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# Female athletes' perceptions towards alcohol and performance: a psychological approach

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FEMALE ATHLETES' PERCEPTIONS TOWARDS ALCOHOL  
AND PERFORMANCE: A PSYCHOLOGICAL APPROACH

An Abstract of a Thesis

Submitted

in Partial Fulfillment

of the Requirements for the Degree

Master of Arts

Stephanie Dalmacio

University of Northern Iowa

May 2016

## ABSTRACT

Alcohol consumption amongst athletes has been a frequently debated topic with common beliefs being mostly negative. This study aimed to investigate former and active female athletes' perceptions toward alcohol consumption prior to competition. The design used for this study was exploratory-descriptive in nature. A questionnaire was administered to 111 female athletes from 17 different countries. Since the majority of the respondents were tennis players ( $n = 85$ ), results were presented for this more homogenous group. The questionnaire was comprised of 10 questions that examined demographics, perceptions regarding whether alcohol was more likely to help or hurt performance, and alcohol consumption. Results indicated that athletes generally perceived that alcohol consumption was harmful and would negatively affect performance. These views were typically in agreement with coaches and parents but tended to change depending on geographic location. Even though perceptions about drinking were mostly negative, many athletes also indicated that moderate alcohol consumption could possibly help them relax, feel more confident, and cheerful before performing.

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This study by: Stephanie Dalmacio

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has been approved as meeting the thesis requirement of the  
Degree of Master of Arts.

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## DEDICATION

I dedicate this project to my family who has always been there for me, and to my close friends who have always given me a lot of support and reminded me to keep smiling through difficult times. Everything happens for a reason.

Special thank you to my life guru Ernesto who believed in me from day one. Thank you for making me a stronger person physically and mentally. Thank you for being the best role model I could have had.

Finally, thank you to my Sport Psychology mentor Dr. Mickey Mack and advisor Dr. Jennifer Waldron for guiding me through this project and for being patient and understanding of the setbacks I had along the way. I could not have done it without you.

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## INTRODUCTION

Athletes' mindset and mental readiness have been a popular topic amongst sport psychologists across the world. Athletes, coaches, and researchers are always interested in finding strategies to achieve this mental readiness. Mental readiness, or mental toughness, "refers to an inner focus and commitment to rise above challenges when facing adversity" (Madrigal, Hamill, & Gill, 2013, p. 62). A common goal is to try to understand athletes' mental properties to facilitate the discovery of efficient mental training strategies and be able to help these athletes reach maximal performance.

Many factors can affect athletes' preparation and readiness. An athlete's fitness level, dietary intake, rest, and practice time are key points to physical readiness but more is required to reach a desired mental readiness; a substantial factor in sports performance. In addition to the more traditional use of mental strategies such as imagery, trigger words, visualization, and concentration exercises, athletes may look for other alternatives to cope with their every-day struggles of being an athlete. One such common alternative amongst athletes is the consumption of alcohol (Jander, Mercken, Crutzen, & Vries, 2013).

According to a National Collegiate Athletic Association study, about 80% of student-athletes reported consuming alcohol in the past year ("2013 NCAA National Study of Substance Use Habits of College Student-Athletes," 2014). Another study indicated that upwards of 65% of college students drink at least monthly, and a large portion of those binge drink (White & Hingson, 2013). The number of elite athletes who consume alcohol has also greatly increased over the years, reaching a 48% mark for athletes who consume more than four drinks in a single occasion (Kingsland et al., 2013),

which is higher than the estimated 40% of college students that consume the same amount of alcohol (White & Hingson, 2013).

Young women in particular have shown an increased rate of binge drinking and it has been suggested that these women may use alcohol to help ease anxiety (Vinader-caerols, Monleón, & Parra, 2014). Even more specifically, the consumption of alcohol among female athletes is also higher than female non-athletes. For example, one study found that female athletes drink one more drink per week than female students not participating in sports (Rintaugu, Andanje, & Amusa, 2012). Another study found that female athletes binge drink at a much higher rate than non-athletes, and former female athletes continue to binge drink at a higher rate after sports retirement (Green, Nelson, & Hartmann, 2014). Researchers found that there is a positive relationship between alcohol consumption and sports participation even after direct involvement and years of participation. For former athletes, the consumption of alcohol may be linked to ways of coping with the inability of competing any longer because of age, injuries, and negative psychological characteristics left after their sporting career. In those cases, former athletes may feel like drinking may temporarily help with anxiety and stress and fulfill the sensation seeking feeling that sports once produced (Green et al., 2014).

Athletes may use alcohol for a variety of reasons. For instance, when consumed in small amounts, alcohol can help athletes relax, provide positive emotions and positive immediate metabolic effects, help them feel like they belong, and shape their identity in a social setting (Suter & Schutz, 2008). Athletes may also drink to relax and disconnect, to forget pain and injuries, to be able to deal with adversity, to fit in, or due to peer pressure

(Rintaugu et al., 2012). Finally, alcohol not only serves as an escape or coping mechanism (O'Hara, Armeli, & Tennen, 2014; Schaal et al., 2011) but also as a part of socialization within many athletic groups (Jander et al., 2013).

An athlete's perception of wellbeing is another important factor in the process of reaching optimal performance. Positive emotions are transformed into feelings of confidence and power during performance (Rucker, Hu, & Galinsky, 2014). Feeling positive emotions about other aspects of life can make the athlete happier and more satisfied on the court (Malinauskas, 2010). People have the need for autonomy, competence, self-control, relatedness, and affiliation (Coleman & Williams, 2013). These psychological needs help shape a person's overall satisfaction with life. Therefore, off-court factors influence on-court mental readiness and performance. Because of the necessity to think clearly and be able to efficiently adjust in changing situations during competition, the combination of emotions and physical readiness play a large role in achieving success in sports.

In college, student athletes often feel overwhelmed by responsibilities and stress. They may experience lack of sleep, personal problems, academic stress, and injuries (Malinauskas, 2010). These factors can take a toll on an athlete and may interfere with performance, sometimes significantly. Athletes are not only sport competitors, they are normal human beings who have the need for friendships, love relationships, family, and other psychological desires such as having happiness and experiencing joy. Because of busy schedules and constant stress, competitors may experience a strong desire to have a more normal life filled with time to participate in activities with their friends and family.

Thus, they look for ways to live a normal life and for different ways to cope with their everyday struggles. Socialization often becomes an important aspect of athletes' lives. Positive interactions have been shown to help reduce stress and decrease the risk of burnout (Defreese & Smith, 2014). This may help them relax and let go of negative emotions or stresses. Perhaps they are able to meet new people, create relationships, and feel more in control of their lives. Potentially, a lot of socializing is done with the presence of alcohol. Places like bars, clubs, restaurants, friend's houses, concerts, etc. are common places for athletes to "hang out" and de-stress where alcohol is readily available. People and places interrelate creating different emotions which helps shape one's actions and perceptions. For women, there is a culture of intoxication where women start to behave like men while trying to find their freedom and place in society. (Hutton, Wright, & Saunders, 2013). Thus, it is easy to see why alcoholic beverages may become an important part of their social life.

