Social Comparison and Help Seeking Attitudes: Evaluation of the Impact of Subjective and Objective Social Comparison Data on Help Seeking Attitudes

by

William Anthony Anderson Blair, Jr

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Approved by

John C. Dagley, Chair, Associate Professor of Special Education, Rehabilitation, and Counseling
Suhyun P. Suh, Associate Professor of Special Education, Rehabilitation, and Counseling
Chippewa M. Thomas, Associate Professor of Special Education, Rehabilitation, and Counseling

Abstract

The purpose of the present study was to investigate the relationship between Festinger's (1954) theory of social comparison. Specifically, this study focused on the impact of subjective and objective data on help seeking attitudes. Participants of this study (n = 154) were asked to complete an online survey comprised of a demographics section, the Iowa-Netherlands Comparison Orientation Measure (INCOM), and the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) scale. Between the presentation of the INCOM and IASMHS scale, participants were presented with one of four randomly assigned vignettes with specific treatment condition. The treatment conditions provided a combination of objective and subjective advice to seek or not seek mental health services.

Factorial MANOVA was used to evaluate the significance of relationships between the independent variables (e.g., age, gender, ethnicity, education level, previous use of mental health services, and the vignettes) and the dependent variables: the INCOM, Upward Comparison scale, Downward Comparison scale, and the IASMHS scale with three embedded subscales (e.g., Openness, Stigma, and Help-Seeking Propensity subscales). Age was statistically significant for the INCOM, Upward comparison scale, the IASMHS scale, and the Stigma subscale. Gender was statistically significant for the IASMHS and all three subscales. Ethnicity and previous use of mental health treatment were statistically significant for the Openness subscale of the IASMHS scale. The differences between the four vignettes and education level were not statistically significant. Finally, bivariate regression was used to evaluate the predictive nature

of social comparison for help-seeking attitudes and the Openness subscale was found to be significant and predicted 10.4% of help-seeking attitudes in this model. Implications of these data, limitations, and ideas for future research are presented.

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CHAPTER I. INTRODUCTION

Decades of research have shown that a substantial percentage of the population of North America suffers from some type of mental illness at one time or another over the course of a lifetime (Barwick, de Man, & McKelvie, 2009). Similarly, Mackenzie, Gekoski, and Knox (2006) noted that 30–50% of people will experience a psychological issue within an individual's lifetime, and 15–30% of people have experienced a mental disorder within the last year. However, many people who suffer from serious mental health issues or experience significant distress do not seek psychological treatment (Mojtabai, 2008). Data from the population at large has demonstrated a significant disparity between the number of individuals who reported distress and the number of people who make use of mental health services (Kessler, et al., 2005; Mojtabai, 2008; Mojtabai, Olfson, & Mechanic, 2002).

Statement of the Problem

Some researchers believe that as few as 11% of individuals who suffer from interpersonal or psychological pain at a clinical-level (i.e., meet the diagnostic criteria for a psychiatric disorder) seek psychological services (Vogel, Wade, Wester, Larson, & Hackler, 2007). Additionally, it is estimated that fewer than 2% of those with troublesome but sub-clinical suffering seek mental health services (Andrews, Issakidis, & Carter, 2001; Vogel, Wade, & Hackler, 2007; Vogel, Wade, Wester, Larson, & Hackler, 2007). These numbers are compelling. People suffer, but do not seek professional help. For some, seeking professional help is a last resort (Hinson & Swanson, 1993; Vogel, Wester, & Larson, 2007; Vogel, Wester, Wei, &

Boysen, 2005), something to be considered only when attempts to handle problems individually or with help from someone close have not been successful (Vogel, Wester, & Larson, 2007; Vogel, Wester, Wei, & Boysen, 2005; Wills, 1992). Researchers have concluded that two-thirds of people who could benefit from mental health services never seek professional help (Andrews, Issakidis, & Carter, 2001; Shaffer, Vogel, & Wei, 2006; Vogel, Wester, Wei, & Boysen, 2005). This data indicates that emotional pain or distress does not seem to be sufficient in motivating people to seek treatment. Despite the many benefits one can experience from mental health counseling, people continue to have difficulty assuming the role of patient or client.

The presence of emotional pain is an insufficient motivator for seeking professional help. Vogel, Wade, and Hackler (2008) found in their study of university students (n = 295) that psychological distress or pain did not completely mediate the relationship between emotional expression and willingness to seek mental health services. Unfortunately, the disconnect between experience of mental stress and seeking professional help turns out to be a fairly complex. This data indirectly points to the number of variables that are related to an individual's help-seeking attitudes. McCarthy and Holliday (2004) noted that help-seeking attitudes are a central role in actual help-seeking behavior, and the process of psychotherapy itself. Therefore, understanding help-seeking attitudes is vital to helping professions.

Research on help-seeking attitudes (e.g., Andrews, Issakidis, & Carter, 2001; Lazarus, 1993; Segal, Mincic, Coolidge, & O'Riley, 2005; Shaffer, Vogel, & Wei, 2006; Vogel, Wade, & Hackler, 2008) has included studies that have focused on a wide array of possible contributors including culture, education, religion, levels of authoritarianism, locus of control (perception of whether the problem is internal versus environmental), and previous use of mental health services (Calhoun, Dawes, & Lewis, 1972; Fischer & Cohen, 1972; Fischer & Turner, 1970;

Zeldow & Greenberg, 1979). For example, despite obvious challenges with the traditional male gender role, men in the United States appear more reluctant to seek mental health services than women (Berger, Levant, McMillan, Kelleher, & Sellers, 2005; Cheatham, Shelton, & Ray, 1987; Fischer & Turner, 1970). Researchers have demonstrated that 66% of people who seek psychological services are women (McCarthy & Holliday, 2004).

Additionally, one in three women seeks mental health services some time during the course of their lives while the numbers for men are closer to one in seven (Collier, 1982; McCarthy & Holliday, 2004). Furthermore, lower social economic status has also been associated with delays in seeking medical treatment (Ross, 1962; Zeldow & Greenberg, 1979) and the same can be said for seeking professional help for psychological concerns. It has also been made clear that delays in seeking mental health services can lead to limitations of future gains in treatment (Boyd, et al., 2008; Conus & McGorry, 2002; Steinhausen, Rauss-Mason, & Serdel, 1991; Stephensen, 2000). Thus, it seems rather apparent from the research that there are multiple barriers to seeking psychological help.

However, once people overcome the aforementioned barriers and seek psychological help, their attitudes shift. For example, Fischer and Turner (1970) found that the people who have sought mental health services in the past have developed and retained more favorable attitudes about help-seeking, and thus are more likely to seek help in the future. In a later study, Cash, Kehr, and Salzbach, (1978) found that individuals who had previous experience with mental health treatment had carried over a greater recognition of the need for psychological services, as well as increased indifference to stigma, increased interpersonal openness, and more confidence in mental health professionals.

Help-seeking attitudes have also been shown to be the most consistent predictor of intentions to seek mental health services (Cepeda-Benito & Short, 1998; Kelly & Achter, 1995; Mackenzie, Gekoski, & Knox, 2006; Morgan, Ness, & Robinson, 2003; Vogel & Wester, 2003). Positive help-seeking attitudes are linked to views of mental health therapists as trustworthy, knowledgeable, and empathic (Cash, Kehr, & Salzbach, 1978; Leong & Zachar, 1999). These studies demonstrate the extensive barriers to help-seeking and the benefits of overcoming those barriers. One of the ways in which people may overcome these barriers is the use of social comparison. Festinger (1954) facilitated an understanding of how people compare their abilities and attributes with others to see where they "fit" in the world. Freidson (1961) later theorized that people use these comparisons to evaluate their own need for professional help; labeling this as the "lay referral structure" (p. 146). However, there is little research connecting social comparison to help-seeking attitudes.

Purpose of the Study

Despite the thoroughness of research on barriers to seeking mental health services and the influence of previous use of psychological help on help-seeking attitudes, the influence of social comparison on help-seeking attitudes has not been sufficiently investigated. In fact, it has largely been ignored (Mojtabai, 2008). The purpose of this study is to identify connections between social comparison processes, namely the impact of subjective and objective comparison data, on help-seeking attitudes.

Festinger (1954) proposed that people seek to measure themselves in relationship to those they deem similar. These comparisons can often be perceived as more meaningful than objective data. For example, when receiving feedback about test scores, students are rarely satisfied with knowing his or her grade. They frequently want to know what is the highest grade, lowest score,

or the average grade for that exam. Additionally, Festinger (1954) articulated specific conditions where social comparison is more likely to increase. For instance, when objective opinion (i.e., advice not part of individual's social network or lay referral structure) is not available, people are more likely to engage in higher levels of social comparison.

Building on Festinger's work, Sanders (1981) conducted a study that evaluated the use of social comparison on the decision to seek medical attention. The results showed that objective information (e.g., that of a physician or psychologist) that recommended an individual seek treatment for an ailment was not altered by the use of social comparison with an individual's friends and family. In that study, Sanders (1981) used role playing scenarios to observe the degree that social comparison can influence, or even override, objective data provided to the individual. These data support the hypothesis that social comparison is an important component of attitudes about seeking mental health services. Furthermore, researchers have surmised that social comparison data that is supportive of seeking help rather than discouraging increases the likelihood that one will seek mental health services (Freidson, 1961; Rickwood & Braithwaite, 1994; Sanders, 1981; Vogel, Wester, Wei, & Boysen, 2005).

The proposed study attempts to demonstrate the connections between demographic variables (age, sex, ethnicity, and years of secondary education), previous use of mental health services, social comparison, and help-seeking attitudes. Although sex differences in help-seeking has been well established, this study will demonstrate whether or not there are differences in the propensity for social comparison between men and women. Most importantly, this research will also demonstrate the impact of social comparison and objective data on help-seeking attitudes.

Constructs related to the various aspects of the proposed study guided the review of the literature. First, it was important to fully understand the extent of the problem. Secondly, a comprehensive review of the social comparison literature was needed. Lastly, assessment tools with appropriate psychometric properties and demonstrated utility in similar studies were identified. Variables that influence help-seeking attitudes have received a great deal of attention for decades and summarized in recent studies (e.g., Andrews, Issakidis, & Carter, 2001; Lazarus, 1993; Segal, Mincic, Coolidge, & O'Riley, 2005; Shaffer, Vogel, & Wei, 2006; Vogel, Wade, & Hackler, 2008). For example, some researchers have focused on how attachment influences help-seeking attitudes. Attachment styles can impact an individual's level of anxiety, thus changing the approach and avoidance of helping providers. People with greater levels of attachment anxiety will have more concerns about being rejected or abandoned by a mental health provider. Researchers also found that avoidant attachments and low motivation for seeking help was mediated by lower anticipated benefits, greater interpersonal risk, and less positive attitudes about seeking professional help (Shaffer, Vogel, & Wei, 2006).

Personality and individual differences have also received attention regarding their impact on help-seeking attitudes. Barwick, de Man, and McKelvie (2009) found that participants with lower self-esteem, high trait anxiety, and external locus of control had a more negative attitude about seeking professional help. They also found that the inverse was also true in that individuals with better self-esteem, lower trait anxiety, and internal locus of control had more positive attitudes toward seeking psychological care.

Similarly, age has been found to influence help-seeking attitudes. Sellers (2005) found that older men had a more positive view of seeking professional psychological help than younger men and women. Other researchers (e.g., Selby, Calhoun, and Parrott, 1978) found a positive

correlation with age, income, and positive attitudes about seeking help from pastoral counselors. Yet, Murstein and Fontaine (1993) found that younger men were more comfortable talking to a psychiatrist or clergyman than younger women were. This research suggests that spirituality can also have an impact on help-seeking attitudes. Simon and Gerber (1990) found that advertisements for counseling that included religious or spiritual components were important for a small number of their participants. Bergin and Jenson's (1990) research pointed out that therapists infrequently report religious affiliation, demonstrating some disparity between a desire for advertised spirituality and the desire for providers to remain religiously ambiguous (Simon & Gerber, 1990).

Other demographic variables which research shows to have a bearing on help-seeking attitudes are ethnicity, education, marital status, and gender expression. For example, Bonner (1997) and Kirk (1986) found that African-American male students use counseling services on campus less than Caucasian students. With regards to education, Mackenzie, Gekoski, and Knox (2006) found that help-seeking attitudes were positively correlated with level of education for male participants while educational history was not significant for women. Female participants of the study at all levels of education had a generally positive attitude about seeking psychological services. In this same study, Mackenzie, Gekoski, and Knox (2006) theorized that not having a partner increases unmarried peoples' use of mental health services. Similarly, Kessler and colleagues (2005) determined that single people who have never married were more likely to seek psychological help that those who were married. Help-seeking attitudes have also been researched using gender expression and sexual orientation as variables. Johnson (1988) found that individuals who view themselves as more feminine have more positive attitudes toward seeking psychological services. Johnson (1988) also found that participants who

identified themselves as more feminine demonstrated a higher confidence in professionals' ability to help with personal problems.

One of the most significantly researched variables of help-seeking attitudes is sex of the participant. Fischer and Turner's (1970) ground-breaking study found that women sought psychological services more often than men. These results have been duplicated in other studies such as Strohmer, Biggs, and McIntyre (1984), Willis and DePaulo (1991), and later by Barwick, de Man, and McKelvie (2009). Furthermore, Robertson (2001) found that women sought psychological help at higher rates than men despite men having levels of distress that were as high or higher than the female participants.

Another frequently researched variable regarding help-seeking attitudes is stigma. Stigma has been defined as a defect resulting from a personal attribute that is considered socially undesirable (Blaine, 2000; Vogel, Wade, & Hackler, 2007). The concept of stigma is considered by many researchers as dual-faceted presenting in two categories; public stigma and self-stigma. Boyd and colleagues (2008) conceptualized public stigma as an effort to increase the social distance between those who live with and without psychological problems. Self-stigma is the internalization of public stigma and having negative views of seeking help for one's self. Researchers have concluded that stigma negatively influences help-seeking attitudes (Vogel, Wade, & Hackler, 2007). Barwick, de Man, and McKelvie (2009) determined that individuals avoid professional psychological treatment because they see help-seeking as a sign of failure and weakness. Kushner and Sher (1989) found that individuals who experienced the highest level of avoidance due to stigma were those who had suffered from psychological symptoms in the past.

