

PERCEIVED NORMS AND HELP-SEEKING INTENTIONS AMONG COLLEGE
STUDENT-ATHLETES

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WENTING SUN

Dr. Russell Ravert, Thesis Supervisor

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The undersigned, appointed by the dean of the Graduate School, have examined the thesis entitled

PERCEIVED NORMS AND HELP-SEEKING INTENTIONS AMONG COLLEGE
STUDENT-ATHLETES

presented by Wenting Sun,

a candidate for the degree of Master of Science,

and hereby certify that, in their opinion, it is worthy of acceptance.

Associate Professor Russell D. Ravert

Associate Professor Ze Wang

Associate Professor Sarah E. Killoren

DEDICATION

This thesis is dedicated to my lovely parents. As a first-generation student who studied oversea, I could not make this far without their support and unquestioned trust on all the decisions I have made. Thank you for willing to give all your love that enable me to explore the world. Thank you for always been a strong backing that I can reach out for consolation. Thank you, father, for all the humor that makes me laugh when I feel stressed out. Thank you, mom, for walking with me from the library via WeChat at midnight. Although it has been three years without going back home, your love is always by my side. I am always grateful that you are my parents!

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Wenting Sun

Dr. Russell D. Ravert, Thesis Supervisor

ABSTRACT

College student-athletes are vulnerable to mental health-related issues with the constant stresses rooted in the dual responsibilities on academic and athletic performances. Despite the higher intention and resources provided by college athletics departments, many student-athletes tend to underutilize professional services related to mental health well-being. The goal of this study was to better understand student-athletes' decision-making process on help-seeking, by examining perceived descriptive norms, perceived social norms, and athletic identity as potential predictors and moderator of athletes' intention to seek help. With a sample of 122 participants, we found that both perceived descriptive norms and perceived social norms were significantly associated with student athletes' intention to seek help. The relationship between perceived norms and intention to seek help was not dependent on athletic identity. However, as an exploratory finding, gender was indicated as a moderator in that association. In that perceived descriptive norms were a significant predictor of intention to seek help among male athletes while the perceived social norms were the only significant predictor among female athletes. The findings of the present study will contribute to future research and intervention programs on increasing service use among collegiate student-athletes who experience mental health-related issues.

CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

The life of college student-athletes (SAs) can often involve a great number of stressors that cause challenges to their mental health. The NCAA Goal Study (2020) reported that, out of 22,000 SAs, around 39% reported feeling overwhelmed compared to 26.8% in 2001 and 19.6% in 1986. In general, participating in sports/exercise is beneficial to prevent mental health issues. Exercise activities are an effective strategy for stress reduction by increasing self-efficacy and distracting the individual from depressing thoughts (Dogra et al., 2018; Yzer & Gilasevitch, 2019). College students who exercise regularly reported having lower levels of anxiety and depression with a higher level of subjective well-being (Ersöz, 2017; Yzer & Gilasevitch, 2019). With the dual identity as student and athlete, college SAs have additional resources (e.g., teammates, coaches, athletic department) to seek support and help while adjusting to the new college environment. In addition, SAs may have a clear self-identity as an athlete in the process of identity exploration, which may result in less struggle on figuring out who they are and how they fit into the community (Higginbotham, 2021). The disparity between SA mental health and the range of intended support options leads to this question: what are the under-concerned stressors that may threaten their mental health?

As college sports being specialized and popular, SAs are likely to receive distinct status and more attention from the community, as well as expectations from themselves, parents and friends (Pritchard & Wilson, 2005). To fulfill those internal and external expectations, SAs often set higher standards on their athletic performance and invest great effort in daily practices and competitions (Surujlal, Van Zyl, & Nolan, 2013). As collegiate sports require high competition level, SAs tend to experience increased anxiety and depression levels after being injured by worrying about their athletic performance after recovering (Ardern et al., 2013; Li et al., 2017).

On top of athletic performance, SAs are expected to balance their dual roles as a student and an athlete, completing schoolwork and exams while participating in athletic trainings and travels. With such a busy schedule, there is no surprise that SAs have less time for sleep and self care, where are more likely to fail in the track toward mental health issues.

Given the high level of stress reported by SAs, access to mental health services is crucial and needed. In the past decades, the nation collegiate sport organizations (e.g., NCAA) and most institutions started paying additional attention to SAs mental well-being by providing resources and funds like mental health professionals and psychological counseling. However, the degree it will help may depend on SAs' willingness to seek helps from the services. Additionally, research has found that SAs are likely to underutilize resources like mental health professionals when having mental health concerns (Hilliard, et al., 2020). Therefore, research is needed to explore the possible factors that influence SAs on seeking help, especially with mental health related problems.

Help-Seeking and Mental Health

Help-seeking is an adaptive strategy for college SAs to cope when they experience certain mental health problems. Despite the lack of absolute definition, accordance with Rickwood and Thomas (2012), help-seeking is conceptualized as “the proactive and adaptive process where individuals cope with problems by using external resources to seek help” (p. 180). With increased intention on SAs' mental well-being, most institutions offer formal sources, such as mental health professionals and counselors, to help SAs with their mental health concerns. In addition, national college sport organizations like National Collegiate Athletic Association (NCAA) and National Association of Intercollegiate Athletics (NAIA) provide additional resources for coaches and athletic department to support SAs' mental health (Brown, et al.,

2014). Despite the available resources to seek help, however, SAs often underutilize the professional mental health services while suffering in mental health issues (Eisenberg, 2014; Watson, 2005; Watson & Kissinger, 2007).

Humans' behaviors are driven under the influences from both individual factors and the context ones live in, so does help-seeking behaviors (Baral et al., 2013; Bronfenbrenner, 1986). In general, male college students often have lower attitudes of help-seeking with mental health problems compare to female college students (Eisenberg, et al., 2009). Ramaecker and Petrie (2019) also found fewer favorable attitudes toward help-seeking among male athletes with higher conformity to masculine norms. Considering the diversity of race and ethnicity, those who are Asian, Hispanics or Latinos, and Black or African Americans, tend to be less likely to seek for help than White/European American (Chakawa & Shapiro, 2021; Eisenberg, et al., 2009). Beside demographic factors, according to the Theory of Planned behavior model, one's intention on doing certain behaviors are also influenced by their attitudes and perceived norms. Previous studies have investigated the impacts of stigma on mental health as perceived barriers that influence athletes' attitudes to engage in help-seeking (Bird et al., 2018; Kaier et al., 2015; Watson, 2005). For instance, Bird and colleagues (2018) found that the higher levels of stigmatization by others (public stigma) or self-stigma predict lower level of SAs' attitudes toward face-to-face counseling, which indicated the great influence of others on their decision making. More interestingly, the identity as an athlete was also found to be an additional factor with stigma that impact college SAs' attitudes to seek help (Steinfeldt et al., 2009). However, there is limited research on the potential impact of perceived norms on college SAs' help-seeking intention.

Previous research supported that when salient and valued social norms are incompatible with formal service use, individuals will unavoidably be influenced not to seek help (Barksdale, & Molock, 2009; Cauce et al., 2002). Perceived norms, as well, may indicate bidirectional effect that individuals may be more likely to do certain behaviors when perceiving intense social norms. In the case of alcohol consumption, for example, college students who perceive strong norms to drink from their peers are more likely to drink (Knee & Neighbors, 2002; Neighbors et al., 2009). Therefore, college SAs help-seeking intention may be predicted by perceived social norms from significant others, with the additional impacts of athletic identity.

