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Impact of Athletic Identity and Emotional Competence on Athletes’ Attitudes toward Seeking Professional Psychological Help

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IMPACT OF ATHLETIC IDENTITY AND EMOTIONAL COMPETENCE ON ATHLETES’ ATTITUDES TOWARD SEEKING PROFESSIONAL PSYCHOLOGICAL HELP

by

Garrett V. Weatherhead

A dissertation submitted to the Graduate College in partial fulfillment of the requirements for the degree of Doctor of Philosophy Counseling Psychology August 2015

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Athletes have been found to have more negative attitudes toward seeking professional psychological help than non-athletes (Watson, 2005) despite experiencing comparable amounts of mental illness (Markser, 2011). The purpose of the present study was to examine factors that are associated with athletes’ help-seeking attitudes, including athletic identity and emotional competence. A sample of 144 college student-athletes from a small, private Midwestern college in the United States participated in the study. The athletes competed at the NCAA Division III level. Participants were asked to complete the following measures: Athletic Identity Measurement Scale (Brewer, Van Raalte, & Linder, 1993), Attitudes Toward Seeking Professional Psychological Help-Short Form (Fischer & Farina, 1995), Toronto Alexithymia Scale (Bagby, Parker, & Taylor, 1994), Self-Stigma of Seeking Help Scale (Vogel, Wade, & Haake, 2006), the Problem Orientation Scale of the Social Problem Solving Inventory for Adolescents (Frauenknecht & Black, 1995), and the Rumination subscale of the Inhibition Rumination Scale (Roger, Guarino de Scremin, Borril, & Forbes, 2011). Correlational analysis and hierarchical multiple regression analysis were used to examine the extent to which athletic identity and emotional competence, as measured by alexithymia, problem orientation, and rumination, predicted attitudes toward seeking professional
psychological help. Results revealed that both athletic identity and the emotional competence variables entered as a block predicted unique variance in the athletes’ attitudes toward seeking help. Among emotional competence variables, alexithymia had a significant negative bivariate relationship with attitudes toward seeking professional psychological help and emerged as worthy of further study. Problem orientation was identified as a significant predictor in the regression models, however, functioned as a suppressor variable and did not have a significant bivariate correlation with attitudes toward seeking professional psychological help. Findings, implications, and directions for future research are discussed.
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CHAPTER I
INTRODUCTION

Research indicates that athletes experience mental illness at the same rate as non-athletes. Markser (2011) reports that depression is diagnosed in athletes at a similar rate as the general public, and anxiety disorders are “common” among athletes (p. S182). He also indicates that athletes are at a greater risk to engage in eating disorders, alcohol addiction, and steroid use than non-athletes (Markser, 2011). Despite similar levels of mental illness, athletes have been found to underutilize professional psychological help. Watson (2005) found that student-athletes had significantly more negative attitudes toward seeking help, an important precursor to help-seeking behavior, than non-athletes.

In an attempt to understand athletes’ negative attitudes toward seeking help, researchers have suggested that aspects of sports culture may play a role. In an attempt to define sports culture, Hughes and Coakley (1991) introduced the term sport ethic to describe a set of unwritten rules about what it means to be a “real” athlete (p. 362). These rules include athletes playing with pain/injury, making personal sacrifices for the overall benefit of the sport they play, trying to distinguish themselves from other athletes through success or ability, and refusing to be told that they can’t accomplish a goal (Hughes & Coakley, 1991; Malcom, 2006). Individuals who violate the sport ethic risk negative consequences such as teasing from teammates, a poor reputation in the eyes of coaches (e.g. “not a team player”), and less access to playing time (Malcom, 2006). In contrast, those who “play by the rules” have an increased chance to have better relationships, better social status within the team, and more success within the realm of athletics (Malcom, 2006).
One of the most studied by-products of embracing sports culture is participation in the “culture of risk” (Nixon, 1992, 1994; Roderick, 1998). The culture of risk can be described as the high value that is placed on continuing to compete despite pain, injury, and/or risk of more serious injury. Athletes that engage in the culture of risk, meaning those who play through pain or injury, are often celebrated. Those who resist the culture of risk are often denigrated.

One harmful consequence of the culture of risk is athletes minimizing their external expression of pain. Because of the messages they receive about playing with pain, athletes have been found to actively minimize pain and/or conceal it from peers, coaches, and medical staff (White, Young, & McTeer, 1995). These actions, in turn, increase the athlete’s risk of becoming more seriously injured in the short-term, and becoming more permanently disabled in the long-term. In essence, the benefit/reward/reinforcement of sports culture makes it normal or expected for athletes to ignore or minimize the impact of pain and injury, despite the danger of serious, long-lasting physical consequences.

Malcom (2006) recounted an example of the consequence of the culture of risk as she described the story of Ronnie Lott, a professional football player in the United States who chose to amputate his finger rather than forgo the remainder of his athletic season. This example speaks to the depth at which athletes in sports experience the normalization of pain and injury. The values of sports culture had become so ingrained that this athlete was willing to permanently disfigure himself in order to maintain his status.

Study of the impact of the culture of risk is now extending to emotional pain. Researchers have begun to explore if sports culture affects athletes’ willingness to share
emotional pain in the same way it has impacted their willingness to share physical pain. Sinden (2010) conducted a qualitative study on 11 elite amateur rowers in an attempt to understand their experiences of emotion within sport. Results from the study suggest that athletes receive definite messages about expressing emotional pain. She reported that every participant equated sharing emotions to “mental weakness” (Sinden, 2010, p. 249). As a result of these messages, athletes learned that they must hide their emotions in order to avoid appearing inferior (Sinden, 2010).

The finding that athletes engage in a pattern of suppressing their emotions has considerable implications for those involved in sports. Long-term hiding of one’s emotions has the potential of affecting one’s ability to acknowledge their own emotions, their relationships with others, and their ability to cope with trauma (Sinden, 2010). Sinden (2012) also draws a connection between suppression of emotion to many conditions that traditionally plague athletes, such as chronic injuries, substance abuse, eating disorders, and burnout. Further study into how athletes are impacted by this cultural norm is clearly needed.

The impact of sports culture on athletes has been studied with the construct of athletic identity. Athletic Identity is defined as “degree to which an individual identifies within the athlete role” (Brewer, Van Raalte, & Linder, 1993, p. 237). Empirical research has connected high athletic identity to both benefits (e.g., better sport performance, higher self-esteem) and costs (e.g., identity foreclosure, higher prevalence of disordered eating and drinking) (Brewer et al., 1993; Gapin & Petruzzello, 2011; Horton & Mack, 2000; Martens, Dams-O’Connor, & Beck, 2006).
Athletic identity’s potential ability to gauge sports culture makes it a good fit to clarify how sports culture impacts help-seeking. Unfortunately, the construct has been minimally used to study help-seeking attitudes, and the results have been inconclusive. For example, Steinfeldt and Steinfeldt (2010) used hierarchical multiple regression to determine if athletic identity predicted help-seeking attitudes in a sample of 179 high school football players. Athletic identity did not add additional variance in the prediction model, and it did not emerge as a significant predictor in the final model (Steinfeldt & Steinfeldt, 2010). This finding contradicted a previous study that found that college student-athletes had significantly less favorable attitudes toward seeking professional help than non-athletes (Watson, 2005). These mixed results suggest that further research needs is necessary to determine if a relationship exists, as expected, between athletic identity and help-seeking attitudes.

As outlined previously in this section, sports culture seems to have an effect on an athlete’s willingness/ability to express their emotions. One construct that measures a person’s ability to express their emotions is emotional competence. Emotional competence is defined as one’s ability to identify and describe their emotions, as well as their ability to manage their emotions in an effective, non-defensive manner (Rickwood, Deane, Wilson, & Ciarrochi, 2005). Previous research has established a relationship between emotional competence and help-seeking intentions. Specifically, researchers consistently found that those low in emotional competence were significantly less willing to seek professional psychological help for emotional problems (Ciarrochi, Deane, Wilson, & Rickwood, 2002; Rickwood et al., 2005). Although a relationship between emotional competence and help-seeking intentions was consistently found with
adolescents and college students, there has been no study that has examined this relationship in a sample of athletes.

**Purpose of the Study**

The purpose of the present study is to examine the impact of athletic identity and emotional competence on athletes’ attitudes toward seeking professional psychological help. The present study addresses two important gaps in the research on athletes’ help-seeking. First, there have been few research studies exploring the relationship between athletic identity and attitudes toward seeking professional psychological help. Second, the relationship between emotional competence and attitudes toward help seeking has not been established in a sample of athletes. The present study aims to clarify the relationships between athletic identity and emotional competence to better understand the help-seeking attitudes of athletes.

The present study investigates attitudes toward seeking professional psychological help, athletic identity and emotional competence. Review of the literature suggests that athletic identity will have an inverse relationship with help-seeking attitudes and emotional competence will have a positive relationship with the construct. Thus, it was expected that as one’s athletic identity increases their attitudes toward help-seeking will be more negative, and as one’s emotional competence increases their attitudes will be more favorable. Furthermore, information on variables the literature has indicated relate to help-seeking attitudes were included in the analysis. These included information on participants’ gender, race, and self-stigma of seeking help. The statistical analyses used included correlational analyses and hierarchical multiple regression analyses.
Research Questions

Research Question 1

To what extent does the variable of self-stigma relate to and predict athletes’ attitudes toward seeking professional psychological help?

Null Hypothesis 1a:

College student-athletes who participate in the study will not demonstrate a significant correlation between their overall score on self-stigma and their attitudes toward seeking professional psychological help.

Null Hypothesis 1b:

After controlling for gender and race, self-stigma will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.

Research Question 2

To what extent does athletic identity relate to attitudes toward seeking professional psychological help?

Null Hypothesis 2a:

College student-athletes who participate in this study will not demonstrate a significant correlation between their global score on athletic identity and their attitudes toward seeking professional psychological help.

Null Hypothesis 2b:

After controlling for gender, race, and self-stigma, athletic identity will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.
Research Question 3

To what extent does emotional competence as measured by alexithymia, problem orientation, and rumination predict attitudes toward seeking professional psychological help?

Null Hypothesis 3a:

College student-athletes who participate in this study will not demonstrate a significant correlation between their scores on alexithymia, problem orientation, rumination, and attitudes toward seeking professional psychological help.

Null Hypothesis 3b:

After controlling for gender, race, and self-stigma, alexithymia will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.

Null Hypothesis 3c:

After controlling for gender, race, and self-stigma, problem orientation will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.

Null Hypothesis 3d:

After controlling for gender, race, and self-stigma, rumination will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.

Null Hypothesis 3e:

After controlling for gender, race, self-stigma, emotional competence variables of alexithymia, problem orientation, and rumination together will not contribute
unique variance to the prediction of attitudes toward seeking professional psychological help.

Research Question 4

To what extent do athletic identity and emotional competence together predict attitudes toward seeking professional psychological help?

Null Hypothesis 4:

After controlling for gender, race, and self-stigma, athletic identity and emotional competence considered together will not contribute unique variance to the prediction of attitudes toward seeking professional help.

Definition of Terms

1. Athletic Identity - “the degree to which an individual identifies with the athlete role” (Brewer et al., 1993, p. 237). The athlete role is seen as one of multiple roles or identities that a person could possess. One’s athletic identity is considered the salience of the athlete role in their overall identity.

2. Emotional Competence - a term used to describe one’s self-efficacy in their ability to use inter and intrapersonal skills to reach their emotional goals (Saarni, 2011). A person’s emotional competence is conceptualized to change over time as they develop the ability to identify, describe, and apply their emotions in social situations. Emotional competence is differentiated from emotional intelligence in the current study by the former’s focus on malleability of social/emotional skills over time. In contrast, emotional intelligence is viewed as a natural ability that remains stable throughout one’s life.
3. Help-seeking - “a term generally used to refer to the behaviour of actively seeking help from other people” (Rickwood et al., 2005, p. 4). Help-seeking is generally seen as any communication used by a person to receive assistance for a problem. The current study discusses different dimensions of the process of help-seeking, including:
   a. Help-seeking attitudes - describes one’s opinion about seeking help, and are informed through expectations about the process and outcomes of receiving help (Vogel, Wade, & Hackler, 2007).
   b. Help-seeking intentions - describes one’s future plan to seek help (Rickwood et al., 2005).
   c. Self-stigma of seeking help - describes a person’s perception that they are socially unacceptable if they seek help (Vogel et al., 2007).

4. Professional Psychological Help - Assistance provided by individuals who have a “recognised role and appropriate training in providing” mental health treatment (Rickwood et al., 2005, p. 4). Examples include psychologist, sports psychologist, school psychologist, social worker, and college counselor.
CHAPTER II
LITERATURE REVIEW

This chapter will review the literature of the three primary factors in the current study: athletic identity, emotional competence, and help-seeking. The athletic identity section will consider how athletes have been defined and studied, as well as outline research that describes the psychosocial consequences of being an athlete. Then, the construct of emotional competence will be defined and reviewed. Its relationship with help-seeking and the athlete culture will be reviewed. The third section will describe help-seeking with regard to mental health services. The construct of attitudes toward seeking professional psychological help is examined and its associations with athletes and emotional competence will be reviewed. The chapter will end with a summary.

Athletic Identity

This section will define the construct that has been developed to understand the depth at which athletes accept athletic culture, athletic identity. Athletic identity will be reviewed with regard to its positive and negative effects. Further, the connection between athletic identity and masculinity will be considered, with a focus on how athletes are affected by the combination of athletic and masculine ideals.

Definition

Early research into the personality traits of athletes used the dichotomous labels of *athlete* and *nonathlete* to describe study participants (Cornelius, 1995). However, a weakness of this research was that many individuals did not fit neatly into the categories (Cornelius, 1995). For example, consider a middle-aged runner who frequently exercises and often participates in non-competitive events. This person would not be considered an
athlete within the early definition due to their lack of competition in organized sport. The dichotomous labels did not capture the extent that athletics impacted peoples’ lives.

Instead of a dichotomy, Brewer et al. (1993) conceptualized one’s athletic identity as a part of a larger, multidimensional identity. They defined athletic identity as the “degree to which an individual identifies with the athlete role” (Brewer et al., 1993, p. 237). Through this multidimensional lens, dimensions differ in how central they are to one’s personality as well as how important they are to a person (Cornelius, 1995; Harter, 1990). Based on these factors, some dimensions will be more developed and have more salience in their expression (Cornelius, 1995; Harter, 1990). For example, consider a person with a strong athletic identity who participates equally in athletics and music. Because athletics are an important part of his identity, he has the potential to be more concerned with his performance on the playing field rather than in the music hall.

Further, the more developed a particular identity, the more that identity dictates how that person thinks about the world (Cornelius, 1995). Thus, the person from the previous example has a greater likelihood to interpret details of his experience (e.g., diet, social relationships, academic involvement, etc.) based on how it affects his athletic performance rather than how it affects his musical performance.

The Athletic Identity Measurement Scale (AIMS) is the most widely used measure to study athletic identity (Brewer et al., 1993). Early empirical research used the AIMS as a one-dimensional tool that quantifies the degree that one identifies with the athlete role (Visok, Hurst, Maxwell, & Watson, 2008). Recent analysis of the AIMS indicates that it can be used as an overall indicator of athletic identity, as well as broken into the three distinct factors of social identity, exclusivity, and negative affectivity.
Social identity refers to the degree at which people identify themselves as an athlete within a social context (Ryska, 2002). Exclusivity is the extent at which an individual’s worth is determined by sport performance (Ryska, 2002). Negative affectivity is the degree that an individual has a difficult emotional reaction to a poor athletic outcome (Ryska, 2002).

**Consequences Associated with Athletic Identity**

As with other identities, athletic identity is connected to one’s feelings of competence. A highly developed dimension of one’s identity impacts that particular dimension as well as other, less established dimensions (Ryska, 2002). Success within a primary identity leads to feelings of greater competence within that identity as well as globally; this is evident with failure, too (Ryska, 2002). With regard to athletic identity, a person who identifies decidedly with the role of athlete would feel greater competence with their perception of athletic success. This competence would, in turn, extend past the playing field and into other realms (Ryska, 2002, 2003). Ryska (2002, 2003) provided empirical support for this concept in two quantitative studies with high school student-athletes. Results from the studies revealed positive relationships between athletic identity and competence in non-athletic areas such as social, academic, and behavioral (Ryska, 2002). The author concluded “the quality of an adolescent’s sport experience may have a pervasive impact on his or her competence perceptions outside the sport realm” (Ryska, 2002, p. 123).

Thus, those with a high athletic identity are likely to be affected by experiences related to their involvement in sport. Results from empirical research suggest that individuals who are invested in the athlete role experience similar benefits and drawbacks
from participation in sports. Benefits for athletes are described inside and outside athletics. Inside athletics, high athletic identity has been associated with more commitment to training (Danish, 1983; Horton & Mack, 2000); better sport performance (Horton & Mack, 2000); and higher overall sport participation (Downs & Ashton, 2011; Lamont-Mills & Christensen, 2006). Outside of athletics, athletic identity has been associated with factors related to involvement in exercise including better body-image, increased self-confidence, a bigger social network, and less anxiety (Horton & Mack, 2000). Also, athletes have been linked to higher global feelings of competence (Ryska, 2002) and a stable sense of self (Danish, 1983).

One primary drawback of developing a high athletic identity is the risk of a foreclosed identity (Brewer et al., 1993; Brown, Glastetter-Fender, & Shelton, 2000). Identity foreclosure is a “commitment to an occupation or ideology in the absence of engaging in exploratory behavior” (Brown et al., 2000, p. 54). Researchers suggest that athletes spend a significant time developing their bodies, minds, and behaviors to be successful in their sport career. As a result, there is less time, energy and effort put towards other aspects of their lives such as developing other career paths (Brown et al., 2000). Consequences connected with identity foreclosure in athletes include difficulty with transitions out of sport (Alfermann, Stambulova, & Zemaityte, 2004; Samuel & Tenenbaum, 2011; Wylieman, Alfermann, & Lavallee, 2004) and lower maturity/self-efficacy making career decisions (Brown et al., 2000). Other drawbacks linked with high athletic identity include increased vulnerability to emotional issues following a significant life event (Brewer, 1993); high prevalence rates for eating disorders (Gapin &
Petruzzello, 2011) and substance abuse disorders (Martens et al., 2006); and increased tendency to play with injury (Weinburg, Vernau, & Horn, 2013).

**Athletic Identity, Athletic Culture, and Male Role Norms**

Recent research has explored the intersections between athletic culture and expectations of men in American society. Values of both athletic culture and masculinity include emotional inexpressiveness, aggressiveness, and competitiveness. This section will identify research that describes how athletes who ascribe to these values may experience consequences similar to those experienced by men, such as decreased help-seeking for emotional problems and difficulty in interpersonal relationships.

Prior to reviewing the literature in this area, it is important to state that connecting athletic culture and masculinity should be done with caution. Previous research in sports and gender has been used to say that participating in athletics “masculinizes” women (Knoppers & McDonald, 2010). The danger of using this description is that it maintains a larger, unequal system of power and privilege that places men at the top and all other expressions of gender at the bottom (Knoppers & McDonald, 2010). The goal of the current literature review is to avoid perpetuation of the system by emphasizing the overlaps between athlete norms and male role norms for the purpose of examining how they impact all athletes. See Knoppers and McDonald (2010) for a more thorough review of this issue.

