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## The Effects of Problems Attributed to Culture on the Mental Health of Athletes

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THE EFFECTS OF PROBLEMS ATTRIBUTED TO CULTURE ON THE MENTAL HEALTH  
OF ATHLETES

By

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## **ABSTRACT**

### **The effects of problems attributed to culture on athlete mental health**

by

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Demographic changes in the United States during the past century and recognition of the importance of diversity have increased interest in research involving ethno-cultural factors that impact mental health. For example, important psychological constructs, such as self-concept and ethnic identity, have been indicated to develop within cultural context and impact psychological wellbeing (Brittian et al., 2013). The field of psychology, as a whole, is evaluating the merits of etic and emic approaches to research and clinical practice while exploring the importance and application of multicultural counseling/therapy (MCT; Sue & Sue, 2013). In contrast, within sport psychology, the influence of ethnic culture on athletes is relatively understudied. To address this gap in the current literature, the current study explored the relationship between problems attributed to ethnic and athletic culture, the importance of cultural background, and mental health in athlete populations. The present study was aimed to expand understanding of how problems perceived to be due to ethnic and athletic background impact mental health and relationships in collegiate athletes. In addition, this study was conducted to determine if perceiving ethnic and athletic culture as important protects athletes from perceiving problems due to their cultural background.

Correlational analyses were conducted to determine if significant positive associations between problems attributed to ethnic culture and 1) interpersonal difficulties and 2) mental health exist in collegiate athletes. In addition, it was hypothesized that reported problems attributed to athletic culture would be positively associated with mental health complaints and interpersonal difficulties. The hypotheses were partially confirmed. Problems attributed to ethnic culture were associated with relationship problems, but not mental health symptoms. Problems attributed to athletic culture were associated with both relationship problems and mental health symptoms. Self-reported importance of culture (both ethnic and athletic) were positively related to experience of problems attributed to ethnic and athletic culture. Self-reported importance of one's culture was not a significant moderator of relationships between perception of problems attributed to culture and problems with mental health or relationships. Future directions, limitations, and interpretations are reviewed.

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## TABLE OF CONTENTS

<b>APPROVAL PAGE.....</b>	<b>ii</b>
<b>ABSTRACT.....</b>	<b>iii</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>v</b>
<b>CHAPTER 1: Introduction .....</b>	<b>1</b>
<b>CHAPTER 2: Literature Review.....</b>	<b>4</b>
<b>Identity Development.....</b>	<b>4</b>
<b>Culture, Ethnicity, and Race .....</b>	<b>8</b>
<b>Problems Attributed to Ethnic Culture.....</b>	<b>14</b>
<b>Athletic Culture.....</b>	<b>22</b>
<b>Identity, Discrimination, and Athletes.....</b>	<b>24</b>
<b>Sport Level.....</b>	<b>27</b>
<b>Athlete Mental Health.....</b>	<b>29</b>
<b>Clinical Application .....</b>	<b>31</b>
<b>Sport Psychology .....</b>	<b>34</b>
<b>CHAPTER 3: Aims of the Current Study.....</b>	<b>37</b>
<b>CHAPTER 4: Methods .....</b>	<b>41</b>
<b>Participants.....</b>	<b>41</b>
<b>Measures.....</b>	<b>41</b>
Demographics Form.....	41
Consideration of Ethnic Culture in Therapy Scale .....	41

Consideration of Athletic Culture in Therapy Scale .....	42
Symptom Checklist-90-Revised.....	43
The Student-Athlete Relationship Instrument.....	43
<b>Procedure .....</b>	<b>44</b>
<b>Statistical Plan .....</b>	<b>46</b>
<b>Power Analysis .....</b>	<b>47</b>
<b>CHAPTER 5: Results.....</b>	<b>48</b>
<b>Descriptive Results.....</b>	<b>48</b>
Outliers .....	48
Normality.....	49
<b>Preliminary Analysis. ....</b>	<b>49</b>
<b>Primary Analysis.....</b>	<b>50</b>
Hypothesis 1 .....	50
Hypothesis 2 .....	51
Hypothesis 3 .....	51
Hypothesis 4 .....	52
Hypothesis 5 .....	53
Hypothesis 6 .....	53
<b>CHAPTER 6: Discussion.....</b>	<b>55</b>
<b>Problems due to Ethnic Culture. ....</b>	<b>55</b>
<b>Importance of Ethnic Culture.....</b>	<b>56</b>
<b>Problems due to Athletic Culture. ....</b>	<b>58</b>
<b>Importance of Athletic Culture.....</b>	<b>59</b>