Theoretical Framework

The present study is guided by two theories: Theory of Planned Behavior (Ajzen, 1991) and Erikson's theory of identity (Erikson, 1966). The former describes the influence of perceived norms on one's help-seeking intention while the latter describes how the athletic identity may create additional impact build upon on the influence of the perceived norms. Together, these theories provide an emerging model that indicates the potential association between perceived norm and SAs help-seeking intention that moderated by their level of athletic identity.

Theory of Planned Behavior

The Theory of Planned Behavior (TPB) was first developed by Icek Ajzen (1991) to forecast and comprehend human behavior and has been widely applied to explain individuals' help-seeking behaviors. Ajzen asserts that individuals' behavior intention is the most direct factor to their actual engagement of behavior, while the intention can be indicated by three dimensions: one's attitudes, perceived norms, and behavioral controls. Tahtinen and Kristansdottir (2019) supported this statement and found that SAs who have mental health concerns (e.g., depression and anxiety) reported less intention towards help-seeking than non-

athlete students, which also indicate less likelihood of actual help-seeking behavior, according to TPB. Thus, discovering factors that may influence help-seeking intention is particularly important for actual behavioral change. Previous studies have identified the significant impacts of certain factors, including the attitudes, self and public stigma, and perceived behavior controls on SAs' help-seeking intention, under the framework of TPB (e.g., Bird et al., 2018; Kaier et al., 2015; Watson, 2005). However, the perceived norms, as one of the predictors on one's behavior intention in TPB model, was under-examined on the topic of college SAs' mental-health related help-seeking intention.

The original operationalization of perceived norms by Ajzen (1991) overlaps with the concept of social norms, referring to social pressure that an individual perceives when deciding whether to perform a certain behavior (i.e., how much a person thinks others would expect them to do certain things). In general, perceived norms is a weak indicator to one's outcome behaviors, compared to the influences of other factors on ones' intentions and/or behaviors in the TPB model (Armitage & Conner, 2001). One possible explanation is that primary influence of personal factors (i.e., one's attitudes and perceived personal control) is stronger than the influence of norms (Ajzen, 1991). However, Ajzen did not consider the potential influence of descriptive norms, which refer to the likelihood individual thinks others would do certain thing. As reported by Ravis and Sheeran (2003), one's perceived descriptive norms played as an additional predictor, with perceived social norms, that explains extra variations in individuals' help-seeking intention in addition to the three demotions of the TPB model.

Perceived Social Norms

Social norms indicate the injunctive norms one perceives from the public, especially from "significant others" (e.g., most of my peers think that I should seek mental health service if I

experience depression). Within the college context, students may perceive certain peers as “significant others” and more likely to consider opinions from them since they are away from their parents. While students are trying to fit in and exploring their self-identity, peer pressure can be influential when they make certain decisions. Aldalaykeh et al. (2019) supported the aim that perceived negative social pressure toward help-seeking (e.g., Most of my peers view mental health service very negatively) predicted lower intention toward help-seeking. In contrast, individuals with perceived positive social pressure toward help-seeking may be more likely to seek help. Compared to non-athlete students, SAs are most likely surrounded by their teammates in the primary context due to great amount of time spending in daily training and activities. And teammates are one of the essential supportive resources for SAs to reach out when experiencing difficulties (Hagiwara et al., 2017; Wahto, Swift, & Whipple, 2016). In present study, teammates are defined as the “significant others” that SAs perceive social norms from.

Perceived Descriptive Norms

In addition to social norms, in terms of perceived approval of seeking help, the perceived degree that peers also engage in a behavior has been shown to predict individual’s behaviors. In accordance with Ravis and Sheeran (2003), descriptive norms refer to individual’s perception on the likelihood that others would do certain behavior (e.g., “If my friends were having a mental breakdown, their first inclination would be to get professional attention.”). Researchers have applied descriptive norms in other areas (e.g., SAs’ drinking and substance use) and demonstrated the tendency of misestimating others’ behaviors, in which the gap between what they perceive and what is actual would influence self behaviors (Egan et al., 2016; Grossbard et al., 2009). While SAs spend their majority time with their teammates, the perceived likelihood of other teammates help-seeking behaviors for mental health problems is expected to predict SAs’

help-seeking intention, in addition to the influence of perceived social norms. Therefore, our first research question for present study is whether the SAs with higher perceived social and/or descriptive norms from teammates hold higher intention toward help-seeking with mental health concerns.

Erikson's theory of identity

Erikson's (1968) theory of identity emphasizes that individual's identity develops over life with several developmental stages that involve emotional and cognitive transitions, and its appearance is influenced both by physical maturity and by the social needs of a person at a particular stage of life. Most college SAs start playing sport since their adolescence age that give them more opportunities to explore the athletic identity, which operationalized as the degree of self identity with the athletic role (Brewer, 1993). Such identity develops more salience as SAs persist in sport over time, wherein they prioritize their identity as an athlete. It is an essential dimension of self concepts for college SAs that may influence their motivation, experiences and formation of relationships (Brewer, 1993; Cornelius, 1995). The achievement status of athletic identity can bring positive functions, such as the strong bond created between oneself and the athletic team and set a boundary from outsiders (e.g., non-athlete students), as well as the development of interpersonal and leadership skills (Anderson et al., 2009; Cronin et al., 2015). However, SAs with salient athletic identity may change their behaviors to ensure the consistence of their identity as an athlete in certain contexts (Burke, 1991).

Athletic identity has been studied in health-related behaviors among SAs. With the experience of pain or physical injury, for example, athletes with higher level of athletic identity are associated with their expectation of toughness in sport, which significantly predicted the less willingness to seek help (Stadden, 2007). Regarding mental-health related help-seeking,

Weatherhead (2015) indicate that, with a sample of 144 college SAs, those who reported higher level of athletic identity were associated with more negative attitudes toward help-seeking. However, sparsely addressed in the literature on help-seeking behavior is the association between athletic participation and perceived norms toward help-seeking behavior.

Importance of Similarity

According to Erikson's (1966) conception of play, the identity is formed through the interplay of their imaginative creations with those of significant people in their environment and produced a shared version of their world. Previous studies that involved perceived norms either from a broader definition of "others" or peers (Egan et al., 2016; Neighbors et al., 2008; Ravis & Sheeran, 2003). Within the sport environment, SAs and their teammates are more likely to share similar norms that regulate each other's behavior and create a subculture within such context. Therefore, the influence of perceived norms from teammates, who are also athletes, may play a significant role on SAs' help-seeking intention. On the other hand, if SAs do not have strong athletic identity, their teammates' approval or behaviors may be less influential on their help-seeking intention. Considering the influence of one's identity, our second research question is whether the athletic identity moderate the relations between perceived norms and SAs help-seeking intention.