While potentially helpful, the use of alcohol can also have negative effects. Physiologically, alcohol consumption can deteriorate endurance and impair psychomotor skills (Lecoultre & Schutz, 2009). Even small amounts of alcohol can negatively affect hand-eye coordination, balance, and the precision of athletes (Lecoultre & Schutz, 2009). Alcohol slows down reaction times, negatively effects temperature regulation, and may cause an athlete to fatigue quicker during high intensity exercise (Suter & Schutz, 2008). Research has found a connection between sports, excessive drinking, and alcohol-related harm among elite athletes, sports fans, and spectators (Kingsland et al., 2013). The medical consequences of alcohol abuse include eating disorders, anxiety, and depression

(Vinader-caerols et al., 2014). Finally, for underage athletes, the consumption of alcohol is against the law.

Perhaps because of the potentially negative effects of alcohol consumption on athletic performance, the most common approach that coaches utilize is to either prohibit the consumption of alcohol at all times, just during the season, or for some set number of days before competition. With upwards of 80% of college athletes reporting alcohol consumption in the past year (NCAA, 2014), these strategies are clearly no longer effective.

For that reason, additional research is needed to examine the perceptions of female athletes towards alcohol, their beliefs of how alcohol consumption can affect their performance, their feelings toward alcohol before and during competition, and how those beliefs first start. Thus, this study will investigate current and former female athletes' perceptions and attitudes concerning the use of alcohol related to their mental readiness and athletic performance.

## METHODS

The purpose of this study was to examine female athletes' perceptions towards alcohol consumption prior to competition. Most of the previous research examining alcohol and performance has focused on the physiological consequences and/or the amount of alcohol consumed by athletes. Conversely, this study focused on the athletes' perceptions regarding how they felt about consuming alcohol in relation to athletic performance.

### Experimental Design

Due to the lack of current knowledge, the intent of this study was to provide an initial description of athletes' perceptions regarding the use of alcohol in relation to athletic performance and to investigate possible variables that may influence these perceptions. Thus, the design used for this study was exploratory-descriptive in nature. As such, descriptive statistics including frequencies, percentages, and ranges were calculated to help describe the various demographic characteristics as well as perceptions and beliefs that were assessed.

### Developing The Athletes' Perception Questionnaire

Because of the exploratory nature of this study, a novel questionnaire had to be created to examine athletes' perceptions towards alcohol and performance. Specifically, this questionnaire was designed to assess athletes' perceptions, feelings, and beliefs on whether alcohol ultimately hurts, helps, or does not affect one's mindset and readiness in the process of reaching optimal performance.

The first set of questions to be created was designed to gather general demographic information such as participant's current age, the sport in which they participated, and whether they were still competing. Because cultural background may influence the athlete's coping responses (Tamminen & Holt, 2012) and subsequent perceptions about drinking alcohol and it was anticipated that many international students would be recruited to be included in the population sample, a question was created asking participants to identify their country of origin and the legal drinking age for their country of origin.

The next questions to be created and included gathered input on the athletes' perceptions of whether alcohol consumption was more likely to help or hurt their athletic performance. Some of these questions asked participants to respond using a simple help/hurt or agree/disagree type response (see Appendix A). Based on the literature review, additional questions were also created asking respondents to consider potential types of benefits such as relaxation (Suter & Schutz, 2008), feel more cheerful (Armeli, Ehrenberg, Sullivan, & Tennen, 2014), feel like they belong (Suter & Schutz, 2008), it's a habit (Kraemer, McLeish, & O'Bryan, 2015), and feel untroubled (Jander et al., 2013).

The final information gathered was designed to investigate possible variables that may influence these perceptions. Again based on previous literature, specific questions were designed to focus on the athletes' specific experiences with alcohol consumption (White & Hingson, 2013) and the degree to which they believed their attitudes toward alcohol consumption would agree or disagree with their parents, coaches, and teammates perceptions towards alcohol and performance (Hartman et al., 2015; Mastroleo, Marzell,



Turrisi, & Borsari, 2012). Thus, the subsequent questionnaire consists of 10 questions focusing on the athletes' demographic background, perceptions toward alcohol and athletic performance, perceived agreement with significant others, and alcohol consumption (see Appendix A).

### Participants

A total of 111 female athletes from around the world completed the questionnaire for a response rate of 69.4% (e.g., 111 of 160). Participant's ages varied from 18-58 years old with an average of 26.02 years old. All participants had played ( $n = 74$ , 66%) or were currently playing competitively in one or more sports ( $n = 37$ , 33%). To be considered competitive, these athletes had to have participated in high school, college, national, and/or professional tournaments.

Participants were from 17 different countries including Brazil, Spain, Serbia, United States, Hungary, Israel, Netherlands, Belgium, El Salvador, Poland, Romania, Austria, Slovakia, Colombia, Argentina, Germany, and Russia. The vast majority of these athletes reported their competitive sport as Tennis or other racket sport ( $n = 85$ , 77%), 10.8% ( $n = 12$ ) as Volleyball, 2.7% ( $n = 3$ ) Soccer, 2.7% ( $n = 3$ ) Softball, 1.8% ( $n = 2$ ) Track and Field, 1.8% ( $n = 2$ ) Martial Arts, 1.8% ( $n = 2$ ) Golf, and 1.8% ( $n = 2$ ) reported playing a different sport.

### Procedures

Upon receiving permission from the Institutional Review Board, an online form of the Athletes' Perception Questionnaire was created using Survey Monkey. Approximately 160 female athletes, selected from a convenience sample of available

athletes and teams from the NCAA (National Collegiate Athletic Association) as well as international teams, were then contacted through email or social media asking them to participate in this study (see Appendix D). The female athletes were contacted via an email sent by the researcher instructing them to click on the link, which directed them to the online survey located on Survey Monkey. A written Informed Consent Form describing participants' rights and voluntary involvement (see Appendix B), instructions on how to answer the questions, and an explanation of the purpose of this study were included on the link to the survey. Participants were given an initial two-week time period to answer the survey. A follow-up email was then sent two weeks later asking them once again to participate in this research activity.

#### Data Analysis

Response results were tabulated via the Survey Monkey data-base. This data was then transferred to an Excel file for additional data analysis. Descriptive statistics including frequencies, percentages, and ranges were then calculated for the different variables and responses.