<b>Limitations and Future Directions.....</b>	<b>60</b>
<b>Summary and Clinical Implications.....</b>	<b>61</b>
<b>REFERENCES .....</b>	<b>65</b>
<b>CURRICULUM VITAE.....</b>	<b>93</b>

## CHAPTER 1: Introduction

The field of psychology is evolving to reflect societal changes and emerging research, particularly regarding diversity initiatives. In 2002, the American Psychological Association (APA) published guidelines highlighting one of these important evolutions in the field: a movement towards multicultural research, education, and practice. The guidelines address interactions between ethnic and racial minority groups (e.g., Asian and Pacific Islander, African, Latino/Hispanic, Native American/American Indian, multiracial) and the dominant Euro-American culture in the United States. During the last century, the U. S. population has become increasingly diverse. In 1900, only 1 of every 8 Americans endorsed a race other than White. However, by the year 2000 that ratio shifted to 1 of every 4 (U.S. Census Bureau, 2002). These dramatic demographic changes in the U.S. have assisted in accelerating research in ethno-cultural factors impacting mental health.

One component of ethno-cultural research is the push to study the effects of ethnicity and problems attributed to ethnic culture on specific populations, such as athletes. Along these lines, psychologists have failed to provide sufficient insight into the impact of ethnic culture within athletics (Kontos & Breland-Noble, 2002), which, in a world of dramatically changing ethno-graphics, is a critical oversight. Indeed, the demographic shift in the general population is reflected in the demographics of sport participation as well, particularly in children, adolescents, and emerging adult athletes (Kontos & Breland-Noble, 2002).

The shifting demographic make-up of the United States athlete population (National Collegiate Athletic Association; NCAA, 2010) creates an opportunity for

ethnic groups to interact. Interaction of differing ethnic groups in sport is usually a positive experience (Cunningham, 2017); however, these interactions may also cause friction. In a diverse population, there may be an increased risk of attributing problems, particularly interpersonal difficulties, to an individual's ethnic background. There is a growing interest in the challenges that stem from diversity and discrimination (Edwards, 2017).

One's ethnic background and one's views on the importance of ethnic culture can have profound effects on mental health. For example, having positive attitudes and beliefs about one's ethnicity, as well as an active involvement in ethnic traditions and practices, is indicated as a part of having a strong ethnic identity (Lukwago, Kreuter, Bucholtz, Holt, & Clark, 2001). Ethnic and racial identity often function as buffers against mental health problems caused by offensive interactions (Choi et al., 2017). This may be particularly true for ethnic minority groups, who typically endorse higher levels of importance of their ethnic culture and are more likely to experience problems attributed to their ethnic or racial background than those of the ethnic majority (Donohue et al., 2006).

The salience of one's cultural identity varies across the lifespan. College is typically a time for exploration and adjustment, during which individuals challenge or accept components of their background. University attendees may wrestle with more than just cultural background, sometimes struggling to define their identity amongst a number of potential options. This may be particularly true in specific college populations, such as student-athletes. There is limited evidence about the impact of ethnic identity on mental health of athletes. Therefore, it is necessary to examine the multicultural needs of this

population. In addition to developing understanding of their ethnic culture, student-athletes typically endorse identification with unique components of athletic culture. Athletes may experience problems as a result of their athletic background, which may damage their mental health, interfere with interpersonal relationships, and increase frequency of risk behaviors. There is a well-documented need to target the mental health needs of collegiate athletes who are considered to be at-risk for physiological injury, psychological conflict, and academic difficulty (Phillips, 2017).