Masculinity and Gender Differences

Empirical evidence demonstrates the gender identity, especially the traditional masculinity role, as a barrier of help-seeking among male athletes (Addis & Mahalik, 2003, Ramaeker & Petrie, 2019; Steinfeldt & Steinfeldt, 2012). Within the social construction of sport, men are more likely to be acculturated to a traditional masculine gender role, where they

perceive the opportunity to learn what it means and how to behave as a man (Wasyliw & Clairo, 2018). Additionally, seeking help is viewed as being dependent, even perceived as a sign of weakness, which seems conflict with the general masculinity norms (e.g., being tough, strong, and independent). Previous studies including Addis and Mahalik (2003) found that there is an imbalance rate of attitudes on help-seeking between male and female athletes, where male athletes reported lower level of preference to seek help than female athletes. In present study, in addition to the athletic identity, we expect that gender plays a moderating role on the relation between perceived norms and SAs' help-seeking intention.

The Present Study

The present study extends prior research by examining the relation between perceived norms (i.e, social norms and descriptive norms) and SAs' help-seeking intention, and whether athletic identity and gender moderate the association between these variables, respectively (Figure 1). There were two main research questions: 1) Will the SAs who report higher perceived social and/or descriptive norms be more likely to report higher intention toward help-seeking with mental health concerns? 2) Will the athletic identity and gender moderate these relations, respectively? Based on the research questions, we hypothesize the follows:

Hypothesis 1: SAs with high descriptive norm scores (i.e., high perception of peers' intention towards help-seeking) will report higher intent to seek help from mental health professionals if they have a mental health concern.

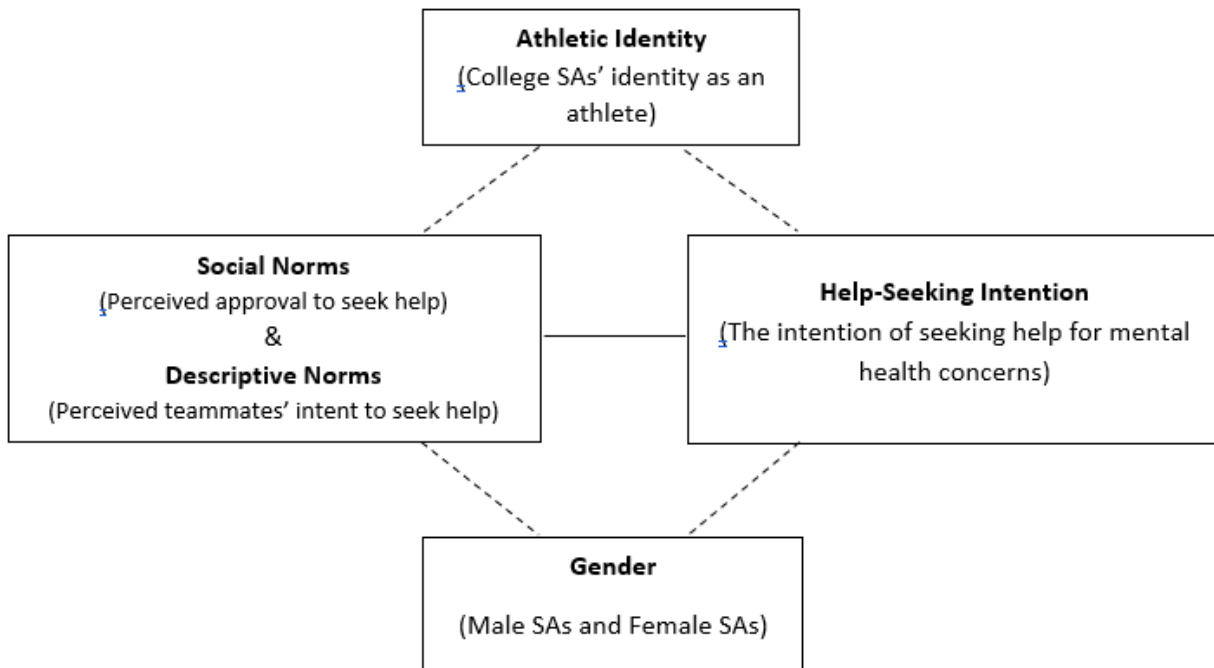
Hypothesis 2: SAs with high social norm scores (i.e., high perceived peer pressure to seek-help if needed) will report higher intent to seek help from mental health professionals if they have a mental health concern.

Hypothesis 3: Controlling the effects of social norms, the association of perceived descriptive norms and SAs' help-seeking intention will be stronger for SAs who have higher athletic identity than those who have lower athletic identity.

Hypothesis 4: Controlling the effects of descriptive norms, the association of perceived social norms and SAs' help-seeking intention will be stronger for SAs who have higher athletic identity than those who have lower athletic identity.

In addition, possible gender differences were examined. Specifically, we tested for interaction effect between gender and perceived descriptive and social term on the predication of SAs' intention to seek help. No specific hypothesis were stated.

Figure 1 Theoretical Model



CHAPTER 2: METHODS

Participants

College SAs were recruited from two National Collegiate Athletic Association (NCAA) Division I and III universities in the Midwest. Because data collection involved online surveys and paper surveys placed in public location, it was not possible to calculate for the response rate. A priori power analysis was conducted using G*Power for a multiple linear regression with examined predictors, $\alpha = .05$, power $(1 - \beta) = .80$, and effect size of .15 (Aldalaykeh et al., 2019). Power analysis results revealed a minimum sample size of 92 participants, and we meet the target population size for saturation with a total of 122 participants.

Instruments

The survey included questions regarding gender, age, race and ethnicity, and type of sports. SAs also reported the type of institution they belong to (i.e., Division I or Division III). Gender and race and ethnicity were the two covariates to determine the differences between groups on the intention of seeking help. Gender was dummy coded as 0 (male) and 1 (female) and entered as dichotomous variables. Race and ethnicity were dummy coded for groups of White, Black or African American, Asian or Pacific Islander, and Hispanic or Latin American and entered as dichotomous variables with two main categories (0 = white-only and 1 = other-than-white-only). Several factors were examined: 1) individual help-seeking intention, 2) perceived social norms, 3) perceived descriptive norms, and 4) athletic identity.

Individual Help-Seeking Intention

The three-item Mental Help-Seeking Intention (MHST) scale measures SAs' help-seeking intention and perceived descriptive norms (e.g., "*If I had a mental health concern, I would intend to seek help from a mental health professional*"). It is a seven-point Likert scale

from 1 (i.e., Definitely false) to 7 (i.e., Definitely true). Internal reliability has been previously reported as Cronbach's $\alpha = .87$ (Hammer & Spiker, 2018). An overall scale score is the mean of all three items. High MHST refers a high intent to seek help if having a mental health concern, whereas low MHST score refers a low intent to seek help.

Perceived Descriptive Norms

The three-item MHST scale was adapted to measure perceived descriptive norms (3-item). In the present study, SAs' teammates are identified as "significant others", therefore, the subject changes from "I" to "my teammate" (e.g., "*If my teammate had a mental health concern, he/she would intend to seek help from a mental health professional*"). A seven-point Likert scale from 1 (i.e., Definitely false) to 7 (i.e., Definitely true) is used. The overall scale score is the mean of respective items. High score of perceived descriptive norms means SAs are more likely to think their teammates would seek help for mental health concern, where as low score of perceived descriptive norms means SAs are less likely to think their teammates would seek help.

