05</td>
<td>[-.28, .11]</td>
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</table>

Note. Time 1 Public Stigma and Distress Disclosure centered at the group mean. Public stigma measured by the SSRPH (Komiya et al., 2000); Distress Disclosure measured by the DDI (Kahn & Hessling, 2001); Gender (0 = female, 1 = male); SA vs. GO/WL vs. GO, dummy coded.

*= p < .05, **= p < .01, ***= p < .001
**Self-stigma.** The random intercept model did not converge for Time 2 self-stigma. Secondary analyses using MPlus yielded an ICC of .006. Therefore, I conducted a hierarchical linear regression analysis (see Table 7). At Step 1, I entered the centered self-stigma variable measured at Time 1, which significantly predicted Time 2 self-stigma, \( \beta = .74, p < .001, 95\% \text{ CI} = [.61, .80] \). At Step 2, I added the measure of distress disclosure tendencies, which significantly predicted self-stigma, \( \beta = -.16, p < .01, 95\% \text{ CI} = [-.19, -.04] \). Gender did not explain additional variance in self-stigma. Time 1 self-stigma remained significant, \( \beta = .68, p < .001, 95\% \text{ CI} = [.55, .75] \). At Step 3, I added the dummy-coded condition variables. Participants in the waitlist condition reported increased levels of self-stigma than participants in the group-only condition, \( \beta = .29, p < .01, 95\% \text{ CI} = [.12, .47] \). There was no difference between participants in the self-affirmation vs. group-only condition. Time 1 self-stigma remained significant, \( \beta = .68, p < .001, 95\% \text{ CI} = [.55, .75] \) as did distress disclosure, \( \beta = -.16, p < .01, 95\% \text{ CI} = [-.19, -.04] \).

Table 7

### Hierarchical Linear Regression Predicting Time 2 Self-Stigma.

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictors</th>
<th>( R^2 )</th>
<th>( \Delta R^2 )</th>
<th>( B )</th>
<th>( SE_{b} )</th>
<th>( \beta )</th>
<th>95% CI</th>
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<td></td>
<td>.70</td>
<td>.05</td>
<td>.74</td>
<td>[.61, .80]</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td>.58***</td>
<td>.03**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time 1 Self-Stigma</td>
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<td>.65</td>
<td>.05</td>
<td>.68***</td>
<td>[.55, .75]</td>
</tr>
<tr>
<td></td>
<td>Distress Disclosure</td>
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<td></td>
<td>-.11</td>
<td>.04</td>
<td>-.16**</td>
<td>[-.19, -.05]</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
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<td></td>
<td>.09</td>
<td>.08</td>
<td>.06</td>
<td>[-.07, .24]</td>
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</table>
Table 7. (continued)

<table>
<thead>
<tr>
<th>Step 3</th>
<th>.60***</th>
<th>.02**</th>
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<tr>
<td>Time 1 Self-Stigma</td>
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<tr>
<td>Distress Disclosure</td>
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<td>.04</td>
</tr>
<tr>
<td>Gender</td>
<td>.09</td>
<td>.08</td>
</tr>
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<td>SA vs. GO</td>
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<td>.08</td>
</tr>
<tr>
<td>WL vs. GO</td>
<td>.29</td>
<td>.09</td>
</tr>
</tbody>
</table>

*Note.* Time 1 Self-Stigma and Distress Disclosure centered at the group mean. Self-Stigma measured by the Self-Stigma Scale of Seeking Psychological Help (Vogel et al., 2006); Distress Disclosure measured by the Distress Disclosure Index (Kahn & Hessling, 2001); Gender (0 = female, 1 = male); Gender (0 = female; 1 = male); SA vs. GO, dummy coded. WL vs. GO, dummy coded.

* = p < .05, ** = p < .01, *** = p < .001

**Attitudes toward seeking help.** The random intercept model converged for Time 2 attitudes, yielding a nonsignificant Wald’s Z = 0.78, p > .05. The ICC value was .03. I built a linear mixed model, which also converged, retaining a nonsignificant Wald’s Z = 0.50, p > .05. The ICC value was .002. Mixed model analyses revealed that, as expected, attitudes measured at Time 1 predicted Time 2 attitudes, γ = .49, SE = .08, t(6) = 6.47, p < .001, 95% CI = [.34, .64]. Results also suggested that attitudes towards seeking help could be partially explained by intervention condition. Although the SA vs. GO comparison was not significant, γ = .07, SE = .14, t(6) = .48, p = .64, 95% CI = [-.22, .35], results suggested a significant difference regarding the WL vs. GO comparison, γ = -.48, SE = .17, t(6) = -2.74, p < .05, 95% CI = [-.83, -.12]. This suggests that self-affirmation did not facilitate increased attitudes compared to the group-only condition. However, participants in the group-only condition reported increased attitudes towards
seeking psychological help compared to those in the waitlist condition. Neither distress disclosure tendencies nor gender predicted Time 2 attitudes.