A primary purpose of psychological research is to inform practice. Extant literature demonstrates that multicultural competence is essential for effective psychological treatment. Examining the relationship between ethnic culture and problems attributed to ethnic culture by athletes can affect how practitioners address multicultural issues in the population of collegiate student athletes. Overall, student-athletes tend to express less positive attitudes about mental health services and are stigmatized for seeking help (Gulliver, Griffiths, & Christensen, 2012; Watson, 2005). Therefore, sport psychologists need to understand and address not only ethnic culture, but also the specifics of athletic culture to provide effective treatment. Intervention with athletes can be enhanced by developing an understanding of how ethnic and athletic cultural factors influence mental health, specifically how athletes are affected by problems they attribute to their cultural background and how the importance of their background protects them from mental health problems.

## CHAPTER 2: Literature Review

### Identity Development

The study of identity has theoretical, empirical, and public health implications (Kwate & Goodman, 2014; Schwartz, 2005). The construct of *identity* defines how humans view themselves (Stanley & Robbins, 2011). Erik Erikson was the first to emphasize the importance of one's sense of self in establishing mental health. He asserted that identity formation, the act of consolidating multiple potential identities into a coherent sense of self, is a critical developmental task (Erikson, 1968; McAdams & Guo, 2014). A sound sense of self is associated with positive self-image and social relationships, as well as decreased mental health problems (Schwartz et al., 2011a). A viable sense of identity provides a sense of unity and continuity (Hamman & Hendricks, 2005). Marcia (1980) emphasized the self-constructed nature of identity and the energy that it takes to actively coordinate motivations, abilities, and values.

The formation of an enduring, coherent identity involves testing out different possibilities and gradually moving towards durable life choices (Arnett, 2000). James Marcia (1966, 1967) developed the construct of *identity status* to describe various stages of identity formation and highlighted a distinction between identity exploration and identity commitment. Exploration is a problem-solving period that involves sorting through various roles and facilitates decision making (Kroger & Marcia, 2011). Commitment refers to the degree of adoption of identifiable goals and values (Kroger & Marcia, 2011). There are four identity statuses: 1) identity diffusion; 2) foreclosure; 3) moratorium; and 4) identity achievement. Each represents a different level of exploration and maturity ranging from minimally developed (identity diffusion) to well-developed

(identity achievement). Individuals with a diffuse sense of self are considered to be in the least mature stage of identity development because they generally lack a commitment to their identity and are avoiding exploration (Adams, Berzonsky, & Keating, 2006; Prager, 1986). Identity diffusion is characterized by a lack of motivation due to inadequate awareness of one's own identity (Adams, 1998). Movement through the various stages of identity status occurs through a process of identity development. Erikson theorized that identity formation occurs as a result of experiencing crisis, believing that challenges or turning points in life are important contributors to development of identity status (DiCaprio, 1974).

To work towards a consistent sense of self, human beings must be willing to work through contradictions in their self-concept and master developmental problems. Successful resolution of each crisis in Erikson's developmental stages results in psychosocial strength. Moving from stage to stage requires psychosocial estrangement (e.g., gaining autonomy means distance from supportive others), which can be difficult (Massey, 1986). Often, early in the development of identity, individuals enter identity foreclosure, unconsciously adopting the beliefs and values of parents and role models. This stage involves a commitment to an idea of one's self, but forecloses on any prospect of autonomy or exploration. In adolescence and emerging adulthood, many people begin to wrestle with their sense of self. They begin to try out different potential roles and attempt to find who they will be in adulthood (Hamman & Hendricks, 2005). Individuals begin accepting responsibility for their own thoughts and actions and making decisions independently (Arnett, 2000).