## RESULTS

The purpose of this study was to examine athletes' perceptions toward alcohol consumption related to sport competition. Perceived opinions of how alcohol influences their bodies can be important elements to understanding the athletes' beliefs and behaviors towards alcohol consumption. Thus, descriptive statistics were used to provide an initial description of athletes' perceptions regarding the use of alcohol in relation to athletic performance and to investigate possible variable that may influence these perceptions such as the beliefs of significant others, cultural background, current athletic status, and alcohol consumption.

### Participants

A total of 111 female athletes completed the survey. All participants had played (n = 74, 66.7%) or were currently playing competitively (n = 37, 33.3%) in one or more sports. The vast majority of these athletes reported their sport as Tennis or other racket sport (n = 85, 76.6%) with only one other sport attaining over 3% of the overall respondents (e.g., volleyball at 10.8%). Descriptive statistics were calculated for the entire group of athletes. Because so many of the respondents were tennis players, descriptive analyses were then repeated for the tennis athlete subgroup. Since the results were very similar, a post-hoc decision was made to analyze and describe the most homogenous group, the athletes who indicated their primary sport as tennis. Thus, the results presented in this section are for the 85 respondents who indicated that they played competitive tennis or some other racket sport.

### Alcohol Consumption

When asked about their alcohol consumption, nearly all of the participants (98.8%) said they had consumed alcohol at some point in their lives. When asked more specifically whether or not they had ever consumed alcohol before a competition, 52.3% (n = 44) reported having had a drink or two the night before a competition and 9.5% (n = 8) reported having had a drink the day of a competition.

### Perceptions Regarding Alcohol Consumption and Performance

The next series of questions examined the participants' perceptions and attitudes concerning the use of alcohol related to athletic performance. First, participants were asked if they believed alcohol was more likely to help or hurt performance. Results revealed that 97.6% (n = 81) of the athletes believed alcohol was more likely to hurt performance as compared to help their performance 2.4% (n = 2).

Results examining participants' perceptions of how alcohol use could potentially improve their performance are provided in Table 1. As illustrated, to help me relax (52%), be more confident (27%), and feel more cheerful (21%) were the responses that participants indicated were most likely to help improve performance. Conversely, to feel more focused (6%), feel like I belong (8%), and because it's a habit or ritual (8%) were rated as the least likely to potentially help performance.

Table 1

Potential reasons why alcohol use may be beneficial by percentages and frequencies

Responses

<u>Potential Reasons</u>	<u>Likely</u>	<u>Not likely</u>	<u>Never</u>
	<u>n (%)</u>	<u>n (%)</u>	<u>n (%)</u>
Help me relax	44 (52%)	16 (19%)	24 (29%)
Feel more focused	5 (6%)	19 (23%)	58 (71%)
Be more confident	22 (27%)	18 (22%)	43 (52%)
Feel like I belong	7 (8%)	25 (30%)	51 (61%)
It's a habit or ritual	7 (8%)	19 (23%)	57 (69%)
Feel more cheerful	18 (21%)	24 (29%)	42 (50%)
Feel untroubled	9 (11%)	22 (27%)	51 (62%)

Parents, Coaches, and Teammates Beliefs

The next sets of questions were designed to examine the athletes' perceptions of their teammates, parents, and coaches' beliefs. Most respondents indicated that their teammates, sporting colleagues, and coaches would disapprove of them either drinking alcohol moderately the night before competition (70.2%) or getting drunk the night before competition (95.2%). When asked whether their perceptions would agree or disagree with the perceptions of their coaches and parents, participants generally reported that the parents' and athletes' perceptions regarding the use of alcohol pertaining to athletic performance would be in agreement (71.1%). Similarly, 62.7% said their coaches' and their own perceptions were in agreement.

Next, the athletes were asked to indicate whether they agreed or disagreed with the statement “I feel it does not make a difference if I drink alcohol the day of competition.” Results indicated that 93.9% (n = 77) disagreed with the statement whereas 6.1% (n = 5) agreed. For the second statement “I feel it does not make a difference if I drink the day before competition,” 64.3% (n = 54) disagreed, 23.8% (n = 20) neither agreed nor disagreed, and 11.9% (n = 10) agreed.

The final question of the survey asked participants to summarize their overall philosophy towards alcohol use and performance by choosing one of four possible choices with which they most strongly agreed. Results indicated that 14.3% (n = 12) of the respondents thought alcohol might be beneficial if consumed moderately, 63.1% (n = 53) said alcohol is not beneficial no matter how much is consumed, and 22.6% (n = 19) reported alcohol is not beneficial if consumed in large amounts.

#### Results by Geographic Regions

To examine potential differences in perceptions based on the athlete’s cultural background, participants were sub-grouped into three geographic regions. The Central and South America group consisted of Brazil, Colombia, Argentina, and El Salvador. The European group consisted of Spain, Serbia, Hungary, Israel, Netherlands, Belgium, Poland, Romania, Austria, Slovakia, Germany, and Russia, while the North America group consisted of athletes from the United States.

Due to the rather substantial differences in the number of respondents for each of the three groups, these results should be interpreted with extreme caution. However, it is interesting to observe that the percentages appear to vary by geographic region (see Table

2). For example, their perceptions of whether alcohol use was in agreement with their parents or coaches displayed quite a range of percentages (e.g., 57% to 82%). These results suggest that athletes from North America were most likely to be in agreement with their coaches and parents. For the respondents from Central and South America there may also be differences in what the athletes believe their coaches' and parents' perceptions about the use of alcohol related to sport performance are. Finally, results concerning the perceptions of whether alcohol was beneficial no matter how much is consumed were fairly similar across the three regions (see Table 2).

Table 2

Differences by geographic region

Responses

Survey Questions	Central/ South	European	North America
	47 (%)	25 (%)	11 (%)
Not beneficial regardless	30 (64%)	16 (64%)	6 (55%)
Perceptions in agreement parents	33 (70%)	16 (64%)	9 (82%)
Perceptions in agreement coaches	27 (57%)	15 (60%)	9 (82%)

Former Vs. Active Athletes

Because of the exploratory nature of this study, results were also computed comparing the perceptions of players who classified themselves as current athletes versus those who classified themselves as former athletes. It was hypothesized that the

perceptions of these two groups might differ because some of the former athletes may have finished playing more than 5-10 years ago where rules and perceptions could be different than what they are now for current athletes. It is also important to consider that rules change often in main institutions like the NCAA for college tennis or the WTA (Women's Tennis Association) at the pro circuit.