Perceived Social Norms

The three-item subscale of perceived social norms from the Theory of Planned Behaviour Questionnaire (e.g., "*Most people who are important to me think that I should seek mental health service.*") was adapted and measures SAs' perceived social norms from teammates (e.g., "*Most of my teammates think that I should seek mental health service if I am in needed.*"). The original seven-point Likert scale from 1 (i.e., Strongly Disagree) to 7 (i.e., Strongly Agree) has demonstrated good reliability (Cronbach's $\alpha = .75$ to $.86$) (Aldalaykeh, et al., 2019; Mo & Mak, 2009). The scores for the item "Most of my teammates view mental health service very negatively" were reversed (e.g., 1 to 7, 2 to 6). An overall scale score represents the mean of the

respective items. SAs with high score of perceived social norms indicates to a high level of perceived approval on help-seeking for mental-health concerns, whereas those with low score indicates a low level of perceived approval.

Athletic Identity

The seven-item Athletic Identity Measurement Scale (AIMS) measures the significant level of identity as an athlete to SAs' sense of self (i.e., "I consider myself as athlete", "Sport is the most important part of my life"). The scale is a seven-point Likert scale that ranges from 1 (Strongly disagree) to 7 (Strongly agree) with a good internal reliability (Cronbach's $\alpha = .81$) (Brewer & Cornelius, 2001). The overall scale score is the mean of respective items. SAs with high scores indicated a stronger self-identification with the athletic role, where as those with low scores indicated a weaker identity as an athlete.

Process of Data Collection

The investigator's university Institutional Review Board and each institution's athletic department approved the study. Following approval, SAs were recruited from an institution from NCAA Division I and Division III, respectively. Due to the variation of COVID-19 policy across institutions overtime, the investigators applied both online and in-person recruitment methods regarding the approval of athletic departments and institutions.

For the NCAA Division I institution, the investigator first sent recruitment emails with an online survey link to SAs, in which the consent form located at the first page of survey for respondents to view before starting the survey. The athletic department later approved the in-person data collection with the access of collecting data in public area. SAs who did not complete the online survey participate via completing a hard-copy paper survey with the same questions. For the Division III institution, the stakeholders assisted the process by sending

recruitment emails, including the online survey link, to the SAs. The SAs from the two institutions also read the consent form before completing the paper survey. Coaches or any other athletic staffs were not present while respondents completed the surveys. Both online and paper survey took approximately 10 minutes to complete. Data from paper surveys were entered by the investigator in an excel spreadsheet combined with online survey data. Ten items in the survey are not studied in current study but are included in the survey to be used in a separate research study. These steps were taken to ensure confidentiality of athletes and college sites:

- 1) The survey was completely anonymous - no names or other identifying information were collected on the survey.
- 2) No data can be traceable to any individual college. Data were collected from multiple colleges and combined in the dataset.

Missing data. Participants were allowed to decline answering any questions. In case of missing data, the scale mean would be applied for that participant. Cases with over 50% of missing items or more than one missing item from certain scale were removed from the dataset.

Data Analysis

Before conducting the data analysis for hypotheses, we scanned missing values included in the dataset, and all data were missing randomly and completely independent of other data. A total of 125 respondents started the survey. Among them, three cases were discarded from the dataset due to failing to complete over 50% of the survey. Thus, the final dataset included a total of 122 college student-athletes. There were no missing data in responses on the items included in this study.

Descriptive statistics were conducted first to report the basic description of each variable (e.g., mean, mode, median, and range). To examine the hypotheses, the present study ran the

following analyses with the R statistical software (R 4.1.1.), as well as SPSS software to ensure the accuracy of statistical results. A p-value that less than 0.05 represents a significant finding in present study. The following statistical analyses were conducted to test the hypotheses:

1. Pearson Correlation for correlation between quantitative variables. Categorical variables (i.e., gender, race and ethnicity, types of sports) were dummy coded and included as binary variables with the variables perceived descriptive norms, perceived social norms, athletic identity, and individual help-seeking intention.
2. A t-test was conducted to determine if there is a mean different in target variables between male and female SAs.
3. Second t-test was conducted to examine the mean difference in target variables between SAs who were white-only and other-than-white.
4. A hierarchical multiple regression was conducted to test the significance of main effects (i.e., perceived descriptive terms, and athletic identity) and interactive effects (i.e., perceived descriptive norms x athletic identity) of predictors on the outcome (i.e., individual help-seeking intention scores), while controlling the potential effects of gender and race and ethnicity. Gender and race and ethnicity were dummy coded, where 0 as “male” and “white-only”, and 1 as “female” and “other-than-white”. The perceived descriptive norms, and athletic identity were centered and then multiplied to improve meaning interpretation of regression coefficients. A linear regression was conducted in the first sub-model with gender and race and ethnicity as independent variable; then the perceived descriptive norms, perceived social norms, and athletic identity were included as independent variable in the second sub-model; lastly, the interaction terms, *perceived descriptive norms x athletic identity* and *perceived social norms x athletic identity* were

added in the last sub-model. To test the moderating role of athletic identity, the type I F test (type I sum of square) was used to examine whether adding the predictor/interaction terms significantly improve the prediction of the outcome obtained through other predictors and interaction terms already included in the model (Mangiafico, 2015).

5. Another hierarchical regression was conducted to test the significance of gender as a moderator that may strengthen the association between perceived descriptive/social norms and individual help-seeking intention. In the first sub-model, perceived descriptive norms, perceived social norms, and an interaction term *perceived descriptive norms x perceived social norms* were added. By adding the interaction term, we could examine whether the variables depend on each other. Then, gender and two interaction terms *perceived descriptive norms x gender* and *perceived social norms x gender* were added to the second sub-model. And a Type I F test was conducted to examine the additional, significant contribution of the interaction term on the prediction of dependent variable (i.e., individual help-seeking intention scores).
6. To test whether gender was as a significant moderator of the relation between perceived descriptive/social norms and individual help-seeking intention, we ran additional linear regression analyses to test the gender differences. To do this, we conducted separate linear regression analyses on male and female participants with perceived descriptive and social norms as independent variables and individual help-seeking intention as the dependent variable.

To ensure the accuracy of the multiple linear regression analysis, the study examined the assumption of 1) *linearity* to indicate the linear relationship existed between predictors and criterion, 2) *homoscedasticity* to measure the constant variance from each level of predictors, 3)

independency of residual to exclude clustering and serial dependency, and 4) *multicollinearity* to measure the degree of overlapping effects between predictors (Poole & O'Farrell, 1971). In addition, the study measured the outliers by measuring 1) *leverage* for predictors only to see the distance between observed values from each case is from the mean, 2) *discrepancy* to measure the residual of criterion, and 3) *influence* to see how the regression equation would change after a certain case was removed from the data set (Fidell & Tabachnick, 2003).