While the aforementioned variables have received much critical attention in relationship to help-seeking attitudes, the connection between social comparison and help-seeking attitudes

has not been fully explored. The concept of social comparison has been of interest to researchers over the past six decades. Festinger (1954) was the first to theorize that people have an innate drive to evaluate their opinions and abilities against those of others. Gibbons and Buunk (1999) reiterated that the major goal of social comparison is to obtain information about one's self. The presence of objective data has been shown to have an impact on peoples' tendency to engage in these comparisons. However, when no objective is available, people compare their capabilities and limitations with that of others (Festinger, 1954; Wood, 1989).

The propensity of social comparison and the use of objective data are also connected to individuals' attitudes about seeking psychological help. Mojtabai (2008) investigated the link between social comparison and help-seeking attitudes and found that individuals who described themselves as more worried, nervous, or anxious than other people were significantly more likely to seek psychological help. Some research has also been performed evaluating the importance of objective data being present and the effect on social comparison. Sanders (1981) found that when objective data encouraged help-seeking, social comparison data did not have an effect on the outcome. Although there is a scarcity of these studies, it is congruent with the hypotheses that are proposed in this research and a call for further empirical data using these two constructs.

CHAPTER II. REVIEW OF LITERATURE

Introduction

As previously mentioned, the influence of social comparison on help-seeking attitudes has not been fully explored. More specifically, there has been little empirical study of the impact of subjective and objective information on an individual's attitudes about seeking psychological help. This section outlines some of the variables that have been studied well, such as attitudes about seeking psychological help (Cramer, 1999; Lazarus, 1993), the impact of gender (e.g., Fischer & Turner, 1970) age (e.g., Murstein & Fontaine, 1993), and attachment (e.g., Shaffer, Vogel, & Wei, 2006) on help-seeking attitudes. The literature available on social comparison (e.g., Goodman, Sewell, & Jampol, 1984; Vogel, Wester, Wei, & Boysen, 2005) and the impact of social comparison data on help-seeking attitudes is also reviewed.

Overview of Help-seeking Attitudes

Help-seeking attitudes have been an interest in research for many years. Researchers and clinicians agree that individuals seek mental health services when they experience an intolerable amount of emotional pain or distress. However, there is less agreement about the variables that lead one to seeking professional help. For example, Calhoun, Dawes, and Lewis (1972) found a negative correlation between severity of symptoms and help-seeking attitudes within their subject pool. In other words, as the severity of symptoms increased, participants' help-seeking attitudes became less positive. However, Cramer (1999) found that individuals were more likely to seek mental health services when distress is high and attitudes about seeking psychological

help are positive. Additionally, he found that distress was higher when social support networks were absent or insufficient. Cramer (1999) also noted that the tendency to conceal personal information from others is often correlated with negative attitudes toward help-seeking.

Additionally, Lazarus' (1993) postulated that people seek help when distress goes beyond their coping threshold and when faced with a problem, people typically respond in one of two ways. When an individual sees his or herself as capable of making an impact on the situation, he or she would take a problem-solving approach and begin to work toward resolving the issue. When individuals doubt their abilities to manage the stressor or event, they may choose an emotionally-focused style. Therefore, the perception of a problem is key because it prepares the individual for a particular problem-solving approach. Lazarus (1993) also proposed that when individuals believe they are incompetent to resolve their problems, their help-seeking attitudes become more positive as they emotionally seek help from others. Similarly, Fisher and Turner (1970) found that positive attitudes about seeking mental health services were related to an internal locus of control and a sense of self efficacy.

Help-Seeking and Attachment

Adult attachment style is one potential predictor of whether or not individuals pursue mental health services (Feeney & Ryan, 1994; Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998; Shaffer, Vogel, & Wei, 2006; Vogel & Wei, 2005). Attachment theory suggests that attachment behaviors are evolutionary and increase survival of infants and the continuation of our species (Bowlby, 1988). Shaffer, Vogel, and Wei (2006) hypothesized that people with increased attachment anxiety would have a higher level of fear about not being liked or accepted by a mental health provider. In fact, using structural equation modeling, the researchers found that increased attachment avoidance and a lower intent to seek help was mediated by lower

anticipated benefits, higher anticipated risks, and less positive attitudes about seeking psychological help. The researchers also found that higher attachment anxiety and a greater intent to seek help was mediated by higher anticipated benefits and risks and more positive attitudes about seeking psychological help (Shaffer, Vogel, & Wei, 2006).

Help-Seeking and Personality

Personality and individual differences of personality structure also impact an individual's desire to seek mental health services. Barwick, de Man, and McKelvie (2009) studied the relationship between help-seeking attitudes and personality variables. They found participants with low self-esteem, high trait anxiety, and an external locus of control had a more negative attitude about seeking professional help. Additionally, individuals who feel good about themselves have lower levels of trait-anxiety and maintain an internal locus of control have more positive attitudes about seeking mental health services (Barwick, de Man, & McKelvie, 2009). Researchers also found a link between low self-esteem and an emotionally-focused coping style, specifically that individuals with low self-esteem have more positive attitudes about help-seeking than individuals with high self-esteem (Carver, Scheier, & Weintraub, 1989; Fleishman, 1984; Holahan & Moos, 1987; Terry, 1991).

Help-Seeking and Age

Some research has found that age correlates with comfort in seeking help from various mental health providers. For example, Murstein and Fontaine (1993) found that younger men were more comfortable than younger women talking to psychiatrists and clergy. Similarly, Selby, Calhoun, and Parrott (1978) found in their study a positive correlation between age, income, and positive attitudes about pastoral counseling. These data indicate that older individuals view the help of clergymen more favorably than younger participants. Berger,

Levant, McMillan, Kelleher, and Sellers (2005) found in their sample that older men had more positive views of psychological help than younger male and female participants.

Additionally, they and other researchers found that older women were more comfortable than older men with psychiatric nurses, marriage counselors, and psychologists (McCarthy & Holliday, 2004; Murstein & Fontaine, 1993). Mackenzie, Gekoski, and Knox (2006) found that both older age and female gender were associated with more positive help-seeking attitudes and influenced intentions to seek mental health services. This is congruent with other research that has concluded similar results (e.g., Currin, Schneider, Hayslip, & Kooken, 1998; Robb, Haley, Becker, Polivka, & Chwa, 2003), but contradictory to other hypothesized outcomes (e.g., Estes, 1995; Lebowitz & Niederehe, 1992). However, Mackenzie, Gekoski, and Knox (2006) noted that some studies have found negligible differences between age groups when comparing participants' willingness to seek mental health services (e.g., Segal Mincic, Coolidge, & O'Riley, 2005).

Help-Seeking and Spirituality

Individuals who identify themselves as spiritual or religious may seek out psychotherapists that identify themselves similarly. Simon and Gerber (1990), found that of their 194 participants, 23 (11.8%) reported that the word "spirituality" in the description of care (or identification of religious beliefs) affected their willingness to seek out a helping professional. Despite the potential attractiveness of a psychotherapist with a religious affiliation, Bergin and Johnson (1990) found that therapists report low degrees of religious affiliation, and a propensity for spirituality. As a result, there is a clear need for helping professionals to be at least minimally sensitive to spiritual concerns and be willing to discuss them during the course of therapy.

Help-Seeking and Culture

Help-seeking attitudes have also been researched using cultural covariables. Ang, Lim, Tan, and Yau (2004) and Leong and Zachar (1999) reviewed several studies using help-seeking attitudes and cultural variables and gender of White Americans (Leong & Zachar, 1999), Chinese Americans (Tata & Leong, 1994), African Americans (Neighbors & Howard, 1987), and Taiwanese (Yeh, 2002). The results of these studies were that women had more positive help-seeking attitudes across multiple ethnicities (Leong & Zachar, 1999). Ang, Lim, Tan, and Yau (2004) also noted that some researchers found that Taiwanese undergraduate students typically waited until their problems were unmanageable before seeking professional help due to elements of self and public stigma. Ang, Lim, Tan, and Yau (2004) concluded that public stigma may be a barrier for many Taiwanese students, and potentially for students from other Asian cultures as well, to seek mental health services. As a result, some individuals may use their social support network (e.g., friends, parents, siblings, etc.) before seeking mental health services (Ang, Lim, Tan, & Yau, 2004).

A lack of culturally competent treatment providers may also be a factor that influences help-seeking attitudes. People who are contemplating the use of mental health services may prefer a provider with a similar belief system (Simon & Gerber, 1990). For example, some researchers have found that African American students use university counseling center services less than Caucasian students, and African American males use university mental health services less than African-American females (Bonner, 1997; Kirk, 1986). Cultural difference may lead some individuals to experience physical pain while others may be more likely to experience emotional stress. In his study, Zola (1973) concluded that people have distinct patterns of attribution of their symptoms when they were categorized by cultural background. For example,

one cultural group in the study explained their symptoms by means of specific areas of the body while another group had no such distinction (Zola, 1973). This data is important because it outlines the inter-cultural differences regarding help-seeking attitudes.

Help-Seeking and Education

Mackenzie, Gekoski, and Knox (2006) found that women had positive attitudes toward seeking mental health services regardless of education level. However, higher education was positively correlated with more positive help-seeking attitudes in men. The researchers suggested that outreach programs that increased men's knowledge about mental health services could increase their willingness to seek professional help. Cohen and Struening (1962, 1964) and Leong and Zachar (1999) noted that good mental health is increased with formal education.

Help-Seeking and Marital Status

Kessler, et al. (2005) found that single people who had never been married were more likely to seek mental health services than those who were married. Mackenzie, Gekoski, and Knox (2006) hypothesized that one explanation may be the lack of support from a partner that increases unmarried people's use of mental health services.

Help-Seeking and Gender

There are a great number of studies that have established that women seek psychological help more often than men, beginning with Fischer and Turner's (1970) development and use of the Attitudes Toward Seeking Professional Help (ATSPPH). One conclusion drawn from such outcomes is that women have more positive help-seeking attitudes than men (Barwick, de Man, & McKelvie, 2009; Fischer & Turner, 1970; Strohmer, Biggs, & McIntyre, 1984). This is similar to the research published by Willis and DePaulo (1991), who found that men in North America seek mental health services about half as frequently as women. Mackenzie, Gekoski,

and Knox (2006) also found that men under utilize mental health services due to less positive attitudes about psychological openness than women.

Robertson (2001) noted that women seek psychological help at a much higher rate than men despite the male participants of the study having similar if not higher levels of distress. Leong and Zachar (1999) found that female college students had more positive attitudes toward seeking mental health services than their male counterparts and that females had a greater recognition of need for help, greater confidence in mental health practitioners, and interpersonal openness sub-scales. Several studies have supported Fischer and Turner's (1970) findings that females have more positive attitudes toward seeking mental health services (Ang, Lim, Tan, & Yau, 2004). Komiya, Good, and Sherrod (2000) found female college students more willing to seek mental health services than male students. However, they did not find a significant difference between males and females in regard to stigma tolerance, which is one of the facets of the ATSPPH and reported by Fischer and Turner (1970). Some researchers have indicated that these data are a call to reform the process of getting male clients involved in psychotherapy (Good & Wood, 1995; Leong & Zachar, 1999).

Some researchers have conceptualized the underutilization of mental health services as paradoxes of the defining traits of masculinity and the steps required to seek psychological help (Brooks, 2001; Mahalik, Good, & Englar-Carlson, 2003; Rochlen, McKelley, & Pituch, 2006). In other words, the socialization process of teaching boys to be men (e.g., lack of emotional expression, denial of vulnerabilities or weaknesses, and the necessity of strong problem-solving skills) likely inhibits men from seeking mental health services (Addis & Mahalik, 2003; Good & Wood, 1995; Mahalik, et al., 2003; O'Neil, 1981; Robertson, 2001; Rochlen, 2005; Rochlen, Blazina, & Raghunathan, 2002; Rochlen, McKelley, & Pituch, 2006; Wilcox, & Forrest, 1992).

McCarthy and Holliday (2004) hypothesized that these attributes make it decidedly more difficult for men to seek psychological help. Some researchers postulate that this may be in part because of an incongruence in stereotypical male traits and the qualities that make individuals desirable therapy clients (e.g., willingness to self disclose, able to be interpersonally vulnerable, emotional awareness, and emotional expression). These traits that make candidates ideal for psychotherapy are contradictory to traditional male values (Eisler & Blalock, 1991; Good, Gilbert, & Scher, 1990: Good & Wood, 1995; O'Neil, 1981). Similar to the research that correlates gender differences and help-seeking attitudes, Mackenzie, Gekoski, and Knox (2006) found in their study that women demonstrated a greater openness to acknowledging psychological problems than the male participants. This finding was consistent with past research (e.g., Kessler, Brown, & Bowman, 1981) that investigated gender differences in the willingness to identify emotional discomfort, which is also a desirable trait of a psychotherapy candidate. It is hypothesized that these results are a product of gender role socialization (Betz & Fitzgerald, 1993; Davidson-Katz, 1991; Good, Wallace, & Borst, 1994; Good & Wood, 1995). Furthermore, in studies with college males (e.g., Robertson & Fitzgerald, 1992), gender role conflict is linked to more unfavorable views of traditional mental health services (e.g., individual therapy) and a greater appreciation for non-traditional interventions such as workshops and seminars (Good & Wood, 1995).

Help-Seeking and Sex-Role Orientation

Johnson (1988) found that expressions of femininity and masculinity have a substantial influence on attitudes toward seeking mental health services, echoing the previously noted research that females (who are stereotypically feminine) have a more positive view of seeking professional help. Johnson (1988) found that students who were identified as more feminine

(male students included) were more confident in professionals' ability to help with problems of a personal nature. Students who rated as feminine along with those identified as androgynous were more willing to identify a need for help. These results are similar to those concluded by Sipps and Janeczek (1986), which identified femininity as a major contributor to an individual's attitudes about seeking mental health services. However, contrary to Sipps and Janeczek (1986), Johnson (1988) concluded through statistical analysis that sex role orientation and gender have an impact on help-seeking attitudes independently and not as an interaction of these two variables.