**Intentions to seek help.** The random intercept model converged for Time 2 intentions, yielding a nonsignificant Wald’s $Z = 0.91, p > .05$. The ICC value was .06. I built a linear mixed model, which also converged, retaining a nonsignificant Wald’s $Z = 0.89, p > .05$. The ICC value was .05. Mixed model analyses revealed that, as expected, intentions to seek help measured at Time 1 predicted Time 2 intentions, $\gamma = .63, SE = .05, t(6) = 11.63, p < .001, 95\% CI = [.53, .74]$. However, Time 2 intentions could not be explained by intervention condition. Specifically, neither the SA vs. GO comparison was significant, $\gamma = .09, SE = .21, t(6) = .46, p > .05, 95\% CI = [-.33, .52]$, nor was the WL vs. GO comparison, $\gamma = -.28, SE = .25, t(6) = -1.13, p > .05, 95\% CI = [-.80, .23]$. This indicates that regardless of intervention condition, after controlling for Time 1 intentions, participants did not differ on intentions at Time 2. Neither distress disclosure tendencies nor gender predicted Time 2 intentions.

**Hypothesis 2 Summary.** Analyses of Hypothesis 2 suggests the utility of a one-time group experience in reducing public stigma to a waitlist-control condition. There were no differences on measures of self-stigma, attitudes, or intentions to seek help.

**Hypothesis 3.** Participants who complete the self-affirmation intervention prior to the group therapy session will engage in more self-disclosure relative to the group-only condition.

**Analysis of Hypothesis 3.** I conducted two multi-level regressions (an unconditional, or random intercept, model and one with the variables of interest included) for the self-disclosure variable. The main variable of interest was intervention condition: self-affirmation plus group therapy (SA) vs group therapy only (GO). The waitlist condition was not included in these analyses because they did not provide data on group process variables (because they did not
attend a group session). Both gender and distress disclosure tendencies were included as covariates. I excluded history of psychotherapy as a covariate due to its lack of relationships with self-disclosure.

The random intercept model converged, yielding a significant Wald’s $Z = 2.20, p < .05$. The ICC value was .25. I then conducted a mixed model analysis, which also converged, retaining a significant Wald’s $Z = 2.09, p < .05$. The ICC value was .23. Results suggested no difference in perceived self-disclosure levels due to group condition, but did suggest a trend, $\gamma = -.43, SE = .24, t(5) = -1.77, p = .09, 95 \% CI = [-.93, .07]$. If this finding were significant, it would be unexpected, as it suggests that participants in the self-affirmation condition trended towards disclosing less than participants in the group-only condition. Neither distress disclosure tendencies nor gender predicted self-disclosure.

**Hypothesis 3 Summary.** Analysis of Hypothesis 3 suggests no significant differences in the perceived quality and quantity of in-session self-disclosure between the self-affirmation and group-only conditions. However, a trend emerged which suggested that participants in the self-affirmation condition trended towards disclosing less than participants in the group-only condition.

**Hypothesis 4.** Participants who complete the self-affirmation intervention prior to the group therapy session will report greater levels of cohesion, engagement, bond, and empathy relative to the group-only condition.

**Analysis of Hypothesis 4.** To test hypothesis four, I conducted two multi-level regressions (an unconditional, or random intercept, model and one with the variables of interest included) for each of the following dependent variables: cohesion, engagement, alliance, and bond. The main variable of interest was intervention condition: self-affirmation plus group
therapy (SA) vs. group therapy only (GO). The waitlist condition was not included in these analyses because they did not provide data on group process variables (because they did not attend a group session). Distress disclosure tendencies and gender were included in the models.

**Cohesion.** The random intercept model converged for cohesion, yielding a nonsignificant Wald’s $Z = 0.95, p > .05$. The ICC value was .07. I then conducted a mixed model analysis, which also converged, retaining a nonsignificant Wald’s $Z = 0.84, p > .05$. The ICC value was .06. Mixed model analyses suggested no difference in cohesion ratings between the two group conditions, $\gamma = -.02, SE = .07, t(5) = -.31, p > .05$, 95% CI $[-.18, .12]$. Results suggested an effect of distress disclosure tendencies, $\gamma = .11, SE = .04, t(5) = 2.85, p < .01$, 95% CI $[.03, .18]$ with increased disclosure tendencies related to higher ratings of cohesion. Gender was not related to perceptions of group cohesion.

**Group climate – engagement.** The random intercept model converged for Time 2 intentions, yielding a significant Wald’s $Z = 2.41, p < .05$. The ICC value was 0.30. The mixed model analysis also converged, retaining a significant Wald’s $Z = 2.38, p < .05$. The ICC value was 0.33. Results suggested that intervention condition did not have an effect on engagement, $\gamma = .07, SE = .24, t(5) = .28, p > .05$, 95% CI $[-.43, .56]$. Similarly, neither distress disclosure tendencies nor gender were related to engagement.