Results comparing former athletes ( $n = 57$ ) with still competing athletes ( $n = 27$ ) were pretty similar. When asked if they had ever had an alcoholic drink or two the night before competition, 51% of former athletes responded yes as did 41% of current athletes. When former athletes were asked if they had ever had a drink the day of competition, 88% answered no. When current athletes were asked the same question, 85% reported no. Thus drinking the night before competition was relatively commonplace, especially for former tennis athletes, whereas drinking the day of competition was pretty rare for both groups.

Results also showed that 61% of former athletes believed alcohol to not be beneficial no matter how much was consumed versus 63% of current athletes. For former athletes 16% believed alcohol could be beneficial if consumed in moderate amounts while that number decreased to 4% for current athletes.

#### Perceptions of Potential Uses by Alcohol Usage

Finally, exploratory analyses were conducted to examine potential differences in the perceptions of the athletes regarding potential benefits of using alcohol based on whether or not they had reported using alcohol the night before a competition. Athletes who responded yes to the question of whether they had consumed alcohol the night



before a competition (n = 44), indicated that they were most likely to use it to feel more relaxed (66%), feel more confident (36%), or feel more cheerful (32%). A total of 20.5% (n = 9) of these athletes summarized their philosophy regarding the relationship between alcohol and performance as “may be beneficial if consumed moderately” and 56.8% (n = 25) indicated that alcohol “is not beneficial no matter how much is consumed.” The remaining 22.7% (n = 10) selected “is not beneficial if consumed in large amounts.”

Subject’s who responded no to ever used alcohol the night before competition (n = 40) also indicated that the most significant potential benefit would be to help them relax (38%). The next closest responses were help feeling more confident (15%) and help being more cheerful (10%). For these athletes, the predominant summarizing philosophy was “is not beneficial no matter how much is consumed” (70.0%, n = 28) and the “may be beneficial if consumed moderately” was selected by 7.5% (n = 3). The “is not beneficial if consumed in large amounts” option was selected by 22.5% (n = 9).

Thus, both groups believed that the greatest potential benefit of using alcohol the night before a competition was to help the individual feel more relaxed followed by increased feelings of confidence. However, the percentage of individuals who summarized their philosophy about alcohol and performance did appear to vary by their reported usage the night before competing.

## DISCUSSION

This study aimed to investigate female athletes' perceptions toward moderate alcohol consumption and its effects on performance. Results indicated that nearly all of the athletes who completed the survey had used alcohol at some point in their lives. This is not surprising considering that alcohol exposure is common in many cultures around the world and often occurs around sporting events, which are a big part of entertainment in many countries. Because of that, sporting fans commonly gather at bars, friend's houses, or at home where alcohol is often present. Athletes also encounter social drinking in different situations and locations in which they may feel the need to drink in order to belong to a group, to loosen up, and sometimes to just be social, less shy. Studies indicate that adolescents in general expect alcohol to facilitate their social interactions; they use alcohol to help them feel more relaxed and confident in social settings (Varlinskaya & Spear, 2014). Since athletes' beliefs regarding alcohol consumption are probably based on past experiences, cultural norms, and cultural habits, it is not surprising that most of the participants in this study had previously consumed alcohol.

Results of this study also indicated that these athletes overwhelmingly reported that alcohol consumption would be detrimental to their performance. This prevalent belief in the potentially harmful effects of alcohol use related to athletic performance may have occurred for a number of reasons. First, many college athletes are now required to take drug courses where they are warned of the use and misuse of alcohol and the potentially negative consequences. For example, research has found common effects of drinking, especially binge drinking, to involve loss of energy, loss of concentration,

sickness, and fatigue (Suter & Schutz, 2008). Suter and Schutz (2008) also found that typically, large amounts of alcohol will create physical discomfort but it can also act as a depressant in women which is a concerning factor considering that female athletes tend to use drinking as more of a coping mechanism than male athletes (Wilson, Pritchard, & Schaffer, 2004). This educational effort may have had an impact on the athletes' beliefs regarding the benefits versus negative consequences of using alcohol and it might even help regulate binge drinking in college sports. The finding that only 4% of current athletes believed alcohol could be beneficial if consumed in moderate amounts compared with 16% of former athletes may provide additional support for this educational effort. Second, most athletes reported that teammates, sporting colleagues, and coaches would disapprove of them getting drunk the night before competition (95%) or drinking moderately the night before competition (73%). Perhaps the athlete's negative attitude toward alcohol consumption is simply a reflection of significant others in their lives.

Interestingly, while nearly everyone indicated that alcohol consumption was harmful to their performance, over half of the athletes in this study admitted that they had consumed a drink or two the night before a competition. In addition, nearly 1 of 10 reported having had a drink the day of a competition. This apparent contradiction in perceptions can be explained in a couple of different ways. First, the results may suggest that female athletes in this survey were confused by the mixed messages concerning alcohol use and its effects. Coaches, parents, and institutions tell athletes that alcohol is detrimental to them. On the other hand, athletes are surrounded by large amounts of alcohol everywhere they go which could account for the percentage of students that either

agreed or disagreed with the alcohol effects the day before competition. Another plausible explanation can be obtained by examining the reasons why they might drink before competition. Results examining the most common perceptions of how alcohol use could potentially improve their performance included: to help me relax (52%), be more confident (27%), and feel more cheerful (21%). Conversely, to feel more focused (6%), feel like I belong (8%), and because it's a habit (8%) were rated as the least likely to potentially help performance.

The most common reason athletes gave for drinking was to relax. This sentiment was particularly common (66%) for those who indicated that they had previously used alcohol the night before a competition. To understand this perception, one needs to recognize that athletes deal with a lot of pressure on and off the court. In individual sports such as tennis and golf, there is no one else to rely on which makes it that much harder for players to be relaxed and feel confident in order to perform to the best of their abilities.

Athletes also deal with a lot of pressure off the court. They have the responsibility to perform well at all times, to keep parents and coaches happy, to attain good results, and to be a role model to younger athletes. Athletes work hard to seek the approval and admiration of others to boost their egos but they also have the need to express the non-athlete side of themselves, which may only happen amongst their closest group of friends or family, mostly because it is an environment free of pressure. Having friends outside of sports, going out and socializing, or simply taking the time off may help with achieving inner peace and being more relaxed. In trying to find a life outside of sports, athletes'

ways of coping with these stressors often involve a common approach, alcohol consumption. Moderate alcohol consumption may help decrease this pressure and the accompanying anxiety (Suter & Schutz, 2008). To support this idea, Wilson et al. (2004) reported perceptions of coping outcomes to involve “feel better,” “to get through it,” “not praying or meditating,” and “venting” amongst the most common for female athletes. Thus, athletes may drink moderately prior to competition to simply relax and disconnect from the constant pressure to perform well not only because they are consuming alcohol but also because drinking means socializing, something many of them miss because of the lack of time. To these athletes, drinking may seem more like a habit rather than something to expect outcomes from. Indeed, in this study, results show that 8% of athletes may drink because of habits, and not to find a solution for mental stress.