Environment has a significant impact on identity formation and movement through the stages of identity status. Indeed, identity development is embedded in environmental context (Adams et al., 2006), such as cultural background or social setting. For example, college campuses are often a hotbed of identity exploration, development, and growth. College education promotes exposure to a variety of cultures and worldviews (Arnett, 2000). Many university students experience a move away from the immature stages of foreclosure and diffusion and find themselves approaching moratorium and identity achievement (Prager, 1986; Waterman, Geary, & Waterman, 1974; Waterman & Waterman, 1971). The identity status of moratorium is characterized by active struggle with identity crises. It is a period of questioning and of consideration as people grapple with questions about who they are. This stage often occurs during emerging adulthood when individuals are able to experiment with potential roles and obtain broad life experiences (Arnett, 2000). Resolution of identity crises takes a great deal of reflection; however, the act of finding resolution indicates the discovery of the status of identity achievement, considered the most mature identity status, and means one is emerging with an integrated sense of self.

When a person looks in the mirror and asks the question, “Who am I?” several identities may come to the surface, particularly during phases of identity formation. These identities can be based on religious background, political views, sexuality, gender, social status, cultural background, career aspirations, and more. Often, many aspects of identity (i.e., gender, race, hobbies, etc.) impact self-concept simultaneously. Portions of identities overlap and intersect, making it hard to discern where one aspect of identity ends and another begins.

Stage theories attempt to explain the typical order of developmental processes; however, identity development is not unidirectional (Douglass, Wang, & Yip, 2016). This may be because multiple identity components (i.e., ethnic identity, gender identity, career identity, etc.) mature concurrently, but at different paces (Meeus, van de Schoot, Keijsers, Schwartz, & Branje, 2010; Pastorino, Dunham, Kidwell, Bacho, & Lamborn, 1997). In addition, individuals devote varying levels of significance to the diverse aspects of their identity at different times (Douglass et al., 2016). Within every person exists a “package” of multiple identity features, which shift in different settings and contexts (Brekhus, 2003, p. 17). Often, different facets of one’s identity are emphasized or muted to better match the environment. Fluctuation is normal. However, a coherent, organized, and integrated sense of one’s own identity is correlated with positive self-image and pro-social behavior (Luyckx, Goossens, Soenens, Beyers, & Vansteenkiste, 2005; Schwartz et al., 2011a).

In a person with a solid sense of identity, certain aspects will surface as more important or central to the sense of self. The construct of *centrality* represents the relative importance of a particular identity factor within a person’s self-concept (Brittian et al., 2013). For example, people with high racial centrality would define themselves by their racial identity across social situations. Research demonstrates that ascribing importance to one’s Ethnic and Racial Identity (ERI) increases sensitivity to problems perceived to be due to one’s ethnic background (Sellers, Caldwell, Schmeelk-Cone, & Zimmerman, 2003). The subjective experience of ethnic identity depends on the personal meaning the individual places on ethnicity or race (Rowley, Sellers, Chavous, & Smith, 1998). Indeed,



there is a consistent association between centrality (i.e., importance) of ethnic and racial identity components and mental health (McClain et al., 2016).

Amongst emerging adults, the university context can promote identity exploration or prompt confusion (Schwartz et al., 2011a). From the freshman year to the senior year, college students evidence significant identity maturation (Waterman et al., 1974). Identity stabilizes as one develops awareness of one's self-concept, assumes a sense of belongingness, and shares values and attitudes with others (Phinney, 1990). College is, essentially, an institutionalization of identity moratorium. In college, many students begin developing psychological resources, such as competence, purpose, and wisdom, through identity formation. It is important to note that identity moratorium is a time of vulnerability. Though individuals are actively addressing challenges and forming salient identities, they have less psychological resources to address threats (Adams et al., 2006). Unfortunately, some groups may be more vulnerable than others. For example, African American college students endorse higher rates of racially influenced stressors and evaluate campus climates less favorably (Pieterse, Carter, Evans, & Walter, 2010). College students are developing cognitive patterns and identity structures that could last the rest of their adult lives. Therefore, evaluating identity formation in the college setting is important.