**Working alliance – bond.** The random intercept model converged for bond yielding a nonsignificant Wald’s $Z = 1.34, p > .05$. The ICC value was 0.12. I then conducted a mixed model analysis. This model also converged, retaining a significant Wald’s $Z = 1.39, p > .05$. The ICC value was 0.14. Results suggested no difference in bond ratings between the two group conditions, $\gamma = -.13, SE = .20, t(5) = -.68, p > .05$, 95% CI $[-.54, .27]$. Similarly, neither distress disclosure tendencies nor gender were related to engagement.
Empathy. The random intercept model did not converge for perceptions of empathy. Secondary analyses using MPlus yielded an ICC of .003. Therefore, I conducted a hierarchical linear regression analysis (see Table 8). At Step 1, I entered the centered distress disclosure index measured at Time 1 and gender. Neither variable significantly predicted empathy, but results suggested a trend for distress disclosure, $\beta = .16, p = .064, 95\% CI = [-.007, .251]$ and gender, $\beta = -.15, p = .092, 95\% CI = [-.47, .04]$. At Step 2, I added the condition variable (SA vs. GO). There was no difference between participants in the group-only and self-affirmation condition, $\beta = -.04, p = .65, 95\% CI = [-.47, .04]$. Trends remained for distress disclosure, $\beta = .16, p = .068, 95\% CI = [-.009, .251]$ and gender, $\beta = -.15, p = .092, 95\% CI = [-.48, .03].$

Table 8
Hierarchical Linear Regression Predicting Perceptions of Therapist Empathy.

<table>
<thead>
<tr>
<th>Model</th>
<th>Predictors</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$B$</th>
<th>$SE_b$</th>
<th>$\beta$</th>
<th>95% CI</th>
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<tr>
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<tr>
<td></td>
<td>Distress disclosure</td>
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<td>.12</td>
<td>.12</td>
<td>.07</td>
<td>.16</td>
<td>[-.01, .25]</td>
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<tr>
<td></td>
<td>Gender</td>
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<td>-.22</td>
<td>-.22</td>
<td>.13</td>
<td>-.15</td>
<td>[-.47, .04]</td>
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<td>.00</td>
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<td>.12</td>
<td>.07</td>
<td>.16</td>
<td>[-.01, .25]</td>
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<td>.13</td>
<td>.15</td>
<td>[-.48, .03]</td>
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<tr>
<td></td>
<td>SA vs. GO</td>
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<td>-.05</td>
<td>.12</td>
<td>-.04</td>
<td>[-.28, .18]</td>
</tr>
</tbody>
</table>

Note. Distress disclosure centered at the group mean. Distress Disclosure measured by the DDI (Kahn & Hessling, 2001); Gender (0 = female, 1 = male); Empathy measured by the Empathic Understanding subscale of BLRI (Barrett-Lennard, 2015); SA vs. GO, dummy coded

* = $p < .05$, ** = $p < .01$, *** = $p < .001$
**Hypothesis 4 Summary.** Analyses of Hypothesis 4 suggest no differences on measures of stigma (public, self), attitudes, or intentions to seek help between the self-affirmation and group-only condition.
CHAPTER 5
DISCUSSION

The present study primarily examined the effects of a self-affirmation intervention preceding a one-time meeting for group therapy. Specifically, I tested its utility to increase ratings of group relationships (e.g., cohesion) and openness towards psychological help (e.g., less self-stigma). The secondary purpose of this study was to replicate and extend upon earlier findings by Wade et al. (2011), which showed that one session of group psychotherapy is sufficient to reduce levels of self-stigma. I sought to extend upon these findings by adding a waitlist condition.

Previous research (Seidman, Lannin, et al., 2018) has suggested that a self-affirmation intervention immediately preceding a psychotherapy intake is useful in reducing self-stigma and increasing positive perceptions of self-disclosure. This is the first known study to bring this intervention “into the therapy room” by examining the utility of this intervention on psychotherapy process variables (e.g., group cohesion). Overall, our findings provide modest support for the benefit of a self-affirmation intervention preceding the initial meeting of a group. Our results suggest that participants who completed the self-affirmation intervention prior to completing a session of group reported less public stigma than individuals who only completed the group therapy session. However, I found no evidence for differences between the two group conditions on group relationship variables or psychological help-seeking variables other than public stigma.

In addition, I found evidence that participants attending a one-time group session reported lower levels of Time 2 self-stigma, replicating earlier findings (Wade et al., 2011). This study provided a more rigorous test by adding a no-treatment (i.e., waitlist) condition that
reduces concern that Wade and colleagues’ findings were due to a general trend over time. Furthermore, I also found that participating in a group was associated with increased attitudes toward counseling compared to participants in the waitlist condition. Thus, attending a group session has a positive effect on variables central to the help-seeking process.

**Self-Affirmation, Process, and Outcome**

Results suggesting a significant decrease in public stigma following the self-affirmation intervention may be partially explained by earlier suggestions that self-affirmation works by increasing openness to others (Crocker et al., 2008). When groups first form, members commonly report fear of judgment, not belonging, and as a result, turn inwards (Yalom & Leszcz, 2005). It is possible that the affirmation task reduced participant’s fears of judgment from others. In turn, they may have better recognized fellow help-seekers also as peers with similar experiences, fostering less stigmatizing attitudes.