In addition to the studies on sex role orientation, experimenters have reviewed the effect of gender role conflict and help-seeking attitudes. Some researchers have found that men with greater gender role conflict and more tradition views of masculinity had a less positive view about seeking mental health services (Berger, Levant, McMillan, Kelleher, & Sellers, 2005; Good, Dell, & Mintz, 1989; Good & Wood, 1995; Robertson & Fitzgerald, 1992; Wisch & Mahalick, 1995)

It is also important to note that these findings are not limited to Caucasian participants. Ang, Lim, Tan, and Yau (2004) found that females have more positive attitudes toward seeking mental health services in their sample of student trainee teachers in Singapore. The researchers also found that femininity was positively correlated with the participants' level of indifference to stigma. This finding is similar to Johnson's (1988) and Sipps and Janeczek's (1986) results of women having a greater stigma indifference to stigma, but contrary to Leong and Zachar's (1999) findings of no significant difference in indifference to stigma.

Help-Seeking and Stigma

Some scholars have concluded that stigma towards those who live with mental illness and negative views about seeking mental health services is the greatest barrier to seeking treatment. Stigma has been defined as a flaw resulting from a personal or physical attribute that is considered socially undesirable (Blaine, 2000; Vogel, Wade, & Hackler, 2007). Vogel, Wade, and Haake (2006) added that when this definition is expanded to psychological help-seeking, an individual who seeks mental health services is socially undesirable. Boyd, et al. (2008) conceptualize public stigma as an effort to increase the "social distance" (p. 4) between those with and individuals living without mental illness. They also perceive stigma to be a form discrimination that is dependent on power. Researchers concluded through empirical study that stigma (both public and self-stigma) negatively influence help-seeking attitudes (Vogel, Wade, & Hackler, 2007).

Individuals with mental health concerns are seen by the general population as inferior and at least partially responsible for their own illness (Barwick, de Man, & McKelvie, 2009; Corrigan, 2004; Levey & Howells, 1994; Morrison, de Man, & Drumheller, 1993; Rousseau & de Man, 1998). Andreasen (1984), Guze (1992), and Leong and Zachar (1999) noted that this prejudice against those who are perceived as mentally ill is an obstacle to some that could benefit from mental health services. These negative views of seeking professional help have become defined as avoidance factors or motivation to evade treatment (Deane & Chamberlain, 1994; Kushner & Sher, 1989; Leong & Zachar, 1999). Individuals may avoid professional treatment because they see help-seeking as a personal failure and a weakness, which incites shame or guilt about entering mental health treatment (Barwick, de Man, & McKelvie, 2009).

Attitudes about seeking mental health services is influenced in part by an individual's ability to tolerate stigma, the perception from others that one must be damaged to seek psychological help. Fischer and Turner (1970) found that some participants showed a significant sensitivity to what others might think or say about them should they seek psychological treatment. Other researchers have also noted that many individuals who suffer from mental health concerns never seek psychological help as a result of stigma (Corrigan, 2004; Vogel, Wade, & Hackler, 2007; Vogel, Wester, & Larson, 2007). Consistent with this finding, it has been noted that fewer than one third of those who need help actually pursue mental health services for the same reasons (Andrews, Issakidis, & Carter, 2001; Vogel, Wester, & Larson, 2007).

Some researchers have found that individuals who tend to conceal personal information (Cepeda-Benito & Short, 1998; Kelly & Achter, 1995; Vogel, Wade, & Hackler, 2008) withhold distressing information from others (Vogel, Wade, & Hackler, 2008; Vogel & Wester, 2003), and individuals who are less practiced at expressing emotions (Ciarrochi & Deanne, 2001; Komiya, Good, & Sherrod, 2000; Vogel, Wade, & Hackler, 2008) are less likely to seek help. Kushner and Sher (1989) conceptualized this struggle as an approach/avoidance conflict (Vogel, Wester, & Larson, 2007). Vogel, Wester, and Larson (2007) identified approach factors as level of distress or emotional pain and the desire to decrease the distress. Several avoidance factors have also been indentified such as social stigma (Komiya, Good, & Sherrod, 2000; Vogel, Wester, & Larson, 2007), apprehension or fears about treatment (Deane & Todd, 1996; Kushner & Sher, 1989; Vogel, Wester, & Larson, 2007), fear of emotion (Komiya et al., 2000; Vogel, Wester, & Larson, 2007), perceived risks (Vogel & Wester, 2003; Vogel, Wester, & Larson, 2007; Vogel, Wester, Wei, & Boysen, 2005), and self-disclosure (Hinson & Swanson, 1993;

Vogel, Wester, & Larson, 2007). Vogel, Wade, and Haake (2006) noted that some people tend to avoid expressing unpleasant emotions and such avoidance can be a barrier to seeking mental health services. In their research, Vogel, Wade, and Hackler (2008) found that emotional expression and attitudes about seeking mental health services were mediated by anticipated risks such as the perception of danger from opening up to another person (Vogel & Wester, 2003; Vogel, Wade, & Hackler, 2008) and the anticipated benefits of seeking professional help. Vogel, Wester, Wei, and Boysen (2005) found that anticipated benefits of emotional expression predicted help-seeking within their entire sample. Similarly, they found that anticipated risks of emotional expression predicted help-seeking for individuals in their sample who had experienced distressing events in their lives (Vogel, Wester, Wei, & Boysen, 2005).

Some individuals avoid seeking mental health services despite recognizing the need or benefit of such services. Kushner and Sher (1989) found that individuals who indicated that they needed mental health services in the past and did not pursue it held the most fear about seeking psychological help. Leong and Zachar (1999) indentified this reaction as self-stigmatization. It is hypothesized in this study that self-stigma influences and is influenced by social comparison processes.

Overview of Social Comparison

Festinger's (1954) theory of social comparison hypothesizes that people have an innate drive to evaluate their opinions and abilities. The theory postulates that in order for people to function effectively in their environment, individuals must know their strengths and weaknesses, and they must evaluate these attributes accurately in themselves and others (Festinger, 1954; Jones & Gerard, 1967; Wood, 1989). Gibbons and Buunk (1999) noted that the main purpose of social comparison is to obtain information about one's self. Festinger's (1954) theory states that

people rate their skills and abilities against some form of objective data. Wood (1989) referred to this as "direct, physical standards" (p. 231). However, when objective data is not present, individuals begin to compare their capacities and limitations with other people (Festinger, 1954; Wood, 1989).

One keystone to social comparison theory is with whom people choose to compare themselves. Festinger (1954) noted that people will choose other individuals who are deemed (by the comparer) to be similar in abilities to evaluate one's own skill level. For example, someone who has newly taken up the game of golf will not compare himself or herself against a member of the Professional Golfers Association. Wood (1989) referred to this as the "similarity hypothesis" (p. 231). Freidson (1961) termed the providers of such social comparison data as the "lay referral structure" (p.146) when using the information as advice about seeking medical help. He hypothesized that individuals' help-seeking attitudes were most heavily influenced by members of one's household (e.g., immediate family) with less significance placed on the opinions of those farthest from the home (e.g., work mates) (Festinger, 1954). When close comparisons are unavailable and individuals must move outward from the epicenter of their own skill sets, Festinger (1954) and Wood (1989) hypothesized that people lose accuracy in the evaluation of their abilities. Furthermore, the more divergent the target comparison is from the individual making the comparison, the less stable the opinion becomes (Festinger, 1954; Wood, 1989).

Researchers have expanded Festinger's (1954) research to areas beyond using social comparison to evaluate opinions and abilities. One area of expansion is the effect social comparison has on psychiatric symptoms and how symptoms influence one's uses of social comparison. There is consensus among researchers that there are three main goals of social

comparison: self-evaluation, self-improvement, and self-enhancement (Festinger, 1954; Gibbons & Buunk, 1999; Wood, 1989). Research has also concluded that social comparison processes are directional, meaning that they are cast either upward toward those perceived as superior or downward toward those who are perceived to be inferior (Gibbons & Buunk, 1999; Wood, 1989).

Additionally, individuals often make downward comparisons, or see themselves as superior to some people (Hakmiller, 1966; Wills, 1981; Wood, 1989). Wills (1981) proposed the theory that downward social comparisons are motivational. This theory stated that when people are feeling down, they compare themselves with those who are seemingly in a worse position in order to elevate one's evaluation (Wills, 1981; Wood, Michela, & Giordano, 2000). Contrarily, the affect-cognition priming model proposed by Wheeler and Miyake (1992) theorized that unhappy people make more upward comparisons where they compare themselves less favorably to others because comparisons that are mood congruent (e.g., I am not as good as that person) are more accessible and negative thoughts and feelings are readily available. However, some empirical studies have shown that individuals make downward social comparisons when they are feeling positive rather than pessimistic (Wheeler & Miyake, 1992; Wood, Giordano-Beech, Taylor, Michela, & Gaus, 1994; Wood, Michela, Giordano, 2000).

Social comparison has also been described as a method of negotiating social relationships. Some experts have noted that these comparisons are used to determine one's rank within a social context, create perceptions of superiority and inferiority, and foster belonging (Allan & Gilbert, 1995; Bailey, 1988; Bailey, Wood, & Nava, 1992). These elements of social comparison have been linked to self-esteem. Individuals with a high self-esteem may be more likely to make self-enhancing comparisons, which help them feel more superior (Wheeler &

Miyake, 1992; Wood & Lockwood, 1999; Wood, Michela, & Giordano, 2000). Morse and Gergen (1970) found that college students' self-esteem suffered when they were competing with someone who was perceived as tidy and appeared competent. The participants reportedly felt better when their adversary was disheveled and disorganized (Morse & Gergen, (1970); Wood, 1989). These results would suggest that attributes such as confidence are affected by both upward and downward comparisons.

Upward social comparisons are a method of self-enhancement and encourage individuals to strive for improvement (Wheeler & Miyake, 1966; Wood, 1989). Using the example of the beginning golfer, he or she would look toward a friend who is perceived as having more skill, but operating at a level considered to be achievable by the comparer. Continuing this example, the golfer may perceive himself or herself superior to those who have been playing longer and have worse scores than the comparer. However, in regard to gaining skill, individuals appear more interested in comparing themselves with those perceived to be above them and not inferior performers (Nosanchuk & Erickson, 1985; Seta, 1982; Wood, 1989). Individuals may focus on the superior performer in order to learn from them (Berger, 1977; Wood, 1989) or for inspiration (Brickman & Bulman, 1977; Wood, 1989); both are potentially used to achieve self-improvement (Wood, 1989).

However, despite the potential gains that can be made with upward comparisons, they are not without their flaws. One potential risk for making upward comparisons is that the information gained may have a detrimental effect on the comparer as they face their own feelings of inadequacy (Wood, 1989). For example, a study conducted by Cash, Cash, and Butters (1983) found that women who viewed photographs of women billed as physically attractive subsequently rated their own attractiveness quite low except when the photograph was thought to

be that of a professional model (Wood, 1989). This research reifies that individuals are able to dismiss comparison data that is divergent from the comparer, but unable to do so when the comparer sees the object of comparison as similar (Wood, 1989).

Research has also shown that psychological symptoms and the severity of symptoms have an impact on social comparison processes. Some studies have noted that that an individual will gauge symptom severity by judging his or her symptoms as more severe, less debilitating, or equal to the symptoms of other people (Mojtabai, 2008; Suls, Martin, & Leventhal, 1997).

Giordano, Wood, and Michela (2000) found that participants with a more depressive personality style (also labeled as dysphoria in the study) made fewer comparisons. Research has also shown that people who were depressed engaged in less self-disclosure for fear of being perceived as different from others (Allan & Gilbert, 1995; Furnham & Brewin, 1988). Some research has shown that dysphoric individuals may avoid other people because they expect the comparisons to be emotionally painful or negative (Giordano, Wood, & Michela, 2000; Swallow & Kuiper, 1990). Other explanations for a lower frequency of comparisons by those with dysphoria may be higher levels of social isolation (so fewer opportunities for comparison are present) and fatigue both within the study and within their daily lives (Giordano, Wood, & Michela, 2000). Giordano, Wood, and Michela also found that when dysphoric people did make comparisons, they were affected by the comparisons far more than non-dysphoric participants. Similar to Wood and Lockwood (1999), these researchers found that dysphoric individuals were more deflated by upward comparisons and invigorated by downward ones when compared to their non-dysphoric counterparts (Giordano, Wood, & Michela, 2000).

However, these conclusions are divergent from the results of other research. Gibbons and Buunk (1999) found that dysphoric participants were more inclined to make comparisons,

potentially in an effort to feel better about themselves. Giordano, Wood, and Michela's (2000) results also seem antithetical to the original hypotheses mentioned earlier, that people engage in social comparison at least in part to feel superior (Wood & Lockwood, 1999). These results indicate that some upward comparisons can have a negative effect on an individual's sense of self worth, especially if an individual's personality is vulnerable to more negative-oriented comparisons or the individual is prone to depression.

Social Comparison and Help-Seeking Attitudes

Despite the wide array of studies that have expanded Festinger's (1954) original theory, there is little research that explore the connection between social comparison and help-seeking behavior. However, it has been clearly shown that there is a link between social comparison and help-seeking attitudes. For example, research supports that individuals are more likely to seek mental health services when they perceive their distress as more severe than that of other people (Goodman, Sewell, & Jampol, 1984; Vogel, Wester, Wei, & Boysen, 2005). Strohmer, Biggs, and McIntyre (1984) used role play in their research and found that social comparison data that indicated a serious condition lead to higher scores on the DACL-E. In other words, social comparison data worsened the participants' perceptions of a disorder such as depression.

Mojtabai (2008) used data from the 2003 US National Survey to investigate the impact of social comparison on attitudes toward seeking mental health services. The results indicated that individuals who described themselves as more worried, nervous, or anxious than other people were significantly more likely to seek psychological help when compared to those who did not describe themselves as worried, nervous, or anxious. These data support the assumption that social comparison is an important component of attitudes about seeking mental health services.

Sanders (1981) found that when the constructs of social comparison theory were applied to help-seeking in medicine, he found several conditions that both supported and expanded Festinger's (1954) research. Sanders (1981) found that when the objective data was present and encouraged help-seeking, social comparison data (e.g., both the "encouraged" and "not encouraged" conditions) did not have an effect on the outcome. However, this support of Festinger's (1954) hypothesis is not universal for all conditions. For example, Sanders (1981) found that when the objective data was not in favor of seeking help, social comparison data had a much greater impact on the participants' responses. In other words, Sanders (1981) found that the "objective go" condition trumped any social comparison response, which is in support of Festinger's (1954) hypothesis. However, when Sanders' (1981) objective data was not in support of seeking help, the "social comparison go" data had a motivational effect. Although these data were collected about seeking medical services, results were expected to be similar in this study when participants were asked about seeking professional psychological help.