When in social settings outside of sports, the athlete may experience feelings of excitement, distraction, happiness, and joy. This might provide an opportunity to forget about daily stressors such as academic responsibilities or performance pressure while socializing amongst other groups of peers. Conversation topics may have nothing to do with the world of sports, which perhaps makes the athletes feel more cheerful (21% of respondents). In addition, if an athlete is feeling happier their confidence levels might also increase because of their perception of a happier life. This may explain why 27% of these athletes identified alcohol as a potential way to feel more confident.

Overall, the findings of this study also suggest that athletes’ perceptions appeared to be in agreement with their coaches’ and parents’ perceptions but varied slightly based on their country of origin. For example, the US appears to be where athletes’ perceptions

mostly agree with their coaches and parents. In addition, the US also has the lowest disagreement rate between parents, coaches, and the athletes' perceptions. In other continents like Europe, South, and Central America those agreement numbers drop for coaches and parents. This interesting phenomenon may be due to similar culture and sport organization in both South and Central American countries. It is possible that these countries have the same beliefs, strategies, and organizational views compared to the US. Numerical results in Europe indicate more similarities with South and Central America compared to the United States. In many cases, depending on the culture the athlete is a part of, getting drunk is not the purpose of drinking but it is rather to socialize while catching up with friends or family. These athletes may experience early exposure to alcohol at home, in family gatherings, and amongst their group of friends. Having alcohol more accessible may also make it less appealing, perhaps less tempting. Thus, alcohol exposure plays an important role in shaping athletes drinking behaviors from an early age. These cultural differences in perceptions almost certainly influence the athlete's drinking choice and their beliefs on alcohol effects in performance.

While providing an initial description of athletes' perceptions regarding the use of alcohol in relation to athletic performance, this study also has a number of limitations. For example, because of the sensitive nature of this topic (e.g., using alcohol), participants may have just been repeating what they think is the right response. This response bias may have skewed the results.

Another limitation was the design of the questionnaire. The participants were asked to select potential uses of alcohol to improve their performance from a list created

by the principal investigator. This strategy may have led to conflicting results regarding the respondent's true perceptions regarding the benefits/harmful effect of alcohol. A second limitation concerning the questionnaire involves the vagueness of some of the questions asked. For instance, 14% of all athletes most strongly agreed that alcohol might be beneficial if consumed moderately whereas 23% reported alcohol is not beneficial if consumed in large amounts. The complicating factor when looking at these differences is that moderate and large amounts of alcohol are based on perception and on athlete's metabolism so that for one athlete, a few drinks may be a large amount and for another, it may be a moderate amount.

To summarize, further research is necessary to discover a more clear understanding of female athlete's perceptions about alcohol consumption and athletic performance. An alternative view on alcohol consumption needs to be researched to perhaps help revise conceptions and taboos created by society throughout the decades. For example instead of strictly prohibiting alcohol consumption, open discussions should take place so that the athlete can openly share their feelings with sports leaders. In addition, athletes need to feel like they can express their feelings in a less judgmental system. If athletes felt they could be honest about their use of alcohol, coaches, teammates, and trainers would be able to better guide the athlete to a healthier life style, with less stress and more trust creating better relationships. Moreover, discussing how alcohol impacts their performance in both positive and negative ways, may allow more athletes to be open and honest about consumption and to make better choices as they go forward in their sports careers and personal lives.

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APPENDIX A  
RESEARCH QUESTIONNAIRE

**Demographics**

1. Country of Origin: \_\_\_\_\_ Age: \_\_\_\_\_
2. Legal drinking age in country or origin: \_\_\_\_\_
3. Are you a former athlete or still competing? \_\_\_\_\_ Former athlete/ Still compete
4. Check the sport(s) you play/ed competitively (e.g. high school, national circuit, college, international tournaments):
 

a. Tennis or any other racket sports	f. Martial Arts
b. Track and field	g. Golf
c. Soccer	h. Volleyball
d. Softball	i. Other _____
e. Swimming	

**Perception Towards Alcohol and Athletic Performance**

5. Do you think alcohol is more likely to help or hurt your performance?  
Help/ Hurt/ Either
6. If you were to use alcohol to potentially improve your performance, would you use it to:
 

a. Help me relax	yes	maybe	no
b. Feel more focused	yes	maybe	no
c. Be more confident	yes	maybe	no
d. Feel like I belong	yes	maybe	no
e. It's a habit/ritual	yes	maybe	no

f. Feel more cheerful    yes    maybe    no

g. Feel untroubled    yes    maybe    no

7. How do you think your teammates and coaches would feel about you?

a. Drinking the night before competition    Don't disapprove/disapprove

b. Getting drunk the night before competition    Don't disapprove/disapprove

8. Do you think your perceptions of alcohol are in agreement or disagreement with your parents?    Agreement/ Disagreement

Coaches?    Agreement/ Disagreement

9. I feel I have to drink to be able to socialize with my friends and/or teammates.

True/False

10. I feel it does not make a difference if I drink or not the day of competition.

True/False

11. In summary, in your own philosophy how would you describe alcohol and performance?

a. May be beneficial if consumed moderately

b. Is beneficial if consumed in large amounts

c. Is not beneficial no matter how much is consumed

d. Is not beneficial if consumed in large amounts

### **Alcohol Consumption and Performance**

12. Have you ever used alcohol? (e.g. wine, beer, etc.)? Yes/No

13. Have you ever had a drink or two the night before a competition? Yes/no

14. Have you ever had a drink the day of a competition? Yes/No

## APPENDIX B

## INFORMED CONSENT

**UNIVERSITY OF NORTHERN IOWA  
HUMAN PARTICIPANTS REVIEW  
INFORMED CONSENT**

**Project Title:** Female Athletes' Perceptions Towards Alcohol and Performance: A Psychological Approach.

**Name of Investigator(s):** Stephanie Dalmacio

**Invitation to Participate:** You are invited to participate in a research project conducted through the University of Northern Iowa. The University requires that you give your signed agreement to participate in this project. The following information is provided to help you make an informed decision about whether or not to participate.

**Nature and Purpose:** The purpose of this study is to understand female athletes' perceptions towards alcohol and performance. This study may help coaches and health professionals to find new, more positive ways for dealing with alcohol consumption in the world of sports.

**Explanation of Procedures:** Participation in this study requires you to complete a one-time, online survey. Completion of the instrument will take approximately three minutes. Participation is voluntary and you may stop taking the survey at any time.

**Discomfort and Risks:** There is minimal overall risk for participation in the study. Beyond the time it takes for participation, there is a possibility of slight discomfort and invasion of privacy when answering questions.