Steinfeldt and associates have used quantitative research with American football players to consistently connect higher gender role conflict (GRC) with higher identification as an athlete (Steinfeldt, Steinfeldt, England, & Speight, 2009; Steinfeldt & Steinfeldt, 2010; Steinfeldt & Steinfeldt, 2012). GRC is conceptualized as the negative
consequences of the socialization of male gender roles (O’Neil, 2008). It occurs when “rigid, sexist, or restrictive gender roles result in restriction, devaluation, or violation of others or self” (O’Neil, 2008, p. 362). Someone high in GRC would embrace the values associated with the stereotypical male, which would put him at greater risk of experiencing the negative consequences of the masculine role. Empirical research has linked higher GRC to negative outcomes such as difficulty in interpersonal relationships, lower attitudes toward seeking help, and increased depression and anxiety (O’Neil, 2008; Steinfeldt et al., 2009). Subscales of GRC include success, power, and competition; restrictive emotionality; restrictive affectionate behavior between men; and conflict between work and family relationships (O’Neil, 2008).

Steinfeldt et al. (2009) confirmed the hypothesis that higher levels of athletic identity would be linked with higher levels of GRC in a sample of 211 college football players. Results showed that players endorsing the highest level of athletic identity scored significantly higher on all subscales of GRC than other groups of players (Steinfeldt et al., 2009). This finding was replicated in a later study with 179 high school football players (Steinfeldt & Steinfeldt, 2010). These results suggest that the more an individual ascribes to the athlete role, the more they embrace stereotypic messages about masculinity.

Athletic identity has also been connected to a different construct related to masculinity labeled conformity to masculine norms (Steinfeldt & Steinfeldt, 2012). Conformity to masculine norms is described as conforming to American culture’s definition of masculinity (Steinfeldt & Steinfeldt, 2012). Norms linked to this construct include winning, emotional control, risk-taking, violence, power over women, playboy,
self-reliance, and primacy of work (Steinfeldt & Steinfeldt, 2012). Results from two studies with college football players (samples of 197 and 523) indicated that athletic identity was significantly correlated with higher conformity to masculine norms (Steinfeldt, Gilchrist, Halterman, Gormory, & Steinfeldt, 2011; Steinfeldt & Steinfeldt, 2012). Thus, as athletics become more primary to an individual’s identity, the more likely they will conform to behavior consistent with American culture’s view of masculinity.

Research shows that as females embrace aspects of the athlete culture, they may also embrace aspects of stereotypic masculinity. Results from a study comparing athletic identity and gender-role orientation in a sample of college students showed that women who scored high on athletic identity related more to masculine norms than women who scored low on athletic identity (Lantz & Schroeder, 1999). Thus, women whose identity was more entrenched in athletics identified more with norms associated with masculinity than norms associated with femininity (Chalabaev, Sarrazin, Fontayne, Boiche, & Clement-Guillotin, 2013; Lantz & Schroeder, 1999). Also, in a recent study that compared female athletes to female nonathletes, Steinfeldt, Zakrajsek, Carter, and Steinfeldt (2011) found that female athletes reported significantly higher levels of conformity to the masculine norms of winning and risk-taking. While future research needs to replicate and extend these findings, female athletes who embrace the athletic culture may also be more apt to embrace aspects of stereotypic masculinity.

Overall, this line of research suggests that being involved with athletics socializes athletes to conform to stereotypic masculine norms. This, in turn, may make athletes more susceptible to negative consequences often associated with masculinity. Two
consequences consistently linked with stereotypic masculinity include decreased amount of help-seeking for psychological issues and difficulties with interpersonal intimacy in relationships (Steinfeldt & Steinfeldt, 2012).

In general, help-seeking literature examines attitudes, beliefs, and behaviors that people take when they experience difficulties in their lives (Addis & Mahalik, 2003). *Difficulties* broadly refer to any problem individuals face could seek assistance for, including physical health issues and emotional problems. In a review of the research involving help-seeking and masculinity, Addis and Mahalik (2003) indicated that men have been consistently found to seek help less frequently than women regardless of age, nationality, and racial and ethnic background. Further, the authors noted that men are also less likely to seek professional help for emotional issues in the form of counseling and psychiatric services (Addis & Mahalik, 2003). Addis and Mahalik (2003) go on to suggest that men’s unwillingness to seek-help is a reason that men experience more negative physical and emotional consequences, including dying an average of seven years younger and having higher incidence of substance abuse difficulties than women.

Indeed, empirical research with athletes has established that as athletic identity increases, so too does one’s negative attitudes towards seeking psychological help. Quantitative results from aforementioned studies with American football players indicated that higher athletic identity is significantly related to higher levels of stigma towards seeking psychological help (Steinfeldt et al., 2009; Steinfeldt & Steinfeldt, 2012) as well as more negative attitudes towards seeking help (Steinfeldt & Steinfeldt, 2010). Researchers conjecture that high stigmatization of help-seeking among athletes may be
connected to the value of mental toughness in sport (Steinfeldt et al., 2009). Therefore, a person who seeks assistance for mental health needs would be viewed as mentally weak.

Another consequence linked with stereotypical masculinity is difficulty in interpersonal relationships. Researchers indicate that men’s relationship with themselves and others may suffer because of the masculine norm to restrict one’s emotional experience (Fischer & Good, 1997). Fischer and Good (1997) explain this process by commenting that “boys and men in a dominant White, North American culture may be socialized to derogate or ignore much of their emotional experiencing, such that they become less able to recognize and process many emotions as they occur” (p. 160). In support of this concept, a quantitative study with 208 college men found that subjects endorsing traditional masculine gender roles also experienced higher levels of alexithymia (difficulty identifying and describing one’s own feelings) and fear of intimacy (Fischer & Good, 1997).

This same process may be occurring for athletes as a consequence of sport culture. Sports’ value of playing through physical and emotional pain may create a person that is increasingly “numb” to the impact of their emotions. Therefore, individuals who hold their athletic identity as their primary identity would be expected to be more emotionally restricted and less emotionally aware.

Research connecting athletic identity and emotional restrictiveness is limited, and the results are mixed (Melendez, 2009-10; Steinfeldt & Steinfeldt, 2010; Steinfeldt et al., 2009). In a study using cluster analysis to examine relationships between athletic identity, GRC, and help-seeking stigma, results showed that the group of football players with the highest amount of athletic identity also had significantly higher restrictive
emotionality, a subscale of GRC, than the other two groups (Steinfeldt et al., 2009). However, higher athletic identity also corresponded to all other subscales of GRC, indicating that athletic identity may be more indicative of GRC in general rather than just restrictive emotionality (Steinfeldt et al., 2009). In a study exploring college athletes’ adjustment to college, higher athletic identity was significantly correlated to lower scores on a scale measuring one’s personal-emotional adjustment to college in a sample of male and female athletes (Melendez, 2009-10). The researcher suggested that this finding may indicate that identification with the athlete role may “negatively influence student-athletes’ intra-psychic states, degrees of psychological distress, and somatic complaint levels” (Melendez, 2009-10, p. 357). Finally, higher athletic identity was significantly correlated with subscales in GRC, but not restrictive emotionality, in a sample of high school football players (Steinfeldt & Steinfeldt, 2010). These results are not consistent with the Steinfeldt et al. (2009) study that connected the constructs. Though, the finding may be different due to a multitude of factors such a difference in sample age (high school vs. college athletes).

The fields of sport psychology, masculinity, and counseling would benefit from more focused research on how athletic identity impacts one’s emotions. Research to date has not examined how the specific context of athletics may affect the development, expression, and prevalence of emotional difficulties in athletes.

**Summary**

This section defined and reviewed the construct of athletic identity. Athletic identity is conceptualized as one of multiple identities held by an individual and is defined as the degree and exclusivity with which one identifies with the role of athlete
Positive and negative consequences of athletic identity were reviewed. Positive consequences were discussed both inside (e.g., commitment to training, better performance, higher sport participation) and outside (e.g., global feelings of competence, stable self-concept) of sport. Negative consequences were associated with identity foreclosure, which was, in turn, associated with difficulties with sport transitions and career maturity.

The theoretical and empirical connections between athletic identity and masculinity were also highlighted. Multiple studies were reviewed that supported the concept there may be a significant overlap between athlete norms and male role norms. Potential negative consequences of this overlap were detailed for athletes, including decreased help-seeking for psychological issues and decreased emotional competence.

This section also noted gaps in the athletic identity literature, especially related to help-seeking. Current athletic identity literature focuses primarily on help-seeking stigma and attitudes. Other areas of help-seeking are important to consider, including awareness of a problem for which to seek help (Rickwood et al., 2005). There has been no study of the effect of athletic identity on athletes' ability to recognize and identify that they have an emotional issue that would necessitate psychological help. Also, though the research indicates that athletic identity affects help-seeking in male athletes, there has been no study for female athletes. Lastly, athletic identity has primarily focused on help-seeking behavior of team-oriented sport (e.g., football). Sports that are individualistic in nature (e.g., golf, tennis) may create different patterns of psychological help-seeking.

As noted in this section, emotional competence has only been studied peripherally with respect to athletic identity. To date, there have been no studies that connect athletic
identity with an athlete’s level of emotional competence. The next section highlights the importance of emotional competence in one’s mental health, well-being, and interpersonal relationships. The proposed study intends to explore the connection between athletic identity and emotional competence to better understand the impact of athlete culture on one’s emotions.

**Emotional Competence**

This section will review the construct of emotional competence. First, emotional competence will be distinguished from emotional intelligence, and similarities and differences between the two constructs will be discussed. Next, research studies investigating emotional competence will be reviewed, with an emphasis on how the construct impacts human relationships. The section will conclude with a focused look at the links between emotional competence, athletics, and help-seeking.

**Emotional Intelligence and Emotional Competence**

The definitions of emotional intelligence (EI) and emotional competence (EC) have similar components, but their theoretical underpinnings differentiate them. This segment will first define each construct, and then discuss their differences.

The amount of EI research has grown in volume and complexity in the past 20 years, and some believe that the field is still in its infancy (e.g., Akerjordet & Severinsson, 2006). Interest in the construct results from its potential to provide insight into positive relationships and healthy living for individuals, families, businesses, and leaders. Empirical research has shown that EI is connected to important aspects of life as higher EI has been connected to higher well-being, better physical health, deeper social
relationships, increased professional success, and less deviant behavior (Brasseur, Gregoire, Bourdu, & Mikolajczak, 2013; Mayer, Salovey, & Caruso, 2004).

Despite the amount of EI investigation, researchers continue to disagree about its definition. EI theory and research has yielded multiple opinions about the definition (Bar-On, 2006; Brackett & Geher, 2006; Joseph & Newman, 2010; Mayer, et al., 2004). Definitions of EI are typically categorized as either ability or trait models (Joseph & Newman, 2010). Ability models place EI in a category with other intelligences (e.g., cognitive, social, practical), and they suggest that EI should correspond with cognitive ability (Joseph & Newman, 2010; Mayer et al., 2004). These models conceptualize the construct as a set of emotional abilities that can be considered “right” or “wrong.” (Mayer et al., 2004). In contrast, trait models, also known as mixed models, do not consider the construct a type of intelligence (Joseph & Newman, 2010). Instead, they define EI as a broader construct that includes personality traits and emotion-related characteristics that assist individuals to adapt in their environment (Bracket & Mayer, 2003; Joseph & Newman, 2010).

The most prominent ability model was proposed by Salovey and Mayer (1990), and has been subsequently refined (Mayer et al., 2004). Mayer et al. (2004) define EI as: the capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth. (p. 197)
Two important aspects of this definition include the authors’ conceptualization of EI as a type of intelligence and the multiple parts of the EI construct. Placing EI as a type of intelligence emphasizes that emotion ability, like cognitive ability, can be operationalized as correct or incorrect, and is thought of as a natural, within person trait (Mayer et al., 2004). Thus, there are “right” ways that emotions, or emotional information, can be utilized, and one’s EI is dependent on inborn abilities within themselves (Buckley & Saarni, 2006). The definition also separates EI into four distinct parts including perceiving emotions, using emotions to assist thought, understanding emotions, and managing emotions (Mayer et al., 2004). These parts, or branches, are conceptualized to be connected to a person’s personality (Mayer et al., 2004).

Trait models of EI were empirically driven as opposed to theory driven (Mikolajczak, 2009). Thus, proponents of this view researched the emotional attributes that led people to score high on measures of well-being, mental and physical health, and social support (Mikolajczak, 2009). One leading example of a trait model was developed by Bar-On (Bar-On, 2006). Bar-On conceptualized EI as a “cross-section of interrelated emotional and social competencies, skills, and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands” (p. 14). This model is measured using individual’s self-report of their effectiveness in five areas including intrapersonal, interpersonal, stress management, adaptability, and general mood (Bar-On, 2006). Each of these areas is composed of a combination of several skills. Examples of the skills that make up the interpersonal area include empathy, social responsibility, and interpersonal relationship (Bar-On, 2006).
Bar-On’s model is a good exemplar of trait models because of its self-report measurement of a variety of different characteristics that lead to positive life outcomes.

Both trait and ability models have faced criticisms (Brackett & Mayer, 2003; Meyer & Fletcher, 2007; Mikolajczak, 2009). Trait EI models have been subject to two primary critiques. First, trait models have been found to converge with preexisting constructs (Zeidner, Matthews, & Roberts, 2012). Studies exploring convergent, discriminant, and incremental validity of competing EI measures have found that aspects of trait measures are not distinguishable from personality traits, especially conscientiousness and neuroticism (Brackett & Mayer, 2003; Zeidner et al., 2012). This has led critics to suggest that trait models do not provide different information than existing constructs. Second, almost all trait EI measures rely on participant self-report to assess the construct. Detractors suggest that these measures may be subject to self-report bias, and, thus, their results are in fact subjective opinions about objective skills (Mikolajczak, 2009).

Ability models are criticized for the methods they use to judge the correctness of answers on their measures (Conte, 2005). Instead of self-report, ability EI measures utilize a model similar to tests of cognitive ability. That is, they ask specific questions about an emotional situation and then judge answers as right or wrong. Answers are judged by target scoring, consensus scoring, and expert scoring, each of which has its drawbacks (Conte, 2005). Despite these criticisms, the study of EI using both trait and ability models remains robust. And, both models have been found to have value in predicting positive outcomes (Mikolajczak, 2009).
In much of the literature, the terms of emotional intelligence and emotional competence are used interchangeably. This practice, along with the large amount of available research, makes it difficult to differentiate the terms. However, the theory behind EC creates a clear division between the constructs, and this division is critical for the proposed study.

EC is conceptualized as a set of skills that are influenced by context (Saarni, 2011). Saarni (2011) defines EC as the “demonstration of self-efficacy in emotion-eliciting social transactions” (p. 55). Self-efficacy refers to the confidence to utilize one’s skills to achieve their goals in emotional interactions. Saarni (2011) outlined eight skills involved in EC. The skills include: awareness of one’s own emotions; awareness of others’ emotions; being able to use apt emotional vocabulary given the context; capability for empathy and sympathy; understanding that internal emotional states and external emotional expression are separate; ability to cope with aversive emotions; awareness of how to communicate emotions in different types of relationships; and capability for emotional self-efficacy (Saarni, 2011). The skills are conceptualized to be interdependent with each other, which implies that as one skill develops so too do other skills. For example, as a person becomes more aware of their own emotions, they may increase their emotion vocabulary. Reciprocally, as their emotion vocabulary increases, they are better able to describe their inner emotional states thereby increasing their own emotional awareness.

With regard to context, EC is influenced by a social constructivist point-of-view (Buckley, Storino, & Saarni, 2003). This indicates that one’s emotional experience is influenced by their personal interpretation of an interaction, as well as the relevant
cultural cues (Buckley et al., 2003). Thus, if a person perceives another’s action as intentionally harmful, then the emotion of anger may arise. However, if a person perceives the same action as accidental, then the emotional experience may be completely different. Further, one’s perception is impacted by cultural standards. One’s culture dictates their expectations of what is normal or acceptable behavior. And, a person may be influenced by several cultures. Take, for example, an African American male athlete in the United States. The person’s emotional experience may be impacted by several factors including Western culture, African American culture, sports culture, and masculine culture. In essence, EC reflects a person’s skills in navigating the complexities of identity and context to achieve their emotional goals.

Saarni (2011) highlights three conceptual differences between EI and EC. First, EC is viewed as a set of interdependent skills that develop over the course of a lifetime. EI is viewed as a natural ability that is more or less stable throughout one’s life. Second, proponents of EC contend that one’s emotional experience cannot be separated from the context of the situation and the overall culture of the people involved. EI is conceptualized as transferrable across many situations regardless of context or culture. Finally, EC includes a component of personal integrity whereas EI does not. A person’s level of EC depends on their use of skills with good intentions while EI does not specify this as a requirement. Saarni (2011) explains that someone with a high level of EI may manipulate their environment with poor intentions for their own personal gain.

The current study fits better within the EC framework because it emphasizes the development of skills and the impact of culture. The conceptual basis of the study hinges on the idea that sport culture influences the emotional experience of athletes. As
explained above, EI primarily focuses on a set of inborn, mostly static abilities whereas EC posits that individuals have the ability to develop a set of skills. This difference is important as it implies that athletes’ emotional skills are malleable. Further, EC's acknowledges that context affects the development and expression of emotions. Within the EC model, sport culture is bound to impact an athlete’s point-of-view, especially if their athletic identity is central to their overall identity.

**Emotional Competence and Help-Seeking**

A review article by Rickwood et al. (2005) summarizes a line of research that consistently found that lower EC was related to lower intention to seek help for emotional problems. This section will review this research with a focus on how EC influences help-seeking intentions, the operationalization of the EC construct, and EC and multicultural variables.

Rickwood et al. (2005) explored EC in a series of studies by Ciarrochi and associates (Ciarrochi & Deane, 2001; Ciarrochi et al., 2002; Ciarrochi, & Scott, 2006; Ciarrochi, Scott, Deane, & Heaven, 2003; Ciarrochi, Wilson, Deane, & Rickwood, 2003). The studies consistently defined EC as “the ability to identify and describe emotions, the ability to understand emotions, and the ability to manage emotions in an effective and non-defensive manner” (Rickwood et al., 2005, p. 13). They specifically differentiated EC from EI by explaining their wish to avoid the misperception that they were researching a type of intelligence; rather, their intent was to focus on how emotion identification and use was a skill (Ciarrochi et al., 2002). Help-seeking intentions was assessed using the General Help-Seeking Questionnaire (GHSQ), a measure that explores
one’s willingness to seek help from a range of sources including, formal (e.g., psychologist), informal (e.g. friend), and no one (Ciarrochi & Deane, 2001).

In an early study, Ciarrochi and Deane (2001) assessed a sample of 300 Australian undergraduate students regarding their EC, hopelessness, and help-seeking intentions. The study found that higher levels of EC, especially subscales measuring managing emotions of others and managing self-relevant emotions, was significantly related to higher intentions to seek help from informal and formal sources for emotional problems and suicidal ideation (Ciarrochi & Deane, 2001). These results held true even after controlling for the potentially confounding variable of hopelessness (Ciarrochi & Deane, 2001).