CHAPTER III. METHODOLOGY

Sample

Approximately 1500 people received an email invitation from Qualtrics (www.qualtrics.com) to recruit 150 participants for this study. All participants had to be adults at least 19 years of age to ensure they could provide informed consent. The target number of participants was determined by a priori power analysis using G*Power 3.1. G*Power 3.1 was designed by Erdfelder, Faul, and Buckner (1996) and is a stand-alone computer program that can estimate the necessary number of participants to achieve adequate observed power (Faul, Erdfelder, Lang, & Buchner, 2007). The analysis indicated a minimum of 140 participants would be required for adequate statistical power (1 - *ß)* of 80%, a medium effect size (0.25), and a 95% confidence interval.

Instrumentation

Iowa-Netherlands Comparison Orientation Measure

The instrument used to assess social comparison was the Iowa-Netherlands Comparison Orientation Measure (INCOM) (Gibbons & Buunk, 1999). This scale is an assessment of the tendency "to measure one's self in comparison to the abilities of others." The INCOM consists of 23 Likert-type scale items that range from 0 (Strongly Disagree) to 4 (Strongly Agree). In addition to the total score (derived from items 1–11), the instrument consists of two subscales: an upward comparison subscale (items 12–17) and the downward comparison subscale (items 18–23). The items that comprise the instrument were initially chosen from items provided by

researchers with recognized expertise in social comparison (Gibbons & Buunk, 1999). Items were translated to and from English and Dutch to enable use with participants of both the United States and the Netherlands.

The INCOM was administered to ten samples in the United States (N = 4,300 participants) and twelve samples in the Netherlands (N = 3,200 participants). To assess the internal reliability of the IMCOM, the developers calculated Cronbach's Alpha coefficients. These values indicated that the INCOM is internally consistent with an overall Alpha of .83. This value was obtained from the American samples (Alpha values ranging from .78 to .85) and the Dutch samples (Alpha values ranging from .78 to .84) (Gibbons & Buunk, 1999). Temporal stability was demonstrated via test-retest reliability. The assessments produced Pearson correlation coefficients ranging from .71 (at the 3–4 week mark) to .60 at the one year point of analysis of the American sample and a correlation of .72 at the 7.5 month post-initial assessment point in the Dutch sample (Gibbons & Buunk, 1999). These values may only be in the 60–70% range for linear similarity, but the authors noted that this may be in part because the INCOM is sensitive to situational variables (Gibbons & Buunk, 1999).

Validity tests were also conducted by the researchers. Gibbons and Buunk (1999) examined construct validity in the context of Hofstede's (1980) theory suggesting that Americans are more achievement-oriented than the Dutch, and thusly engage in a greater degree of social comparison. Gibbons and Buunk's (1999) findings were congruent with Hofstede's (1980) theory, reporting that scores on the INCOM were statistically significantly higher in the combined male and female American (A) sample (mean = 39.75; SD = 6.39) than the scores of the combined male and female Dutch (D) participants (mean = 38.05; SD = 6.79). Additionally, in an effort to demonstrate construct validity, Gibbons and Buunk (1999) evaluated the INCOM

for correlations with instruments that measure similar social concept s. For example, moderate (but statistically significant) correlations were found with interpersonal orientation (Swap & Rubin, 1983; r = .45) and public self-consciousness (Fenigstein, Scheier, & Buss, 1975; r = .43).

Gibbons and Buunk (1999) also reported correlations for discriminant validity when comparing the INCOM to various measures that are antithetical to the process of social comparison. For example, there were negative yet statistically significant correlations between the *Rosenberg's Self-Esteem Scale* (Rosenberg, 1965; Dutch sample = -.16 to -.51; American sample = -.09 to -.23) and the INCOM. Theoretically, individuals who score high on the INCOM will likely score low on scales assessing self esteem, which is congruent with Wheeler and Miyake's (1992) theory that unhappy people make upward comparisons more often than others. However, these data were not assessed using the upward or downward scales of the INCOM. Overall, these results indicate that the INCOM is a valid and reliable instrument when used to research social comparison.

Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) Scale

The instrument that was used to assess help-seeking attitudes is the Inventory of Attitudes Toward Seeking Mental Health Services Scale (MacKenzie Knox, Gekoski, & Macaulay, 2004). This instrument was adapted from Fischer and Turner's (1970) Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS) and expanded to a five-point scale from the four-point scale used on the ATSPPHS (MacKenzie Knox, Gekoski, & Macaulay, 2004). The IASMHS scale consists of 24 Likert-type scale items that range from 0 (Disagree) to 4 (Agree). The instrument reports several scores that provide information about the participants' help-seeking attitudes. Data provided by the instrument consists of a total score and three sub-scores:

psychological openness, help-seeking propensity, and indifference to stigma. The total score is obtained by adding the three sub-scores or by adding all of the numeric responses provided.

The psychological openness factor has items that reflect an individual's willingness to acknowledge psychological problems and the possibility of seeking help for them. The help-seeking propensity factor is a measure of an individual's belief that he or she is willing and able to seek professional help for psychological symptoms. The indifference to stigma factor (items reflects the level of concern about what other people (e.g., friends and family) might think should they learn that the individual was seeking professional mental health services (MacKenzie Knox, Gekoski,& Macaulay, 2004).

The reliability of the IASMHS scale was determined by using Cronbach's Alpha. These values indicated that the scale is internally consistent with an overall coefficient of .87. The three factors also demonstrated good internal consistency with coefficients of .82 on the psychological openness subscale, .76 for the help-seeking propensity subscale, and .79 for the indifference to stigma. MacKenzie, Knox, Gekoski, and Macaulay (2004) also noted that the temporal consistency was good for the psychological openness subscale and for the indifference to stigma subscale. Temporal stability was demonstrated via test-retest reliability with a three-week delay of the second administration. Pearson correlation coefficients were determined to be $r = .86$, $p < .01$ for the total score, $r = .86$, $p < .01$ for psychological openness, help-seeking propensity was $r = .64$, $p < .01$, and indifference to stigma was $r = .91$, $p < .01$.

Validity tests were also conducted by the researchers. MacKenzie, Knox, Gekoski, and Macaulay (2004) examined criterion validity by evaluating past use of mental health services and the intentions to use such services if they were needed in the future. Past use of professional psychological help was evaluated by participants responding positively to one or both of the

following questions: (a) “Have you ever discussed psychological problems with your family physician?” and (b) “Have you ever discussed psychological problems with a mental health professional (e.g., psychologist, psychiatrist, and social worker)?” In the community sample (n = 322), 54% of the participants reported having sought help from one of these resources for psychological problems in the past, and 32% of the replication sample of college students (n = 297) reported that they had sought help in the past for psychological concerns.

The researchers also evaluated the IASMHS scale against participants’ intentions to seek professional help. MacKenzie, Knox, Gekoski, and Macaulay (2004) evaluated the relationships between the total attitude score, the three subscales, and the mean scores of additional questions (e.g., “If you were to experience significant psychological problems how likely is it that you would consider talking to a family physician?”). The questions were scored with a 7-point Likert-type scale ranging from 1 (*very unlikely*) to 7 (*very likely*). MacKenzie, Knox, Gekoski, and Macaulay (2004) reported the Pearson product correlations as .24 for psychological openness, .43 for help-seeking propensity, .24 for indifference to stigma, and .38 for the total score.

Procedure

The participants were invited to participate in the study via a hyperlink provided by Clearvoice Surveys. The hyperlink directed participants to the survey software provided by Qualtrics. Participants completed several blocks within the software. The first block (see Appendix A) was the introduction, an explanation of the purpose of the study, and a demographics section (see Appendix C). The data in the demographics block included information pertaining to age, gender, years of education, and previous use of professional help for psychological problems. After completing the demographics block, they proceeded to the

social comparison scale, the Iowa-Netherlands Comparison Orientation Measure (INCOM). Following completion of the INCOM, participants were then presented one of four vignettes that were randomly generated by the survey software.

After reading the vignette, the participants were instructed to complete the final scale embedded in the survey, the Inventory of Attitudes Toward Seeking Mental Health Services Scale (IASMHS) scale while keeping in mind the information they had just read in the vignette. Finally, the last block of the survey was used to debrief the participant (see Appendix F). The debriefing page explained that this study was designed to measure one's tendency toward social comparison and the impact of objective and subjective information on help-seeking attitudes. Additionally, the symptoms that were described in the vignette are typical of a Major Depressive Disorder. This mental illness has a lifetime prevalence of 17.1% (Ingram, Walter, & Siegle, 1999). The participant was instructed that if he or she is at all troubled by their identification with some of these symptoms, that he or she might want to seek help (either from medical or counseling services) to discuss their reaction, or the feelings and thoughts associated with such symptoms. Upon completion of the survey, participants were provided with compensation in the form of credits. A completed survey awarded the participant with 2.5 credits that could be exchanged with Clearvoice Surveys for restaurant, Amazon, or monetary gift cards.

Experimentation with Social Comparison Data in Previous Research

Although there is a limited amount of research using vignettes in social comparison research, two studies have used hypothetical symptoms to assess the affect of psychological distress on social comparison and help-seeking attitudes. Sanders (1981) had participants imagine that they had developed physical symptoms of either a low or high severity. Objective information was manipulated based on the participants' prescribed condition. Participants were

then asked to rate their level of motivation to seek professional help. In another study, Strohmer, Biggs, and McIntyre (1984) asked participants to assume a role via scripted dialogue that manipulated psychological symptoms severity and social comparison information. The present study intended to take the hypothesized correlations between social comparison and help seeking and evaluate them via clinical vignettes.

Similar to past studies, this experiment used a 2 X 2 design for the four vignette conditions (see Table 1 in Chapter 4). Vignette A was the encouraged to seek help condition for both the social comparison and objective data. This condition is such that the participant read a vignette that encouraged seeking professional help from both the social comparison data (e.g., a friend) and the objective data (e.g., a physician). Vignette B was the social comparison not encouraged and objective encouraged conditions. Vignette C was the social comparison encouraged and the objective data not encouraged. Vignette D was the research condition that is the not encouraged to seek help condition from both the objective and social comparison sources.

Vignettes

The vignettes used in this study were created to mirror symptoms of a Major Depressive Disorder. The symptoms used in the vignette were: a sad mood, decreased interest in hobbies (e.g., anhedonia), social isolation, decreased appetite, fatigue, decreased concentration, and sleep disturbance. Additionally, the vignettes were shown to several mental health professionals (e.g., psychologists, psychiatrists, social workers, and psychiatric technicians. One-hundred percent (n = 10) of those polled agreed that the symptoms listed in each vignette are demonstrative of a Major Depressive Disorder.

Research Hypotheses

Despite these examples of research connecting social comparison data and help-seeking attitudes, it was unclear as to how objective and social comparison data influence one's attitudes about seeking psychological help. The present study attempted to demonstrate the relationship between objective data, social comparison data, and help-seeking attitudes by testing the following hypotheses:

Hypothesis 1: There will be a statistically significant relationship between age and:

Hypothesis 1a: scores on the INCOM using Factorial MANOVA.

Hypothesis 1b: scores on the IASMHS scale in all four vignettes using Factorial MANOVA.

Hypothesis 2: There will be a statistically significant relationship between education and:

Hypothesis 2a: scores on the INCOM using Factorial MANOVA.

Hypothesis 2b: scores on the IASMHS scale in all four vignettes using Factorial MANOVA.

Hypothesis 3: There will be a statistically significant relationship between the scores of individuals who have previously sought mental health treatment and:

Hypothesis 3a: scores on the INCOM using Factorial MANOVA.

Hypothesis 3b: scores on the IASMHS scale in all four vignettes Factorial MANOVA.

Hypothesis 4: There will be a statistically significant relationship between gender and:

Hypothesis 4a: scores on the INCOM using Factorial MANOVA.

Hypothesis 4b: scores on the IASMHS scale in all four vignettes using Factorial MANOVA.

Hypothesis 5: There will be a statistically significant relationship between ethnicity and:

Hypothesis 5a: Scores on the INCOM using Factorial MANOVA.

Hypothesis 5b: Scores on the IASMHS scale in all four vignettes using Factorial MANOVA.

Hypothesis 6: When comparing group means of the IASMHS scale via Factorial MANOVA, there will be a statistically significant difference with the following expected outcomes:

Hypothesis 6a: Participants who have read Vignette A will produce the highest mean score on the IASMHS scale.

Hypothesis 6b: Participants who have read Vignette B will produce the second highest mean score on the IASMHS scale.

Hypothesis 6c: Participants who have read Vignette C will produce the third highest mean score on the IASMHS scale.

Hypothesis 6d: Participants who have read Vignette D will produce the lowest mean score on the IASMHS scale.

Hypothesis 7: Scores on the INCOM will have a statistically significant relationship with the scores on the IASMHS scale via bivariate regression.

CHAPTER IV. RESULTS

Introduction

The purpose of this study was to investigate the relationship between Festinger's (1954) theory of social comparison and help seeking attitudes. Four treatment conditions were created to evaluate the influences of objective and subjective data on participants' attitudes on seeking psychological help. Additionally, possible relationships were explored between demographic variables (e.g., age, gender, ethnicity, and previous use of mental health services), social comparison, and help seeking attitudes. This chapter presents a brief summary of data collection methods, the statistical analyses that were conducted to address the six hypotheses, and the results of those analyses.