The lack of significant differences between the two group conditions (i.e., self-affirmation vs. group-only) on any post-group help-seeking outcomes except public stigma is unexpected. Although in a nascent stage, the evidence for the effects of self-affirmation on psychological help-seeking variables is promising (Lannin et al., 2017; Seidman, Lannin, et al., 2018; Seidman, Wade, et al., 2018). Therefore, I anticipated that participants would report reduced self-stigma and increased attitudes and intentions.

Similarly, self-affirmation did not lead to greater self-disclosure nor did it increase perceptions of group relationship variables (cohesion, group climate, alliance, empathy) relative to the the group-only condition. These findings are surprising, as previous research has suggested that self-affirmation lowers the self-stigma of seeking psychological help (Lannin et al., 2013), which is linked to increased perceptions of working alliance bond (Kendra et al., 2014).
Similarly, self-stigma has been found to have an indirect effect on session outcomes via worsened perceptions of the therapeutic working alliance (Owen, Thomas, & Rodolfa, 2013). Additionally, research has demonstrated the ability of self-affirmation to increased perceived benefits of self-disclosing personal information to a counselor immediately before an intake (Seidman et al., 2018). Therefore, I expected clients to be more engaged in the therapeutic process, and as a result, help co-create therapeutic relationships with other members and the group leader.

In addition, this study was used to examine whether the self-affirmation intervention would provide an additive effect above the effect of attending a group session. This study had adequate power to detect a medium effect, but was underpowered to detect small effects. It is entirely possible that a 10-minute self-affirmation intervention might only provide a small effect in such a short time period. Yet even a small effect, should it exist, could be considerable and meaningful over the course of thousands of groups and tens of thousands of clients. It is possible that the 10-minute pre-group intervention does indeed result in some small changes (e.g., in self-stigma, attitudes, self-disclosure, or cohesion) compared to only attending a group session. Those small effects could lead to more clients seeking help or staying in therapy. For example, if small changes in attitudes or self-stigma resulted in just 10% more people seeking therapy or 10% fewer group client drop-outs, then, over the course of 10,000 clients, 1,000 more people would get the help they need and deserve. These issues need further investigation; the current study cannot answer them, nor can it rule them out.

Another possible reason I did not find significant effects for the self-affirmation intervention is the complexity of interactions that occur during group psychotherapy. Research (Burlingame et al., 2002) has suggested that interactions occur at multiple levels in a group
setting, including: 1) member to member, 2) member to group leader, and 3) member to group-as-a-whole. Therefore, even if the self-affirmation intervention was successful in some of its aims (e.g., reducing self-stigma, increasing positive self-disclosure perceptions), its effects could quickly disappear when group factors begin to emerge. Each group met for 75 minutes and varied across a multitude of factors (e.g., group size, topics discussed). For example, it is possible that, upon starting group, certain members did not bond, causing early group tension, or topics were discussed that caused discomfort significant enough to “wash out” affirmation effects.

Similarly, it is possible that one-time interpersonal process groups have a “ceiling effect” related to relationship variables. Although research has found that measures of alliance taken as early as session one can predict group treatment outcome (Norton & Kazantzis, 2016), these data were collected from participants attending a weekly manualized 12-session cognitive-behavioral treatment protocol for anxiety. Another study (Piper et al., 2005) has found connections between early working alliance ratings and outcome in a group setting, yet early alliance was defined by an aggregate rating of the first four sessions. Groups are unique and dynamic, yet follow similar patterns in early sessions (Yalom & Leszcz, 2005). It is possible that there are more opportunities for relationship building when participants know the group will extend beyond one session. As interpersonal process groups may be especially unpredictable, regardless of potential affirmation effects, it is likely that members felt unsure of how to proceed within a first session, creating a narrow window for group relationship development and differences.

**Group vs. No Group**

The lack of change in intentions may be explained by the item wording, which asks participants to imagine if they were experiencing a psychological problem. These intentions may
be better referred to as “hypothetical intentions” vs. “actual intentions”. It may be difficult for people to envision feeling psychological distress that reaches clinical levels. Therefore, hypothetical intentions may be difficult to change. The lack of change in public stigma appears more difficult to explain. It is possible that by not isolating the unique effect of self-affirmation, participants generally maintained public stigma towards other help-seekers, although they felt less judgmental of themselves for seeking help. This may be viewed as a form of cognitive dissonance elicited to maintain a positive self-image. After the conclusion of the group session, it may have been difficult for participants to maintain two seemingly conflicting views. Wade et al. (2011) suggests “the thoughts and beliefs that counseling will lead to diminished self-regard may come to odds with more positive thoughts about counseling” (p. 9). However, as participants only attended one session and were not committing to actual psychological treatment, they may still have sought to distance themselves from “real” help-seekers, leading to no change in public stigma.