Next, Ciarrochi et al. (2002) explored if social support mediated the relationship between EC and help-seeking in a sample of 137 Australian high school students. They hypothesized that lower EC would lead to lower amount and quality of social support, which, in turn, would lead to lower intention to seek help (Ciarrochi et al., 2002). Their results showed that social support partially mediated the relationship between EC and help-seeking, suggesting that social support could explain part of the relationship but not all of it (Ciarrochi et al., 2002). Results also replicated a strong association between lower EC with lower intention to seek help (Ciarrochi et al., 2002). Specifically, adolescents who were lowest in ability to identify, describe, and manage their emotions were found to be the most unlikely to seek help from informal sources and likely to seek help from no one (Ciarrochi et al., 2002; Rickwood et al., 2005).

The connection between low EC and low intention to seek help was again replicated in a sample of 217 Australian high school students (Ciarrochi, Wilson, et al.,
2003). The results found that participants with lower EC were least likely to seek help from informal sources and most likely to seek help from no one when facing emotional difficulties (Ciarrochi, Wilson, et al., 2003). Taken together, this line of research provides strong support for the positive relationship between EC and intentions to seek help.

Though the same definition of EC was used in each of the studies, the way the construct was measured evolved. EC was measured using multiple different measures including the Self-Report Emotional Competence (SREC), the Levels of Emotional Awareness (LEAS), the Toronto Alexithymia Scale (TAS-20), the Emotional Control Questionnaire (ECQ), and the Social Problem Solving Inventory for adolescents (SPSI-a) (Ciarrochi & Deane, 2001; Ciarrochi et al., 2002; Ciarrochi, & Scott, 2006; Ciarrochi, Scott, et al., 2003; Ciarrochi, Wilson, et al., 2003). The measures represent a myriad of different conceptualizations of EC and other constructs. For example, Ciarrochi et al. (2002) used the SREC (a trait EI measure), the LEAS (an ability EI measure), and the TAS-20 (a measure of a psychological condition known as alexithymia). Further, the three studies reviewed above did not use the same combination of measures. The lack of consistent use of measures made it difficult for results to be replicated and understood in relationship to past research.

Ciarrochi, Scott, et al. (2003) attempted to remedy this situation with a construct validation study. The study utilized multiple measures of EC, EI, and other constructs to gauge their ability to predict the occurrence of psychological health factors including depression, stress, anxiety, suicidal thoughts, hopelessness, life satisfaction, and social support (Ciarrochi, Scott, et al., 2003). Results indicated that the variables with the most
“pervasive” effects on measures of health were effective problem orientation, difficulty
describing emotion, and rumination measured by the SPSI-a, TAS-20, and ECQ,
respectively (Ciarrochi, Scott, et al., 2003, p. 1958). Effective problem orientation is a
measure of how one thinks about problems in living (Ciarrochi, Scott, et al., 2003). The
variable of ‘difficulty describing emotion’ assesses alexithymia, a condition in which one
is unable to identify and describe their emotions (Ciarrochi, Scott, et al., 2003).
Rumination describes one who has difficulty getting troubling thoughts out of their mind
(Ciarrochi, Scott, et al., 2003). These variables were combined to form an “optimal” set
of predictors for one’s EC.

This study allowed Ciarrochi and associates to match their definition of EC with
the consistent use of scales. The use of this combination of scales was used in a later
longitudinal study that measured EC and well-being (Ciarrochi & Scott, 2006). The
study compared scores of 163 Australian college students who completed measures at a
one-year interval. The results indicated that each of the three EC variables predicted
distinct facets of well-being over the interval (Ciarrochi & Scott, 2006). Lower effective
problem orientation predicted increases in depression, anxiety and stress (Ciarrochi &
Scott, 2006). Higher difficulty identifying and describing emotions predicted an increase
in anxiety and a decrease in positive mood (Ciarrochi & Scott, 2006). Higher rumination
predicted a decrease in positive affect (Ciarrochi & Scott, 2006).

In addition to the strong connection between EC and help-seeking, another
consistent finding by this line of research was that women were more emotionally aware
than men (Ciarrochi, Scott, et al., 2003; Ciarrochi, Wilson, et al., 2003; Rickwood et al.,
2005). While the researchers did not make any definitive conclusions about this result,
Rickwood et al. (2005) suggested that the cultural norm for men to not express emotions may stunt their emotional development. The researchers hypothesize about the process of this stunting by noting that: “boys often do not recognise psychological distress for what it is, and if they do, they deliberately attempt to deny it and avoid exposing their distress to others” (Rickwood et al., 2005, p. 24).

Other than gender, no other multicultural factors were explored. One glaring weakness of this line of research was that there was no reporting of race, ethnicity, sexuality, or socioeconomic status of the participants. As such, there was no exploration of the impact of these factors on EC. This criticism could be extended to the entire field of research examining EC and EI, as there were very few studies that examined multicultural differences in these constructs. Results from the little work done in this area suggest that race and other multicultural factors should not be ignored in the study of EC. For example, a quantitative research by Smith (2002) showed that participants of different races had significantly different scores on a measure of trait EI.

Ciarrochi and associates’ operationalization of EC is worth further comment. To date, the effort by this line of research to explore, define, and operationalize EC is one of very few attempts to develop the concept of EC with late adolescents and adults. Much work with the construct has focused on the development and social health of infants through elementary school children (see Denham, 2006 for a review). Despite Saarni’s pioneering work to define and develop EC, there has been no measure that operationalizes her conceptualization in an adult population. Further, the author’s emphasis on context has traditionally been difficult to pin down. Saarni (2001) references this difficulty by commenting that “a thorough analysis of what context really
entails for emotion communication remains a challenge to investigators and theoreticians alike” (p. 127). Consequently, though Ciarrochi, Scott, et al.’s (2003) version of EC does not capture all aspects of the construct, it does provide a good foundation for further exploration.

**Emotional Competence and Sports**

Exploration of emotion in sports literature has typically focused on athlete development, participation and performance (Meyer & Fletcher, 2007; Vallerand & Blanchard, 2000). This work has examined how emotions can be controlled to increase positive emotions (e.g., confidence, motivation) and decrease negative emotions (e.g., anger, doubt) to reach peak performance (Zizzi, Deaner, & Hirschhorn, 2003). There has been little exploration of how sport participation may affect one’s emotional experience off the field, and there have been no studies using the EC construct for this purpose. This section will review the work done in this area. This section will also briefly discuss sports research using the EI construct.

Though there has been no study of sports and emotions using EC, there has been work using specific dimensions of the construct. An example of this work includes a doctoral dissertation that compared athletes and nonathletes on the dimensions of emotional awareness, assertiveness, regulation of emotions, empathy, and interpersonal relationships (Schwartz, 2008). Schwartz (2008) used portions of the Bar-On EQ-I, a trait measure of EI, to compare a combined sample of 138 college students from a small, private university competing at a NCAA division I level. The sample of 69 athletes was mostly Caucasian (74%) and female (66%) from a myriad of sports including basketball, soccer, softball, track and field, golf, and tennis. The researcher’s hypothesis that athletes
would score lower than nonathletes on all dimensions was based in psychoanalytic theory; it was suggested that athletes would be less aware of their emotions because they posed a threat (e.g., to take energy away from other ego functions such as concentration) to athletic performance (Schwartz, 2008).

Contrary to the study’s hypothesis, the results showed no difference between athletes and nonathletes in the areas of emotional awareness, regulation of emotions, and assertiveness (Schwartz, 2008). Further, athletes had higher scores in the areas of empathy and interpersonal relationships, though not significantly so, than nonathletes (Schwartz, 2008).

At first glance, the results from this study contradict the hypothesis of the proposed study that athletes will be significantly less emotionally competent than nonathletes. However, a closer look at the study’s design may partially explain the results. Schwartz (2008) compares athlete status with the dichotomous tags of “athlete” or “nonathletes.” An athlete in the study was considered anyone who participated in a varsity athletic sport at the NCAA Division I institute where he solicited participants, whereas nonathletes were those who did not participate in a varsity athletic sport at the same school. As mentioned in the section on Athletic identity, this comparison strategy may not reflect the strength of one’s actual identification as an athlete (Cornelius, 1995). That is, a person who is was considered a nonathlete in Shwartz’s (2008) study may in fact identify strongly with the athlete role.

A recent study by Steinfeldt and Steinfeldt (2012) supports the concept that exploring the strength of one’s athletic identity is important to consider in this type of research. Their study examined the combination of athletic identity and conformity to
masculine norms in a sample of college football players. Their analysis revealed three distinct clusters that differed in athletic identity and conformity to masculine norms, with higher athletic identity not necessarily corresponding to higher conformity (Steinfeldt & Steinfeldt, 2012). These results suggest that there is a lot of diversity of the strength of athletes’ identification within sports culture, even within a homogenous group of athletes (i.e., college football players). Thus, the results of the Schwartz study may have provided different information if the construct of athletic identity was included.

Another study using relevant dimensions of EI to explore athletes’ emotions investigated the disordered eating patterns of judoists (Filaire, Larue, & Rouveix, 2011). The Bar-On EQ-I, a trait EI measure, was given along with measures evaluating eating attitudes and body image to compare a small sample of male judoists with a group of male nonathlete controls. Results indicated that both groups included individuals with disordered eating (DE) attitudes, and the athlete group had higher scores on EI than nonathletes (Filaire et al., 2011). Interestingly, when the athlete group was split into DE attitude and non-DE attitudes, the DE attitudes groups scored significantly lower on scales of emotional self-awareness and empathy (Filaire et al., 2011). In fact, athletes with DE attitudes scored the lowest of any group on emotional self-awareness and empathy (Filaire et al., 2011). While these results would be difficult to generalize due to the small sample size and other design issues, they do lend some support to the idea that the emotional experience of some athletes is impacted by sport culture.

A growing amount of research is also using EI to explore its usefulness in sport performance (Meyer & Fletcher, 2007). Measures of both ability and trait EI have been given to samples of athletes who play baseball (Zizzi et al., 2003), hockey (Perlini &
Halverson, 2006), basketball (Stough, Clements, Wallish, & Downey, 2009) and endurance running (Lane & Wilson, 2011). These studies typically attempt to match dimensions of EI to measures of sport performance. For example, Perlini and Halverson (2006) compared the trait EI scores of a small sample of NHL hockey players to their performance outcomes such as points scored and total professional games played. Meyer and Fletcher (2007) comment that this research has potential for being helpful to practitioners, coaches, and athletes, but there is “much work” that needs to be done (p. 10). They cite several current problems with EI research in sport such as lack of an agreed upon definition of EI, inconsistent use of EI models, and small sample sizes (Meyer & Fletcher, 2007).

**Summary**

This section began by defining and differentiating the constructs of EI and EC. The definitions of the constructs contained much overlap, especially their emphasis the factors of emotional self-awareness, emotional awareness of others, and the ability to use emotional information to facilitate social and emotional goals (Mayer et al., 2004; Saarni, 2011). EC was differentiated from EI by its emphases on a set of skills separate from the trait-like nature of intelligence, the importance of contextual cues, and personal integrity (Saarni, 2011).

Next, the section reviewed the connection between EC and help-seeking. A line of research was reviewed in which lower EC was correlated with lower intentions to seek help (Rickwood et al., 2005). This line of research also operationalized the EC construct in a specific manner for use with late adolescents and adults.
Last, studies considering athletes’ emotional experience within the context of sport were reviewed. With regard to EC and sports, it was noted that there have been no studies utilizing the EC construct with athletes. Connections between constructs similar to EC were explored, including EI.

Finally, the section revealed some gaps in the literature that the proposed study intends to examine. First, at the time of this review, the construct of EC has never been examined with athletes. The current study would be the first to examine the constructs together. Second, much of the previous work in this area has focused exclusively on how emotion-related constructs may be related to sport performance. The proposed study would add to the literature base exploring EC’s ability to predict athletes’ attitudes toward seeking help.

**Help-Seeking**

Help-seeking research focuses on the gap between those who experience significant emotional difficulties and those who actually take action to get help. One large empirical study found that only one-third of those diagnosed with a mental health disorder consulted with a health professional (Andrews, Issakidis, & Carter, 2001). Further, current literature routinely indicates that a majority of people prefer to handle their difficulties by themselves or with forms of informal help (e.g., family) (Vogel, Wester, Wei, & Boysen, 2005). This puts them at risk for going untreated, or receiving treatment that is either not helpful or harmful.

This section will examine the help-seeking behaviors of college student-athletes, who are generally considered to underutilize professional mental health care (Lopez & Levy, 2013). The section will begin by defining and discussing different types of help-
seeking research. Then, empirical research on one area of help-seeking, help-seeking attitudes, will be reviewed with a focus on factors that have been found to facilitate and hinder one’s behavior to seek help. Lastly, research on the help-seeking attitudes of collegiate student-athletes will be explored. Gaps in the current literature will be identified.

Definition

Rickwood et al. (2005) considered help-seeking a general term that refers to any action or communication with another to get support for a problem. Support may take the form of advice, information, understanding, and treatment. Help may be sought from informal sources, such as family, friends, significant others, or formal sources, such as psychologists, counselors, clergy, medical doctors, or teachers (Rickwood et al., 2005).

Help-seeking for psychological or emotional problems is generally measured in three different ways: attitudes, intentions, and behaviors (Uffelman, 2005). Help-seeking attitudes describe one’s opinion about seeking help, and are informed through expectations about the process and outcomes of counseling (Vogel, et al., 2007). Help-seeking intentions assess one’s future intention to seek help, and typically explore how the source of help (formal vs. informal) and type of problem (e.g., emotional, academic, substance abuse) affect one’s plan to seek assistance (Rickwood et al., 2005). Help-seeking behaviors explore the factors that differentiate those that have sought help and those that have not (Uffleman, 2005).

The theory of reasoned action (TRA), developed by Ajzen and Fisbein (1980), informs the structural model of how help-seeking attitudes, intentions, and behaviors fit together (Vogel et al., 2005). TRA suggests that a person’s behaviors are at the end of a
decision-making process that includes one’s intentions to act on the behavior and their attitudes about the outcome of the behavior. Said differently, a person’s attitudes about how a behavior will help or harm them will affect their intention to engage in the behavior, which in turn will affect them actually engaging in the behavior (Vogel et al., 2005). In the case of help-seeking research, if one has positive attitudes toward help-seeking, then they will have higher intentions to seek help. And, higher intentions to seek help is a precursor for actually seeking help.

Several empirical studies have tested this connection of help-seeking variables (e.g., Vogel et al., 2007; Vogel et al., 2005) using structural equation modeling. For example, Vogel et al. (2005) hypothesized that the connection between factors found to affect one’s expectation of counseling (e.g., social stigma) and one’s intention to seek counseling would be mediated by their help-seeking attitudes. In other words, a person who expresses a high amount of stigma towards going to counseling will have lower attitudes toward counseling. This, sequentially, will lead to lower intention to actually engage in counseling services. The authors’ hypothesis was confirmed, which provided evidence that help-seeking attitudes affect intentions to seek help which affect help-seeking behaviors.

Help-Seeking Attitudes

The current study will utilize help-seeking attitudes to investigate the possible effects of athletic identity and emotional competence on potential help-seeking. Attitudes toward seeking professional help have been found to be a consistent predictor of actual help-seeking (Nam et al., 2013). Multiple things have been found to impact one’s
attitudes towards help-seeking including psychological factors and demographic variables. This section will provide a review of the relevant research.

Many psychological factors have been found to impact one’s attitudes toward help-seeking. In a recent meta-analysis of help-seeking literature, Nam et al. (2013) considered the psychological factors that influence help-seeking attitudes. The researchers analyzed 19 studies, including a total of 7,397 participants, which used a particular criterion measure of help-seeking attitude, the same criterion measure used in the current study. Results were organized by approach and avoidance factors. Approach factors were those that led to better attitudes toward professional psychological help, whereas avoidance factors were those that led to negative attitudes (Nam et al., 2013).

Approach factors included anticipated benefits, self-disclosure, and social support (Nam et al., 2013). Results from the meta-analysis indicated significant, positive relationships between these approach factors and help-seeking attitudes. The construct of anticipated benefits measures one’s view of the value of expressing personal information to a counselor. Self-disclosure is the level of comfort in divulging private information, such as thoughts, beliefs, and feelings, to another person. Social support assesses one’s perception of their reliable connections with others. Thus, as these approach factors increased, so too did a person’s positive attitudes for professional psychological help. Anticipated benefits had a large effect size, while self-disclosure and social support had medium and small effect sizes, respectively (Nam et al., 2013).

Avoidance factors included self-stigma, public stigma, anticipated risks, self-concealment, and depression, each of which had a significant, negative relationships with help-seeking attitudes (Nam et al., 2013). Self-stigma measures a person’s perception
that they are socially unacceptable if they seek help (Vogel et al., 2007). Public stigma measures the perception held by society that one is deficient if they seek help (Vogel et al., 2007). Anticipated risks assesses one’s view of the dangers or disclosing private information to a professional (Nam et al., 2013). Self-concealment is a “predisposition to hide distressing and potentially embarrassing personal information” (Cepeda-Benito & Short, 1998, p. 58). Last, depression was defined for the analysis as a state in which consistent depressed mood and/or loss of interest occurs with other physical and mental indicators (Nam et al., 2013). Self-stigma had a large effect size. Public stigma and anticipated risk had medium effect sizes. Self-concealment and depression had small effect sizes.

Another psychological factor found to impact help-seeking attitudes is emotional openness (Komiya, Good, & Sherrod, 2000). Emotional openness is conceptualized as a level of comfort with emotions with a tendency to seek emotional experiences (Komiya et al., 2000). Komiya et al. (2000) studied whether a person’s emotional openness influenced their attitudes toward professional help-seeking in a sample of 311 undergraduate students. They found that increased emotional openness predicted more positive attitudes towards help seeking (Komiya et al., 2000). These findings were replicated in a sample of 500 English-speaking Caribbean college students (Greenidge & Daire, 2010). Emotional expression is mentioned here due to its connection to emotional competence. While the connection between EC and help-seeking intentions has significant empirical support (e.g., Ciarrochi & Deane, 2001; Ciarrochi et al., 2002), few studies were found that investigated the connection between the constructs. Emotional
openness is similar to EC in its focus on emotional experiences. Results from the mentioned studies suggest that EC may be an important factor for help-seeking attitudes.

Demographic variables have also been found to affect help-seeking attitudes (Gloria, Hird, & Navarro, 2001; Nam et al., 2010). In another recent meta-analysis, Nam et al. (2010) provided empirical support that demographic variables such as gender and race affect help-seeking attitudes. The analysis examined 14 studies with a total of 5,713 participants, and all studies included Caucasian American, Asian American, or Asian individuals (Nam et al., 2010). With regard to gender, the results contributed more support for the general belief that gender is a significant variable related to help-seeking attitudes. It was found that female participants held more positive attitudes toward help-seeking across all races included in the sample (Nam et al., 2010). These results replicate the findings of many empirical studies that women have more positive attitudes toward help-seeking than men (e.g. Gloria et al., 2001).

With regard to race, results from the meta-analysis indicated that Caucasian Americans had more favorable attitudes towards seeking professional psychological help than Asian Americans and Asians (Nam et al., 2010). This result replicates previous findings from empirical work with Asian groups (e.g., Masuda, Suzumura, Beauchamp, Howells, & Clay, 2005), as well as other racial groups (e.g., Gloria et al., 2001; Sheu & Sedlacek, 2004) that there are significant differences between the attitudes towards help-seeking for different racial groups. In addition to race, the meta-analysis supported the concept that acculturation to Western values influences help-seeking attitudes. Specifically, the study found that the Asian Americans’ attitudes toward professional help were significantly lower than Caucasian Americans’ attitudes and significantly higher
than the Asians’ attitudes; there were in the middle (Nam et al., 2010). Thus, the authors suggested, “assimilation into Western culture is related to more positive attitudes toward seeking help” (Nam et al., 2010, p. 115).