Data Collection

Participants of this study were recruited from Qualtrics (www.qualtrics.com). Qualtrics contacted Clearvoice Surveys (www.clearvoicesurveys.com), who solicited approximately 1500 individuals over the age of 19 for participation via email invitation. Participants were provided a hyperlink to the electronic survey (https://humsci.us2.qualtrics.com/SE/?SID=SV_bK6Rw8ZoKOS0IqU), where they were first presented with an introduction page that included contact information for the researcher and the Institutional Review Board that approved the study. Individuals who chose to proceed were prompted to complete the demographics section. Each question required an answer in order to advance through the survey. After the participants completed the demographics block, they were presented with the Iowa-Netherlands Comparison

Orientation Measure (INCOM) and a second instruction page. Following the instructions, one of four vignettes that provided the treatment condition in this experiment was presented. The vignettes consisted of objective data (e.g., the advice of a physician) and subjective data (e.g., a close friend) with conditions that either encouraged participants to seek help or discouraged (not encouraged) to seek mental health services. Following the vignette, participants were presented with the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) scale. The last section of the survey was a debriefing page. This section explained to participants that they may recognize some of the symptoms in the vignettes as they are taken from the Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR) criteria for Major Depressive Disorder. Participants were encouraged to seek medical or mental health care if they experience these symptoms to ensure their symptoms are addressed (American Psychiatric Association, 2000). These experimental conditions are delineated in Table 1.

Table 1

Vignette Treatment Conditions

	Subjective = Encouraged	Subjective = Not Encouraged
Objective Data = Encouraged	Vignette A	Vignette B
Objective Data = Not Encouraged	Vignette C	Vignette D

Participants

Of the surveys distributed via email invitation, 154 recipients chose to participate in the study. The sample was comprised of 77 men (50%) and 77 women (50%). Regarding ethnic composition of the sample, 122 participants identified themselves as Caucasian (79.2%), 9 as

Latin American/Hispanic (5.8%), 9 as African American (5.8%), 7 as Asian/Asian American (4.5%), and 7 as "Other" (4.5%). Participants who selected Other were prompted to provide his or her ethnicity in a text block. The results were: multiracial (n = 2), Indian (n = 2), Pacific Islander (n = 2), and Native American (n = 2). The mean age of the participants was 46.27 years (SD = 12.91) with a range of 20 to 73 years. Age was also transformed into a categorical variable for statistical analysis with the following division: 20 to 29 years (n = 18), 30 to 39 years (n = 29), 40 to 49 years (n = 44), 50 to 59 years (n = 36), and 60 to 73 years (n = 27). Participants were also asked to report their years of education. The results were an average of 15.16 (SD = 2.66) years and a range of 9–22 years of education. This variable was also transformed into a categorical variable for statistical analysis as: 9 to 12 years of education (n = 24), 13 to 16 years (n = 94), 17 to 19 years (n = 26) and 20-22 years (n = 10). Finally, participants were prompted to answer whether or not they had previously received psychological services. Forty-two participants (27%) endorsed seeking psychological help before or during the study. Of those participants that sought help, 40% reported they sought care from a therapist/counselor (n = 17), 24% sought help from a psychologist (n = 10), 26% from a psychiatrist (n = 26), 7% from a physician (n = 3), and 2% sought help from a social worker (n = 1). These data are summarized in Tables 2 and 3.

Table 2

Demographic Information of Participants

Variable	M	SD	N	%
Age	46.27	12.91		
20–29			18	11.7
30–39			29	18.8
40–49			44	28.6
50–59			36	23.4
60–79			27	17.5
Years of Education	15.16	2.66		
9–12			24	15.6
13–16			94	61.0
17–19			26	16.9
20–22			10	6.5
Gender				
Male			77	50.0
Female			77	50.0
Ethnicity				
Caucasian			122	79.2
African American			9	5.8
Latin American/Hispanic			9	5.8
Asian/Asian American			7	4.5
Other			7	4.5

Table 3

Percentages of Participants' Previous Use of Mental Health Professionals

Variable	N	%
Previous Use of Mental Health		
Yes	42	27
No	111	73
Mental Health Professional Used		
Psychologist	10	24
Psychiatrist	11	26
Physician	3	7
Therapist/Counselor	17	40
Social Worker	1	2
Length of Treatment		
< 1 Month	7	17
1-4 Months	12	29
4-24 Months	13	31
> 24 Months	10	24

Statistical Analysis

The analysis of data consisted of descriptive statistics, Pearson-product correlations, and a Factorial MANOVA. Age and education were transformed into categorical variables as continuous variables are not conducive to analyses of variance. The independent variables were age, gender, ethnicity, education, and previous use of mental health services. There were two

instruments used as dependent variables used in this study and analyzed via the Factorial MANOVA. The first was the INCOM, which provided a total score and two subscale scores: the Upward Comparison Subscale (Upward Scale) and Downward Comparison Scale (Downward Scale). The second instrument used was the IAMSMHS scale, which provided a total score and three subscale scores: Help-Seeking Propensity (HSP Subscale), Openness to Seeking Services (Openness Subscale), and indifference to Stigma (Stigma Subscale). Additionally, a bivariate regression was computed to evaluate the relationship between scores on the predictor variable (INCOM) and the criterion variables (the IASMHS scale and three IASMHS subscales).

Hypothesis 1: Age, the INCOM, and the IASMHS scale

Based on results of previous research, it was hypothesized that the relationship between age, social comparison, and help-seeking attitudes would be statistically significant. The continuous variable of age was transformed into a categorical variable with five categories. The final category encompasses ages 60 to 79 as only one participant was over the age of 70. Using the Factorial MANOVA, the relationship between age and the dependent variables was evaluated and found to be statistically significant (Wilks' Λ = .710, F(24, 461.70,) = 1.98, p = .004, partial η^2 = .082). Between-subjects were evaluated with Alpha levels at .05. Results reveal that age categories have a statistically significant difference on the INCOM total score, the upward comparison subscale of the INCOM, the IASMHS total score, and the Stigma subscale of the IASMSHS. F ratio, statistical significance, estimated marginal means (MM), standard error (SE), F ratio, significance (Sig.), and observed power (ObsPwr) are summarized for the INCOM in Table 4, and for the IASMHS scale in Table 5. Furthermore, the amount of variance of the dependent variables explained by age is captured in Table 6. Post hoc analysis was also

conducted using the Scheffé tests to explore statistically significant differences between age group and the dependent variables. Results of these analyses are summarized in Table 7.

Table 4

Participants' Scores on the Iowa-Netherlands Comparison Orientation Measure (INCOM) by Age

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
INCOM Total			5.600	.000***	.976
20–29	36.60	2.01			
30–39	39.25	1.60			
40–49	31.66	1.60			
50–59	31.09	1.73			
60–79	33.11	1.94			
Upward Scale			3.929	.005**	.895
20–29	19.76	1.54			
30–39	21.70	1.22			
40–49	17.74	1.22			
50–59	16.72	1.32			
60–79	16.11	1.48			
Downward Scale			2.381	.055	.675
20–29	16.95	1.55			
30–39	18.84	1.22			
40–49	15.40	1.22			
50–59	14.29	1.33			
60–79	16.33	1.49			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 5

Participants' Scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) Scale by Age

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
IASMHS Total			3.479	.010**	.851
20–29	50.48	3.82			
30–39	51.88	3.04			
40–49	58.02	3.04			
50–59	57.78	3.29			
60–79	64.30	3.69			
Stigma Subscale			3.985	.004**	.900
20–29	14.88	1.85			
30–39	14.53	1.47			
40–49	17.34	1.47			
50–59	17.41	1.59			
60–79	21.49	1.78			
Openness Subscale			1.204	.312	.370
20–29	15.04	1.41			
30–39	14.61	1.12			
40–49	16.91	1.12			
50–59	16.16	1.21			
60–79	17.20	1.36			

(table continues)

Table 5 (continued)

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
HSP Subscale			1.670	.161	.502
20–29	20.55	1.79			
30–39	22.74	1.42			
40–49	23.77	1.42			
50–59	24.20	1.54			
60–79	25.61	1.73			

Note. MM refers to estimated marginal means; **p* < .05, ***p* < .01, ****p* <.001

Table 6

Partial η^2 and V*ariance Explained for Age and Statistically Significant Variables*

Age	INCOM	UP_SUB	IASMHS_TOT	STIGMA_SUB
Partial η^2	.141	.103	.092	.104
Variance %	14.1%	10.3%	9.2%	10.4%

Table 7

Post hoc Results for Age, the INCOM, and the IASMHS Scales

Variable	Age Groups	Mean Diff	SE	Sig.
IASMHS	20's & 60's	-15.94	4.19	.008
	30's & 60's	-16.69	3.68	.001
Stigma	20's & 60's	-7.83	2.02	.006
	30's & 50's	-5.53	1.66	.029
	30's & 60's	-10.00	1.78	.000
	40's & 60's	-5.15	1.62	.044
INCOM	30's & 40's	6.67	1.73	.007
	30's & 50's	7.27	1.81	.004
Down Scale	30's & 50's	4.76	1.39	.023
Up Scale	30's & 50's	5.02	1.38	.012
	30's & 60's	5.87	1.48	.005

Hypothesis 2: Education, INCOM, and IASMHS Scale

The relationship between education level, social comparison, and help-seeking attitudes was evaluated in this study. The continuous variable of "years of education" was transformed into a categorical variable with four categories described above in the narrative. Using the Factorial MANOVA, the relationship between education and the dependent variables was *not* statistically significant (Wilks' Λ = .907, $F(18, 373.84,) = .728$, $p = .782$, partial $\eta^2 = .032$). F ratio, statistical significance, estimated marginal means (MM), standard error (SE), F ratio,

significance (Sig.), and observed power (ObsPwr) are summarized for the INCOM in Table 8 and for the IASMHS scale in Table 9.

Table 8

Participants' Scores on the Iowa-Netherlands Comparison Orientation Measure (INCOM) by Education (categories are in years)

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
INCOM Total			1.292	.280	.339
9–12	32.90	1.90			
13–16	33.78	1.32			
17–19	32.65	1.75			
20–22	38.03	2.52			
Upward Scale			1.326	.268	.347
9–12	17.17	1.45			
13–16	17.45	1.00			
17–19	17.61	1.33			
20–22	21.37	1.92			
Downward Scale			.355	.786	.118
9–12	15.69	1.46			
13–16	16.61	1.02			
17–19	15.79	1.35			
20–22	17.35	1.94			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 9

Participants' Scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) Scale by Education (categories in years)

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
IASMHS Total			0.464	.708	.142
9–12	58.15	3.62			
13–16	58.33	2.51			
17–19	57.03	3.32			
20–22	52.47	4.79			
Stigma Subscale			1.711	.168	.440
9–12	18.83	1.75			
13–16	18.90	1.21			
17–19	16.85	1.60			
20–22	13.95	2.31			
Openness Subscale			0.274	.844	.101
9–12	16.75	1.33			
13–16	16.10	.925			
17–19	16.22	1.22			
20–22	14.89	1.77			
HSP Subscale			0.167	.918	.080
9–12	22.57	1.69			
13–16	23.33	1.17			
17–19	23.96	1.55			
20–22	23.61	2.24			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Hypothesis 3: Previous Mental Health Treatment, INCOM, and IASMHS Scores

The relationship between previous mental health treatment, social comparison, and help-seeking attitudes was also evaluated in this study. Using the Factorial MANOVA, the relationship between previous mental health treatment and the dependent variables was *not* statistically significant (Wilks' Λ = .949, $F(6, 132) = 1.174$, $p = .324$, partial $\eta^2 = .051$). F ratio, statistical significance, estimated marginal means (MM), standard error (SE), F ratio, significance (Sig.), and observed power (ObsPwr) are summarized for the INCOM in Table 10 and for the IASMHS scale in Table 11. Variance explained of the Openness subscale by previous use of mental health treatment (Prev MH Use) is summarized in Table 11.

Table 10

Participants' Scores on the Iowa-Netherlands Comparison Orientation Measure (INCOM) by Previous Use of Mental Health Treatment

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
INCOM Total			2.108	.436	.121
Yes	34.89	1.56			
No	33.79	1.24			
Upward Scale			.849	.358	.150
Yes	18.89	1.19			
No	17.91	0.95			
Downward Scale			.002	.963	.050
Yes	16.39	1.20			
No	16.34	0.96			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 11

Participants' Scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) scale by Previous Use of Mental Health Treatment

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
IASMHS Total			2.108	.149	.303
Yes	58.42	2.97			
No	54.57	2.36			
Stigma Subscale			.195	.659	.072
Yes	17.41	1.43			
No	16.85	1.14			
Openness Subscale			5.409	.021*	.637
Yes	17.13	1.09			
No	14.85	0.87			
HSP Subscale			0.668	.415	.128
Yes	23.88	1.39			
No	22.87	1.10			

Note. MM = estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 12

Partial η^2 and V*ariance Explained for Previous Use of Mental Health Treatment and the Openness Subscale of the IASMHS scale*

Prev MH Use	OPEN_SUB
Partial η^2	.038
Variance %	3.8%

Hypothesis 4: Gender, the INCOM, and the IASMHS scale

The relationship between gender, the INCOM, and the IASMHS scale was evaluated via Factorial MANOVA and found to be statistically significant (Wilks' Λ = .870, F(6, 132,) = 3.290, p = .005, partial η^2 = .130). Between-subjects were evaluated with Alpha levels at .05. Results reveal that gender has a statistically significant difference on the IASMHS total score, the Stigma subscale, the Openness subscale, and the Help-Seeking Propensity (HSP) subscale. The F ratio, statistical significance, estimated marginal means (MM), standard error (SE), F ratio, significance (Sig.), and observed power (ObsPwr) are summarized for the INCOM in Tables 11 and for the IASMHS scale in Table 12. The amount of variance of the dependent variables explained by gender is presented in Table 13.