**Limitations and Future Directions**

Although this study is the first to test the effects of a self-affirmation intervention on group psychotherapy process and outcome variables, there are several limitations worth noting. Primarily, further research is needed for generalizability purposes. All participants were college students who earned research credit. Knowing that the group would not continue beyond the one session, participants may have felt less committed to engaging in group-like work. It is possible that this intervention may have a stronger effect when participants foresee possible change as a result of the treatment (e.g., decreasing shyness). Future research should examine the longitudinal impact of self-affirmation on therapy process and outcome variables.
Additionally, we did not recruit a clinically distressed sample and excluded participants who identified as having previous or current levels of suicidal ideation. Group psychotherapy can help people who do not meet diagnostic criteria, and interpersonal difficulties are a common concern among college students (Center for Collegiate Mental Health, 2018). However, participants may have expected limited utility of the meeting and thus were less motivated to help co-create therapeutic relationships. Future research should seek to include participants who are experiencing psychological distress, as they are more likely to perceive benefit from psychotherapy.

Furthermore, not all participants who signed up for the study also signed up to participate at Time 2. The researcher corresponded with several potential participants who were unable to attend due to scheduling conflicts, as group offerings were limited due to therapist availability. However, although the results suggested no differences on demographic factors or measures of stigma, attitudes, or intentions, it is possible that participants who self-selected to attend Time 2 differed in other ways. Participants who attended the session may have had increased motivations to attend a “low-commitment” form of therapy unlike those who did not participate; 70% of participants who participated at Time 2 answered “yes” to a question asking if they signed up for the study to “test run” group counseling to see how it may be helpful to resolve distress they were experiencing (e.g., for reasons not solely related to obtaining research credit). Additionally, they may have had more familiarity with group therapy, unique of personal treatment history (e.g., knowing close others’ who have previously attended and benefitted).

**Implications**

Although limited by population and methodological factors, this study does provide unique findings, in addition to replicating and extending upon previous findings. Specifically, a
short, self-affirmation intervention prior to starting group therapy might be worthwhile for helping to reduce public stigma for those seeking group therapy. These findings are promising, and may foster reduced levels of discrimination and prejudice towards individuals who seek psychological help and openness towards seeking therapy in the future. However, the study did not provide compelling evidence for the utility of a self-affirmation intervention in reducing other help-seeking variables or increasing ratings of group therapy relationships (i.e., cohesion) above and beyond attending a group session. More exploration and highly-powered studies are needed to determine if there is an effect of self-affirmation on these variables.

Our study provides further evidence for the utility of attending one group therapy session in increasing openness to psychological help-seeking. Participants who attended a group reported lower levels of self-stigma and increased attitudes compared to participants in waitlist groups. Given the role these variables play in preventing and promoting help-seeking (Lannin et al., 2015; Nam et al., 2013; Vogel et al., 2007), therapists could seek to offer brief “try-out” sessions to promote help-seeking. As this group would be limited to one meeting, therapists should take special care in the member selection process and seek to implement structure consistent with the literature on early group formation (e.g., Johnson, 2009; Yalom & Leszcz, 2005). Alternatively, those looking to increase help-seeking might find other ways to get people to at least experience a group session once. This has implications for future work that might be done on the effects of watching (versus participating in) a group therapy session. Perhaps a vicarious experience would have similar positive effects without requiring people to attend an actual session.

**Conclusion**

The present study expands on a promising field of research that has demonstrated the utility of a brief intervention to increase openness towards psychological help by examining its
effect on group psychotherapy process and outcome variables. Specifically, we examined its ability to promote positive ratings of group relationships (e.g., cohesion) and help-seeking openness (e.g., positive attitudes). Our findings suggest that preceding a group with a self-affirmation intervention can reduce levels of public stigma, which may facilitate more positive perceptions of psychological help-seekers and interactions concerning mental health service use. In addition, this study provides further evidence for the effects of attending just one group therapy session. Corroborating earlier research, participants who attended a session of group reported lower levels of self-stigma. By adding a waitlist-condition, this study suggests that this difference may not be due to a time trend. Additionally, I found that participants also reported more positive attitudes towards psychotherapy. Therapists may seek to encourage help-seeking by hosting “one-time” group therapy meetings.

Years of research have documented the utility of group psychotherapy to reduce mood and behavioral symptoms associated with psychological distress. However, as Ormont (1956, p. 844) notes: “asking a patient to venture into a group is often tantamount to asking him to return to his original family constellation with all its accompanying trauma, terror, and personal tragedy”. As a result, securing client buy-in is a typical hurdle that therapists must navigate. Therefore, it is imperative that there is continued examination of how to promote a positive “first-contact” experience so as to prevent early dropout and facilitate future help-seeking.
REFERENCES


APPENDIX A

IRB APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Date: 08/09/2018
To: Andrew Seidman Nathaniel Wade
From: Office for Responsible Research
Title: The use of self-affirmation and group therapy to reduce stigma
IRB ID: 18-285
Submission Type: Initial Submission Review Type: Full Committee
Approval Date: 08/07/2018 Date for Continuing Review: 08/06/2020

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.

- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.