This review of the help-seeking attitudes literature highlighted recent research of the construct. It identified psychological factors and demographic factors that have been found to impact one’s help-seeking attitudes. One noted gap in attitudes research is the lack of exploration in how one’s emotional competence affects their attitudes toward seeking professional help.

The current study was intended to consider this gap more closely to potentially explain why athletes underutilize professional counseling services. The premise for this hypothesis is that athletic culture may decrease an athlete’s EC. And, a person lower in EC would not see the value in seeking help for emotional problems. Specifically, a person who has difficulty identifying and describing their emotions may be less likely to anticipate any benefit from going to counseling where their emotions will be a focus. Thus, lower attitudes toward seeking professional help would translate into lower actual help-seeking behavior.

**Help-Seeking and Collegiate Athletes**

College student-athletes often face different demands than non-athletes, which create unique barriers to seeking professional psychological help. A majority of help-seeking research with athletes has been exploratory examination of their opinions about seeking psychological help (e.g. Lopez & Levy, 2013; Watson, 2006). Few studies have done empirical research to connect specific psychological and demographic factors to constructs related to actual help-seeking behavior, such as help-seeking attitudes and
intentions. This section will first review research that considers the factors that influence help-seeking attitudes and intentions. Then, other help-seeking research that highlights the opinions of athletes will be surveyed.

A quantitative study by Watson (2005) compared help-seeking attitudes toward professional psychological help between athletes and nonathletes. Participants included 135 student-athletes from a NCAA Division I Southeastern university, and 132 nonathletes from the same university (Watson, 2005). As expected, results indicated that athletes had significantly more negative views toward counseling than their nonathlete peers (Watson, 2005). These results provide empirical support that athletes have a more negative view of professional psychological help than nonathletes.

Another study connecting factors affecting help seeking has been previously reviewed in the athletic identity section of this literature summary (i.e., Steinfeldt & Steinfeldt, 2010). Relevant results will again be reviewed here. Briefly, this work primarily considered the impact of gender role conflict (GRC) and athletic identity on high school football players’ attitudes towards seeking professional psychological help (Steinfeldt & Steinfeldt, 2010). Results from a hierarchical regression analysis indicated that only one GRC factor, restrictive emotionality, and one demographic factor, year in school, predicted a small amount of variance (18%) for help-seeking attitudes (Steinfeldt & Steinfeldt, 2010). Restricted emotionality is a measure of what males are taught to refrain from outward expressions of their emotions. Thus, the results suggested that athletes who restrict emotions have more negative attitudes towards help-seeking. However, the researchers cautioned that the low amount of predicted variance and
convenience sampling may limit the generizability of the results (Steinfeldt & Steinfeldt, 2010).

Other work explored athletes’ views about help-seeking barriers. In a recent study investigating athletes’ perceived barriers to seeking counseling, Lopez and Levy (2013) noted two primary barriers including lack of time and fear of stigma for using services. Both of these barriers are supported by previous research with athletes. Lopez and Levy’s (2013) finding that lack of time impedes their ability to seek help replicated an earlier finding by Watson (2006), which found that athletes endorsed time as a reason they would not seek counseling support. This is a reasonable concern as athletes’ sport-related time commitments (e.g., practice, games, meetings, travel, and health maintenance) can average more than 30 hours per week during their athletic season (Simons, Bosworth, Fujita, & Jensen, 2007). With the addition of academic demands, it makes sense that athletes may struggle to find time to utilize counseling services, especially if services adhere to regular business hours (Lopez & Levy, 2013; Ward, Sandstedt, Cox, & Beck, 2005).

The next barrier, stigma, is recognized as a significant factor that affects help-seeking in the general population. However, contextual factors for college athletes, such as higher visibility and negative attitudes towards athletes, may exacerbate the stigma they experience (Watson, 2006; Parham, 1993). Student-athletes are often highly visible to others on campus due to their accomplishments, reputation, or, in some cases, their physical size. Seeking services from counseling centers may mean losing the confidentiality and anonymity that counseling typically offers non-athlete students (Watson, 2006). Further, college athletes are often perceived negatively by faculty and
non-athletes. Common assumptions about athletes are that they receive special treatment, are not academically motivated, and are incompetent (i.e., “dumb jock”) (Simons et al., 2007). These assumptions may prevent them from seeking services outside of a safe environment, such as the athletic department.

Qualitative and survey research with athletes matches and extends this quantitative work. One recent qualitative study reported the results of three focus groups with a total of 15 elite Australian athletes who ranged in age from 16 to 23-years-old (Gulliver, Griffiths, & Christensen, 2012). Discussions were based on pre-determined topics from help-seeking literature, with space to allow other topics to be discussed. Researchers noted that the primary topic discussed by athletes was stigma (Gulliver et al., 2012). Another main topic was the athletes’ lack of knowledge about the symptoms of mental disorders (Gulliver et al., 2012). It was noted that athletes from the study found it “difficult to determine the difference between normal feelings of tiredness and sadness associated with their sport, and symptoms of a mental disorder” (Gulliver et al., 2012, p. 166).

The idea that athletes were unsure if they had a mental health problem was also noted in survey research with a sample of 1,617 retired professional football players (Schwenk, Gorenflo, Dopp, & Hipple, 2007). Results showed that those players who endorsed moderate to severe depression were 4.2 times as likely to report that they did not recognize that symptoms of depression were important, rather they believed them to be just a “part of life” (Schwenk et al., 2007, p. 601). These results suggest that education about symptoms of common mental health disorders may be important for athletes. Also, they may be signals that athletes are not as emotionally competent as
others. Individuals who cannot differentiate feelings of being physically tired from symptoms of depression and anxiety may be the same individuals who have difficulty identifying their emotions.

Overall, this section has highlighted several aspects of help-seeking research with athletes. First, there is little research connecting psychological and demographic factors to help-seeking attitudes and intentions. This connection is important because it can create a better understanding of how these factors are impacting actual help-seeking behavior for athletes. The few studies that have examined this connection suggest that athletes have more negative attitudes toward help-seeking than nonathletes, and athletes who restrict their emotion may be more prone to having negative attitudes. Second, athletes have consistently identified stigma, lack of time, and lack of knowledge about mental health symptoms as barriers to seeking help. The concept of stigma is also important due to its overlap with the larger help-seeking attitudes literature. Future work with athletes should include these topics when studying help-seeking.

Summary

This section defined and reviewed relevant literature about help-seeking for professional psychological services. Different areas of help-seeking were identified and connected. Specifically, help-seeking is split into three areas including attitudes, intentions, and behaviors. Help-seeking attitudes have been found to affect one’s intention to seek help, which, in turn affects one’s actual help-seeking behaviors.

The next section investigated literature on help-seeking attitudes. Help-seeking attitudes are influenced by psychological factors including anticipated benefits, self-disclosure, social support, stigma, anticipated risks, self-concealment, and depression.
Demographic factors were also found to impact help-seeking attitudes, especially gender and race. One notable gap in this literature was the absence of empirical studies exploring the connection between emotional competence and help-seeking attitudes.

Last, the help-seeking attitudes of college-student athletes was explored. Research from this section indicated that athletes have more negative attitudes toward seeking help. Also, three barriers were identified, including lack of time, stigma, and lack of knowledge about mental health symptoms. One limitation of this literature was emphasized. Specifically, there is a paucity of empirical studies connecting athletes’ psychological and demographic factors to help-seeking attitudes and intentions.

**Summary of Chapter II**

This literature review summarized and integrated research from four areas: athlete culture, athletic identity, emotional competence, and help-seeking. These topics were examined with a general focus of how each may impact the underutilization of counseling services among college student-athletes. This section will briefly review each section, as well as consider how each section informs the goals of this current study.

The first section of this chapter explored the role of sports culture on how athletes are socialized to express emotion. The section primarily surveyed qualitative research that provided support for the idea that athletes face negative consequences for expressing physical and/or emotional vulnerability. This researcher suggested that the strong messages athletes receive about showing “weakness” may have negative consequences on their physical and mental health, as well as their interpersonal relationships.

The next section reviewed the construct of athletic identity, defined as the degree to which an athlete identifies with the athlete role (Brewer et al., 1993). After general
consequences of the construct were identified, a line of quantitative research was examined which provided a link between athletic identity and adherence to male gender role norms. That is, the more a person exclusively identifies as an athlete, the greater they embrace behaviors associated with masculinity. Specific consequences of this link were noted, including increased denigration of professional help-seeking and increased emotional restrictiveness. Overall, this section revealed a paucity of literature connecting athletic identity, emotional restrictiveness, and help-seeking. The current study attempted to fill part of the gap by exploring how athletic identity and one aspect of emotional restrictiveness, emotional competence, helps predict attitudes toward help-seeking.

The subsequent section considered emotional competence (EC). A portion of the section was dedicated to defining EC, and differentiating it from the closely related concept of emotional intelligence (EI). EC was said to be different from EI due to its focus on malleable skills rather than permanent traits, as well as its consideration of context. Then, a line of quantitative research was highlighted that operationalized EC and connected it to help-seeking intentions. Results from the research showed a particularly strong, positive link between EC and one’s intention to seek help. The section lastly revealed that there was no research connecting EC and athletes. The work of other emotion-related constructs with athletes was noted, including quantitative research with EI. Overall, this section provided a link between EC and help-seeking, and accentuated the lack of research between athletic identity and EC.

The final section examined the field of help-seeking for professional psychological help. After help-seeking was defined, the section focused on one part of
the literature base, help-seeking attitudes. Relevant quantitative research on help-seeking attitudes was reviewed, including a discussion about factors that made individuals more likely to approach or avoid professional psychological help. Then, the connection between help-seeking with athletes was explored. Previous research in this area revealed several barriers for athletes to seek professional help, including stigma, time, and lack of understanding of mental health issues. Overall, this section emphasized that help-seeking is impacted by many factors, including one’s ability to express their emotions. The section also highlighted the need to include stigma when considering help-seeking attitudes. Stigma was found to be important for the general population as well as specifically for athletes.

Taken together, review of the literature suggests that athletic identity and EC may significantly influence athletes’ attitudes toward seeking professional psychological help. Additionally, the review revealed that male gender role socialization, stigma, and demographic factors also may impact athletes’ decision to seek help. The intent of the current study was to better understand how these factors affect help-seeking, and to understand what role EC may have in predicting and understanding athletes’ attitudes toward seeking help.
CHAPTER III

METHOD

This chapter is divided into the following sections: procedure, instrumentation, data analysis, and summary. The procedure section describes the participants that were recruited for the study as well as the method used to recruit them. The instrumentation section discusses the instruments used in the study and describes their psychometric properties. The data analysis section discusses the data analyses methods and how the data were analyzed with the use of hierarchical multiple regression. Finally, the chapter concludes with a short summary.

Research Participants

Participants for this study (approved by the Human Subjects Institutional Review Board: see Appendix A) were student-athletes at a small, private Midwestern college in the United States. In order to qualify for the study, the participants were required to have competed at the varsity level of any sport at the NCAA Division III level within the last year. This study specifically sought Division III athletes because it is expected that these student-athletes have a greater range of attitudes about the salience of their athletic identity than Division I or II athletes. This expectation comes from the fact that athletic scholarships are not offered at NCAA Division III, and most Division III athletes do not seek a professional athletic career after college. Thus, student-athletes at the Division III level were expected to have a greater variability of athletic identity than those at higher levels of competition because they are less dependent on athletics for their livelihood. Recruiting participants with greater variability of athletic identity was consistent with the researcher’s intention to study the help-seeking attitudes of student-athletes along a
continuum of athletic identity scores. With regard to recruiting participants in any Division III sport, previous studies exploring similar constructs (e.g., Steinfeldt & Steinfeldt, 2012) focused on only one sport at a time (i.e., football). The current study intended to obtain results that would be more generalizable to all athletes at the Division III level of competition.

A total of 168 survey packets were handed out and all were returned. Twenty-four packets were unusable due to insufficient data. The remaining 144 student-athletes ranged in age from 18 to 22 years old ($M = 19.48$, $SD = 1.03$). Twelve participants did not report their age. There were 94 (65.3%) male and 50 (34.7%) female participants. A total of 72.2% ($n = 104$) reported being Caucasian/European American, 9.7% ($n = 14$) African American, 4.9% ($n = 7$) Asian American, 4.9% ($n = 7$) Biracial/Multiracial, 4.2% ($n = 6$) Latino/a, 0.7% ($n = 1$) Middle Eastern descent, 0.7% ($n = 1$) Native American, and 2.8% ($n = 4$) other race/ethnicity. The participants reported playing the following sports: football ($n = 56$), baseball ($n = 17$), women’s lacrosse ($n = 12$), softball ($n = 12$), women’s tennis ($n = 12$), men’s tennis ($n = 11$), women’s soccer ($n = 6$), men’s swimming and diving ($n = 6$), women’s swimming and diving ($n = 4$), men’s basketball ($n = 2$), women’s basketball ($n = 2$), women’s cross country ($n = 2$), men’s cross country ($n = 1$), and men’s golf ($n = 1$). With regard to year in school, 44.4% ($n = 64$) reported being freshman, 33.3% ($n = 48$) sophomore, 14.6% ($n = 21$) junior, and 6.9% ($n = 10$) senior. One participant did not report their year in school.

**Procedure**

The recruitment of participants consisted of first gaining permission of the athletic director through email and mail contact (see Appendices B and C) to obtain access to
their coaches and student-athletes. With assistance of the athletic director, meetings were coordinated with groups of student-athletes. The researcher met with student-athletes in three different settings within the athletic department, including a meeting with a majority of the student-athletes from an athletic season (i.e., spring sports), a meeting of football players prior to a practice, and student-athletes waiting to complete athletic physicals. In meetings with the student-athletes, a script (see Appendix D) was read that informed potential participants of the general nature and reason for the study, the estimated time needed to complete the packet, and the anonymous nature of the study. All willing participants were provided with a packet containing a number of materials, including an anonymous survey consent form (see Appendix E), a demographic questionnaire (see Appendix F) and a battery of measures (see Instrumentation section). Participants were then asked to return the packets, completed or uncompleted, to a designated box placed at the back of the room.

**Instrumentation**

**Athletic Identity Measurement Scale**

The Athletic Measurement Scale (AIMS) assesses the strength and exclusivity that a person identifies with the athlete role (Brewer et al., 1993). This scale was used to represent the construct of Athletic Identity.

The 7-item questionnaire utilizes a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Although originally developed as a unidimensional tool, Brewer and Cornelius (2001) identified three first-order dimensions (i.e., social identity, exclusivity, and negative affectivity) that were subordinate to a higher-order dimension of
athletic identity. These results were replicated in a confirmatory factor analysis with a sample of 362 NCAA Division I and Division II athletes (Visek et al., 2008).

The social identity dimension reflects one’s social identification as an athlete, and includes questions such as “Most of my friends are athletes” (Ryska, 2002). The exclusivity dimension reflects how central the athletic role is in one’s life, and includes questions such as “Sport is the most important part of my life” (Ryska, 2002). The negative affectivity dimension reflects one’s emotional response to unfavorable outcomes in sport and includes questions such as “I would be very depressed if I were injured and could not compete in sport” (Ryska, 2002). The current study used the global score of athletic identity, which ranges from 7 to 49. Higher scores indicate stronger identification with the athlete role (Visek et al., 2008). Cronbach’s alpha for the AIMS in the current study was 0.72.

With regard to construct validity, the AIMS correlated significantly to measures of athletic involvement and importance of sport competence (Brewer et al., 1993). In a sample that included 243 college students, the AIMS was found to have high internal consistency (alphas ranged between 0.87 and 0.93) and high test-retest reliability (0.89) over a 14-day period.

**Attitudes Toward Seeking Professional Psychological Help-Short Form**

The Attitudes Toward Seeking Professional Psychological Help-Short Form (ATSPPHS-SF) is a 10-item shortened version of the original 29-item Attitudes Toward Seeking Professional Help Scale (Fischer & Farina, 1995; Fischer & Turner, 1970). This scale was be used to represent the criterion measure of Help-Seeking Attitudes in this study.
The measure assesses help-seeking attitudes using a 4-point Likert scale that ranges from 0 (disagree) to 3 (agree). Five items address positive help-seeking attitudes, and 5 items address negative help-seeking attitudes. An example of a positive item includes “I would want to get psychological help if I were worried or upset for a long period of time”; an example of a negative item includes “A person should work out his or her own problems; getting psychological counseling would be a last resort.” Items addressing negative attitudes are reverse coded. Overall scores range from 0 to 30, with higher scores reflecting more positive attitudes toward seeking professional psychological help. Cronbach’s alpha for the ATSPPHS-SF in the current study was 0.82.

The ATSPPHS-SF was developed to offer a shorter, less obvious measure of help-seeking attitudes. The short form had a high correlation with the original version (r = .87) (Fischer & Farina, 1995), and was shown to be internally consistent in samples of traditional age college students (alpha = .77) and adult medical patients (alpha = .78) (Elhai, Schweinle, & Anderson, 2008). Both samples were predominantly Caucasian. Test-retest reliability was .80 over a one-month interval (Fischer & Farina, 1995). When tested for construct validity, the ATSPPHS-SF significantly correlated in a negative direction with a measure of help-seeking stigma, and did not have a significant relationship with measures of mental health (Elhai et al., 2008). These results indicate that positive attitudes toward seeking professional help were associated with lower amounts of stigma, as anticipated by the authors. They also show that the ATSPPHS-SF did not correlate with measures of mental illness, indicating that negative help-seeking attitudes were separate from psychopathology (Elhai et al., 2008). Finally, the
ATSSPPHS-SF was found to be significantly associated with higher intentions to seek professional help and higher amounts of recent counseling visits (Elhai et al., 2008). These expected associations lend support to criterion validity of the measure.

The ATSSPPHS was used to compare a sample of 135 NCAA Division IA student-athletes to a sample of 132 college student nonathletes (Watson, 2005). Watson reported that athletes had significantly lower attitudes toward seeking help than nonathletes. However, internal consistency data was not reported by the author.

**Toronto Alexithymia Scale**

The Toronto Alexithymia Scale (TAS-20) measures the extent to which individuals struggle to identify and describe feelings, and focus their thoughts externally rather than on their internal feelings (Bagby, Taylor, & Parker, 1994). This scale was used to represent the Alexithymia variable of the Emotional Competence construct.

The 20-item self-report measure asks participants to rate themselves on a 5-point Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree). The TAS-20 has three subscales: Difficulty Identifying Feelings (DIF); Difficulty Describing Feelings (DDF); and Externally Oriented Thinking (EOT) (Taylor, Bagby, & Luminet, 2000). The DIF is a 7-item subscale that measures the capability to identify feelings and differentiate them from bodily sensations. A sample item from this subscale includes “I have feelings that I can’t quite identify” (Parker, Taylor, & Bagby, 2003). The DDF is a 5-item subscale that assesses the capability to describe one’s feelings to others. An example item from this scale is “It is difficult for me to find the right words for my feelings” (Parker et al., 2003). The EOT is an 8-item subscale that measures externally oriented thinking. This subscale includes items such as “I prefer talking to people about
their daily activities rather than their feelings” (Parker et al., 2003). The current study used the overall score of the TAS-20, which can range from 20 to 80. High scores on the questionnaire indicate a higher amount of alexithymia. Cronbach’s alpha for the TAS-20 in the current study was 0.85.