**Benefits and Compensation:** There are no direct benefit or compensation for participating in this study.

**Confidentiality:** Information obtained during this study which could identify you will be kept confidential. The summarized findings with no identifying information may be published in an academic journal or presented at a scholarly conference. Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties.

**Right to Refuse or Withdraw:** Your participation is completely voluntary. You are free to withdraw from participation at any time or to choose not to participate at all, and by doing so, you will not be penalized or lose benefits to which you are otherwise entitled.

**Questions:** If you have questions about the study you may contact or desire information in the future regarding your participation or the study generally, you can contact Stephanie Dalmacio at 316-516-6567 or [Stephanie.dalmacio@uni.edu](mailto:Stephanie.dalmacio@uni.edu) or the project investigator's faculty advisor Mickey Mack at the School of HPELS, University of Northern Iowa 319-273-6129 or [mickey.mack@uni.edu](mailto:mickey.mack@uni.edu). You can also contact the office of the IRB Administrator, University of Northern Iowa, at 319-273-6148, for answers to questions about rights of research participants and the participant review process.

**Agreement:**

**By clicking yes, I understand the nature and extent of my participation in this project as stated above and the possible risks arising from it. I hereby agree to participate in this project. I acknowledge that I have received a copy of this consent statement. I am 18 years of age or older.**

APPENDIX C  
EMAIL TO COACHES

Dear coaches,

My name is Stephanie Dalmacio. I am a graduate student looking to finish my master's degree in Sports Psychology in May 2015 at the University of Northern Iowa. I am working on a research about the perceptions of female athletes towards alcohol and performance as part of my thesis and need your help with distributing the survey to your athletes. The survey should not take more than 3 minutes. Your participation is voluntary but would be greatly appreciated.

Thank you,

Stephanie Dalmacio



## APPENDIX D

## EMAIL TO ATHLETES

Dear athlete,

My name is Stephanie Dalmacio, I'm a graduate student looking to finish my masters' degree in Sports Psychology at the University of Northern Iowa in May 2015. I am working on a research about the perceptions of female athletes towards alcohol and performance as part of my thesis and want to ask for your help on taking this short survey online. This survey should not take more than 3 minutes. Your participation is voluntary but would be greatly appreciated.

An informed consent is attached to this email. Please read it before taking this survey.

Click on this link to survey: <https://www.surveymonkey.com/s/ZMLT9D8>

Thank you.

## APPENDIX E

### EXPANDED LITERATURE REVIEW

This extended review of literature was organized into four sections. The first section examines the different types and amounts of pressure that athletes encounter. The next section briefly reviews some of the coping techniques that athletes use to deal with this stress. The third section discusses the use of alcohol as a coping technique. Included in this section are a review of potential benefits, potential negative consequences, and the prevalence of alcohol consumption. The fourth and final sections will review some possible variables that may influence alcohol consumption.

#### Pressure In Sports

Athletes experience high levels of internal and external pressures (Lundqvist & Sandin, 2014). From having to adjust and overcome setbacks to performing with injuries, having a social life, and feeling in balance, the athlete also has the need to feel positive emotions outside of their sport. Self-acceptance, positive relations to others, environmental mastery, purposes in life, personal growth, and social acceptance form an athlete's sense of self-actualization and well-being (Lundqvist & Sandin, 2014).

Student athletes often feel overwhelmed with so many responsibilities and stress. They may experience lack of sleep, personal problems, academic stress, and injuries (Malinauskas, 2010). These factors put together can take a big toll on an athlete and can interfere with performance, sometimes significantly. Athletes are not only sports entertainers, they are also normal human beings who have the need for friends, love relationships, family, and other psychological needs such as feeling happy and

experiencing joy. Because of busy schedules and the constant stress, competitors may start to feel the need to have a more normal life filled with time to participate in outside activities with their friends and family. Athletes may start to look for ways to achieve having a normal life and ways to cope with their every day struggles. Socialization becomes an important aspect of athletes' lives because they get to interact outside of their sport, they may start to feel more in control of their lives, they relax and tend to let go of any negative emotion or stress. They are able to meet new people and develop new relationships.

Athlete's wellbeing and satisfaction with life plays a large role on influencing how they feel and perform on the court. Lundqvist and Sandlin (2014) describe their sense of wellbeing as a sense of satisfaction from within, involving most aspects of the life lived. In the same study, athletes have expressed that self-esteem combined with personally relevant life values such as the approval of coaches and parents or having a stable love relationship are two important characteristics of their global wellbeing. In performance, athletes have expressed their feelings of readiness as having self-confidence, positive self-image and self-awareness of athletic strengths as well as having the ability to focus on strengths and progress instead of defects and failures (Lundqvist & Sandin, 2014). Therefore, experiencing positive emotions and wellbeing can greatly influence an athletes' capability of performing well.

Athletes' perceptions of wellbeing are also an important factor in the process of reaching optimal performance. Feeling positive emotions about other aspects of life can make the athlete happier and more satisfied on the court (Malinauskas, 2010). Life

satisfaction is important not only to athletes, but people in general. People have the need for autonomy, competence, self-control, relatedness, and affiliation (Coleman & Williams, 2013). These psychological needs help shape a person's overall satisfaction with life. Therefore, off-court factors influence on-court mental readiness and performance.

Feeling stressed and experiencing negative emotions are common in athlete's lives. Within high college and professional levels of competition, the athlete is expected to play well, stay injury free, and keep high grades at all times. Such expectations can lead to burnout, fatigue, mental instability, and poor time management (Cosh & Tully, 2014). The combination of sport and education stressors may also impact athletes' motivation patterns as it may put the athlete in doubt of his or her capabilities and blind them from past achievements decreasing confidence. Stressors may vary but are most likely shared in other sport settings such as professional, amateur, juniors, and national levels of competition. Shared stressors include pressure to perform, conflicts with coaches, opponents, or teammates, maintaining a diet, sleeping well, fear or awareness of an injury, and relationships with coaches or loved ones (Holt, Hoar, & Fraser, 2005).

#### Coping Techniques of Athletes

Athletes' mindset and mental readiness have been a popular topic amongst sport psychologists across the world. Athletes, coaches, and researchers are always interested in finding strategies to achieve this mental readiness. Mental readiness, or mental toughness, "refers to an inner focus and commitment to rise above challenges when facing adversity" (Madrigal et al., 2013, p. 62). A common goal is to try to understand

athletes' mental properties to facilitate the discovery of efficient mental training strategies and be able to help these athletes reach maximal performance.