- Obtain IRB approval prior to implementing any changes to the study.

- Inform the IRB if the Principal Investigator and/or Supervising Investigator end their role or involvement with the project with sufficient time to allow an alternate PI/Supervising Investigator to assume oversight responsibility. Projects must have an eligible PI to remain open.

- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.

- Stop all human subjects research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research participants. Human subjects research activity can resume once IRB approval is re-established.

- Submit an application for Continuing Review at least three to four weeks prior to the date for continuing review as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

IRB 03/2018
APPENDIX B

SELF-AFFIRMATION INTERVENTION

Below are a series of rank-ordering tasks. For each task, you will be presented with a list of personal strengths. Living in accordance with one’s strengths provides “guiding principles” in life, which can help give us meaning and purpose. Living a life congruent with some of the strengths listed may be very important to you, while others may be less important.

For the next two tasks, please rank the listed strengths in order of personal importance to you, with 1 = Most important and 6 = Least important. For example, if “Bravery” is your 3rd top ranked-strength in Task 1, please write “3” on the line next to it.

**Task 1:**

_______ Gratitude
_______ Humor
_______ Hope
_______ Zest
_______ Forgiveness
_______ Love

**Task 2:**

_______ Creativity
_______ Fairness
_______ Curiosity
_______ Humility
_______ Kindness
_______ Teamwork
Bring forward your *top rated strength (#1) from each task* and re-rank them in order of importance. For example, if you ranked “Gratitude” and “Kindness” as your #1’s, please re-rank them in the task below, with “1” being the most important, and “2” being the second most important. Please write the name of the strength next to its rank.

**Task 3: Re-ranking of Personal strengths from Task 1 & 2**

<table>
<thead>
<tr>
<th>PERSONAL STRENGTH RANK</th>
<th>PERSONAL STRENGTH NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

We are interested in how ____________________________ influences your life.

*(Write top-rated (#1) personal strength from Task 3 above)*

Now, please try to reflect on this personal strength. What about this personal strength makes it so important to you? How has living a life in accordance with this strength made you proud of yourself and made your life better? Please use the timer given to you and make sure to use at least 7 minutes. **Do not continue on to the next task until the 7 minutes are up.** Even if you finish writing in 7 minutes, please use the extra time to read over the essay and reflect on the strength. If you need a bit more extra time to write, you can do so. If you need extra space, please find remaining space on the survey to write.
APPENDIX C

PRE-GROUP ORIENTATION

What is Group Counseling?
Group counseling is a psychological service that provides members an opportunity to grow through interaction with others. Many people come to group because they experience some form of distress which is often related to their relationships with other people. One way that group can help in a way that individual counseling may not is that, in group, people learn more about how they interact with others, and how the patterns of interaction help and/or hurt their relationships. However, you do not need to be feeling distressed to benefit — learning how to interact in a more productive, healthy manner can help anyone!

What should I expect?
Coming for the first time is typically the hardest part. It is normal and expected to feel uncomfortable and anxious as you meet new people in this setting and explore the new rules and norms of this setting (e.g., “what do I say?”). As many people come to group due to some type of relationship distress (e.g., wanting to be more able to speak up for their needs, social anxiety), the group leader will try to facilitate a safe space where these topics can be discussed. In group, members interact with a counselor, but primarily talk with the other members. Many group members report feeling less lonely and isolated after hearing about how their peers may have similar experiences to them. Group counseling is also different than individual counseling because the relationships you develop with other members and counselor can help illuminate your patterns of interaction, so that you can learn new ways to relate to others outside of group and have more meaningful relationships.

It is helpful when members give and receive feedback to/from other members, so they can learn more about how they are seen and understood by others. At times, group may feel unstructured and members may feel nervous or unsure about what to say. This is a normal part of the group process and leaders will encourage members to share these feelings so they can be discussed.

What are the benefits?
Most clients who receive counseling function better in relationships. Smith and Glass (1975) found that the typical client is better off than 75% of people who go without help. Burlingame et al. (2011) has demonstrated that group counseling is just as effective as individual counseling. In fact, research has shown that group counseling is more effective than individual for certain problems.
APPENDIX D

MEASURES

Stigma Scale for Receiving Psychological Help
(SSRPH; Komiya, Good, & Sherrod, 2000)

<table>
<thead>
<tr>
<th>0 = Disagree</th>
<th>1</th>
<th>2</th>
<th>3 = Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seeing a psychologist for emotional or interpersonal problems carries social stigma.</td>
<td></td>
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<tr>
<td>2. It is a sign of personal weakness or inadequacy to see a psychologist for emotional or interpersonal problems.</td>
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<tr>
<td>3. People will see a person in a less favorable way if they come to know that he/she has seen a psychologist.</td>
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<tr>
<td>4. It is advisable for a person to hide from people that he/she has seen a psychologist.</td>
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<td></td>
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<tr>
<td>5. People tend to like less those who are receiving professional psychological help.</td>
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</tr>
</tbody>
</table>
Self-Stigma of Seeking Help  
(SSOSH; Vogel, Wade, & Haake, 2006)