The TAS-20 has been found to have good internal consistency across samples of 401 college students (alpha = .80) and psychiatric outpatient clients (alpha = .83) (Bagby, Parker, & Taylor, 1994). Race and ethnicity were not reported in either of the samples. Test-retest reliability was .77 over a three-week interval with a sample of 72 college students (Bagby, Parker, et al., 1994). When tested for construct validity, the TAS-20 was significantly negatively related to measures of psychological mindedness and need for cognition (Bagby, Parker, et al., 1994). These findings suggest that as a person rates higher in alexithymia they are less willing to talk about and access their feelings and have a lower tendency to engage in extended processing of cognitions. When compared with a measure of personality characteristics, the TAS-20 significantly correlated to openness to feelings in a negative direction and correlated to neuroticism and vulnerability to stress in a positive direction (Bagby, Taylor, et al., 1994). The TAS-20 also did not significantly relate to agreeableness or conscientiousness (Bagby, Taylor, et al., 1994). Each of these relationships to personality characteristics was anticipated by the researchers and supported the validity of the measure. Lastly, the TAS-20 correlated significantly with a psychosomatic measure that has been used in the past to assess alexithymia (Bagby, Taylor, et al., 1994).

Though initial validation studies of the TAS-20 did not report race/ethnicity statistics, the measure has since been validated with samples from many different
race/ethnicities in multiple cultures and languages. Taylor, Bagby, and Parker (2003) report that the TAS-20 has been translated into 18 different languages and its factor structure has been examined in 19 different cultural populations. The authors indicate that results from confirmatory factor analysis provide “strong support” that the measure’s three factor structure is generalizable across most cultures and translations. Taylor et al. (2003) reported that estimates for internal reliability were acceptable (alpha ≥ .70) for the reported studies (n = 36) with only one exception, a sample of students from Poland. These results suggest that results from the TAS-20 will be reliable and valid across diverse populations.

The TAS-20 has been used sparingly with athletes. The measure has been used in several studies with extreme sport athletes (e.g., skydivers, mountaineers, ocean rowers) with the purpose of exploring if alexithymia may contribute to these individuals’ desire to participate in dangerous sports (Woodman, Hardy, Barlow, & Le Scanff, 2010; Woodman, Huggins, Le Scanff, & Cazenave, 2009). Extreme sport athletes were found to be significantly more alexithymic than controls, and alexithymic athletes experienced anxiety differently than non-alexithymic athletes (Woodman et al., 2010; Woodman et al., 2009). Researchers postulated that these results suggest that alexithymic individuals are drawn to dangerous sports because they provide “an attractive perceived respite from emotional difficulty in other life domains” (Woodman et al., 2010). Overall, the amount of studies using the TAS-20 is quite low, and the current study attempted to add to the limited amount of data reported that studied athletes and alexithymia.
Social Problem Solving Inventory for Adolescents

The Social Problem Solving Inventory for Adolescents (SPSI-A) is a 45-item self-report measure that assesses one’s intrapersonal and interpersonal problem-solving behaviors (Frauenknecht & Black, 1995). A section of this scale was used to represent the Problem Orientation variable of the Emotional Competence construct.

The scale was modeled after the definition and theoretical underpinnings of the Social Problem-Solving Inventory-Revised (SPSI-R; D’Zurila & Nezu, 1990), but was modified for use with adolescents. The SPSI-A evaluates problem-solving behaviors with three dimensions including problem orientation scale, problem-solving skills scale, and automatic processes scale. The measure uses a 5-point Likert scale that ranges from 0 (not at all true of me) to 4 (extremely true of me). Scores are computed by summing the numerical responses for each item and then dividing them by the total number of items (to achieve a global score) or the number of items in each subscale (to achieve a subscale score). Higher scores reflect greater self-perception of problem-solving skills.

The current study utilized the 9-item Problem Orientation Scale (POS). The POS rates effective problem solving, which includes skills of viewing problems as challenges rather than threats, self-efficacy in one’s ability to solve problems, and exerting effort to solving problems rather than avoiding them (Ciarrochi, Scott, et al., 2003). Examples of items from the measure include “Complex problems make me very angry or upset” and “I avoid dealing with problems in my life.” After negative items are reverse scored, the numerical values of the questions are summed and divided by nine. Higher scores reflect more effective problem orientation. Cronbach’s alpha for the POS in the current study was 0.79.
The POS has been found to have good internal consistency in a sample of 308 adolescent high school students (alpha = .93), and good test-retest reliability ($r = .78$) over a two-week interval (Frauenknecht & Black, 1995). The POS was also found to be internally consistent with a study of 330 adolescents and adults (alpha = .84) (Ciarrochi, Scott, et al., 2003). However, these results may not be generalizable for individuals who are not Caucasian as the sample of high school students was 97.5% Caucasian and demographic information was not provided for the second sample. Construct validity was supported by a significant positive correlation between the POS and another measure of problem solving ($r = .63$), and a significant negative correlation with a measure of personal problems ($r = .45$) (Frauenknecht & Black, 1995).

**Inhibition Rumination Scale**

The Inhibition Rumination Scale (I-RS) measures two factors of emotional response style, emotional inhibition and emotional rumination (Roger, Guarino de Scremin, Borril, & Forbes, 2011). A portion of this scale was used to represent the Rumination variable of the Emotional Competence construct.

The 39-item scale uses a forced-choice format, asking participants to respond to items with “true” or “false.” The scales’ two dimensions are Emotional Inhibition and Rumination. The Emotional Inhibition subscale assesses one’s tendency to suppress or hold back emotions that they feel. The Rumination subscale measures a person’s tendency to reflect on “negative emotion associated with past” or future events (Roger et al., 2011, p. 242). Higher scores reflect greater amounts of a particular attribute measured. For example, a high score on the Emotional Inhibition subscale would suggest
that a person inhibits his or her emotions to a larger degree than someone who scored lower on the scale.

The current study only utilized the Rumination subscale. The subscale is an expanded version of the Rehearsal scale from the Emotional Control Questionnaire 2 (ECQ-2; Roger & Najarian, 1989). The Rumination subscale enhanced the previous scale by adding items related to future events. Example questions from this scale include “I find it hard to get thoughts about things that upset me out of my mind” and reverse scored item “I worry less about what might happen than most people I know” (Roger et al., 2011). There are 18 total questions on the scale with 5 questions being reverse-scored. Total scores range from 0-18, and a high score on the scale indicates that a person engages in higher amounts of rumination. Cronbach’s alpha for the Rumination scale in the current study was 0.82.

The Rumination scale was found to have acceptable scores for internal consistency (alpha = .835) in a sample of 326 undergraduate students in England (Roger et al., 2011). The authors did not report race/ethnicity data for the sample. Test-retest data was not reported. Construct validity was supported by a positive significant correlation with a measure of negative emotional sensitivity, and a negative significant correlation with a measure of detached coping style. These results suggested that, as expected, those who ruminate tend to be more sensitive to “negative emotional cues” and have more difficulty remaining emotionally detached when solving problems (Roger et al., 2011, p. 240).

There was an absence of race/ethnicity data in the write-up of the I-RS’s validation studies (Roger et al., 2011). The data was derived from two samples of
undergraduate students compose of 128 and 594 students in the United Kingdom. The authors described a “relatively limited” ethnic range in the smaller sample, but did not mention which ethnicity was primary (Roger et al., 2011, p. 239). The second sample was described as having a “wide diversity of ethnic background,” but, again, did not describe the potential range of races/ethnicities represented (Roger et al., 2011, p. 239). Further, because the I-RS is a new adaption of a previous scale, there is a lack of published studies using the scale with race/ethnicity data. Also, there are no studies that use the I-RS with a sample of athletes.

**Self-Stigma of Seeking Help Scale**

The Self Stigma of Seeking Help Scale (SSOSH) assesses the reduction in “self-concept, self-esteem, and self-efficacy” as a result of seeking psychology treatment (Vogel, Wade, & Haake, 2006, p. 325). Self-stigma has been found to be a significant factor that contributes to Help-Seeking Attitudes. In order to clarify the impact of Athletic Identity and Emotional Competence, the analysis controlled for score on the SSOSH using hierarchical multiple regression.

The measure is a 10-item scale that uses a 5-point Likert scale which ranges from 1 (strongly disagree) to 5 (strongly agree). Scores range from 10 to 50, with higher scores reflecting higher self-stigma toward seeking psychological help. Five items are reverse scored. An example of an item from the scale includes “I would feel inadequate if I went to a therapist for psychological help.” An example of a reverse-keyed item includes “I would feel okay about myself if I made the choice to seek professional help.” Cronbach’s alpha for the SSOSH in the current study was .86.
Factor analyses supported the SSOSH’s use as a unidimensional tool (Vogel et al., 2006). Internal consistency scores ranged from .89 to .91 over three large samples of predominantly White college students (Vogel et al., 2006; Vogel et al., 2007). Test-retest reliability has been reported at .72 over a two month period (Vogel et al., 2006). Tests of construct validity showed that the SSOSH had significant positive correlations with measures of anticipated risks for seeking professional help and social stigma (Vogel et al., 2006). The scale had a significant negative correlation with a measure assessing anticipated benefits of seeking professional help (Vogel et al., 2006). Thus, higher scores on the SSOSH were associated with lower amounts of anticipated benefits of receiving professional help and higher amounts of anticipated risks and social stigma for seeking help.

Further, results from the Vogel et al. (2006) study highlighted self-stigma’s role in help-seeking. Specifically, higher scores on the SSOSH were associated with lower attitudes toward seeking professional psychological help and lower intentions to seek counseling in the future.

**Data Analysis**

IBM SPSS statistical software was used to perform all statistical analyses. Descriptive statistics, correlation analysis, and hierarchical multiple regression were utilized to investigate the research questions. Assumptions of linearity, homoscedasticity, and multicollinearity were evaluated to ensure that multiple regression could be used to analyze the data. Predictor variables included gender, race, self-stigma of seeking help, athletic identity, alexithymia, problem orientation, and rumination. The criterion variable was attitudes toward seeking professional psychological help.
The first research question of “To what extent does the variable of self-stigma relate to and predict athletes’ attitudes toward seeking professional psychological help?” was examined with correlational analysis and hierarchical multiple regression. To test null hypothesis 1a, a Pearson correlation was calculated for self-stigma of seeking help and attitudes toward seeking professional psychological help. Hierarchical multiple regression was performed to analyze null hypothesis 1b with attitudes toward seeking professional psychological help as the criterion variable. The predictor variables of gender and race were entered together as the first block of analysis. Self-stigma of seeking help was entered as the second block. The F test for significant difference in variance accounted for in attitudes toward seeking professional psychological help between the first and second model was utilized to examine null hypothesis 1b.

The second research question of “To what extent does athletic identity relate to attitudes toward seeking professional psychological help?” was investigated with correlational analysis and hierarchical multiple regression. To test null hypothesis 2a, a Pearson correlation was calculated for athletic identity and attitudes toward seeking professional psychological help. To test null hypothesis 2b, hierarchical multiple regression was used with attitudes toward seeking professional psychological help as the criterion variable. The predictor variables of gender and race were entered in the first step of the model, and self-stigma of seeking help was entered in the second step of the model. Athletic identity was then entered in the third step of the model. The F test for significant difference in variance accounted for attitudes toward seeking professional psychological help between the second and third model was utilized to evaluate null hypothesis 2b.
Correlational analysis and hierarchical multiple regression were also used to examine the third research question of “To what extent does emotional competence as measured by alexithymia, problem orientation, and rumination predict attitudes toward seeking professional psychological help?” Null hypothesis 3a was tested with a Pearson $r$ correlation between each of the three emotional competence variables and attitudes toward seeking professional psychological help. Null hypotheses 3b, 3c, and 3d were evaluated by placing each of alexithymia, problem orientation and rumination individually in the third block of a hierarchical multiple regression analysis. The first block included gender and race, and the second block included self-stigma of seeking help. Null hypothesis 3e was evaluated by placing all three emotional competence variables in the third block of the analysis. The $F$ test for significant difference in variance accounted for attitudes toward seeking professional psychological help between the second and third models was utilized to evaluate null hypotheses 3b, 3c, 3d, and 3e.

The fourth research question of “To what extent do athletic identity and emotional competence together predict attitudes toward seeking professional psychological help?” was examined with hierarchical multiple regression. To test null hypothesis 4, hierarchical multiple regression was used with attitudes toward seeking professional psychological help as the criterion variable. The predictor variables of gender and race were entered in the first step of the model, and self-stigma of seeking help was entered as the second step of the model. Athletic identity, alexithymia, problem orientation, and rumination were then entered as the third step of the model. The $F$ test for significant difference in variance accounted for attitudes toward seeking professional psychological help between the second and third model was used to evaluate null hypothesis 4.
Summary of Chapter III

This chapter reviewed the method in which this study was conducted. The chapter began with a brief introduction. This section was followed by a description of the participants in the study and the manner in which they were recruited. The instrumentation used in the study was then described. These measures included the AIMS, the ATSPPHS-SF, the TAS-20, the Rumination subscale from the IRS, the POS from the SPSI-A, the SSOSH and a demographics form. Finally, the chapter was concluded with a review of the data analyses utilized in the study. The primary analyses were correlational analysis and hierarchical multiple regression analysis.
CHAPTER IV
RESULTS

Chapter IV presents the research findings of this study. First, descriptive statistics and correlations will be presented. This will be followed by the results of the main statistical analyses for each of the research questions.

Descriptive Statistics

The means, standard deviations, and Pearson $r$ correlations were calculated using the IBM SPSS statistical software. The means and standard deviations for the predictor variables were as follows: the Self-Stigma of Seeking Help (SSOSH) scale had a mean of 25.81 ($SD = 6.77$), the Athletic Identity Measurement Scale (AIMS) had a mean of 37.07 ($SD = 5.98$), the Toronto Alexithymia Scale (TAS-20) had a mean 44.84 ($SD = 11.39$), the Rumination subscale from the Inhibition-Rumination Scale (IRS) had a mean of 7.40 ($SD = 4.13$), and the Problem Orientation (POS) subscale from the Social Problem Solving Inventory for Adolescents (SPSI-A) had a mean of 3.07 ($SD = .58$). The mean and standard deviation for the criterion variable, Attitudes Toward Seeking Professional Psychological Help - Shortened Form (ATSPPH-SF), were 15.84 ($SD = 5.76$). Pearson $r$ correlations among each of the variables were calculated and are presented in Table 1.

Prior to running the main analyses, the data were checked to ensure that they met the three assumptions of multiple regression: linearity of relationships, homoscedasticity and the absence of multicollinearity. To assess for violations to linearity and homoscedasticity, the standardized residual partial plots were examined. The plots did not show any violations to these assumptions. With regard to multicollinearity, Licht (1995) indicates that multicollinearity between independent variables becomes a concern
when bivariate correlations exceed 0.80. Review of Table 1 shows that there are no bivariate correlations between independent variables that exceed 0.549. Thus, the data fit the assumptions of multiple regression.

Table 1

*Correlation Matrix for Criterion and Predictor Variables*

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Race</th>
<th>ATPPSH-SF</th>
<th>SSOSH</th>
<th>AIMS</th>
<th>TAS-20</th>
<th>Rumination</th>
<th>POS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>.029</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATPPSH-SF</td>
<td>-.233**</td>
<td>.175*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SSOSH</td>
<td>-.040</td>
<td>-.079</td>
<td>-.620***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIMS</td>
<td>-.185*</td>
<td>-.029</td>
<td>-.275**</td>
<td>.178*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAS-20</td>
<td>-.090</td>
<td>-.211*</td>
<td>-.307***</td>
<td>.344***</td>
<td>.192*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumination</td>
<td>.095</td>
<td>-.003</td>
<td>-.102</td>
<td>.254**</td>
<td>.106</td>
<td>.431***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>POS</td>
<td>-.176*</td>
<td>.076</td>
<td>.005</td>
<td>-.243**</td>
<td>-.091</td>
<td>-.481***</td>
<td>-.549***</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note. ATPPSH-SF = Attitudes Toward Seeking Professional Psychological Help – Short Form, SSOSH = Self-Stigma Associated with Seeking Help, AIMS = Athletic Identity Measurement Scale, TAS-20 = Toronto Alexithymia Scale, Rumination = Rumination Scale from IRS, POS = Problem Orientation Scale from SPSI-A. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”

* p<.05  ** p<.01  *** p<.001

Hypothesis Testing

**Research Question 1**

To what extent does the variable of self-stigma relate to and predict athletes’ attitudes toward seeking professional psychological help?
Null Hypothesis 1a:

College student-athletes who participate in the study will not demonstrate a significant correlation between their overall score on self-stigma and their attitudes toward seeking professional psychological help.

To test the null hypothesis 1a, a Pearson $r$ correlation was calculated for the overall scores for the measures of self-stigma for seeking help (SSOSH) and Attitudes Toward Seeking Professional Psychological Help - Short Form (ATSPPH-SF). As shown in Table 1, a significant correlation was found between SSOSH and ATSPPH-SF ($r = -.620, p < .001$). Higher self-stigma scores as measured by the SSOSH were associated with less positive attitudes towards seeking professional psychological help as reflected by the ATSPPH-SF. Thus, Null Hypothesis 1a was rejected.

Null Hypothesis 1b:

After controlling for gender and race, self-stigma will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.

Hierarchical multiple regression was performed to test null hypothesis 1b. Attitudes towards seeking professional psychological help was used as the criterion variable. In this analysis and all subsequent analyses, the predictor variables of gender and race were entered together as a block in order to control for them. Gender and race accounted for 8.3% of the variance in attitudes toward seeking professional psychological help (Multiple $R = .288; R^2 = .083; \text{Adjusted } R^2 = .070; \text{ } R^2 \text{ Change} = .083; F_{\text{Change}} (2, 141) = 6.357; p = .002$). Both gender ($t = 2.825; p = .005$) and race ($t = 2.092; p = .038$) were identified as significant predictors in this model.
The variable of self-stigma of seeking help was then entered in the second model (Multiple $R = .666$; $R^2 = .443$; Adjusted $R^2 = .431$; $R^2$ Change = .360; $F_{Change} (1, 140) = 90.561; p < .001$). These results are presented in Table 2. Self-stigma of seeking help was found to explain a significant amount of additional variance in predicting attitudes toward seeking professional psychological help. In this model, gender ($t = 3.252; p = .001$) was a significant predictor and race ($t = 1.925; p = .056$) approached significance.

Null hypothesis 1b was rejected.

Table 2

*Summary of Hierarchical Regression Analyses for Variables Predicting Attitudes Toward Seeking Professional Psychological Help (N = 144)*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>16.074</td>
<td>1.097</td>
<td></td>
<td>14.656</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Gender</td>
<td>2.749</td>
<td>.973</td>
<td>0.228</td>
<td>2.825</td>
<td>.005</td>
</tr>
<tr>
<td>Race</td>
<td>2.164</td>
<td>1.034</td>
<td>.169</td>
<td>2.092</td>
<td>.038</td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>29.560</td>
<td>1.656</td>
<td></td>
<td>17.845</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Gender</td>
<td>2.476</td>
<td>.761</td>
<td>0.205</td>
<td>3.252</td>
<td>.001</td>
</tr>
<tr>
<td>Race</td>
<td>1.561</td>
<td>.811</td>
<td>.122</td>
<td>1.925</td>
<td>.056</td>
</tr>
<tr>
<td>SSOSH</td>
<td>-.512</td>
<td>.054</td>
<td>-.603</td>
<td>-9.516</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

*Note.* SSOSH = Self-Stigma of Seeking Help. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”

Model 1: Multiple $R = .288$ $R^2 = .083$ Adjusted $R^2 = .070$ $R^2$ Change = .083 $F_{Change} (2, 141) = 6.357$ $p = .002$

Model 2: Multiple $R = .666$ $R^2 = .443$ Adjusted $R^2 = .431$ $R^2$ Change = .360 $F_{Change} (1, 140) = 90.561$ $p < .001$

**Research Question 2**

To what extent does athletic identity relate to attitudes toward seeking professional psychological help?
Null Hypothesis 2a:

College student-athletes who participate in this study will not demonstrate a significant correlation between their global score on athletic identity and their attitudes toward seeking professional psychological help.