CHAPTER 3: RESULTS

Demographics

Among the 122 respondents, the average age was 20-year-old ($SD = 1.64$, $range = 18$ to 24), with 48 males (39%) and 74 females (61%). Eighty-eight respondents identified as white-only (72%) while thirty-four identified as other-than-white (28). A majority SAs ($n = 117$, 96%) were from a NCAA Division I institution and the rest were from NCAA Division III institution ($n = 5$, 4%). A non-parametric Kruskal-Wallis test was conducted in SPSS to confirm that there was no difference in group means for social norms, descriptive norms, athletic identity and intendency to seek help across institutions. The null hypothesis was retained, indicating that the means are similar across the institutions among all the measured variables. The means for the five female SAs from Division III institution were not statistical different from female SAs from Division I institution. Participants were asked to specify whether they play an individual sport or team sport, with the criteria been whether participants compete as individuals or a group. A majority ($n = 84$, 69%) respondents reported playing in individual sports (e.g., tennis, golf, wrestling), while thirty-eight (31%) reported playing in team sports (e.g., basketball, baseball, football). The frequencies and percentages for categorical variables are exhibited in Table 1.

Table 1

Frequencies and Percentages for Categorical Variables

Variable	Frequency	Percent
Gender		
Male	48	39.34%
Female	74	60.66%
Missing	0	0.00%

Race and Ethnicity		
White-only	88	72.13%
Other-than-white	34	27.87%
Missing	0	0.00%
Types of Institution		
NCAA Division I	117	95.90%
NCAA Division III	5	4.10%
Missing	0	0.00%
Types of Sports		
Individual Sports	84	68.85%
Team Sports	38	31.15%
Missing	0	0.00%

Note. $N = 122$

Measured Variables

Because the nine items measured perceived descriptive norms, perceived social norms, and individual help-seeking intention were measured within a single item set, principal component analysis using varimax rotation was conducted in SPSS software to verify whether they represented separate constructs. The analysis resulted in a three-factor solution, with three components with Eigenvalues over 1, accounting for 80.3% of total variance. All items loaded onto the expected component.

Principal component analysis of the seven athletic identity items resulted in a two-factor solution, accounting for 60.3% of total variance. Items worded, “I would be very depressed if I were injured and could not compete” and “I feel bad about myself when I do poorly in sport”

loaded on a separate component than other items. The original athletic identity scale was designed with three components, “social identity”, “exclusivity”, and “negative affectivity” (Visek et al., 2008), and these two exclusive items were from the “negative affectivity” component, which may help explain this separate loading. However, for purposes of this study the entire seven item score was used based on its use in prior research and acceptable internal reliability.

The internal consistency reliability of each scale was examined with the Cronbach’s alpha, as a previous step of combining the items as composite variable by calculating the raw mean. The MHST scale that examined the SAs’ individual help-seeking intention had an excellent internal reliability ($\alpha = .93$) in this study, which was higher than the results from Hammer and Spiker’s (2018) study ($\alpha = .87$). The perceived descriptive norms scale was adapted from the three-item MHST scale by replacing the subject “I” to “My teammates”. The adapted scale used in this study also had an excellent internal reliability ($\alpha = .94$). The AIM scale applied for athletic identity was indicated to have an acceptable internal reliability ($\alpha = .75$) in this study.

The perceived social norms scale was adopted from the Subjective Norms sub-scale of Theory of Planned Behaviour Questionnaire. Despite the good internal reliability ($\alpha = .75$ to $.86$) reported from previous studies (Aldalaykeh, et al., 2019; Mo & Mak, 2009), the present study reported a marginal internal consistency ($\alpha = .66$) but was considered acceptable.

After calculating the internal consistency reliability for each continuous variable, we then created a composite variable, in other words, an overall scale score with the raw means of all items from the scale (Table 2). Among the independent variables, the mean perceived descriptive norms score was 4.68 ($SD = 1.51$) while the mean perceived social norms score was 4.66 ($SD = 1.38$). And the mean athletic identity score was 5.47 ($SD = 0.91$). The outcome variable,

individual help-seeking intention, had a mean score of 4.60 ($SD = 1.68$). Although the research plan involved replacing missing scores with the mean of the variables, no data were found to be missing.

Table 2

Means and Standard Deviations for Interval/Ratio Variables (2-digital)

Variable	Mean	Standard Deviation
Perceived Descriptive Norms	4.68	1.51
Perceived Social Norms	4.66	1.38
Athletic identity	5.47	0.91
Individual Help-Seeking Intention	4.60	1.68

Correlation

A Pearson correlation coefficient was computed to assess the linear relationship between the measured variables (Hypotheses 1 and 2). We interpreted the level of the correlational strength according to Chua (2006) standards. According to the results, female SAs tend to, compared to male SAs, have higher scores on perceived descriptive norms, $r(121) = 0.20, p = 0.008$, perceived social norms, $r(121) = 0.20, p = 0.021$, and individual help-seeking intention, $r(121) = 0.20, p = 0.016$, with weak strength ($r > 0.30$). And SAs who were white-only reported slightly higher scores on perceived descriptive norms $r(121) = -0.19, p = 0.049$, as well as perceived social norms, $r(121) = -0.22, p = 0.017$, compared to those who were other-than-white.

In addition, perceived descriptive norms and perceived social norms were moderately associated, $r(121) = 0.53, p < 0.001$. The perceived descriptive norms also moderately correlated with individual help-seeking intention, $r(121) = 0.51, p < 0.001$, indicating that SAs who

perceive more descriptive norms tend to have higher intention to seek help when needed. Lastly, there was a low, positive correlation between perceived social norms and individual help-seeking intention, $r(121) = 0.38, p < 0.001$. The assumptions of normality were measured to ensure the reliability of the Pearson Correlation analysis, and skewness and kurtosis of variables were considered satisfactory (< 2.0). Age and type of sport were not included in later analyses due to a lack of theoretical support and significance of correlational metrics. Correlations between binary and continuous variables are presented in Table 4.

Table 3

Intercorrelations of Key Demographic Variables and Measures

Variables	1	2	3	4	5	6	7	8
1. Gender	1	-.06	-.05	.26**	.20*	.20*	-.16	.20*
2. Race/Ethnicity	-.06	1	-.04	.06	-.19*	-.22*	-.03	-.05
3. Age	-.05	-.04	1	.05	-.09	.01	-.11	.12
4. Type of Sport	.26**	.06	.05	1	-.15	-.10	.25*	-.17
5. PDN	.20*	-.19*	-.09	-.15	1	.53***	.01	.51***
6. PSN	.20*	-.22*	.01	-.10	.53***	1	.00	.38***
7. AI	-.16	-.03	-.11	.25*	.01	.00	1	-.08
8. IHS	.20*	-.05	.12	-.17	.51***	.38***	-.08	1
Mean	.61	.28	20.36	.31	4.68	4.66	5.47	4.60
SD	.49	.45	1.63	.47	1.48	1.38	.91	1.68
Range	0-1	0-1	18-24	0-1	1-7	1-7	1-7	1-7
Minimum	0	0	18	0	1	1.33	3.14	1
Maximum	1	1	24	1	7	7	7	7
Skewness	-.45	.98	.28	.80	-.47	-.51	-.53	-.38
Kurtosis	1.20	1.96	1.13	1.64	1.63	1.47	1.63	1.28

Note. $N = 122$; Gender: (0 = Male, 1 = Female); Race/Ethnicity: (0 = White-only, 1 = Other-than-white); Type of Sport: (0 = Individual Sport, 1 = Team Sport); PDN = Perceived Descriptive Norms, PSN = Perceived Social Norms, AI = Athletic Identity, IHS = Individual Help Seeking Intention
 $*p < .05$, $**p < .01$, $***p < .001$.