Table 13

Participants' Scores on the Iowa-Netherlands Comparison Orientation Measure (INCOM) by Gender

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
INCOM Total			.542	.463	.113
Male	34.80	1.40			
Female	33.88	1.35			
Upward Scale			.253	.616	.079
Male	18.64	1.07			
Female	18.16	1.03			
Downward Scale			2.514	.115	.350
Male	17.13	1.08			
Female	15.60	1.04			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 14

Participants' Scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) Scale by Gender

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
IASMHS Total			15.880	.000***	.977
Male	51.73	2.67			
Female	61.25	2.56			
Stigma Subscale			7.254	.008**	.763
Male	15.59	1.28			
Female	18.68	1.24			
Openness Subscale			10.343	.002**	.891
Male	14.57	.983			
Female	17.40	.944			
HSP Subscale			10.307	.002**	.890
Male	21.58	1.25			
Female	25.17	1.20			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 15

Partial η² and V*ariance Explained for Gender and Statistically Significant Variables*

Gender	IASMHS_TOT	OPEN_SUB	HSP_SUB	STIGMA_SUB
Partial η^2	.104	.070	.070	.050
Variance %	10.4%	7.0%	7.0%	5.0%

Hypothesis 5: Ethnicity, the INCOM, and the IASMHS

The relationships between ethnicity, the INCOM, and the IASMHS scale were evaluated via Factorial MANOVA and found to be statistically significant (Wilks' Λ = .702, F(24, 461.70,) = 2.051, p = .003, partial η^2 = .085). Between-subjects were evaluated with Alpha levels at .05. Results reveal that ethnicity has a statistically significant difference on the Openness subscale of the IASMHS scale. The F ratio, statistical significance, estimated marginal means (MM), standard error (SE), F ratio, significance (Sig.), and observed power (ObsPwr) are summarized for the INCOM in Tables 16 and for the IASMHS scale in Table 17. Furthermore, the amount of variance of the dependent variables explained by ethnicity is captured in Table 18. Post hoc analysis was also conducted using the Scheffe test to explore statistically significant differences between ethnicity group and the dependent variables. Statistically significant results were found for the "Caucasian" and "Other" groups with a mean difference of 7.86, a standard error of 1.97, and a significance level of p = .004.

Table 16

Participants' Scores on the Iowa-Netherlands Comparison Orientation Measure (INCOM) by Ethnicity

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
INCOM Score			2.417	.052	.682
African American	29.40	2.59			
Latin-American	33.06	2.61			
Caucasian	35.60	1.00			
Asian American	33.31	2.96			
Other	40.33	2.95			
Upward Scale			2.148	.078	.623
African American	15.72	1.97			
Latin American	16.97	1.99			
Caucasian	18.28	0.76			
Asian American	17.34	2.25			
Other	23.70	2.25			
Downward Scale			0.674	.611	.215
African American	14.28	1.99			
Latin American	17.37	2.01			
Caucasian	16.41	0.77			
Asian American	15.17	2.27			
Other	18.59	2.27			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 17

Participants' Scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) Scale by Ethnicity

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
IASMHS Total			.976	.423	.303
African American	57.19	4.91			
Latin American	53.94	4.96			
Caucasian	57.96	1.89			
Asian American	63.58	5.62			
Other	49.80	5.60			
Stigma Subscale			.072	.060	.636
African American	16.98	2.37			
Latin American	15.78	2.40			
Caucasian	19.80	0.91			
Asian American	19.70	2.71			
Other	13.43	2.71			
Openness Subscale			3.74	.006**	.878
African American	15.27	1.81			
Latin American	16.28	1.83			
Caucasian	17.38	0.70			
Asian American	20.42	2.07			
Other	10.59	2.07			

(table continues)

Table 17 (continued)

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
HSP Subscale			1.627	.171	.491
African American	24.93	2.30			
Latin American	21.91	2.32			
Caucasian	20.79	0.88			
Asian American	23.46	2.63			
Other	25.79	2.62			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 18

Partial η^2 and V*ariance Explained for Ethnicity and the Openness Subscale of the IASMHS Scale*

Ethnicity	OPEN_SUB
Partial η^2	.098
Variance %	9.8%

Hypothesis 6: Vignette, the INCOM, and the IASMHS Scale

The relationships between the vignettes, social comparison, and help-seeking attitudes were also evaluated in this study. Using the Factorial MANOVA, the relationship between the vignettes and the dependent variables were *not* statistically significant (Wilks' $\Lambda = .878$, $F(18, 373.84,) = .979$, $p = .484$, partial $\eta^2 = .042$). F ratio, statistical significance, estimated marginal

means (MM), standard error (SE), F ratio, significance (Sig.), and observed power (ObsPwr) are summarized for the INCOM in Table 19 and for the IASMHS scale in Table 20.

Table 19

Participants' Scores on the Iowa-Netherlands Comparison Orientation Measure (INCOM) by Vignette

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
INCOM Score			1.000	.395	
Vignette A	32.66	1.72			
Vignette B	35.53	1.59			
Vignette C	34.94	1.53			
Vignette D	34.24	1.60			
Upward Scale			.090	.965	.066
Vignette A	18.33	1.31			
Vignette B	18.79	1.22			
Vignette C	18.14	1.17			
Vignette D	18.34	1.22			
Downward Scale			.147	.932	.076
Vignette A	15.96	1.33			
Vignette B	16.22	1.23			
Vignette C	16.48	1.18			
Vignette D	16.80	1.23			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Table 20

Participants' Scores on the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) scale by Vignette

Variable	MM	SE	*F* Ratio	Sig.	ObsPwr
IASMHS Total			0.341	.796	.115
Vignette A	55.76	3.28			
Vignette B	57.54	3.03			
Vignette C	57.66	2.91			
Vignette D	55.02	3.03			
Stigma Subscale			1.252	.293	.329
Vignette A	15.83	1.58			
Vignette B	17.39	1.46			
Vignette C	18.80	1.41			
Vignette D	16.50	1.46			
Openness Subscale			0.788	.503	.216
Vignette A	17.07	1.21			
Vignette B	16.08	1.12			
Vignette C	15.28	1.07			
Vignette D	15.52	1.12			
HSP Subscale			0.281	.839	.103
Vignette A	22.85	1.53			
Vignette B	24.07	1.42			
Vignette C	23.58	1.36			
Vignette D	23.00	1.42			

Note. MM refers to estimated marginal means; *$p < .05$, **$p < .01$, ***$p < .001$

Hypothesis 7: Bivariate Correlation between the INCOM, and the IASMHS Scale

Multiple regression analysis was conducted to determine how well scores on the Independent variables INCOM, Upward Comparison Scale, and Downward Comparison Scale predicted scores on the IASMHS scale. Regression analysis indicated that the relationship was statistically significant with $R^2 = .122$, $R^2_{adj} = .104$, $F(3, 150,) = 6.931$, $p < .001$. This model accounts for 10.4% of the variance in help-seeking attitudes measured by the IASMHS scale. Of the three predictors, only the Upward Comparison Scale was statistically significant. These data and the results of the other two predictors are summarized in Table 21.

Table 21

Coefficients for Scores on the IASMHS Scale by the INCOM, Upward Scale, and Downward Scale

Variable	*B*	ß	*t*	*p*	Bivariate *r*	Partial *r*
Downward	-.272	-.100	-1.120	.265	-.229	-.091
Upward	-.962	-.369	-3.279	.001	-.329	-.259
INCOM	.254	.130	1.194	.234	-.174	-.097

CHAPTER V. DISCUSSION

Introduction

In this study, participants' level of social comparison and help-seeking attitudes were evaluated along with several demographic variables for comparison. On the basis of factorial analyses, several main effects were found to be statistically significant. However, no interactions between demographic variables, social comparison, and help-seeking attitudes were significant. This chapter provides a comprehensive discussion of the results of the study. A brief overview of the study is presented, followed by implications of the results. Finally, the limitations of the study are presented along with recommendations for future research.

Overview of the Current Study

Social comparison is a concept that suggests that people have an innate drive to evaluate their opinions and abilities in relationship to others. Festinger (1954) hypothesized that people seek objective data to evaluate one's own strengths and weaknesses. However, when this information is not available, people seek subjective, or social comparison information from peers (Festinger, 1954; Wood, 1989). Festinger (1954) proposed that people seek to gain information about themselves by measuring themselves with those they believe are similar. As previously noted, Mojtabai (2008) purported that the influence of social comparison data on help seeking attitudes is largely unknown. Hence, the present study was designed to increase the empirical evidence connecting social comparison processes and help-seeking attitudes.

Help-seeking attitudes have been an interest of researchers for the past several decades, and reflected in relatively recent investigations and writings (e.g., Andrews, Issakidis, & Carter, 2001; Lazarus, 1993; Segal, Mincic, Coolidge, & O'Riley, 2005; Shaffer, Vogel, & Wei, 2006; Vogel, Wade, & Hackler, 2008). A wide range of potential variables identified and researched that may impact help-seeking attitudes has included age, education level, ethnicity, gender, and previous use of mental health services (Calhoun, Dawes, & Lewis, 1972; Fischer & Cohen, 1972; Fischer & Turner, 1970; Zeldow & Greenberg, 1979). For several decades, Festinger's (1954) theory of social comparison has been the subject of numerous scholarly investigations. However, aside from the hallmark study by Sanders (1981), there is limited research to date that has combined an evaluation of social comparison and help-seeking attitudes. Specifically, there has been a limited number of empirical analyses that have evaluated the impact of objective and subjective social comparison data on help-seeking attitudes. The present study aimed to add empirical data regarding the nature of social comparison theory by testing its relationship to help seeking attitudes, and also by assessing the relative impact of various demographic characteristics to social comparison.

The present study examined the impact of social comparison on help-seeking attitudes by the use of vignettes. Vignettes have demonstrated some usefulness in the research of social comparison and attitudes toward help-seeking. Sanders (1981) used role-play via vignette instruction in an effort to learn ways of controlling unnecessary medical visits. The researcher instructed participants to imagine they were experiencing symptoms of a medical condition. Social comparison data was manipulated and either encouraged or discouraged the pursuit of medical care. The results of Sanders' (1981) study were that objective data indicating no need

for medical care did not reduce unnecessary medical visits largely due to social comparison data that encouraged help-seeking.

Additionally, more recent studies have been conducted using vignettes. Simonds and Thorpe (2003) used vignettes to evaluate participants' perception of individuals who demonstrate symptoms of Obsessive Compulsive Disorder (OCD). Three subtypes of OCD were presented and participants were asked to make judgments about others who may live with the disorder and to evaluate how they "might feel" if they experienced the problems described in the vignettes. Stigma and other reactions were rated differently between the subtypes, indicating that the participants were responding to the stimuli of the vignette (Simonds & Thorpe, 2003).

Stigma toward help-seeking in mental health was also researched using vignettes by Barney, Griffiths, Jorm, and Christensen (2006). The vignette used in that study described a person who met the DSM-IV-TR criteria for depression. Participants then completed instruments to assess self-stigma, perceived stigma, and attitudes toward seeking mental health services. Results demonstrated some correlations between attitudes toward help-seeking and stigma in the community (Barney, Griffiths, Jorm, & Christensen, 2006). Furthermore, Mahalik and Rochlen (2006) also used a vignette to describe symptoms of depression. Participants were asked to imagine they had begun to experience the described symptoms (e.g., sad mood, anhedonia, hypersomnia, fatigue, poor concentration, difficulty making decisions, and passive suicidal thoughts) after a long period of wellness. The request in Mahalik and Rochlen's (2006) study to imagine symptoms was similar to that of Sanders (1981), in which he asked participants to imagine symptoms of a medical condition. Some of the results of Mahalik and Rochlen's research were significant, which provided additional support for the use of vignettes in research about attitudes toward help-seeking.

In the present study, vignettes were used to present one of four treatment conditions that were randomly presented to participants. Responses to the vignettes were expected to support previous hypotheses about the impact of social comparison when seeking medical care (Sanders, 1981). The vignettes used in this study were created using the DSM-IV-TR criteria for a Major Depressive Disorder (American Psychiatric Association, 2000). Participants of this study were presented with variations of objective and subjective social comparison data in a two-by-two design. The four treatment conditions were randomly presented to the participants and each condition was embedded with a unique combination of advice from subjective (e.g., a close friend) and objective (e.g., a physician) data that either encouraged (the "encouraged" condition) or did not encourage (the 'not encouraged" condition) the participant to seek mental health services. The condition in Vignette A was the objective and subjective data both "encouraged" the participant to seek help. The conditions in Vignette B were embedded with the objective "encouraged" and subjective "not encouraged" to seek help. Vignette C was the objective "not encouraged" and subjective "encouraged" to seek help conditions. Finally, Vignette D had the objective and subjective "not encouraged" to seek help conditions.

Age, Social Comparison, and Help-Seeking Attitudes

In the present study, the relationship found between age and help-seeking attitudes was statistically significant. As previously noted, group means were statistically significant when comparing age and help-seeking attitudes. Specifically, as age increases, help-seeking attitudes become more positive, indifference to stigma is increased, help seeking propensity is increased, and openness to seeking help improves. Additionally, age explained a statistically significant level of the variance for help-seeking attitudes (9.2%) and the Stigma subscale (10.4%). This is similar to previous research, which indicated that older participants tend to have more

positive help-seeking attitudes than their younger counterparts (Selby, Calhoun, & Parrott, 1978) but contrary to other research that found older adults had more negative views of seeking mental health services (Segal, Mincic, Coolidge, & O'Riley, 2005). Some previous researchers found an interaction with age and gender (e.g., Levant, McMillan, Kelleher, & Sellers, 2005). However, no such interaction was statistically significant in this study.

In regards to social comparison, age was a statistically significant variable as it explained 14.1% of the variance. Additionally, age explained 10.3% of the variance for the Upward Comparison scale. Although data that connect these two variables is not abundant, these results indicated that as age increased, the tendency to make upward comparisons, decreased. This affirms previously noted research that social comparison processes are directional and are either upward toward those perceived as superior, or downward toward those who are perceived to be inferior (Hakmiller, 1966; Gibbons & Buunk, 1999; Wills, 1981; Wood, 1989). It is possible that participants in late adulthood have fewer comparison objects and therefore, upward comparisons are limited. This conclusion is congruent with Festinger's (1954) hypothesis, labeled the "similarity hypothesis" (p. 231) by Wood (1989), that comparison objects must be similar or have an increased chance of being disregarded.

Education, Social Comparison, and Help-Seeking Attitudes

Contrary to the research published by Mackenzie, Gekoski, and Knox (2006), education level was not a statistically significant variable for social comparison or help-seeking attitudes. One explanation is that the sample of this study differed slightly in educational level. Mackenzie, Gekoski, and Knox (2006) reported that 40.6% of their sample (n = 322) had post secondary education whereas 61% of the sample from this study had between 13 to 16 years of education. Percentages of participants who reported postgraduate degrees (17–22 years of

education) were nearly identical in the present study and Mackenzie, Gekoski, and Knox's (2006) sample. Additionally, although the differences between groups of educational level were not statistically significant when comparing social comparison and help-seeking attitudes, some information about group differences is relevant to the hypotheses of the present study. For example, the highest scores of social comparison were reported by individuals with the highest level of education. This conclusion may be the result of some component inherent to the process of obtaining a professional or doctoral degree may increase social comparison processes. Future research focused on replication of these results could lead to a greater understanding of social comparison processes of graduate students and potentially make an argument for changes in student selection, pedagogy, or program design.