To test the null hypothesis 2a, a Pearson $r$ correlation was calculated for the global scores on the Athletic Identity Measurement Scale (AIMS) and Attitudes Toward Seeking Professional Psychological Help - Short Form (ATSPPH-SF). As shown in Table 1, a significant correlation was found between AIMS and ATSPPH-SF ($r = -.275$, $p < .001$). Higher athletic identity scores were associated with less positive attitudes towards seeking professional psychological help. Thus, null hypothesis 2a was rejected.

Null Hypothesis 2b:

After controlling for gender, race, and self-stigma, athletic identity will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.

To test null hypothesis 2b, AIMS scores were added in the third step of the hierarchical multiple regression with attitudes toward seeking professional psychological help as the criterion variable. These results are presented in Table 3. Athletic identity was found to explain a significant amount of additional variance in predicting attitudes toward seeking professional psychological help (Multiple $R = .678$; $R^2 = .460$; Adjusted $R^2 = .445$; $R^2$ Change = .017; $F_{\text{Change}} (1, 139) = 4.412; p = .037$). Gender ($t = 2.825; p = .005$), self-stigma ($t = 9.126; p < .001$) and athletic identity ($t = -2.100; p = .037$) were identified as significant predictors in this model. Race approached significance ($t = 1.925; p = .056$). Therefore, hypothesis 2b was rejected.
Table 3

*Summary of Hierarchical Regression Analyses for Athletic Identity and Other Variables Predicting Attitudes Toward Seeking Professional Psychological Help (N = 144)*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (Constant)</td>
<td>29.338</td>
<td>2.940</td>
<td></td>
<td>9.978</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Gender</td>
<td>2.186</td>
<td>.765</td>
<td>.181</td>
<td>2.858</td>
<td>.005</td>
</tr>
<tr>
<td>Race</td>
<td>1.543</td>
<td>.801</td>
<td>.120</td>
<td>1.925</td>
<td>.056</td>
</tr>
<tr>
<td>SSOSH</td>
<td>-.493</td>
<td>.054</td>
<td>-.580</td>
<td>-9.126</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>AIMS</td>
<td>-.130</td>
<td>.062</td>
<td>-.135</td>
<td>-2.100</td>
<td>.037</td>
</tr>
</tbody>
</table>

*Note. SSOSH = Self-Stigma of Seeking Help, AIMS = Athletic Identity Measurement Scale. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”

Model 3: Multiple $R = .678$  $R^2 = .460$  Adjusted $R^2 = .445$  $R^2$ Change = .017  $F_{Change}(1, 139) = 4.412  p = .037$

**Research Question 3**

To what extent does emotional competence as measured by alexithymia, problem orientation, and rumination predict attitudes toward seeking professional psychological help?

**Null Hypothesis 3a:**

College student-athletes who participate in this study will not demonstrate a significant correlation between their scores on alexithymia, problem orientation, rumination, and attitudes toward seeking professional psychological help.

To test the null hypothesis 3a, Pearson $r$ correlations were calculated between each emotional competence variable and scores of the Attitudes Toward Seeking Professional Psychological Help - Short Form (ATSPPH-SF). These results are shown in Table 1. A significant correlation was found between the TAS-20, a measure of alexithymia, and ATSPPH-SF ($r = -.307, p < .001$). Higher alexithymia scores, or increased difficulty describing and identifying emotions, associated with more negative
attitudes toward seeking professional psychological help. Correlations for the other emotional competence variables were found to be nonsignificant, including scores from the Rumination scale ($r = -.102, p = .225$) and the Problem Orientation Scale (POS; $r = .005, p = .950$). Because one of the three emotional competence variables, alexithymia, had a significant bivariate correlation with the criterion variable, null hypothesis 3a was rejected in part for alexithymia and failed to be rejected for rumination and problem orientation.

Null Hypothesis 3b:

After controlling for gender, race, and self-stigma, alexithymia will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.

To test null hypothesis 3b, TAS-20 scores were added in the third step of the hierarchical multiple regression with attitudes toward seeking professional psychological help as the criterion variable. These results are presented in Table 4. Alexithymia did not account for significant additional variance in predicting attitudes toward seeking help after controlling for gender, race, and self-stigma (Multiple $R = .668$; $R^2 = .447$; Adjusted $R^2 = .431$; $R^2$ Change = .004; $F_{\text{change}} (1, 139) = .920; p = .339$). Therefore, hypothesis 3b was accepted.

Null Hypothesis 3c:

After controlling for gender, race, and self-stigma, problem orientation will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.
Table 4

Summary of Hierarchical Regression Analyses for Alexithymia and Other Variables Predicting Attitudes Toward Seeking Professional Psychological Help (N = 144)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (Constant)</td>
<td>25.820</td>
<td>2.293</td>
<td>11.258</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>2.418</td>
<td>.764</td>
<td>.201</td>
<td>3.166</td>
<td>.002</td>
</tr>
<tr>
<td>Race</td>
<td>1.407</td>
<td>.827</td>
<td>.110</td>
<td>1.700</td>
<td>.091</td>
</tr>
<tr>
<td>SSOSH</td>
<td>-0.494</td>
<td>.057</td>
<td>-0.581</td>
<td>-8.646</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>TAS-20</td>
<td>-0.033</td>
<td>.035</td>
<td>-0.066</td>
<td>-0.959</td>
<td>.339</td>
</tr>
</tbody>
</table>

Note. SSOSH = Self-Stigma of Seeking Help, TAS-20 = Toronto Alexithymia Scale. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”

Model 3: Multiple $R = .668$  $R^2 = .447$  Adjusted $R^2 = .431$  $R^2$ Change = .004  $F_{Change}$ (1, 139) = .920  $p = .339$

To test null hypothesis 3c, scores from the Problem Orientation Scale (POS) were added in the third step of the hierarchical multiple regression with attitudes toward seeking professional psychological help as the criterion variable. These results are presented in Table 5. Although approaching significance at the .05 level, problem orientation did not account for significant additional variance in predicting attitudes toward seeking help after controlling for gender, race, and self-stigma (Multiple $R = .676$; $R^2 = .457$; Adjusted $R^2 = .442$; $R^2$ Change = .014; $F_{Change}$ (1, 139) = 3.711; $p = .056$).

Therefore, hypothesis 3c was accepted.

Null Hypothesis 3d:

After controlling for gender, race, and self-stigma, rumination will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.
Table 5

Summary of Hierarchical Regression Analyses for Problem Orientation and Other Variables Predicting Attitudes Toward Seeking Professional Psychological Help (N = 144)

<table>
<thead>
<tr>
<th>Model</th>
<th>$B$</th>
<th>Std. Error</th>
<th>Beta</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3.147</td>
<td></td>
<td>9.358</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Gender</td>
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<td>.182</td>
<td>2.849</td>
<td>.005</td>
</tr>
<tr>
<td>Race</td>
<td>1.662</td>
<td>.805</td>
<td>.130</td>
<td>2.064</td>
<td>.041</td>
</tr>
<tr>
<td>SSOSH</td>
<td>-.539</td>
<td>.055</td>
<td>-.634</td>
<td>-9.785</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>POS</td>
<td>-1.251</td>
<td>.650</td>
<td>-.127</td>
<td>-1.926</td>
<td>.056</td>
</tr>
</tbody>
</table>

Note. SSOSH = Self-Stigma of Seeking Help, POS = Problem Orientation Scale. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”

Model 3: Multiple $R = .676$ \( \text{R}^2 = .457 \)     Adjusted $R^2 = .442$ \( R^2 \text{ Change} = .014 \) \( F_{\text{Change}} (1, 139) = 3.711 \) \( p = .056 \)

To test null hypothesis 3d, scores from the Rumination scale were entered together in the third step of the hierarchical multiple regression with attitudes toward seeking professional psychological help as the criterion variable. These results are presented in Table 6. Rumination did not account for significant additional variance in predicting attitudes toward seeking help after controlling for gender, race, and self-stigma (Multiple $R = .666$; \( R^2 = .444 \); Adjusted $R^2 = .428$; \( R^2 \text{ Change} = .001 \); \( F_{\text{Change}} (1, 139) = .279 \); \( p = .598 \)). Therefore, hypothesis 3d was accepted.

Null Hypothesis 3e:

After controlling for gender, race, self-stigma, emotional competence variables of alexithymia, problem orientation, and rumination together will not contribute unique variance to the prediction of attitudes toward seeking professional psychological help.
Table 6

Summary of Hierarchical Regression Analyses for Rumination and Other Variables Predicting Attitudes Toward Seeking Professional Psychological Help (N = 144)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (Constant)</td>
<td>24.512</td>
<td>1.927</td>
<td></td>
<td>12.718</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Gender</td>
<td>2.432</td>
<td>.768</td>
<td>.202</td>
<td>3.167</td>
<td>.002</td>
</tr>
<tr>
<td>Race</td>
<td>1.555</td>
<td>.813</td>
<td>.121</td>
<td>1.912</td>
<td>.058</td>
</tr>
<tr>
<td>SSOSH</td>
<td>-.520</td>
<td>.056</td>
<td>-.612</td>
<td>-9.304</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Rumination</td>
<td>.048</td>
<td>.092</td>
<td>.035</td>
<td>.528</td>
<td>.598</td>
</tr>
</tbody>
</table>

Note. SSOSH = Self-Stigma of Seeking Help. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”

Model 3: Multiple $R = .666$  $R^2 = .444$  Adjusted $R^2 = .428$  $R^2$ Change = .001  $F_{Change}$ (1, 139) = 2.79  $p = .598$

To test null hypothesis 3e, scores from all three emotional competence scales, TAS-20, POS, and the Rumination scale, were added together in the third step of the hierarchical multiple regression with attitudes toward seeking professional psychological help as the criterion variable. These results are presented in Table 7. When entered together, alexithymia, problem orientation, and rumination were found to explain a significant amount of additional variance in predicting attitudes toward seeking professional psychological help (Multiple $R = .689$; $R^2 = .475$; Adjusted $R^2 = .442$; $R^2$ Change = .032; $F_{Change}$ (1, 137) = 2.739; $p = .046$) In this model two of these three variables, alexithymia ($t = -2.038; p = .043$) and problem orientation ($t = -2.495; p = .014$), were identified as significant individual predictors along with gender ($t = 2.440; p = .016$) and self-stigma ($t = -8.984; p < .001$). Interesting to note is the finding in this model that while problem orientation has a non-significant near 0 bivariate correlation with the criterion, problem orientation emerges as a significant predictor and apparently serves as suppressor variable in the model. Hypothesis 3e was rejected.
Table 7

Summary of Hierarchical Regression Analyses for Emotional Competence and Other Variables Predicting Attitudes Toward Seeking Professional Psychological Help (N = 144)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (Constant)</td>
<td>35.191</td>
<td>4.271</td>
<td>8.239</td>
<td>&lt; .001</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.894</td>
<td>.776</td>
<td>.157</td>
<td>2.440</td>
<td>.016</td>
</tr>
<tr>
<td>Race</td>
<td>1.348</td>
<td>.816</td>
<td>.105</td>
<td>1.652</td>
<td>.101</td>
</tr>
<tr>
<td>SSOSH</td>
<td>-.509</td>
<td>.057</td>
<td>-.598</td>
<td>-8.984</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>TAS-20</td>
<td>-.080</td>
<td>.039</td>
<td>-.159</td>
<td>-2.038</td>
<td>.043</td>
</tr>
<tr>
<td>POS</td>
<td>-1.978</td>
<td>.793</td>
<td>-.200</td>
<td>-2.495</td>
<td>.014</td>
</tr>
<tr>
<td>Rumination</td>
<td>-.008</td>
<td>.107</td>
<td>-.006</td>
<td>-.079</td>
<td>.937</td>
</tr>
</tbody>
</table>

Note. SSOSH = Self-Stigma of Seeking Help, TAS-20 = Alexithymia, POS = Problem Orientation Scale. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”
Model 3: Multiple $R = .689$  $R^2 = .475$  Adjusted $R^2 = .442$  $R^2$ Change = .032  $F_{\text{Change}}(1, 137) = 2.739$  $p = .046$

Research Question 4

To what extent do athletic identity and emotional competence together predict attitudes toward seeking professional psychological help?

Null Hypothesis 4:

After controlling for gender, race, and self-stigma, athletic identity and emotional competence considered together will not contribute unique variance to the prediction of attitudes toward seeking professional help.

To test null hypothesis 4, scores from a measure of athletic identity, the AIMS, and all three emotional competence scales, TAS-20, POS, and the Rumination scale, were added together in the third step of the hierarchical multiple regression with attitudes toward seeking professional psychological help as the criterion variable. These results are presented in Table 8. When entered together, athletic identity, alexithymia, problem orientation, and rumination were found to explain a significant amount of additional
variance in predicting attitudes toward seeking professional psychological help (Multiple
\[ R = .701; \ R^2 = .491; \ \text{Adjusted } R^2 = .465; \ R^2 \text{ Change} = .048; \ F_{\text{Change}} (1, 136) = 3.225; \ p = .015 \). In this model, gender \( (t = 2.062; \ p = .041) \), self-stigma \( (t = -8.793; \ p < .001) \),

athletic identity \( (t = -2.116; \ p = .036) \), and problem orientation \( (t = -2.565; \ p = .011) \) were significant individual predictors at the .05 level. The predictor of alexithymia approached significance \( (t = -1.859; \ p = .065) \). Hypothesis 4 was rejected.

Table 8

*Summary of Hierarchical Regression Analyses for Athletic Identity, Emotional Competence and Other Variables Predicting Attitudes Toward Seeking Professional Psychological Help (N = 144)*

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 (Constant)</td>
<td>39.737</td>
<td>4.734</td>
<td></td>
<td>8.394</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Gender</td>
<td>1.605</td>
<td>.778</td>
<td>.133</td>
<td>2.062</td>
<td>.041</td>
</tr>
<tr>
<td>Race</td>
<td>1.367</td>
<td>.806</td>
<td>.107</td>
<td>1.696</td>
<td>.092</td>
</tr>
<tr>
<td>SSOSH</td>
<td>-.495</td>
<td>.056</td>
<td>-.582</td>
<td>-8.793</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>AIMS</td>
<td>-.130</td>
<td>.061</td>
<td>-.135</td>
<td>-2.116</td>
<td>.036</td>
</tr>
<tr>
<td>TAS-20</td>
<td>-.073</td>
<td>.039</td>
<td>-.144</td>
<td>-1.859</td>
<td>.065</td>
</tr>
<tr>
<td>POS</td>
<td>-2.009</td>
<td>.783</td>
<td>-.203</td>
<td>-2.565</td>
<td>.011</td>
</tr>
<tr>
<td>Rumination</td>
<td>-.002</td>
<td>.106</td>
<td>-.002</td>
<td>-.023</td>
<td>.982</td>
</tr>
</tbody>
</table>

*Note.* SSOSH = Self-Stigma of Seeking Help, AIMS = Athletic Identity Measurement Scale, TAS-20 = Alexithymia, POS = Problem Orientation Scale. For the Gender variable, men were code “1” and women were coded “2.” For the Race variable, participants of color were coded “0” and White participants were coded “1.”

Model 3: Multiple \( R = .701 \) \( R^2 = .491 \) \( \text{Adjusted } R^2 = .465 \) \( R^2 \text{ Change} = .048 \) \( F_{\text{Change}} (1, 136) = 3.225 \) \( p = .015 \)

**Summary of Chapter IV**

Chapter IV presented the results of this study. Descriptive and correlational statistics were reported in addition to the results of the hierarchical multiple regression analyses. Null hypotheses 1a and 2a were rejected after correlational analysis determined that the variables of self-stigma of seeking help and athletic identity were significantly

and negatively related to attitudes toward seeking professional psychological help.
Correlational analysis was also used to reject, in part, null hypothesis 3a as one of the three emotional competence variables, alexithymia, was found to be significantly negatively related to attitudes toward seeking professional psychological help. Problem orientation and rumination were not significantly related to the criterion.

Hierarchical multiple regression supported retaining null hypotheses 3b, 3c, and 3d. These hypotheses examined the effect of individually adding each emotional competence variables to the prediction model after controlling for gender, race, and self-stigma of seeking help. By themselves, alexithymia, problem orientation, and rumination did not significantly add variance to the prediction of attitudes toward seeking professional psychological help beyond gender, race, and self-stigma.

Hierarchical multiple regression findings supported rejection of null hypotheses 1b, 2b, 3e, and 4. Specifically, the analyses revealed that self-stigma (hypothesis 1b) contributed unique variance to the prediction of attitudes toward seeking professional psychological help after controlling for gender and race. Athletic identify (hypothesis 2b) was found to contribute unique variance to the prediction of the criterion variable after controlling for gender, race, and self-stigma. When placed in the prediction model together, the three emotional competence variables, alexithymia, problem orientation, and rumination, were together found to explain a significant amount of additional variance in the variance of the criterion. However, only alexithymia and problem orientation emerged as significant individual predictors in this model with gender and self-stigma. Finally, athletic identity, alexithymia, problem orientation and rumination together predicted a significant amount of unique variance to attitudes toward seeking professional psychological help.
psychological help. In this final model gender, self-stigma, athletic identity, and problem orientation emerged as significant individual predictors.
CHAPTER V
DISCUSSION

Chapter V includes a discussion of the findings of this study. To maintain consistency, this chapter will discuss the results in the same order as they were presented in Chapter IV. Sections will address: (1) gender and race; (2) self-stigma of seeking help; (3) athletic identity; (4) emotional competence; and (5) athletic identity and emotional competence together. The chapter will conclude with sections that address the study’s implications, consider its limitations, and provide a summary.

The purpose of this study was to examine the factors that may predict college student-athletes’ attitudes toward seeking professional psychological help. The primary aim of the study was to explore if the combination of athletic identity and emotional competence are factors in the prediction of student-athletes’ attitudes toward seeking professional help. Other goals of the study were to investigate the relationships between other factors suggested by the literature that impact athletes’ help-seeking attitudes, including gender, race, and self-stigma of seeking help.

Previous research has shown that college student-athletes have more negative views than non-athletes toward seeking professional psychological help, an important factor that has been found to influence actual help-seeking (Watson, 2005). Steinfeldt and associates have consistently connected athletes’ views toward help seeking with their level of athletic identity. For example, higher athletic identity is significantly related to higher levels of stigma towards seeking psychological help (Steinfeldt et al., 2009; Steinfeldt & Steinfeldt, 2012) as well as more negative attitudes towards seeking help.
A limitation of this line of research was that it primarily focused on athletes in American football.