Differences Between Groups Among Gender and Race/Ethnicity

A series of t -test were conducted to detect the differences between groups among gender and race and ethnicity (Table 3). The result indicated that female SAs reported higher perceived descriptive norms ($M = 4.99$; $SD = 1.48$) than male SAs ($M = 4.25$; $SD = 1.48$), $t(121) = -2.59$, $p = 0.011$). The scale was designed such that SAs with higher perceived descriptive norms scores consider their teammates more likely to seek help for mental health-related problems. Female SAs indicated higher perceived social norms ($M = 4.93$; $SD = 1.39$) than male SAs ($M = 4.33$; $SD = 1.39$), $t(121) = -2.23$, $p = 0.029$. In other words, female SAs perceived higher level of approval from their teammates on help-seeking for mental-health concerns. Consistent with the findings, female SAs also reported higher individual help-seeking intention ($M = 4.89$; $SD = 1.68$) than male SAs ($M = 4.14$; $SD = 1.67$), $t(121) = -2.41$, $p = 0.017$. No significant differences were found in the level of athletic identity between male and female SAs, $t(121) = 1.69$, $p = 0.095$.

With regard race and ethnicity, t -tests found that the SAs who were white-only reported significantly higher scores of perceived descriptive norms ($M = 4.86$; $SD = 1.48$) than those who were other-than-white ($M = 4.29$; $SD = 1.48$), $t(121) = 1.93$, $p = 0.043$. SAs who were white-only also indicated higher scores of perceived social norms ($M = 4.89$; $SD = 1.39$) than those who were other-than-white ($M = 4.21$; $SD = 1.39$), $t(121) = 2.31$, $p = 0.025$. Based on prior research, minority group members would be expected to be less likely to seek help. However, no

significant difference was found between white-only and other-than-white SAs, $t(121) = 0.38, p = 0.705$. Likewise, no significant differences were found in the level of athletic identity among race and ethnicity groups, $t(121) = 0.38, p = 0.699$. It could be due to low sample size.

Table 4

Group Differences in Gender and Race and Ethnicity

	Male		Female		<i>t</i>
	<i>M (SD) or %</i>	<i>Min; Max</i>	<i>M (SD) or %</i>	<i>Min; Max</i>	
PDN	4.25(1.48)	1.00; 7.00	4.99(1.48)	1.33; 7.00	-2.59*
PSN	4.33 (1.39)	1.33; 7.00	4.93 (1.39)	1.67; 7.00	-2.23*
AI	5.63 (.90)	3.14; 7.00	5.33 (.91)	3.14; 7.00	1.69
IHS	4.14 (1.67)	1.00; 7.00	4.89 (1.68)	1.00; 7.00	-2.41*

	White-Only		Other-Than-White		<i>t</i>
	<i>M (SD) or %</i>	<i>Min; Max</i>	<i>M (SD) or %</i>	<i>Min; Max</i>	
PDN	4.86 (1.48)	1.00; 7.00	4.29 (1.48)	1.00; 7.00	1.93*
PSN	4.89 (1.39)	1.33; 7.00	4.21 (1.39)	2.00; 7.00	2.31*
AI	5.47 (.91)	3.14; 7.00	5.39 (.91)	3.57; 6.71	0.38
IHS	4.64 (1.68)	1.00; 7.00	4.51 (1.68)	1.00; 7.00	0.38

Note. $N = 122$.

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

Athletic Identity as Moderator

To test the hypotheses 3 and 4, a hierarchical multiple regression analysis was conducted using the individual help-seeking intention as the outcome variable. The data were screened for

assumptions, and four participants were eliminated due to high leverage values. Linearity, normality, multicollinearity, homogeneity, and homoscedasticity were all met.

The predictor variables, gender and race and ethnicity were first entered into the model to control for demographic differences in individual help-seeking intention. Only gender accounted for a significant amount of variance in individual help-seeking intention, $R^2 = 0.04$, $F(2, 115) = 2.96$, $p = .036$).

The perceived descriptive norms, perceived social norms, and athletic identity scores were centered before being entered into the second model with the purpose of minimizing multicollinearity effects (Holmbeck, 1997). Adding the three variables into the second model, while controlling other variables, only perceived descriptive norms were found to significantly enhance the variance in help-seeking intention $\Delta R^2 = 0.26$, $\Delta F(5, 112) = 9.07$, $p < .001$.

In the final model, the two interaction terms, perceived descriptive norms x athletic identity and perceived social norms x athletic identity, were entered, which failed to account for a significant amount of additional variance in individual help-seeking intention, $\Delta R^2 = 0.27$, $\Delta F(7, 110) = 7.06$, $p < .001$. Therefore, in response to the third and fourth hypothesis, results (Table 5) did not find the moderating effects of athletic identity among the relation between perceived descriptive/social norms and individual help-seeking intention.

Gender as Moderator

As an exploratory examination, we also ran a hierarchical multiple regression analysis to explore the potential moderated effects of gender on the relation between perceived descriptive/social norms and individual help-seeking intention. The perceived descriptive norms, perceived social norms, and interaction term of the two variables (perceived descriptive norms x perceived social norms) were added to the first model. The interaction term was added to test

whether the two variables independently predict individual help-seeking intention. The result indicated that perceived descriptive norms and social norms significantly and independently account for the variation of individual help-seeking intention, $R^2 = 0.27$, $F(3, 114) = 14.00$, $p < 0.001$. The non-significant result of the interaction term indicated that the association between perceived descriptive norms and help-seeking intention was not dependent on perceived social norms scores, nor vice versa.

In the second model, gender and two interaction terms, *perceived descriptive norms x gender* and *perceived social norms x gender*, were added to examine whether gender would strengthen the relation between perceived descriptive/social norms and individual help-seeking intention. The overall model was significant, $\Delta R^2 = 0.29$, $\Delta F(6, 111) = 9.22$, $p < .001$, and the two interaction terms added additional variation in the outcome (Table 6). A Type I F test was conducted to examine the additional, significant contribution of the interaction term on the prediction of individual help-seeking intention, and the result was statistically significant $F(3, 111) = 3.52$, $p = 0.012$.

To identify the nature of gender as a moderator of the relation between perceived descriptive/social norms and individual help-seeking intention, we then ran two additional multiple regression with male-only and female-only. We found that with male SAs, the perceived descriptive norms was significant predictor of their help-seeking intention while perceived social norms remained non-significant, $R^2 = 0.34$, $F(3, 42) = 7.24$, $p < 0.001$. However, the result was different for female SAs. Among female SAs, the perceived social norms was significant predictor of their help-seeking intention while perceived descriptive norms was non-significant, $R^2 = 0.27$, $F(3, 68) = 8.41$, $p < 0.001$.

Two three-way-interaction terms were created and added to the model along with athletic identity as a third step, in order to assess the possibility that the prediction of perceived descriptive norms and social norms on intention to seek-help between male and female SAs. Those items did not reach significance and were not included in the final model.