Many factors can affect athletes' preparation and readiness. An athlete's fitness level, dietary intake, rest, and practice time are key points to physical readiness but more is required to reach a desired mental readiness; a substantial factor in sports performance. In addition to the more traditional use of mental strategies such as imagery, trigger words, visualization, and concentration exercises, athletes may look for other alternatives to cope with their every-day struggles of being an athlete.

Athletes are forced to think outside of the box to find ways to cope with so many challenges. Described by Holt et al. (2005) "Coping is a process of conscious efforts to manage demands that are appraised as taxing or exceeding an individual's resources." Strategies for coping include seeking social support, focusing on technical aspects of the game, increasing effort, wishful thinking (Tamminen & Holt, 2012), and many others. Tamminen and Holt (2012) also discovered that coping strategies happen more often during most critical competition periods and that middle adolescents have a greater range of coping strategies because of experiencing more stressful situations. The older the athlete gets the more effective their coping strategies become.

Mental practice has become a public strategy to improve sport performance and a common area of research for sports psychologists. Also known as mental or motor rehearsal (Cocks, Moulton, Luu, & Cil, 2014), mental practice is believed to help with guiding training of young and older athletes in various levels of competition.

According to Madrigal et al. (2013) four separate dimensions are required to build mental toughness and readiness: attitude/mindset belief, training (hard work), competition (handling pressure, regulating performance), and post competition (handling failure and success). In addition to various dimensions, common strategies are used to improve mental readiness. Exercises involving imagery, visualization, trigger words, relaxation, goal setting, and positive self-talk (Howland, 2007) are commonly used to teach the athlete how to mentally overcome pressure and adversity. Another common alternative amongst athletes is the consumption of alcohol (Jander et al., 2013).

#### The Use of Alcohol as a Coping Technique

Many coping strategies are discussed between educators, coaches, and parents but in reality athletes find their own ways of diminishing stress. A shared coping strategy nowadays amongst athletes is the use of alcohol. Alcohol serves as not only an escape or coping mechanism but also as part of socialization within many athletic groups. In a study amongst Dutch adolescents, the desire to belong to a group, and the expectation to become more relaxed were important drinking motives (Jander et al., 2013). Jander and colleagues (2013) also discovered that getting socially rewarded was found to be related to moderate alcohol use while negative emotions and sensation seeking motives translated into high alcohol consumption. With 20.9% of athletes admitting to drink rarely or occasionally, alcohol is often the most popular substance and coping mechanism used by athletes (Schaal et al., 2011). This phenomenon is seen not only amongst athletes but also within young people and adolescents whose alcohol consumption has reached 78.5% in 12 months in 2012. (Vinader-caerols et al., 2014).

### Potential Benefits

Athletes may use alcohol for a variety of reasons. For instance, when consumed in small amounts, alcohol can help athletes relax, provide positive emotions and positive immediate metabolic effects, help them feel like they belong, and shape their identity in a social setting (Suter & Schutz, 2008). Athletes may also drink to relax and disconnect, to forget pain and injuries, to be able to deal with adversity, to fit in, or due to peer pressure (Rintaugu et al., 2012). Additional research found that young men and women use alcohol to help ease anxiety (Vinader-caerols et al., 2014). It was reported that alcohol not only serves as an escape or coping mechanism (O'Hara et al., 2014; Schaal et al., 2011) but also as a part of socialization within many athletic groups (Jander et al., 2013).

Studies showed that relaxation and feelings of belonging to a group were motives for alcohol consumption for athletes (Jander et al., 2013; Rintaugu et al., 2012). The two motives were part of expectations and desires from the athletes. Those motives helped the researcher create questions more focused on the perceptions of those feelings. Interpreting the answers was also part of analyzing athletes' perceptions about possible potential reasons for drinking. Other studies showed that female athletes used alcohol consumption in search for stress reduction and social assertiveness as positive expectancies (Zamboanga & Ham, 2008). More studies found other reasons to be more of negative nature like drinking because of sadness or difficulty relaxing which may influence the athlete to drink to feel untroubled as found in the results of this research (Armeli et al., 2014).

In some articles, drinking as a ritual or because of alcohol's energy content (ethanol) seemed to be common amongst many adolescents groups (Poli et al., 2013). The next feeling reported in this study was of cheerfulness. In countries like Denmark, drinking symbolizes active participation in social gatherings and has become the norm for many. Feeling cheerful is one of the main reasons for engaging in high-risk drinking in western countries (Eliassen et al., 2014). The same study explained that alcohol could help reducing tension. If combined with positive interactions of dopamine and serotonin generated by the brain, alcohol can help a person feel cheerful and more sociable.

Furthermore, an athlete's perception of wellbeing is another important factor in the process of reaching optimal performance. Positive emotions are transformed into feelings of confidence and power during performance (Rucker et al., 2014). Feeling positive emotions about other aspects of life can make the athlete happier and more satisfied on the court (Malinauskas, 2010). People have the need for autonomy, competence, self-control, relatedness, and affiliation (Coleman & Williams, 2013). These psychological needs help shape a person's overall satisfaction with life. Therefore, off-court factors influence on-court mental readiness and performance. Because of the necessity to think clearly and be able to efficiently adjust in changing situations during competition, the combination of emotions and physical readiness play a large role in achieving success in sports.

Student athletes often feel overwhelmed by responsibilities and stress. They may experience lack of sleep, personal problems, academic stress, and injuries (Malinauskas, 2010). These factors can take a toll on an athlete and may interfere with performance,



sometimes significantly. Athletes are not only sport competitors, they are also normal human beings who have the need for friends, relationships, family, and other psychological desires such as having happiness and experiencing joy. Because of busy schedules and constant stress, competitors may experience a strong desire to have a more normal life filled with time to participate in activities with their friends and family. Thus, they look for ways to live a normal life and for different ways to cope with their everyday struggles. Socialization often becomes an important aspect of athletes' lives and positive interactions have been shown to help reduce stress and decrease the risk of burnout (Defreese & Smith, 2014). This may help them relax and let go of some negative emotions or stresses. Perhaps they are able to meet new people, create relationships, and feel more in control of their lives. Potentially, a lot of socializing is done with the presence of alcohol. Places like bars, clubs, restaurants, friend's houses, concerts, etc. are common places for athletes to "hang out" and de-stress where alcohol is readily available. Thus it is easy to see why alcoholic beverages may become an important part of their social life.

Previous research have found drinking motives in women outside of sports to have evolved from socialization in trying to belong and to conform with society's standards (Stappenbeck, Bedard-gilligan, Lee, & Kaysen, 2013). Perceived peers' drink behavior and normative principles were the strongest predictor of alcohol use in female adolescents (Jander et al., 2013). In athletes, studies find that verbal harassment or aggressions is the most common type of violence followed by physical and sexual violence (Schaal et al., 2011). For women, rates as high as 17.2% reported from

experiencing some sort of trauma or distress in past experiences (Stappenbeck et al., 2013). Understandably, female athletes and women in general may drink to cope with the constant stress in their lives.