Another line of research has consistently linked lower help-seeking with lower amounts of emotional competence. Ciarrochi and colleagues have found that lower emotional competence was significantly associated with lower help-seeking intentions in samples of undergraduate students (Ciarrochi & Deane, 2001) and high school students (Ciarrochi et al., 2002; Ciarrochi, Wilson, et al., 2003). The current study adds to this research by investigating a different sample (i.e., college student-athletes) and a different help-seeking variable (i.e., attitudes toward seeking professional psychological help).

To my knowledge, the current study is the first to assess the predictive value of athletic identity and emotional competence on attitudes toward seeking professional psychological help in student-athletes. The current study also allowed for exploration of help-seeking attitudes of athletes from a range of sports, investigation of the relationships between primary predictors (athletic identity, alexithymia, rumination, and problem orientation), and replication of the relationships other variables (gender, race, and self-stigma of seeking help) to help-seeking attitudes.

**Gender and Race**

Gender and race have consistently been found to be associated with one’s attitudes toward seeking professional psychological help (e.g., Nam et al., 2010). This section will review and discuss results from the Pearson $r$ correlations and the hierarchical multiple regression analysis of gender, race, and help-seeking attitudes.

The Pearson $r$ correlation between gender and attitudes toward seeking professional psychological help was significant ($r = .233, p = .005$). This finding
indicates that female college student-athletes in this sample had more favorable attitudes toward seeking professional help. This finding is consistent with previous research (e.g., Nam et al., 2010) that has found that women generally have more favorable attitudes toward seeking professional psychological help than men. As mentioned in the literature review, there is a large body of research that is trying to pinpoint the factors that influence men’s more negative attitudes toward help-seeking. Addis and Mahalik (2003) reported that this research has primarily focused on masculine role socialization. They noted that constructs have been developed, such as gender role conflict, to measure the extent that men accept gendered role norms. Research has consistently found that men who more fully embrace the values of stereotypical masculinity (e.g., restrictive emotionality, need for success) have more negative attitudes, intentions and behaviors toward help seeking (Addis & Mahalik, 2003). Addis and Mahalik (2003) noted the consequences of these negative attitudes toward help-seeking as less help-seeking behaviors and poorer health outcomes.

One result that is not consistent with previous research is the lack of significant correlation between gender and alexithymia ($r = -.090, p = .281$). This finding indicates that there was not a significant single order correlation between student athletes’ gender and their self-reported ability to identify and describe emotions. This lack of a significant relationship seems contrary to findings of a number of research studies (e.g., Bagby, Taylor, et al., 1994; Parker et al., 2003) that have found that men have more difficulty than women identifying and describing their feelings. If replicated in future research with athletes, it may be important to further examine gender and alexithymia among athletes.
With regard to race, there was a small positive correlation between race and attitudes toward seeking professional help ($r = .175, p = .035$). This finding signifies that white student-athletes had more favorable attitudes toward seeking professional psychological help than student-athletes of color in this sample. This finding is consistent with previous research. As noted in the literature review, persons of color have been regularly found to have less favorable attitudes toward seeking professional psychological help than whites (e.g., Gloria et al., 2001; Nam et al., 2010). Research indicates that the help-seeking attitudes for students of color in higher education are influenced by aspects of the university system (e.g., inaccurate stereotyping, oppression) as well as racial/ethnic cultural norms that stigmatize professional psychological help (Gloria et al., 2001; Nam et al., 2010).

Though significant, the correlation between race and help-seeking attitudes should be interpreted with caution. The sample of student-athletes of color represented a myriad of races and ethnicities, including African American ($n = 14$), Asian American ($n = 7$), Biracial/Multiracial ($n = 7$), Latino/a ($n = 6$), Middle Eastern descent ($n = 1$), Native American ($n = 1$), and other race/ethnicity ($n = 4$). Each different group and subgroup may have different cultural norms and values about help-seeking and self-disclosure. For example, a Korean American woman and a Latino American man likely have differences in cultural norms about help-seeking and opinions of help-seeking, and yet they are both placed in the person of color group. Making broad generalizations about the group as a whole should be done with great care.

Race was also significantly correlated to alexithymia ($r = -.211, p = .011$). This finding indicates that student-athletes of color in this sample had more difficulty than
white student-athletes in identifying and describing their feelings. Previous research provides mixed support for this finding. In support of differences across race, Le, Berenbaum, and Raghavan (2002) found that samples of Asian American and Malaysian college students experienced significantly more alexithymia than European American college students from the same university. In contrast, Culhane, Moreno, Watson, and Millsap (2009) did not find a significant difference in alexithymia between large samples of Hispanic and Anglo American college students. There are many factors that could impact these findings (e.g., acculturation, assimilation, cultural norms), which makes it difficult to fully understand the incongruity in these results. Though the finding from the current study should be considered with caution, it suggests a small statistically significant single order correlation between race as operationalized in the present study and alexithymia, with student-athletes of color tending to score higher on alexithymia.

When entered into the first step of the hierarchical multiple regression model, the predictors of gender and race accounted for 8.3% of the variance in attitudes toward seeking professional psychological help ($p = .002$). As expected, both gender ($t = 2.825; p = .005$) and race ($t = 2.092; p = .038$) were identified as significant predictors in this first step. This result was expected due to the relationships previously outlined in the literature review and briefly discussed in this section.

**Self-Stigma of Seeking Help**

The study’s first research question investigated the connection between self-stigma of seeking help and attitudes toward seeking professional psychological help. As hypothesized, self-stigma was found to have a significant relationship with help-seeking attitudes. The results supporting this hypothesis will be reviewed and discussed. Self-
stigma’s correlations with athletic identity and emotional competence will also be discussed.

The correlation between self-stigma of seeking help and attitudes toward seeking professional psychological help was significant ($r = -.620, p < .001$). This finding indicates that an increase self-stigma was associated with less favorable attitudes of seeking professional psychological help. The strength and direction of this correlation is similar to previous research with college students. For example, Vogel et al. (2006) reported correlations of -.63, -.60, and -.53 between self-stigma and attitudes toward seeking help in three different samples of college students. The correlation in the current study seems to replicate the results from Vogel et al.’s (2006) study with a group of student-athletes. This suggests that self-stigma is an important factor for both athletes and non-athletes in their attitudes toward seeking professional psychological help.

The aim for the current study was to establish self-stigma’s relationship with attitudes in seeking professional help in a sample of college student-athletes, after controlling for gender and race; and then controlling for gender, race and self-stigma in the regression model as the other variables of interest were considered. Self-stigma was found to be a significant predictor of attitudes toward seeking professional psychological help after controlling for gender and race. When entered into the second step of the model, self-stigma explained 36% additional variance in the prediction of attitudes toward seeking professional psychological help ($p < .001$). Together with gender and race, self-stigma accounted for 43.3% of the variance in attitudes toward seeking professional help.
Confirming the relationship between self-stigma and help-seeking could have important implications for athletes. Self-stigma has consistently been found to be negatively associated with attitudes toward seeking professional psychological help across large, diverse samples of men and women (e.g., Choi & Miller, 2014; Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011). For example, Vogel et al. (2011) confirmed the relationship in a study with 4,773 men from different racial/ethnic backgrounds (European American, African American, Asian American, and Latino American) and sexual orientation (heterosexual and gay). The authors found a significant negative correlation between the two variables in each racial/ethnic and sexual orientation category. Results from the current study indicate that the negative correlation exists in a sample of college-student athletes. If replicated, these results suggest that athletes may be able to improve their attitudes toward help seeking by addressing their self-stigma.

Self-stigma also had a small positive correlation with athletic identity ($r = .178, p = .033$). This result suggests that as one’s athletic identity increases so too does their stigma associated with the help seeking process. To my knowledge, the only previous study that explored the relationship of help-seeking stigma and athletic identity in athletes was Steinfeldt et al.’s (2009) study with 211 college football players competing in NCAA Division II and NAIA. Steinfeldt et al. (2009) used a different stigma variable, public stigma, which is the degree that one thinks that society as a whole stigmatizes someone who attends counseling. The authors reported a significant positive correlation between public stigma and athletic identity ($r = .224, p < .01$). Taken together with the result from the current study and the Steinfeldt et al. (2009) study indicates that both public and self-
stigma are associated with athletic identity. These findings provide empirical support that there may be something about sports culture that contributes or supports the perception of the stigma of seeking/receiving psychological help from a professional. However, in the present study, while statistically significant, the magnitude of correlation between self-stigma and athletic identity is small and requires replication.

Lastly, self-stigma was significantly correlated with each emotional competence variable, used in the present study including alexithymia ($r = .344, p < .001$), rumination ($r = .254, p = .002$), and problem orientation ($r = -.243, p = .003$). These results indicate that as self-stigma increases participants reported having more difficulty identifying and describing their feelings, engaging in more ruminative thinking, and reported being less effective in problem solving. Theoretically, the relationships with self-stigma and the emotional competence variables fit. It stands to reason that as a person’s emotional competence decreases, then a person may experience increased stigma toward the process of seeking help for emotional problems. However, the relationships between self-stigma and the emotional competence variables used in the present study have not been well studied.

**Athletic Identity**

The study’s second research question hypothesized that athletic identity would significantly correlate with and aid in the prediction of attitudes toward seeking professional psychological help. Both of these hypotheses were confirmed, and the results of the analyses are discussed. This section also addresses a significant correlation between athletic identity and alexithymia.
Results from the hierarchical multiple regression analysis indicated that athletic identity accounted for a significant amount of additional variance for attitudes toward seeking help after controlling for gender, race, and self-stigma. When entered in the third step of the hierarchical regression analysis, athletic identity accounted for an additional 1.7% of the variance of attitudes toward seeking professional psychological help ($p = .037$). The full model accounted for 46.0% of the variance. Athletic identity, gender, and self-stigma emerged as significant predictors in this model.

One previous study attempted to use athletic identity to predict help-seeking attitudes using the same instruments as the current study. Steinfeldt and Steinfeldt (2010) used hierarchical multiple regression to determine if athletic identity predicted help-seeking attitudes in a sample of 179 high school football players. Other predictors explored in the model were gender role conflict variables and year in school. Athletic identity did not add additional variance in the prediction model, and it did not emerge as a significant predictor in the final model (Steinfeldt & Steinfeldt, 2010). Year in school and the gender role variable of restrictive emotionality were the only predictors found in the model (Steinfeldt & Steinfeldt, 2010).

There are two important differences between the current study and Steinfeldt and Steinfeldt’s (2010) study that may help explain the difference. First, the current study used college student-athletes rather than high school athletes. Previous research has showed that athletic identity becomes more salient for athletes as they get older (Houle, Brewer, & Kluck, 2010). To this point, athletic identity was found to be higher in the current study ($M = 37.07, SD = 5.98$) than in Steinfeldt and Steinfeldt’s (2010) study ($M = 35.65, SD = 7.17$). This increase in athletic identity could be explained by the fact that
college athletes have been in the athletic culture longer than high school athletes, which may lead them to embrace aspects of the culture more fully. The difference in athletic identity may also be explained by the importance of athletics to a college athlete as compared with a high school athlete. There is inherently a level of attrition between high school athletics and college athletics dictated by level of talent, competition, and commitment. Thus, if one makes it to a higher level of athletics, it stands to reason that their athletic identity would be higher. This difference in athletic identity between the samples could account for the different results in the prediction of help-seeking attitudes.

A second difference between the current study and Steinfeldt and Steinfeldt’s (2010) study is the types of sports in which the athletes competed. The current examination explored athletes from a total of 10 different sports while Steinfeldt and Steinfeldt (2010) only studied football players. Previous research has examined how participation in different sports impacts attitudes toward help-seeking. For example, Martin (2005) found that athletes in contact sports (e.g., football, wrestling) had more negative views toward working with a sports psychology consultant than those in non-contact sports (e.g., swimming, tennis). The current study included a mix of athletes from contact \( (n = 107) \) and non-contact \( (n = 37) \) sports. This difference may have accounted for the difference in the help seeking models from the studies.

These two differences, development of athletic identity and different sport participation, represent current trends in the study of athletes’ help-seeking attitudes. These factors have been identified as having an impact on an athlete’s attitudes toward professional psychological help-seeking. Future study in these areas may provide a more
nuanced understanding of the predictive value of athletic identity on help-seeking attitudes across age and sport.

As expected, athletic identity was significantly negatively correlated with attitudes toward seeking professional psychological help \( (r = -.275, p = .001) \). This finding indicates that an increase in one’s athletic identity is associated with less favorable attitudes toward seeking professional psychological help. This result extends the current literature by finding a significant relationship between athletic identity (as measured by the AIMS) and help-seeking attitudes (as measured by the ATSPPH-SF).

Instead of a direct link, previous research has either used non-specific terms (athlete vs. non-athlete) or linked athletic identity with poor help-seeking indirectly through male role norms. In a study that compared 135 college student-athletes to 132 college non-athletes, Watson (2005) found that athletes had significantly less favorable attitudes toward seeking professional psychological help. The athlete vs. non-athlete terminology has been criticized because “non-athlete” may not fully or accurately capture one’s identity. For example, a college student who does not participate on a university team may frequently compete in triathlons and, consequently, identify highly as an athlete. Athletic identity as measured by the AIMS remedies this criticism by providing participants with an overall score that places them on a continuum of athletic identity.

Athletic identity has also been associated with poor help-seeking by connecting athletic identity with male role norms (Steinfeldt & Steinfeldt, 2010; Steinfeldt & Steinfeldt, 2012; Steinfeldt et al., 2009). For example, Steinfeldt & Steinfeldt (2012) found that higher scores on athletic identity were related to higher adherence to male role norms in a sample of college football players. The authors then noted multiple
difficulties associated with adherence to male role norms, such as less help-seeking behaviors.

While both the Watson (2005) and Steinfeldt & Steinfeldt (2012) studies associate athletic identity with negative attitudes toward help seeking, the result from the current study connects the constructs with extensively used instruments. The AIMS and the ATSPPH-SF have both been used in many studies across diverse samples and topics to explore athletic identity and attitudes toward seeking professional psychological help, respectively. The finding from the current study can be placed within the context of both constructs to better understand the help-seeking patterns of athletes.

Another finding to note is the significant positive correlation between athletic identity and alexithymia. This result suggests that higher athletic identity is associated with more difficulty describing and identifying one’s feelings for this sample of athletes. As noted in the literature review, alexithymia has been sparsely studied in conjunction with athletics. The small amount of literature that is available notes higher amounts of alexithymia in extreme sport athletes (e.g., Woodman et al., 2010), an association between alexithymia and increased alcohol use (e.g., Andres, Castanier, & Le Scanff, 2014). Again, however, it should be noted that since the magnitude of the correlation between athletic identity and alexithymia found in the present study is small this finding should be replicated.

Apparently, this is the first time that athletic identity and alexithymia have been studied together. Previous studies have implied that increased athletic identity may lead to increased struggle to identify and describe emotions. Steinfeldt and associates have reported correlations between athletic identity and the variables of restrictive
emotionality and emotional control in samples of college football players (Steinfeldt et al., 2009; Steinfeldt et al., 2011). Also, Melendez (2009-2010) found that a sample of college student-athletes who scored high in athletic identity also had significantly more difficulty in their personal-emotional adjustment to college. Moving forward, it may be important to further examine the relationship between athletic identity and alexithymia.

**Emotional Competence**

The current study’s third research question that hypothesized that emotional competence would be a significant predictor for attitudes toward seeking professional psychological help was confirmed. This section discusses the results of the predictive model and places them in the context of previous research. Bivariate correlations between emotional competence variables and attitudes toward help-seeking are then reviewed. A final section discusses the role of problem orientation as a suppressor variable in the regression model.

Findings from hierarchical multiple regression analyses indicated that emotional competence variables, when entered together, accounted for significant additional variance in the prediction of attitudes toward seeking professional psychological help. The emotional competence variables accounted for 3.2% additional variance after controlling for the effects of gender, race, and self-stigma ($p = .046$) with the overall model accounting for 47.5% total variance in attitudes toward seeking professional help. Two of three emotional competence variables, alexithymia and problem orientation, emerged as significant predictors. Gender and self-stigma were also found to be significant predictors.
Interestingly, none of the emotional competence variables added statistically significant variance at the $p = .05$ level when entered individually into the third step of the hierarchical regression model. Problem orientation was the only variable that approached significance ($p = .056$), while alexithymia ($p = .338$) and rumination ($p = .598$) did not.

When considered together, these findings seem to replicate, extend, and refine previous research reported in the literature review. The findings appear to replicate, in part, a line of research by Ciarrochi and associates that found a relationship between emotional competence to help-seeking intentions, which measures one’s future intentions to seek help from different sources (formal, informal, no one) (Rickwood et al., 2005). Ciarrochi and associates found that higher emotional competence was associated with higher intention to seek help in samples of 300 Australian undergraduate students (Ciarrochi & Deane, 2001); 137 Australian high school students (Ciarrochi et al., 2002); and 217 Australian high school students (Ciarrochi, Wilson, et al., 2003). The current study found a relationship between emotional competence and help-seeking attitudes, which is a slightly different process than help seeking intentions. Both attitudes and intentions have been found to impact willingness to seek help (Vogel et al., 2007).

The current study extends this line of research by investigating results in a sample of college student-athletes. A primary purpose of the current study was to study whether or not emotional competence may be a factor that impacts college student-athletes’ help-seeking. Findings from the hierarchical analysis seem to, in part, support this assertion as two of the three emotional competence variables, alexithymia and problem orientation, were found to be significant predictors of attitudes toward seeking professional
psychological help in this sample of student-athletes. However, the relationships between the emotional competence variables and the criterion of attitudes toward professional help-seeking in the present study appear complex, were in part not expected, and seem counterintuitive with respective to problem orientation.

Examination of the Pearson r correlations helps provide some information. As expected, alexithymia, with a significant, negative association with attitudes toward seeking professional psychological help \((r = -.307, p < .001)\), emerged as a significant predictor in this model, suggesting that those who struggle to describe and identify their feelings have less favorable attitudes toward help-seeking. Problem orientation, however, did not have a significant single order correlation with the criteria of professional help-seeking attitudes \((r = .005, p = .950)\), indicating that there was no significant correlational association between the two variables. Yet, problem orientation emerged as a significant predictor in this model.

Based on the Pearson r results, one might expect the emergence of alexithymia as a significant predictor in the regression model, and not expect problem orientation to be a significant predictor. Surprisingly, both were found to be significant predictors in the model. The lack of a bivariate relationship between problem orientation and the criterion, and its emergence as a significant predictor suggests that it may influence one or more other predictor variables in the model. This notion is supported by its significant bivariate correlations with alexithymia \((r = -.481, p < .001)\) and self-stigma \((r = -.243, p = .003)\).

This pattern suggests that problem orientation is working as a suppressor variable. Pandey and Elliott (2010) define a suppressor variable as a predictor that has little or no
bivariate connection to the criterion variable, but has a strong correlation to one or more other predictors. This definition describes the current association, as problem orientation has an almost zero correlation with attitudes toward seeking professional psychological help and significant correlations with alexithymia and self-stigma.

Suppressor variables are also known as *enhancer* variables because they enhance the relationship of one or more other predictors to the criterion (Pandey & Elliott, 2010, p. 28). Pandey and Elliott (2010) explicate that the suppressor variable “explains the part of the predictor variable that is irrelevant and not associated with the outcome variable” (p. 29). While suppressor variables are generally viewed as positive, interpretation of problem orientation’s impact on the current study’s findings is unclear. A direction for future research is to identify the “irrelevant variance” that problem orientation is eliminating for other predictor variables in the model.