Table 5

Hierarchical Multiple Regression Examine the Moderating Role of Athletic Identity

Variable	Model 1			Model 2			Model 3		
	B	SE B	β	B	SE B	β	B	SE B	β
Gender	0.751***	0.102	0.43	0.280***	0.288	0.081	0.215**	0.288	0.063
Race and Ethnicity	0.191	0.111	0.16	0.284	0.305	0.076	0.308	0.305	0.083
PDN				0.459***	0.107	0.405	0.438***	0.109	0.387
PSN				0.208	0.115	0.171	0.239*	0.115	0.197
AI				-0.139	0.149	-0.075	-0.208	0.155	-0.112
PDN x AI							0.193	0.144	0.056
PSN x AI							-0.26	0.142	-0.071
R^2		0.277			0.257			0.266	
F for change in R^2		2.955			9.072			7.057	

Note. Model 1 established that our covariate/control variables, gender and race and ethnicity, are predictive of the help-seeking intention, the outcome. Model 2 tested whether other variables, over and above gender and ethnicity, are also predictive of help-seeking intention. Model 3 examined whether athletic identity strengthen the prediction of perceived descriptive/social norms on individual help-seeking intention.

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

Table 6

Hierarchical Multiple Regression Examine the Moderating Role of Gender

Variable	<u>Model 1</u>			<u>Model 2</u>		
	B	SE B	β	B	SE B	β
PDN	0.466***	0.106	0.412	0.643***	0.143	0.568
PSN	0.207	0.117	0.171	-0.104	0.158	-0.086
PDN x PSN	0.011	0.061	0.010	-0.023	0.061	-0.021
Gender				0.331	0.278	0.097
PDN x Gender				-0.483*	0.210	-0.399
PSN x Gender				0.656**	0.229	0.191
R^2		0.250			0.297	
F for change in R^2		14.000			9.222	

Note: Model 1 established that our control variables, perceived descriptive and social norm, are predictive of the help-seeking intention, the outcome. The interaction term, PDN x PSN, was included to measure the independence of the two variables on the prediction of the outcome. Model 2 tested whether gender is also predictive of help-seeking intention and whether it adds additional variation on the prediction of perceived descriptive and social norms.

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

CHAPTER 4: DISCUSSION

While a great number of college student-athletes (SAs) suffer in mental health-related issues, the intention to seek help has been perceived as one of the barriers for SAs to ameliorate from such issues (Hilliard, et al., 2020; NCAA, 2016). To illuminate the basic process by which college SAs seek or do not seek professional psychological help, informed by the Theory of Planned Behavior and Erikson's theory of identity, we examined the effects of perceived descriptive and social norms from teammates on SAs' intention to seek-help, along with the athletic identity as moderator. Teammates are perceived as sources of social support with high

strength of connection with SAs (Holt-Lunstad, Smith, & Layton, 2010). While SAs spend majority time on athletic-related activities, they contribute a tied group membership with their teammates, which indicate the importance of perceived norms from their teammates that predicting the intention to seek help.

The results supported this hypothesis that both the perceived descriptive norms and perceived social norms were positively associated with SAs' help-seeking intention. Recall that descriptive norms reflects the perceived likelihood of significant others for participating certain things, whereas social norms reflects the perceived approval from significant others (Ajzen, 1991; Ravis & Sheeran, 2003). Consistent with previous findings, we found that within the entire sample, the more approval SAs perceived from their teammates to seek help, the more likely they intend to seek help when experiencing mental-health related issues (Eisenberg, et al., 2009; Ramaeker and Petrie, 2019). We also found significance of the perceived descriptive norms on predicting SAs' help-seeking intention, in which the more likely that SAs think their teammates would seek help, the more likely they intend to seek help. Additionally, we expected that the perceived norms from teammates may predict SAs' intention to seek help partly because of their effect on one's identity as an athlete. However, after controlling the covariance of gender and race and ethnicity, the results were statistically non-significant for both interaction terms, in other words, one's level of athletic identity did not add additional effect of perceived descriptive or social norms to SAs' help-seeking intention.

Notably, in post-hoc analyses, we found gender differences in individual help-seeking intention, perceived descriptive- and social norms. In general, female SAs reported higher scores on all three variables than male SAs, which means that female SAs are more likely to seek for help than male SAs since they perceive more approval from teammates and the likelihood of

teammates to do so. Based on prior research and initial *t*-test and correlational results, we explored whether gender would moderate the association between perceived norms and help-seeking intention. Results were significant, indicating that taking gender into account strengthens the predicted value of perceived descriptive norms and perceived social norms on SAs' intention to seek help, respectively.

Specifically, we found that among female SAs, perceived social norms was a significant predictor of their help-seeking intention, whereas perceived descriptive norms was non-significant as an independent predictor. However, among male SAs, perceived descriptive norms were positively associated with help-seeking intention. Several studies from other areas of behavior sciences examined the moderating role of gender on perceived norms and target outcomes. Despite a limited number, one study reported that social norms were more important to females than males when it came to the motivation of using mobile bank (Riquelme & Rios, 2010). And another study focused on motivation to quit smoking also found the increased strength of the relation between social norms and motivation to quit smoking among females (Dohnke, Weiss-Gerlach, & Spies, 2011). However, they did not find a significant association among males.

The significant effect of perceived social norms in current study suggests female SAs may put a lot of emphasis on how other teammates think about them and their behavior, rather than how likely the teammates would participate in certain behavior. In contrast, male SAs may consider more on what other teammates do in the context, rather than what others expect them to do, and these perceived descriptive norms may predict their intention on seeking help when experiencing mental-health concerns. Thus, future research and intervention programs should

consider the gender differences on the topic of seeking help or other decision-making related behaviors.

In summary, these findings signal the effects of both perceived descriptive and social norms from significant others on SAs' intention to seek-help, which directly predict the likelihood of actual help-seeking behaviors when experiencing mental health-related issues. In addition, gender differences should be considered as additional factor that have moderating effect on the prediction of perceived norms to SAs' intention to seek help. Lastly, although the athletic identity was not found to be a significant moderator, the Theory of Planned behavior suggests that it serve an important role in how athletes think and act and has been viewed as important factor when considering athletes' attitudes toward seeking help (Young, 2021). Therefore, a comprehensive examination of the Theory of Planned Behavior model, including gender as additional factor, may help better understand college SAs' help-seeking intention and behaviors.

Strength, Limitation, and Future Direction

Previous studies on understanding college SAs' intentions or behaviors of seeking help mainly focused on perceived stigma or internal attitudes toward seeking help (Bird et al., 2018; Kaier et al., 2015; Ramaecker & Petrie, 2019; Eisenberg, et al., 2009; Watson, 2005). The present study applied a different approach to understand the intention of seeking help among the population of college SAs by examining the effects of perceived descriptive norms, perceived social norms, and athletic identity. In addition, our finding regarding the gender differences in the effects of social versus descriptive norms was notable and should be considered in future studies when examining the influences of perceived norms on one's behavior. Despite the strengths, there were limitations existed in present study.

The study is significantly limited by a small sample size, and from only two institutions, which limits generalization to the general student athlete population. A large majority of NCAA Division I athletes in the sample may have resulted in limited variability in athletic identity scores. In addition, a majority of respondents identified themselves as white-only, which may explain the failure of finding differences between race and ethnicity groups. We expect future research to recruit more participants to examine the consistence of current findings, as well as similar size of race and ethnicity groups to access its potential effects on the intention to seek help.