#### Potential Negative Consequences of Using Alcohol

While potentially helpful, the use of alcohol can also have negative affects. Physiologically, alcohol consumption can deteriorate endurance and impair psychomotor skills (Lecoultre & Schutz, 2009). Even small amounts of alcohol can negatively affect hand-eye coordination, balance, and the precision of athletes (Lecoultre & Schutz, 2009). Alcohol slows down reaction times, negatively effects temperature regulation, and may cause an athlete to fatigue quicker during high intensity exercise (Suter & Schutz, 2008). Research has found a connection between sports, excessive drinking, and alcohol-related harm among elite athletes, sports fans, and spectators (Kingsland et al., 2013). The medical consequences of alcohol abuse include eating disorders, anxiety, and depression (Vinader-caerols et al., 2014). Finally, for underage athletes, the consumption of alcohol is against the law.

Physiologically, alcohol consumption can deteriorate endurance and impair psychomotor skills (Lecoultre & Schutz, 2009). In women, physiological properties seem to show more clear and relevant effects. According to Vinader-caerols and colleagues (2014), due to a lower metabolism rate and a higher sensitivity to alcohol, the same amount of alcohol consumed by both sexes produces a significant higher blood alcohol concentration in women. In addition, women are more vulnerable and susceptible than men to the medical consequences of alcohol abuse such as eating disorders, anxiety, and

depression (Vinader-caerols et al., 2014). Unfortunately, young women have also shown an increased rate of binge drinking (Vinader-caerols et al., 2014).

#### Prevalence of Alcohol Consumption

According to a National Collegiate Athletic Association study, about 80% of student-athletes report consuming alcohol in the past year (“2013 NCAA National Study of Substance Use Habits of College Student-Athletes,” 2014). Another study indicated that upwards of 65% of college students drink at least monthly, and a large portion of those binge drink (White & Hingson, 2013). The number of elite athletes who consume alcohol has also greatly increased over the years, reaching a 48% mark for athletes who consume more than four drinks in a single occasion (Kingsland et al., 2013), which is higher than the estimated 40% of college students that consume the same amount of alcohol (White & Hingson, 2013).

Young women in particular have shown an increased rate of binge drinking and it has been suggested that these women may use alcohol to help ease anxiety (Vinader-caerols et al., 2014). The consumption of alcohol among female athletes is also higher. For example, one study found that female athletes drink one more drink per week than female students not participating in sports (Rintaugu et al., 2012). Another study found that female athletes binge drink at a much higher rate than non-athletes, and former female athletes continue to binge drink at a higher rate (Green et al., 2014). Researchers found that there is a positive relationship between alcohol and sports participation even after direct involvement and years of participation (Green et al., 2014). For former athletes, the consumption of alcohol may be linked to ways of coping with the inability of

competing any longer because of age, injuries, and negative psychological aspects left after their sporting career. In those cases, former athletes may feel like drinking may temporarily help with anxiety and stress and fulfill the sensation seeking feeling (Green et al., 2014).

Potentially, much of socializing is done with the presence of alcohol. Places like bars, clubs, restaurants, friend's houses, concerts, etc. are common places for athletes to "hang out" and distress. Thus, alcoholic beverages become a part of their social life making it difficult for coaches and parents to try to control and regulate.

#### Possible Variables that May Influence Alcohol Consumption

Social influences may shape the development of adaptive or maladaptive coping responses (Tamminen & Holt, 2012). Parents and coaches play a large role in giving the athlete the necessary support needed in stressful times. (Olthuis, Zamboanga, Martens, & Ham, 2011). Positive parental influence is encouragingly correlated to adolescents' use of adaptive coping strategies. Parents who gave their children parental support by showing positive attitudes and hope in non-athletic settings made their children more likely to have effective coping strategies. Interestingly, in the relationship parent child, the bigger the perceived differences were in the relationship, the more adolescents cultivated drinking (Jander et al., 2013). In addition, the more parents talked to their children in an understanding, non-accusatory fashion, the less their children tended to drink later on in life.

Equally, coaches have a central role in athletic settings. Coaches provide feelings of security by being available to support and offer options and possibilities for physical

and psychological progress (Tamminen & Holt, 2012). Their influence can go beyond sport and throughout other areas of the athlete's life. For example, coaches often become responsible for the athlete's academic achievement, good nutrition, and mental health. For having a strong influence and spending a good amount of time with the athlete on a daily basis, coaches need to be aware of their relationship with the athlete and make sure it is a positive, non-harmful one. Thus, parents and coaches are essential social influences to the athlete and can help decrease binge drinking if less accusatory techniques are used.

Other social influences are athlete's friends and love relationships. Just like parental and coaches relationships, positive relations to others like love relationships and friendships are as equally important to the athlete because they are perceived as unconditional, stable, interpersonally close and supportive (Lundqvist & Sandin, 2014). Love relationships, if stable, gave the athlete positive support and someone to share accomplishments essential for the wellbeing of the athlete. Moreover, athletes reported that being in a relationship prevented them from binge drinking (Jander et al., 2013).

In addition, close friends were found to be the most stable source of support with high quality and functionality. Friends outside of sport gave athletes options to engage in non-sport related activities, provided a break from sports to recharge batteries and allowed the athlete to have fun. Instead, one particular study found that the bigger and closer the group of drinking friends, the more athletes drank (Jander et al., 2013). In sporting settings, where athletes may spend a lot of time together in teams or competition cites and become close to one another. Influencing each other to drink alcohol is a

common factor and has become a problem parents and coaches are not able to control any longer.

It is most common that coaches will prohibit the consumption of alcohol either at all times, during the season, or for some set number of days before competition. These strategies are no longer effective especially for female athletes who compared to male athletes; tend to consume alcohol for comforting reasons and coping techniques (Wilson et al., 2004). Not only because of the high percentage of student athletes who reported drinking, but because of such diversity of athletes coaches are working with, athletes with various cultural beliefs and backgrounds, different egos, personalities, and views of their past and present life, it became hard for coaches to set alcohol consumption rules that make sense to the student athlete.

Furthermore, because of their need for autonomy, athletes seek control in most aspects of their lives, a skill learned throughout their lonely lives, competition sites, and traveling. As a result, a coach repressing them from drinking alcohol may be effective leading the athlete to drink to show their coaches they cannot control what they do, to object to their lack of autonomy. For that reason, new, more efficient and positive strategies need to be implemented. Unfailingly, the new strategies cannot try to control these athletes, but rather show them other pathways and views of alcohol consumption.