**Emotional Competence and Athletic Identity**

The current study’s fourth research question, that hypothesized that athletic identity and emotional competence together will contribute unique variance to the prediction of attitudes toward seeking professional psychological help, was confirmed. This section discusses this finding. Suggestions for how to improve the final prediction model are also considered.

Findings from hierarchical multiple regression analyses indicated that emotional competence variables and athletic identity, when entered together, accounted for significant additional variance in the prediction of attitudes toward seeking professional psychological help. The model accounted for 4.8% additional variance after controlling for the effects of gender, race, and self-stigma ($p = .015$). This model accounted for more
total variance (49.1%) than any other model in this study. Athletic identity, problem orientation, self-stigma, and gender emerged as significant predictors. It may important to note that alexithymia approached significance (Beta = -.144, \( p = .065 \)).

As reviewed in previous sections of this chapter, this is the first empirically study athletic identity and emotional competence as predictors in a sample of athletes’ attitudes toward seeking professional psychological help.

The findings suggest important theoretical considerations for the constructs of athletic identity and emotional competence. Athletic identity remained a significant predictor of help-seeking attitudes when entered individually and together with emotional competence. Athletic identity maintained a negative relationship with help-seeking attitudes, suggesting that the more salient one’s identity as an athlete the less favorable attitudes they have toward seeking help from a mental health professional. Thus, the extent to which athletes absorb the messages about athlete culture seems to influence their view of counseling and psychotherapy.

With regard to emotional competence, alexithymia and problem orientation emerged as significant predictors when emotional competence and athletic identity were entered together in the final model. Alexithymia and problem orientation also emerged as significant predictors in the model that included only emotional competence variables. Rumination did not have a significant bivariate correlation with the criterion and did not emerge as a significant predictor in either model. Rumination did have significant relationships with self-stigma and alexithymia.

Pearson correlations further clarified how the emotional competence variables studied in the present study were related to help-seeking attitudes. Specifically, problem
orientation was found to have a near zero relationship with help-seeking attitudes. This finding suggested that problem orientation’s emergence as a significant predictor in the regression models was likely due to its relationship to one or more other predictors in the model. In contrast, alexithymia had a strong negative bivariate relationship with help-seeking attitudes, indicating athletes who struggle to describe and identify their feelings have less favorable attitudes toward help-seeking. Taken together, these results indicate that alexithymia seems to be the most important variable among the three emotional competence variables studied in the current investigation with respect to its ability to predict help-seeking attitudes.

To summarize, findings from the current study suggest that, of the emotional competence variables, alexithymia offers the most promise in the prediction of student-athletes’ help-seeking attitudes. This is especially true when the positive relationship between alexithymia and athletic identity is considered. This relationship may help describe the overall impact of sports culture on the emotional experience of student-athletes. Specifically, the literature review provided support for the notion that sports culture provides the strong, consistent message that being emotional is a sign of mental weakness. There is a possibility that alexithymia may be associated with or be a consequence of this message. As athletes consistently move away from difficult emotions, they may not fully develop the skill to identify, describe, and address them. Findings from the current study provide empirical support for this hypothesis. These results highlight the need for additional research into the relationships between alexithymia, athletic identity, and attitudes toward seeking professional psychological help.
Recent research seems to further refine the role the relationship between alexithymia and attitudes toward seeking professional psychological help. New research in the field of men and masculinity has examined the detrimental effect that culture’s expectations of men has had on men’s ability to describe and identify their feelings. Specifically, Levant et al. (2006) suggest that “normal” men display symptoms similar, but less severe, to clinical alexithymia as they consistently have more difficulty identifying and describing their emotions than women. Levant et al. (2006) labeled this phenomenon normative male alexithymia and they created the Normative Male Alexithymia Scale (NMAS) to measure it.

The important distinction between normative male alexithymia and clinical alexithymia on help-seeking attitudes can be seen in two empirical studies. In the first study, 155 men from the community completed measures of clinical alexithymia, help-seeking attitudes (as measured by the ATSPPH-SF), and their adherence to proscribed male role norms (Berger, Levant, McMillan, Kelleher, & Sellers, 2005). There was no significant bivariate correlation between clinical alexithymia and help-seeking attitudes, and alexithymia did not emerge as a significant predictor in the regression model (Berger et al., 2005). In the second study, 536 men completed an online survey that included measures of normative male alexithymia (as measured by the NMAS), help-seeking attitudes (as measured by the ATSPPH-SF), and their adherence to traditional masculine identity (Sullivan, Camic, & Brown, 2015). Findings from the second study showed a strong negative bivariate correlation between normative male alexithymia and help-seeking attitudes, suggesting that greater normative male alexithymia is associated with less favorable help-seeking attitudes (Sullivan et al., 2015). Normative male alexithymia
also emerged as a significant predictor in the regression model accounting for an extra 3% of unique variance (Sullivan et al., 2015). When considered together, these findings indicate that normative male alexithymia may be a more salient, non-clinical predictor for men’s help-seeking attitudes.

When considered within the context of the current study, the results from Berger et al. (2005) and Sullivan et al. (2015) suggest that normative male alexithymia may be a more appropriate predictor of how athletes are impacted by the norms of sports culture. As outlined in the literature review, there seems to be significant overlap in the emotional expectations of men and athletes. Thus, normative male alexithymia may be a more precise measure of the impact of athletic culture.

**Implications of the Current Study**

The current study provided empirical support for the influence of emotional competence and athletic identity on attitudes toward seeking professional psychological help. Though the findings need to be replicated, they should be communicated to individuals (e.g., coaches, administrators, college counselors, sport psychology consultants) and organizations (e.g., NCAA, high school athletic associations, athletic departments) who are responsible for the health of student-athletes.

Interventions have already been developed for some of the constructs from the current study, such as help-seeking attitudes. For example, Ackerman (2012) examined the impact of a didactic designed to improve athletes’ attitudes toward seeking professional psychological help. The presentation included information about several topics, including mental health issues for athletes and what to expect from psychotherapy (Ackerman, 2012). The current study suggests that it may be important to create a
similar intervention for emotional competence. Important information would include identifying emotional competence, benefits and consequences in sports and interpersonal relationships, and suggestions about developing emotional competence.

Results from the study also seem consistent with suggestions in the literature that athletes receive distinct, often negative, messages from sports culture about emotions and emotional health. This seems implied by athletic identity’s positive association with alexithymia and negative association with attitudes toward seeking professional help. These findings indicate that it may be important to assist athletes to acknowledge and change their understanding about mental health professionals and topics.

An important place to begin this change is with coaches and other influential people within sport. In a study that examined how coaches and other “gatekeepers” viewed mental health, Mazzer and Rickwood (2009) showed that many of these individuals had “reluctance” to refer their athletes to a mental health professional (p. 20). The authors hypothesized that this reluctance, in turn, led to a culture in which seeking help was considered negative. Mazzer and Rickwood (2009) advocated for mental health professionals to take on a more active and educative role within athletic communities so that both gatekeepers and athletes develop a comfort with mental health professionals and topics.

Future research should focus on replicating and extending the findings of the current study. The connections between athletic identity, emotional competence, and help-seeking attitudes should be replicated with larger samples of athletes at all levels of competition from different parts of the United States. There should also be greater intention to understand how these constructs interact across different aspects of
multiculturalism, such as race, ethnicity, age, sexual orientation, and disability status. With regard to instrumentation, future research should consider using a single instrument to measure emotional competence; and consider using different measures of emotional competence. The current study’s use of subscales from three different instruments may be a limitation. A question remaining for further consideration is the most appropriate combination of measures to assess the important components of emotional competence suggested by the literature. Lastly, subsequent researchers could consider using additional factors that have been linked to attitudes toward seeking professional psychological help. The current study only used three (i.e., gender, race, and self-stigma of seeking help) of multiple factors identified in the research literature that may impact one’s help-seeking attitudes. Use of additional factors may lead to a more complete prediction model.

**Limitations of the Current Study**

One limitation of the current study is its reliance on self-report measures. As noted in Heppner, Wampold, and Kivlighan (2008), self-report measures are susceptible to intentional or unintentional distortion. This may be a result of the participant, for example, wanting to respond in a way that helps the researcher or to appear more socially desirable. To this point, Taylor and Bagby (2013) indicate that one potential difficulty with the TAS-20, the instrument used to study alexithymia, is that those who are highly alexithymic may not be able to assess their own emotional deficiencies. The results of the current study should be considered with this limitation in mind.

Another limitation is the use of convenience sampling. Data was gathered from student athletes that attended a small, private college in the Midwest that competes at the
NCAA Division III level. Athletes at this level of competition do not receive athletic scholarships, and a majority do not plan to pursue a career in professional athletics. Students at the college are thought to be typically homogenous in socioeconomic status, and place a high value on academic success. Future research may benefit from including participants that compete at different levels of competition (e.g., high school, NCAA Divisions I and II, professional), from different parts of the United States, and from institutions with more socioeconomic heterogeneity. The sample in this study also had a smaller percentage of participants from diverse racial/ethnic backgrounds. Increased diversity of participants in this area of research may also be helpful. Convenience sampling limits the generalizability of the results.

The study also used a correlational design to investigate associations between variables. Because there was no manipulation of variables, causal conclusions cannot be made about findings discussed in the study.

**Summary and Conclusions**

Chapter V included sections reviewing and discussing the results of the current study related to gender and race, self-stigma of seeking help, athletic identity, emotional competence and athletic identity and emotional competence together. The chapter also included sections discussing the implications and limitations of the study.

The current study found important relationships between the constructs of athletic identity, emotional competence, and attitudes toward seeking professional psychological help. The primary research hypothesis was confirmed as the combination of athletic identity and emotional competence was found to predict a significant amount of additional variance in attitudes toward seeking help after controlling for covariates.
When examined separately, both athletic identity and emotional competence accounted for a significant amount of variance in the prediction of help-seeking attitudes. Of the three emotional competence variables investigated in the present study alexithymia appeared to emerge as the most important variable having a direct relationship with attitudes toward seeking professional psychological help.

The study extended previous research by finding significant bivariate correlations between athletic identity and alexithymia, and athletic identity and help-seeking attitudes. The study also replicated previous findings that one’s attitudes toward seeking professional psychological help were significantly correlated with gender, race, and self-stigma of seeking help.

Future studies need to replicate the findings from the current study with athletes across diverse levels of competition, racial/ethnic backgrounds, and geographical locations. Future research with these constructs should also carefully consider additional and alternate measure approaches to the assessment of emotional competence, as well as including other factors identified as potential predictors of help-seeking attitudes.
REFERENCES


Appendix A

HSIRB Approval Letter
Date: December 9, 2014

To: Patrick Munley, Principal Investigator
    Garrett Weatherhead, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 14-12-12

This letter will serve as confirmation that your research project titled “Investigation of Student-Athletes’ Attitudes Toward Help-Seeking” has been approved under the exempt category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., you must request a post approval change to enroll subjects beyond the number stated in your application under “Number of subjects you want to complete the study.”) Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: December 8, 2015
Appendix B

Athletic Director Initial Email
Dear Athletic Director,

My name is Garrett Weatherhead, and I am a doctoral student in counseling psychology at Western Michigan University. I am requesting your assistance in my doctoral dissertation research project titled *Investigation of Student-Athletes’ Attitudes Toward Help-Seeking*.

The purpose of my research is to investigate possible factors involved in student athletes’ attitudes toward seeking help when it’s available. My experience as a former student-athlete has motivated me to better understand athletes’ views of help-seeking. My hope is that the results of the study will be used to assist current athletes to stay consistently healthy.

I will soon be sending you a letter with additional information about the study. The letter will provide details about how you would participate in the study, as well as a participation form that I will ask you to return in a postage paid envelope. If you would like this letter to be sent to someone else in your organization, then please respond to this email with that person’s name.

Thank you in advance for you consideration of this project. If you have any questions, please contact me by phone at (517) 862-5924 or by email at garrett.v.weatherhead@wmich.edu. My dissertation advisor is Dr. Patrick Munley, and he can be reached at (269) 387-5120.

Warmly,

Garrett Weatherhead
Appendix C

Athletic Director In-Person Recruitment Letter
Dear Athletic Director,

My name is Garrett Weatherhead, and I am a doctoral student in counseling psychology at Western Michigan University. I am requesting your assistance in my doctoral dissertation research project titled *Investigation of Student-Athletes’ Attitudes Toward Help-Seeking*.

The purpose of my research is to investigate possible factors involved in student athletes’ attitudes toward seeking help when it’s available. My experience as a former student-athlete has motivated me to better understand athletes’ views of help-seeking. My hope is that the results of the study will be used to assist current athletes to stay consistently healthy.

I am requesting your permission to allow me to contact coaches in your athletic department to request assistance in recruiting student-athletes at your university to participate in my study. The study involves student-athletes completing a single anonymous survey that is estimated to take about 15 minutes to finish. I plan to administer the surveys in the spring 2015. Data collection and dissemination will be completely anonymous. No identifying information will be collected from individual athletes, and no identifying information will be collected concerning individual educational institutions. Study findings will only be reported in aggregate across colleges and universities. This study has been approved by Western Michigan University Human Subjects Institutional Review Board (HSIRB).

Please let me know if I have your permission to contact the coaches to recruit participants for this study by returning the enclosed form in the postage paid return envelope. If you have any questions about the study or would like additional information before making a decision I would be very pleased to talk with you. Or, if there is another person on your staff who you would like me to contact to discuss the study and possible participation by your student athletes please let me know. If you would like additional information, please contact me by phone at 517-862-5924 or by writing to me at garrett.v.weatherhead@wmich.edu. My dissertation advisor is Dr. Patrick Munley, he can be reached at (269) 387-5120.

Thank you for your consideration.

Warmly,

Garrett Weatherhead, MA  
Western Michigan University
Appendix D

Recruitment Script: Potential Participants
My name is Garrett Weatherhead from the Department of Counselor Education and Counseling Psychology at Western Michigan University. I would like to invite you to participate in a research study designed to gather information about factors that may relate to college athletes’ attitudes toward help-seeking including attitudes about athletics, sports, emotions, and counseling.

To participate in the study, you must be 18-years-old and a varsity athlete at a NCAA Division III athletic program. Participation in this study will take about 15 minutes and involves completion of a survey packet. The surveys do not ask for any identifying information about you or your college or university and, thus, is completely anonymous. None of your responses will be shared with any of your coaches, athletic administrators, or anyone from your school. As an investigator, I am only interested in the overall trend of all of the responses and not any one individual’s responses.

If you would like to participate, I will hand you a survey packet. When finished, place the packet within this box.

Does anyone have any questions at this time? (Pause) If you have questions later, please contact me at (provide email address) or you may contact the primary investigator, Dr. Patrick Munley at patrick.munley@wmich.edu.
Appendix E

Anonymous Survey Informed Consent Form
Western Michigan University  
Counselor Education and Counseling Psychology

Principal Investigator: Patrick Munley, Ph.D.  
Student Investigator: Garrett Weatherhead, M.A.  
Title of Study: Investigation of Student-Athletes’ Attitudes Toward Help-Seeking

You have been invited to participate in a research project titled "Investigation of Student-Athletes’ Attitudes Toward Help-Seeking." This project will serve as Garrett Weatherhead’s dissertation for the requirements of the doctoral degree under the supervision of his doctoral program chair, Dr. Patrick Munley. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study?  
The purpose of this study is to gather information about factors that may relate to college athletes’ attitudes toward help-seeking including attitudes about athletics, sports, emotions, and counseling. We are interested in the overall responses of all the people who participate in this study, not in the responses of any single participant.

Who can participate in this study?  
Study participants must compete in a sport that is under the jurisdiction of their institution’s athletic department and must be at least 18-years-old. Participants must compete at the NCAA Divisions III level.

Where will this study take place?  
Data will be collected in a meeting place decided upon by individual coaches at institutions who have agreed to participate in the study. Though it is assumed that data collection will occur on the campus of participating institutions, the meeting place will depend on individual coaches’ discretion.

What is the time commitment for participating in this study?  
Participation in this study will take about 15 minutes.

What will you be asked to do if you choose to participate in this study?  
If you chose to participate in this study, you will be asked to respond to a series of anonymous questions about yourself. All information and responses are completely anonymous.

What information is being measured during the study?  
Information related to athletic identity, emotional competence, and help-seeking attitudes will be collected during this study.
What are the risks of participating in this study and how will these risks be minimized?
Potential risks of participating in this study are minimal and may include mild discomfort as you are asked to respond to a variety of questions on the surveys. Any discomfort is expected to be mild and no more than what an individual could expect to encounter as part of completing a personal survey. Participants have the option to discontinue answering the measures at any point if they experience discomfort. All questionnaires and responses are completely anonymous. No identifying information is requested about individuals or their institutions.

What are the benefits of participating in this study?
Participating in the study may give student-athletes an opportunity to reflect on factors being investigated in the study, including athletic identity, emotions, and help-seeking attitudes. Participation may also give participants the satisfaction of knowing they are contributing to research considered important for collegiate athletes.

Are there any costs associated with participating in this study?
The time commitment required for participation is a potential cost to participants. Your total time is estimated to be about 15 minutes.

Is there any compensation for participating in this study?
There is no compensation for participating in this study.

Who will have access to the information collected during this study?
Only research team members will have access to the data. Once the packets are collected they will be stored in a secure office in a locked file cabinet at the Center for Counseling and Psychological Services - Grand Rapids campus. In addition, results of this research study may be published or presented; however, study findings will only be reported in aggregate and no individual identifying information will be reported.

What if you want to stop participating in this study?
You can choose to stop participating in the study at any time for any reason. You will not suffer any penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study.

If you have any questions about participation in this study, please contact the principal investigator Dr. Patrick Munley at (269) 387-5120, or the student investigator at garrett.v.weatherhead@wmich.edu or (517) 862-5924. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.
Completing this survey indicates that you have read and understand the contents of this letter and that you agree to take part in this study.

Thank you for your time and participation.

Warmly,

Garrett Weatherhead, MA
Appendix F

Demographic Questionnaire
Demographic Questions

1. What is your age?

2. What is your gender?
   ___ Male
   ___ Female
   ___ Transgender

3. What is your race/ethnicity/cultural background?
   ___ African-American
   ___ Asian-American or of Asian descent
   ___ Biracial or multiracial
   ___ Caucasian/European American
   ___ Latino/a
   ___ Middle Eastern descent
   ___ Native American/American Indian
   ___ Other race/ethnicity/cultural background

4. What year in school are you?
   ___ Freshman
   ___ Sophomore
   ___ Junior
   ___ Senior

5. At what NCAA division level do you compete?
   ___ Division I
   ___ Division II
   ___ Division III

6. What sport do you play?
   ___ Baseball
   ___ Men’s Basketball
   ___ Women’s Basketball
   ___ Men’s Cross Country
   ___ Women’s Cross Country
   ___ Field Hockey
   ___ Figure Skating
   ___ Football
   ___ Men’s Golf
   ___ Women’s Golf
   ___ Hockey
   ___ Men’s Lacrosse
   ___ Women’s Lacrosse
   ___ Men’s Soccer
   ___ Women’s Soccer
___ Softball
___ Men’s Swimming and Diving
___ Women’s Swimming and Diving
___ Men’s Tennis
___ Women’s Tennis
___ Men’s Track and Field
___ Women’s Track and Field
___ Volleyball
___ Wrestling
___ Other