<table>
<thead>
<tr>
<th></th>
<th>1 = Strongly disagree</th>
<th>2 = Disagree</th>
<th>3 = Agree/Disagree Equally</th>
<th>4 = Agree</th>
<th>5 = Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I would feel inadequate if I went to a therapist for psychological help.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2.</td>
<td>My self-confidence would NOT be threatened if I sought professional help.*</td>
<td></td>
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</tr>
<tr>
<td>3.</td>
<td>Seeking psychological help would make me feel less intelligent.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4.</td>
<td>My self-esteem would increase if I talked to a therapist.*</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>5.</td>
<td>My view of myself would not change just because I made the choice to see a therapist.*</td>
<td></td>
<td></td>
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<tr>
<td>6.</td>
<td>It would make me feel inferior to ask a therapist for help.</td>
<td></td>
<td></td>
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<tr>
<td>7.</td>
<td>I would feel okay about myself if I made the choice to seek professional help.*</td>
<td></td>
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<tr>
<td>8.</td>
<td>If I went to a therapist, I would be less satisfied with myself.</td>
<td></td>
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<tr>
<td>9.</td>
<td>My self-confidence would remain the same if I sought professional help for a problem I could not solve.*</td>
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<tr>
<td>10.</td>
<td>I would feel worse about myself if I could not solve my own problems.</td>
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</tbody>
</table>

* = reverse scored. Items will not be marked in participant view.
Mental Help Seeking Attitudes Scale
(MHSAS; Hammer, Parent, & Spiker, 2018)

The following scale assesses your attitudes towards seeking counseling services. Please circle the number that best represents your opinion. Please only circle one number per row. For example, if you feel that mental health counseling is extremely useful, please circle the 3 next to useful. If you feel like it would be useless, but not extremely useless, please circle the “2” or “1” next to useless, based on your own judgment, with “2” indicating a judgment of “more useless” than a rating of “1”. If you are undecided, circle 0. For some items, the language on the left side is negative (e.g., useless), and for other items, it is positive (e.g., important). In the case of “important”, a 3 all the way to the left would mean that you believe mental health counseling is extremely important.

If I had a mental health concern, seeking psychotherapy from a mental health professional would be...

<table>
<thead>
<tr>
<th>Useless</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Useful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important*</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Unimportant</td>
</tr>
<tr>
<td>Unhealthy</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Healthy</td>
</tr>
<tr>
<td>Ineffective</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Effective</td>
</tr>
<tr>
<td>Good*</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Bad</td>
</tr>
<tr>
<td>Healing*</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Hurting</td>
</tr>
<tr>
<td>Disempowering</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Empowering</td>
</tr>
<tr>
<td>Satisfying*</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Unsatisfying</td>
</tr>
<tr>
<td>Desirable*</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>Undesirable</td>
</tr>
</tbody>
</table>

* = reverse scored. Items will not be marked in participant view.
Mental Help Seeking Intentions Scale  
(MHSIS; Hammer & Vogel, 2013)

If I had a mental health concern…

I would **intend** to seek counseling from a mental health professional.  
1 (*Extremely unlikely*) 2 3 4 5 6 7 (*Extremely likely*)

I would **try** to seek counseling from a mental health professional.  
1 (*Definitely false*) 2 3 4 5 6 7 (*Definitely true*)

I would **plan** to seek counseling from a mental health professional.  
1 (*Strongly disagree*) 2 3 4 5 6 7 (*Strongly agree*)
The Group Therapy Experience Scale – Self Disclosure subscale  
(GTES-S; Hunter et al., 1996; Marziliano et al., 2018)

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale 1</th>
<th>Scale 2</th>
<th>Scale 3</th>
<th>Scale 4</th>
<th>Scale 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I revealed a great deal about myself in the group.</td>
<td>1 = Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I intentionally kept my feelings hidden from the group.*</td>
<td>2 = Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I told the group something I had not planned to tell them.</td>
<td>3 = Neutral</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. When I talked, I usually discussed mundane matters in the group.*</td>
<td>4 = Agree</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. I felt uncomfortable talking about my personal issues with the group.*</td>
<td>5 = Strongly Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I have told the group things that I usually only tell close friends.</td>
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</tr>
</tbody>
</table>

* Items removed from original scale to increase reliability.
### Group Environment Scale - Cohesiveness
(GES-C; Wilson et al., 2008)

<table>
<thead>
<tr>
<th>Item</th>
<th>0 = Strongly Disagree</th>
<th>1 = Somewhat Disagree</th>
<th>2 = Somewhat Agree</th>
<th>3 = Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Group members felt a sense of belongingness to the group.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Group members felt close to each other.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Group members showed that they cared for one another.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Group members appeared committed to the group.</td>
<td></td>
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</tr>
<tr>
<td>5. Group members could understand what others in the group are going through.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6. Group members were supportive of one another.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The atmosphere of group was a friendly one.</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Group Climate Questionnaire – Short Form  
(GCQ-SF; Mackenzie, 1983)