Previous Mental Health Treatment, Social Comparison, and Help-Seeking Attitudes

The present study found only one statistically significant difference in group means when comparing participants' previous uses of mental health services, social comparisons, and help-seeking attitudes. The Openness subscale of the IASMHS scale was the only scale that differed between participants that reported they had and had not sought mental health services in the past. These results indicate that people who have sought previous psychological help are more likely to have increased open-mindedness about seeking mental health services in the future. However, it is important to recognize that previous use of mental health services accounted for a mere 3.8% of the variance of the Openness subscale. Additionally, the observed power of this analysis (.637) was weaker than the proposed and commonly accepted minimum of 0.8 (Cohen, 1988). These results were not consistent with the results published by Fischer and Turner (1970), who found that previous use of mental health services improved help seeking attitudes. Fischer and Turner (1970) reported that women with previous contact with a mental health professional had

more positive help seeking attitudes (M = 69.4, SD = 8.5) than those that did not have previous contact with a mental health professional (M = 58.9, SD = *11.9*). The results for male participants were similar as the scores for those who previously had contact with a mental health professional were higher (M = 65.8, SD = 10.5) than women who did not (M = 56.7, SD = 11.0).

Gender, Social Comparison, and Help-Seeking Attitudes

The present study also evaluated differences between men and women and their responses on the INCOM and IASMHS scale. There were no differences in group means on the social comparison scale (e.g., the INCOM). However, there were statistically significant differences between men and women in terms of their help-seeking attitudes. Women had more positive help-seeking attitudes in all four vignette conditions. Additionally, women had higher scores on the Stigma, Openness, and Help-Seeking Propensity subscales. Additionally, gender accounted for over 10% of the variance of help-seeking attitudes. These results are similar to previous research (e.g., Barwick, de Man, & McKelvie, 2009; Fischer & Turner, 1970; Strohmer, Biggs, & McIntyre, 1984) that found women to have higher scores on help-seeking measures. Deductively, since help-seeking attitudes have been shown to be the most consistent predictor of intentions to seek mental health services (Cepeda-Benito & Short, 1998; Kelly & Achter, 1995; Mackenzie, Gekoski, & Knox, 2006; Morgan, Ness, & Robinson, 2003; Vogel & Wester, 2003), these findings affirm that men will continue to grossly underutilize mental health services.

Ethnicity, Social Comparison, and Help-Seeking Attitudes

The present study evaluated group differences between categories of ethnicity, social comparison, and help-seeking attitudes. The Openness subscale was the only dependent variable that was statistically significant when comparing scores of African American, Asian American, Caucasian, and individuals who marked the "Other" category of race/ethnicity. Participants who

identified themselves as Asian American comprised the highest mean when compared to the other groups. Additionally, ethnicity explained 9.8% of the variance for the Openness subscale.

Vignettes, Social Comparison, and Help-Seeking Attitudes

As part of the experimental design of the present study, four treatment conditions were created to evaluate the impact of objective and social comparison data. Each participant was presented with one of the four vignettes with embedded advice about whether participants should or should not seek mental health services. Previous results of similar research found that social comparison data that is supportive of seeking help rather than discouraging increases the likelihood that one will seek mental health services (Freidson, 1961; Rickwood & Braithwaite, 1994; Sanders, 1981; Vogel, Wester, Wei, & Boysen, 2005). However, those results were not replicated in this study.

Correlations of Social Comparison and Help-Seeking Attitudes

The final analysis performed in this study was the predictive value of social comparison evaluated via bivariate multiple regression. The results were that 10.4% of help-seeking attitudes can be predicted by social comparison. However, post hoc assessment found that only the Upward Comparison Scale was statistically significant, predicting 9.6% of scores on the IASMHS scale, measuring help-seeking attitudes. Festinger (1954) hypothesized that social comparison data was frequently valued higher than objective data. Some empirical studies have supported this hypothesis. Sanders (1981) found that social comparison data that encouraged treatment frequently overruled objective information that did not encourage help-seeking. Strohmer, Biggs, and McIntyre (1984) found that when social comparison data was manipulated, a statistically significant main effect was present when the social comparison data was categorized as "serious." However, the results of Sanders' (1981) were not replicated in the

present study. The "encouraged" and "not encouraged" conditions did not have a statistically significant difference on help-seeking attitudes.

Limitations of the Study

There are some limitations to this study. First, the participants are asked to keep a vignette in mind as they respond to the IASMHS scale. The treatment condition was unsuccessful as there were no significant differences between the vignette conditions on the IASMHS scale. Therefore, it is unclear whether or not participants responded to the specified treatment conditions of "encouraged" and "not encouraged" to seek help. This is a similar limitation of Sanders' (1981) and other studies where participants are asked to assume a role for the treatment conditions. Participants may be responding more to "what they *think* they would do instead of what they actually *would* do."

Furthermore, some research has surmised that attitudes are entirely unrelated actual help-seeking behavior or the pursuit of mental health services (Leaf, et al., 1988; Lefebve, Lesage, Cyr, Toupin, & Fournier, 1998; Mackenzie, Knox, Gekoski, Macaulay, 2004). A lack of consistency between attitudes and behavior would limit the usefulness of this research. As an alternative, participants could complete the measures used in the present study (e.g., the INCOM and IASMHS) scale as they enter a waiting room of a mental health clinic or counseling office. This experimental design could capture attitudes while participants were actively seeking mental health care. Additionally, participants could be asked questions about social comparison processes prior to seeking help. For example, participants could be ask if he or she confided in a friend about his or her symptoms (e.g. seeking subjective data) or first sought the opinion of an objective source, such as a physician. These assessments of both attitudes and behavior during the actual help-seeking process could provide additional information that is likely not obtainable

using vignettes. Finally, there may also be a benefit evaluating participants who are (experimental group) and are not (control group) actively seeking mental health services. Understanding these group differences and similarities may provide some clarity to the predictive nature of attitudes toward help seeking behavior.

Another limitation of the study is that the participants are not precisely representative of the general population. For example, participants who identified themselves as African American comprised only 5.8% of the sample. However, individuals who identified themselves as African American during the 2010 census comprised 12.6% (United States Census Bureau, 2010). Additionally, the Caucasian population of the sample and of the general United States population were 79.2% and 72.4%, respectively. These differences mean that the results may generalize to the majority population, however, some minority groups were underrepresented in the present study and extrapolations of the results should be made with greater caution.

In addition to the demographic data of the sample, the manner in which they were recruited may also have limitations to generalizing the results to the greater U.S. population. Participants were recruited via email invitations that they volunteered to receive. Therefore, people who did not previously choose to receive research invitations, individuals without email, or those that who don't own a computer were not represented.

Finally, the use of vignettes in the design of the present study may have been inherently flawed. Since the vignette conditions did not yield any statistically significant results, it is possible that the participants may have ignored the content of the vignettes altogether and simply responded to the instruments. For example, the differences between men and women on the IASMHS scale is a replication of previous research that surmised that women frequently have more positive help-seeking attitudes than men (Barwick, de Man, & McKelvie, 2009; Fischer &

Turner, 1970; Strohmer, Biggs, & McIntyre, 198). This is an indication that the participants of the present study were responding in a forthright manner to the instruments, but potentially did not respond to the conditions created within the vignettes. Additionally, the average time to complete the survey was approximately 16.5 minutes. This is considered to be a somewhat fast completion time due to each participant having to read and progress through an two instruction pages, two instruments, one vignette, and a debriefing page. Although vignettes have demonstrated usefulness in research, the method of delivering the vignette may warrant some additional research.

Conclusions and Recommendations

The present study was an exploration of several demographic variables, components of Festinger's (1954) theory of social comparison, and help seeking attitudes. Social comparison was measured using the Iowa-Netherlands Comparison Orientation Measure (INCOM), and help-seeking attitudes were evaluated using the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) scale. Participants (n = 154) were invited via online solicitation to complete a survey comprised of a demographics block, the INCOM, and the IASMHS scale. The treatment conditions of the current study were embedded in four vignettes. Each participant was randomly presented with one of the four scenarios. The participants were instructed to read the vignette after completing the INCOM, but before being presented with the IASMHS scale. The treatment conditions were created using combination of objective and subjective social comparison data that either encouraged or did not encourage the pursuit of mental health services. The condition within the vignette was modeled after the DSM-IV criteria for a Major Depressive Disorder. The results of the present study were evaluated via Factorial MANOVA, and some relationships were found to be statistically significant. Additionally, bivariate

regression was used to measure whether or not scores on the INCOM were able to predict help-seeking attitudes.

As previously noted, several of the findings from the present study were statistically significant. Age was found to be significant for the INCOM, the Upward Comparison subscale, the IASMHS, and the Stigma Tolerance subscale. The 30 to 39 year-old age group was found to engage in the highest degree of social comparison and upward social comparisons while the 50 to 59 year-old group engaged in the least amount of social comparison. Older adults in the 60 to 79 year-old group demonstrated more positive help-seeking attitudes and a greater degree of stigma tolerance while engaging in the least amount of upward social comparison when compared to other age groups.

Additionally, the differences between men and women for help-seeking attitudes were found to be statistically significant. Similar to the results of previous research (e.g., Fischer & Turner, 1970; Willis & DePaulo, 1991), women in the sample of the present study had more positive attitudes toward help-seeking. Specifically, women scored higher on the IASMHS and the three embedded subscales. These results indicate that the female participants had more positive views of help seeking when compared to the male participants. Furthermore, the women of the present study also had a greater tolerance of stigma, more openness toward seeking help, and an increased likelihood to seek mental health services when needed. This finding is similar to Johnson's (1988) and Sipps and Janeczek's (1986) results of women having a greater stigma tolerance.

The results of the present study indicate that the disparity in help-seeking attitudes between men and women is relatively unchanged despite the passing of four decades of researchers focused on the male experience of help-seeking and psychiatric illness. Additionally,

previous researchers also surmised that men's attitudes toward seeking help improved with education (Mackenzie, Gekoski, & Knox, 2006), which was not supported by the current study. The results of the present study imply that further attempts to educate men on the usefulness of mental health services will continue to be ineffective and that more research on the barriers to improving men's help-seeking attitudes is necessary. For example, future research on stigma tolerance, openness to seeking help, and the inconsistencies between stereotypical male traits and the elements that make a good psychotherapy candidate (Brooks, 2001; Mahalik, Good, & Englar-Carlson, 2003; Rochlen, McKelley, & Pituch, 2006) could prove beneficial.

Unexpectedly, however, men and women seem to engage in upward, downward, and social comparison equally. The results of the present study were not expected due to previous research where women had greater propensity for social comparison and more positive help-seeking attitudes. The current findings are contrary to the results of Gibbons and Buunk (1999) where they reported a statistically significant difference between men and women in both the Dutch and American samples, with women having higher scores than men on the INCOM. Although these two variables have not been well researched together (Mojtabai, 2008), it was plausible that a greater propensity for social comparison would be correlational with more positive help-seeking attitudes. However, this was not the finding of the present study. In fact, only the Upward Comparison scale was a statistically significant predictor of help-seeking attitudes.

Since men and women did not differ in social comparison, and social comparison did not predict help-seeking attitudes, the differences between men and women on help-seeking attitudes is not attributable to variables of the present study and social comparison is not an important part of the help-seeking process. Moreover, previous research has focused on a contrast of severity

of symptoms within the treatment condition (Goodman, Sewell, & Jampol, 1984; Vogel, Wester, Wei, & Boysen, 2005). Future research could use a vignette condition where the participants' symptoms are more or less severe than a comparison object for both men and women. Therefore, further research is necessary to gain a greater understanding of the differences between men and women in social comparison and the impact of social comparison on help-seeking attitudes.

Ethnicity accounted for 9.8% of the variance of the Openness subscale of the IASMHS. Otherwise, ethnicity was not a statistically significant variable for social comparison and help-seeking attitudes. Asian American participants reported higher degrees of openness to seeking mental health services over other ethnicities. This is contrary to the previous research by Cherng's (1988), which surmised that public stigma may be a barrier for Taiwanese students and potentially for other Asian cultures as well. Other research of Asian participants lead investigators to believe that individuals may use their social support network (e.g., friends, parents, siblings, etc.) before seeking mental health services (Ang, Lim, Tan, & Yau, 2004). However, the present study did not find statistically significant differences in social comparison by ethnicity. Additionally, Leong and Zachar (1999) found that women had more positive help-seeking attitudes across multiple ethnicities, whereas no such interactions were statistically significant in the present study.

Previous researchers have also found that members of minority groups such as African-Americans use university counseling centers less than Caucasian students (Bonner, 1997; Kirk, 1986). However, the present study did not find a statistically significant difference between ethnicity on help-seeking attitudes. This suggests that the underutilization of mental health services by minorities on college campuses is not a result of a disparity in help-seeking attitudes

as was previously believed (e.g., Simon & Gerber, 1990). The current findings are important because it could mean that the unnecessary suffering that individuals endure, regardless of ethnicity, is a more universal problem. Additionally, help-seeking attitudes were relatively the same regardless of ethnic group, indicating that the barrier to increasing mental health services by members of a minority group lies elsewhere. Future research on this topic might include perceived barriers, such as time away from work, school, or childcare, transportation, or other logistical barriers.

Finally, the impact of the previous use of mental health services on social comparison and help-seeking attitudes was evaluated in the present study. Participants who indicated they had previously sought mental health services scored higher on the Openness subscale of the IASMHS scale, indicating they were more open to acknowledging psychological problems and to the possibility of seeking help for them (Mackenzie, Knox, Gekoski, & Macaulay, 2004). Despite the amount of the variance explained by previously seeking mental health services (3.8%), these results were significant and contrary to some previous research. For example, Fischer and Turner (1970) and Cash, Kehr, and Salzbach (1978) found that people who have previously sought mental health services carry more favorable attitudes about seeking mental health services, greater recognition of the need for psychological services, as well as increased indifference to stigma, increased interpersonal openness, and more confidence in mental health professionals. The lack of difference between the group who did and did not previously seek treatment may be the result of possible psychotherapy dynamics. It is unclear, however, how individuals seek mental health services and come away with an unchanged perspective. However, it is important to remember that the only 27.3% of the participants of the present study

endorsed previous help-seeking behavior, and the observed power for this relationship is considered lower than desired (Cohen, 1988).