Secondly, our model, in its present form, only examined the perceived norms, athletic identity, and gender as the potential factors that indicated SAs' intention to seek help. However, other variables like perceived stigma, attitudes toward seeking help, and variation of access to resources among division and sport organizations, may explain additional variation on the intention to seek help. Also, it is possible that the source of perceived norms matters. Instead of teammates, SAs may consider coaches or parents as significant others and value more the messages from them, rather than teammates. Therefore, we hope to see a holistic approach on the understanding of SAs' intention to seek help and a "theory of planned behavior" model that fit to the special circumstance of college SAs in the future.

CHAPTER 5: CONCLUSION

Mental well-being has become a well-concerned issue and is also the key element for college student-athletes (SAs) to achieve their goals and being successful in balancing the dual roles of academic and athletic. The present study aimed at assessing the effects of perceived descriptive norms and social norm, as well as the moderating effect of athletic identity on SAs' intention of seeking help if experiencing mental health-related issues. The perceived descriptive

and social norms were found to be the factors in predicting intention to seek help, independently. Statistical results did not support the hypothesis that indicating athletic identity as a moderating factor in the relation of the perceived norms and intention to seek help, suggesting that findings might apply regardless of the centrality of athleticism in the SAs' sense of identity. As an exploratory examination, we found gender play as an alternative moderator that strengthen the effect of perceived norms on predicting SAs' intention to seek help. Specifically, the effect of perceived descriptive norms on help-seeking was more critical for male SAs, while female SAs reported stronger effect of social norms on their intention to seek-help. The results of this study can be used to help sport psychologists and college athletics departments develop intervention programs that might lead to increased service use amongst collegiate SAs who experience mental health-related issues.

It is imperative to create an accessible and comfortable environment for athletes to be open to discuss the mental-health issues. With the purpose of building a holistic athletic well-being model, more and more college athletics departments are focused on creating a culture of mental wellness. In partnership with the leading experts, the NCAA published a series of mental health best practices to guide this effort (National Collegiate Athletic Association, 2016). To maximize the benefits of the available resources, college athletics department and future researchers should consider the undercover culture and norms in sport that has potential influences on athletes' well-being, both mentally and physically.

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APPENDIX A: Survey

College Athlete Survey on Help-Seeking – Thank you for your help!

1. Are you: Male Female Other/ prefer not to answer

2. Age: 18 19 20 21 22 23 24 over 24

3. Which do you consider yourself? (check all that apply):
 White Black/ African American Asian/ Pacific Islander Hispanic/Latino American Indian Other

4. Which type of sport do you play as a college athlete?
 I play an **individual sport** (e.g., track, swimming/diving, golf, tennis, gymnastics, tennis, or other sports with individual competitions and awards)
 I play a **team sport** (e.g., basketball, soccer, baseball, volleyball, rowing, lacrosse, football, or other sports with team, but not individual, competitions).

Mental health concerns could include personal or psychological difficulties (e.g., loss of a loved one, anxiety, depression). Mental health professionals could include team psychologists, counselors or other professionals.

If I had a mental health concern, I would **intend** to seek help from a mental health professional.

1 (Extremely unlikely)	2	3	4	5	6	7 (Extremely likely)
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If I had a mental health concern, I would **try** to seek help from a mental health professional.

1 (Extremely unlikely)	2	3	4	5	6	7 (Extremely likely)
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If I had a mental health concern, I would **plan** to seek help from a mental health professional.

1 (Extremely unlikely)	2	3	4	5	6	7 (Extremely likely)
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If my teammate had a mental health concern, he/she would **intend** to seek help from a mental health professional.

1 (Extremely unlikely)	2	3	4	5	6	7 (Extremely likely)
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If my teammate had a mental health concern, he/she would **try** to seek help from a mental health professional.

1 (Extremely unlikely)	2	3	4	5	6	7 (Extremely likely)
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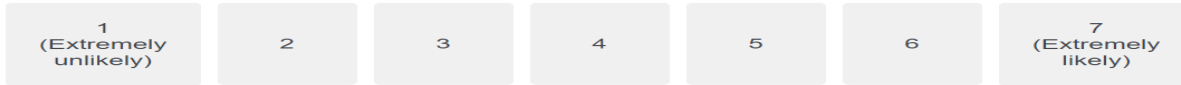
If my teammate had a mental health concern, he/she would **plan** to seek help from a mental health professional.

1 (Extremely unlikely)	2	3	4	5	6	7 (Extremely likely)
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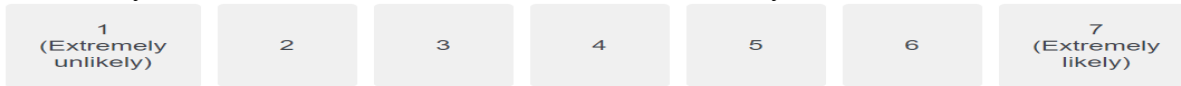
Most of my teammates think that I should seek mental health service.

1 (Extremely unlikely)	2	3	4	5	6	7 (Extremely likely)
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Most of my teammates view mental health service very negatively.



Most of my teammates will seek mental health service if they are in need.



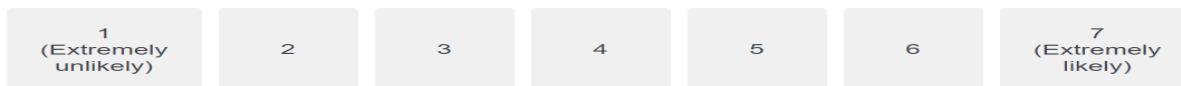
Using the scales below, please indicate how true each of the following statements is an indication of how you define yourself as an athlete – *there are no right or wrong answers so be as honest as possible.*

	1 False 100% of the time	2	3	4	5	6	7 True 100% of the time
14. I consider myself an athlete.	1	2	3	4	5	6	7
15. I have many goals related to sport.	1	2	3	4	5	6	7
16. Most of my friends are athletes.	1	2	3	4	5	6	7
17. Sport is the most important part of my life.	1	2	3	4	5	6	7
18. I spend more time thinking about sport than anything else.	1	2	3	4	5	6	7
19. I feel bad about myself when I do poorly in sport.	1	2	3	4	5	6	7
20. I would be very depressed if I were injured and could not compete	1	2	3	4	5	6	7

	1 False 100% of the time	2	3	4	5	6	7 True 100% of the time
21. I believe in my ability to achieve my goals	1	2	3	4	5	6	7
22. I am able to regulate my focus when performing tasks	1	2	3	4	5	6	7
23. I am able to use my emotions to perform the way I want to	1	2	3	4	5	6	7
24. I strive for continued success	1	2	3	4	5	6	7
25. I execute my knowledge of what is required to achieve my goals	1	2	3	4	5	6	7
26. I consistently overcome adversity	1	2	3	4	5	6	7
27. I am able execute appropriate skills or knowledge when challenged	1	2	3	4	5	6	7
28. I can find a positive in most situations	1	2	3	4	5	6	7

29. Who do you consider the athlete that you look up to most? _____

30. If that person was having a mental-health concern, how likely do you think he/she would be to seek help?



31. Why do you say that?

Thank you for your help with this research!