1 = Not at all  \hspace{1cm} 2 \hspace{1cm} 3 \hspace{1cm} 4 \hspace{1cm} 5 \hspace{1cm} 6 = Extremely

1. The members liked and cared about each other.
2. The members tried to understand why they do the things they do; tried to reason it out.
3. The members avoided looking at important issues going on between themselves.
4. The members felt what was happening was important and there was a sense of participation.
5. The members depended upon the group leader for direction instead of figuring out things for themselves.
6. There was friction and anger between the members.
7. The members were distant and withdrawn from each other.
8. The members challenged and confronted each other in their efforts to sort things out.
9. Instead of being “real”, the members appeared to do things the way they thought would be acceptable to the group.
10. The members rejected and distrusted each other.
11. The members revealed sensitive personal information or feelings.
12. The members appeared tense and anxious.

Engagement: Items 1, 2, 4, 8, 11  
Conflict: Items 6, 7, 10, 12  
Avoidance: Items 3, 5, 9
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I believe the group leader liked me.</td>
</tr>
<tr>
<td>2.</td>
<td>I was confident in the group leader’s ability to help me.</td>
</tr>
<tr>
<td>3.</td>
<td>I felt that the group leader appreciated me.</td>
</tr>
<tr>
<td>4.</td>
<td>The group leader and I trusted one another.</td>
</tr>
</tbody>
</table>

**Working Alliance Inventory (Bond subscale) – Short Form**  
(WAI-SF-B; Tracey & Kokotovic, 1989)

<table>
<thead>
<tr>
<th>Scale</th>
<th>1 = Never</th>
<th>2 = Rarely</th>
<th>3 = Occasionally</th>
<th>4 = Sometimes</th>
<th>5 = Often</th>
<th>6 = Very Often</th>
<th>7 = Always</th>
</tr>
</thead>
</table>

1. I believe the group leader liked me.  
2. I was confident in the group leader’s ability to help me.  
3. I felt that the group leader appreciated me.  
4. The group leader and I trusted one another.
Empathic Understanding Subscale of the Barrett-Lennard Relationship Inventory (BLRI-E; Barrett-Lennard, 2015)

Below is listed a variety of ways that you may have perceived the group leader feeling or behaving towards you. It is possible that not all of the items below apply directly to your experience today. In that case, please respond based off of your judgment of them, how you imagine they would act in relationship to you in the future.

The group leader...

…usually senses or realizes what I am feeling.

… reacts to my words but does not see the way I feel.*

… nearly always sees exactly what I mean.

… appreciates just how the things I experience feel to me…

… does not understand me.

…’s own attitude toward things I do or say gets in the way of understanding me.

… realizes what I mean even when I have difficulty in saying it.

… doesn’t listen and pick up on what I think and feel.

… usually understands the whole of what I mean.

… doesn’t realize how sensitive I am about some of the things we discuss.

…’s response to me is so fixed and automatic that I don’t get through to him/her.*

When I am hurting or upset, the group leader recognizes my painful feelings without becoming upset him/herself.

* = reverse scored. Items will not be marked in participant view.
**Distress Disclosure Index**  
*(DDI; Kahn & Hessling, 2001)*

<table>
<thead>
<tr>
<th></th>
<th>1 = <em>Strongly Disagree</em></th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 = <em>Strongly Agree</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>When I feel upset, I usually confide in my friends.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I prefer not to talk about my problems.*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>When something unpleasant happens to me, I often look for someone to talk to.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.</td>
<td>I typically don’t discuss things that upset me.*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>When I feel depressed or sad, I tend to keep those feelings to myself.*</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6.</td>
<td>I try to find people to talk with about my problems.</td>
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<td></td>
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</tr>
<tr>
<td>7.</td>
<td>When I am in a bad mood, I talk about it with my friends.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>If I have a bad day, the last thing I want to do is talk about it.*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I rarely look for people to talk with when I am having a problem.*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>When I’m distressed, I don’t tell anyone.*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I usually seek out someone to talk to when I am in a bad mood.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I am willing to tell others my distressing thoughts.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* = reverse scored. Items will not be marked in participant view.
APPENDIX E

DEMOGRAPHIC QUESTIONNAIRE

How old are you?

How do you identify in terms of your gender?
  o Female
  o Male
  o Other - please specify: _______

What year in school are you?
  o First
  o Second
  o Third
  o Fourth
  o Other (please specify) _______

What is your current academic major?
  o Psychology, declared
  o Psychology, undeclared
  o Communication Studies, declared
  o Communication Studies, undeclared
  o Other - please specify major and declaration (i.e., declared, undeclared): ____

How do you identify in terms of your race?
  o African American/Black
  o American Indian/Alaskan Native
  o Asian American/Asian
  o Hispanic/Latino/a
  o Native Hawaiian/Pacific Islander
  o Multi-racial
  o White
  o Other (please specify): _______

How do you identify in terms of your sexual orientation?
  o Heterosexual
  o Lesbian
  o Gay
  o Bisexual
  o Questioning
  o Other (please specify): _______