Overall, the present study identified several variables that have statistically significant relationships with social comparison and help-seeking attitudes. The study used Factorial MANOVA to explore group differences on several demographic variables, social comparison, and help-seeking attitudes. Implications for the results of this study were explored and recommendations for future research have been discussed. It is clear that the relationship between social comparison and help-seeking attitudes needs further exploration and warrants more academic attention. Additionally, the results of the present study indicate that there are likely barriers to help-seeking behavior as attitudes are comparable across multiple ethnicities and barriers to mental health treatment may be more universal than previously expected. Furthermore, these results also demonstrate that the act of seeking mental health services does not improve one's help-seeking attitudes. This study has challenged some previous studies and assumptions, and these results along with future research could change the way mental health providers engage with those seeking psychological care.

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Appendix A

Introduction

My name is William Blair and I am completing a dissertation that is required for a Doctorate of Philosophy in Counseling Psychology. The focus of my dissertation research is to help psychologists, psychiatrists, social workers, and counselors gain a better understanding of the connections between social comparison orientations and help-seeking attitudes. The instruments you will be completing today are a brief demographics page and two inventories totaling 47 items. These two inventories are separated by a short vignette that is an important part of this project. Please read the scenario carefully and follow the directions that have been provided in each block.

This research project will likely only take 15–20 minutes to complete. It is important to note that your participation in this research is completely voluntary. You may opt out of the research at any time and choose not to complete the surveys. Should you choose to participate, you will receive the credits from Clearvoice Surveys. The amount of credits you receive was identified in your invitation email. If you are ready to begin, please mark your choice below and follow the instructions provided.

If you have questions, you may also contact me, the primary researcher, by phone at 334-444-5188 or email at william.blair@auburn.edu. You may also contact my my dissertation committee chairman, Dr. John Dagley, at 334-844-2978. Thank you in advance for your time.

The Auburn University Institutional Review Board has approved this document/survey for use from September 20, 2011 to September 19, 2012. Protocol number 11-260 EX 1109.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CHOOSE THE APPROPRIATE BOX TO BEGIN THE SURVEY. YOU MAY PRINT A COPY OF THIS BLOCK/PAGE TO KEEP.

Please mark the box that indicates your participation status

☐ Yes, I am at least 19 years of age, and I would like to voluntarily participate in this research. (Please proceed to the next pages page).

☐ No, I would prefer not to participate in this research.

(You will be exited from survey).

☐ I have already participated in this study. (You will be exited from survey).

Appendix B

Demographic Information

Please do not put your name on this page or any other page in this packet as the research is intended to be anonymous. Complete this form with the requested information. Once you have done so, please follow the instructions at the bottom of this document.

1) Age: _____2) Gender (M/F): _____3) Ethnicity: _____

4) Highest grade completed in school (graduating high school = 12): _____

5) Have you ever sought professional help (psychologist, psychiatrist, therapist, or physician) for psychological concerns? (Y/N) _____

6) If so, how long did see your provider? (weeks? months? years?) _____

7) From whom did you receive professional help? (Circle all that apply)

Psychologist Psychiatrist Physician Therapist Social Worker Not Listed

Now that you have completed the demographics page, the next step is to complete a brief questionnaire. This is a 23-item inventory meant to assess your tendency toward social comparison, which is your tendency to evaluate your knowledge and abilities against those of others.

Appendix C

Iowa-Netherlands Comparison Orientation Measure

Most people compare themselves from time to time to others. For example, they may compare the way they feel, their opinions, their abilities, and/or their situation with those of other people. There is nothing particularly "good" or "bad" about this type of comparison, and some people do it more than others. We would like to find out how often you compare yourself with other people. To do that we would like you to indicate how much you agree with each statement below.

1. I often compare how my loved ones (boy or girlfriend, family members, etc.) are doing with how others are doing.

1	**2**	**3**	**4**	**5**
I disagree strongly				**I agree strongly**

2. I always pay a lot of attention to how I do things compared with how others do things.

1	**2**	**3**	**4**	**5**
I disagree strongly				**I agree strongly**

3. If I want to find out how well I have done something, I compare what I have done with how others have done.

1	**2**	**3**	**4**	**5**
I disagree strongly				**I agree strongly**

4. I often compare how I am doing socially (e.g., social skills, popularity) with other people.

1	**2**	**3**	**4**	**5**
I disagree strongly				**I agree strongly**

5. I am *not* the type of person who compares often with others.

1	2	3	4	5
I disagree strongly				**I agree strongly**

6. I often compare myself with others with respect to what I have accomplished in life.

1	2	3	4	5
I disagree strongly				**I agree strongly**

7. I often like to talk with others about mutual opinions and experiences.

1	2	3	4	5
I disagree strongly				**I agree strongly**

8. I often try to find out what others think who face similar problems as I face.

1	2	3	4	5
I disagree strongly				**I agree strongly**

9. I always like to know what others in a similar situation would do.

1	2	3	4	5
I disagree strongly				**I agree strongly**

10. If I want to learn more about something, I try to find out what others think about it.

1	2	3	4	5
I disagree strongly				**I agree strongly**

11. I never consider my situation in life relative to that of other people.

1	2	3	4	5
I disagree strongly				**I agree strongly**

12. When it comes to my personal life, I sometimes compare myself with others who have it better than I do.

1	2	3	4	5
I disagree strongly				**I agree strongly**

13. When I consider how I am doing socially (e.g., social skills, popularity), I prefer to compare with others who are more socially skilled than I am.

1	2	3	4	5
I disagree strongly				**I agree strongly**

14. When evaluating my current performance (e.g., how I am doing at home, work, school, or wherever), I often compare with others who are doing better than I am.

1	2	3	4	5
I disagree strongly				**I agree strongly**

15. When I wonder how good I am at something, I sometimes compare myself with others who are better at it than I am.

1	2	3	4	5
I disagree strongly				**I agree strongly**

16. When things are going poorly I think of others who have it better than I do.

1	2	3	4	5
I disagree strongly				**I agree strongly**

17. I sometimes compare myself with others who have accomplished more in life than I have.

1	2	3	4	5
I disagree strongly				**I agree strongly**

18. When it comes to my personal life, I sometimes compare myself with others who have it worse than I do.

1	2	3	4	5
I disagree strongly				**I agree strongly**

19. When I consider how I am doing socially (e.g., social skills, popularity), I prefer to compare with others who are less socially skilled than I am.

1	2	3	4	5
I disagree strongly				**I agree strongly**

20. When evaluating my current performance (e.g., how am I doing at home, work , school, or wherever), I often compare with others who are doing worse than I am.

1	2	3	4	5
I disagree strongly				**I agree strongly**

21. When I wonder how good I am at something, I sometimes compare myself with others who are worse at it than I am.

1	2	3	4	5
I disagree strongly				**I agree strongly**

22. When things are going poorly I think of others who have it worse than I do.

1	2	3	4	5
I disagree strongly				**I agree strongly**

23. I sometimes compare myself with others who have accomplished less in life than I have.

1	2	3	4	5
I disagree strongly				**I agree strongly**

Appendix D

Instruction Page II

Now that you have completed the INCOM, you will read a short vignette. This vignette is an example of what people frequently face when they are experiencing psychological problems that may lead to seeking professional help. Once you finish reading the vignette, please complete the next set of questions that comprise the Inventory of Attitudes Toward Seeking Mental Health Service (IASMHS) scale. The IASMHS scale is a 24-item measure designed to evaluate your attitudes toward seeking professional help for mental health concerns.

Appendix E

Vignettes

Vignette A

Consider for a moment that for the past few weeks, you have been experiencing a deeply sad mood for no specific reason that you can determine. You have also found yourself feeling less interested in your hobbies and your classes, and you have even begun to isolate yourself from your social network. Your roommate has noticed that you have become more withdrawn, and your food no longer has its usual appeal. When your roommate asks if you are okay, you mention that you haven't been sleeping well and that you have been feeling tired and a bit run down. This has become quite a preoccupation for you, and you are finding it difficult to concentrate on other things such as your current work project.

These concerns have prompted you to see what is wrong, and you start by sharing these thoughts and feelings with your closest friend. Your friend tells you that it sounds a lot like depression and that talking to a psychologist or mental health counselor would not be a bad idea. This reaction from your friend really gets you thinking, so you make an appointment with your local doctor. The physician that you encounter listens closely to your concerns and tells you that it does sound like depression. The physician adds that there is help at your local counseling center. With this scenario in mind, please answer the questions on the following pages.

Vignette B

Consider for a moment that for the past few weeks, you have been experiencing a deeply sad mood for no specific reason that you can determine. You have also found yourself feeling

less interested in your hobbies and your classes, and you have even begun to isolate yourself from your social network. Your roommate has noticed that you have become more withdrawn, and your food no longer has its usual appeal. When your roommate asks if you are okay, you mention that you haven't been sleeping well and that you have been feeling tired and a bit run down. This has become quite a preoccupation for you, and you are finding it difficult to concentrate on other things such as your current work project.

These concerns have prompted you to see what is wrong, and you start by sharing these thoughts and feelings with your closest friend. Your friend tells you that it doesn't sound serious. Your friend adds that you are probably just going through a rough patch and that you will be back to your usual self in no time at all. This reaction from your friend really gets you thinking, so you make an appointment with your local doctor. The physician that you encounter listens closely to your concerns and tells you that it does sound like depression. The physician adds that there is help at your local counseling center. With this scenario in mind, please answer the questions on the following pages.

Vignette C

Consider for a moment that for the past few weeks, you have been experiencing a deeply sad mood for no specific reason that you can determine. You have also found yourself feeling less interested in your hobbies and your classes, and you have even begun to isolate yourself from your social network. Your roommate has noticed that you have become more withdrawn, and your food no longer has its usual appeal. When your roommate asks if you are okay, you mention that you haven't been sleeping well and that you have been feeling tired and a bit run down. This has become quite a preoccupation for you, and you are finding it difficult to concentrate on other things such as your current work project.

These concerns have prompted you to see what is wrong, and you start by sharing these thoughts and feelings with your closest friend. Your friend tells you that it sounds a lot like depression and that talking to a psychologist or mental health counselor would not be a bad idea. This reaction from your friend really gets you thinking, so you make an appointment with your local doctor. The physician that you encounter listens closely to your concerns and tells you that the symptoms you describe are not serious, do not require treatment, and they will likely pass with time. With this scenario in mind, please answer the questions on the following pages.

Vignette D

Consider for a moment that for the past few weeks, you have been experiencing a deeply sad mood for no specific reason that you can determine. You have also found yourself feeling less interested in your hobbies and your classes, and you have even begun to isolate yourself from your social network. Your roommate has noticed that you have become more withdrawn, and your food no longer has its usual appeal. When your roommate asks if you are okay, you mention that you haven't been sleeping well and that you have been feeling tired and a bit run down. This has become quite a preoccupation for you, and you are finding it difficult to concentrate on other things such as your current work project.

These concerns have prompted you to see what is wrong, and you start by sharing these thoughts and feelings with your closest friend. Your friend adds that you are probably just going through a rough patch and that you will be back to your usual self in no time at all. This reaction from your friend really gets you thinking, so you make an appointment with your local doctor. The physician that you encounter listens closely to your concerns and tells you that the symptoms you describe are not serious, do not require treatment, and they will likely pass with

time. The physician adds that there is help at your local counseling center. With this scenario in mind, please answer the questions on the following pages.

Appendix F

Inventory of Attitudes Toward Seeking Mental Health Services

The term *professional* refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and family physicians). The term *psychological problems* refers to reasons one might visit a professional. Similar terms include *mental health concerns, emotional problems, mental troubles,* and *personal difficulties.*

For each item, indicate whether you *disagree* (0), somewhat agree (1), *are undecided* (2), *somewhat agree* (3), or *agree* (4):

1. There are certain problems which *should not* be discussed outside of one's immediate family.

0	**1**	**2**	**3**	**4**
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

2. I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems.

0	**1**	**2**	**3**	**4**
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems.

0	**1**	**2**	**3**	**4**
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

4. Keeping one's mind on a job is a good solution for avoiding personal worries and concerns.

0	**1**	**2**	**3**	**4**
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

Please turn to the next page

5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

6. Having been mentally ill carries with it a burden of shame.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

7. It is probably best not to know *everything* about one's self.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

8. If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

9. People should work out their own problems: getting professional help should be a last resort.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

10. If I were to experience psychological problems, I could get professional help if I wanted to.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

11. Important people in my life would think less of me if they were to find out that I was experiencing psychological problems.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

Please turn to the next page

12. Psychological problems, like many things, tend to work out by themselves.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

13. It would be relatively easy for me to find the time to see a professional for psychological problems.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

14. There are experiences in my life I would not discuss with anyone.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

15. I would want to get professional help if I were worried or upset for a long period of time.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

17. Having been diagnosed with a mental disorder is a blot on a person's life.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

18. There is something admirable in the attitudes of people who are willing to cope with their conflicts and fears *without* resorting to professional help.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

Please turn to the next page

19. If I believe I were having a mental breakdown, my first inclination would be to get professional help.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

20. I would feel uneasy going to a professional because of what some people would think.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

21. People with strong characters can get over psychological problems by themselves and would have little need for psychological help.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

23. Had I received treatment for psychological problems, I would not feel that it ought to be "covered up."

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

24. I would be embarrassed if my neighbor saw me going into the office of a professional who deals with psychological problems.

0	1	2	3	4
Disagree	**Somewhat disagree**	**Undecided**	**Somewhat agree**	**Agree**

Appendix G

Debrief

Thank you for participating in this research. This study is designed to measure the impact of the opinions of others on help-seeking attitudes. Additionally, the symptoms that were described in the vignette are typically associated with depression, and some people suffer from this disorder during the course of their lifetime. If some of these symptoms listed in the vignette describe your current experiences, it might be useful to seek help from a professional. Consult with your local community mental health center or your primary care physician. Please accept my personal gratitude for completing this research packet. Additionally, you will receive your credits from Clearvoice Surveys (clearvoicessurveys.com) in the customary manner.