### **Culture, Ethnicity, and Race**

Culture is comprised of the knowledge, skills, values, beliefs, traditions, customs, and attitudes that are passed from generation to generation (Møllersen & Holte, 2008; Segall, 1979) and is represented by shared values and behaviors within a group of people. A sense of attachment to a cultural group has a positive influence on mental health,

promoting psychological well-being and human flourishing (Schwartz et al., 2013). In addition, cultural factors influence how humans process autobiographical information (Wang, 2006). That is, individuals understand and define the *self* within the context of cultural influence and the lens of their social traditions. Therefore, understanding the cultural components that influence human beings is critical to comprehending the process of identity development (Burrow-Sanchez, 2014). In the United States, culture is often used in terms of ethnic background, and ethnic culture is widely studied in the field of psychology. Often, the literature utilizes two terms interchangeably: *race* and *ethnicity*. To avoid confusion, the terms *race* and *ethnicity* will be defined based on a review of extant literature, as there are historic differences between the two constructs.

Over the past 150 years, the definition of race has changed significantly (Lowe, 2009). The term evolved from describing family and lineage in the 1800's to defining cultural groups and denoting categories in the 1900's. Both biological and cultural explanations of the origins of the construct of race circulate extensively. Recently, Omi and Winant (1994) defined race as a construct that symbolizes social conflict by referencing different human body types. Race is deemed a problematic construct because it has not been established via scientific or professional consensus (Yee, Fairchild, Weizman, & Wyatt, 1993). According to Johnson (1990), race refers to an antiquated belief that skin color implies that there is a genetic or biological distinction amongst human beings. For example, in the United States, race historically served as a fundamental principle of organizing society, where it was used to classify human beings and define social status (Williams, 1996). In the United States, a racial or ethnic minority background is often associated with disadvantaged social status (Mossakowski & Zhang,

2014; Pearlin, 1989). The social construct of race asserts that individuals are inherently different due to phenotypic, ancestral, or cultural factors (Paradies, 2006). However, modern evidence suggests that physical characteristics, such as skin color and facial features, are not strongly correlated with genetic variability; therefore, human beings cannot be cleanly demarcated into distinct biological categories (Lowe, 2009). Defining a limited number of human races by virtue of genetic markers may be an oversimplification of a complicated science (Jobling, Rasteiro, & Wetton, 2016). Indeed, the human genetic code only differs by an average 0.1% from one person to the next (1000 Genomes Projects Consortium, 2012).

Some have purported the traditional usage of *race* as a social definition (i.e., existence of biological or genetic differences between groups) is no longer relevant (Umaña-Taylor et al., 2014). Others argue that social constructs, once defined, effect the ways that people act and the things that happen to them (Williams & Husk, 2013). Racism is defined as systemic (economic, political, cultural, social) structures, actions, and beliefs that perpetuate inequitable distribution of power, resources, and privileges (Hilliard, 1992). In the United States, the distribution of power, resources, and privileges is unequal between white people and people of color (DiAngelo, 2012). Systemic powers continue to utilize race as a categorization of human identification (Pope-Davis & Liu, 1998). For example, groups that are historically marginalized, such as African-Americans, often report greater exposure to negative experiences due to their racial background (Donohue et al., 2006; Dovidio & Fiske, 2012). Other research demonstrates that centrality of racial identity is linked to psychological distress and perceived stress (Sellers et al., 2003). The popular tendency to construct identity based on the perception

of race, therefore, continues to be a worthy area of study and exploration (Johnson, 1990). Humans are eager to classify others on the basis of observable traits, such as skin color, to simplify their perception of the world. Racial identity may have different meaning for different people, so a cautious attitude should be assumed prior to making assumptions based on racial attributions.

Ethnicity is also a socially constructed paradigm, though it is not based on discrimination or perceived biological differences. It stems from the field of anthropology (Møllersen & Holte, 2008). It can have a profound effect on an individual's identity development (Williams & Husk, 2013). Some suggest ethnicity arises from cultural contact with other groups (e.g., Chinese-Americans) and is a product of the interaction between reference groups (Johnson, 1990). Others report ethnic culture develops as human beings adapt to environmental influences, leading individuals to evidence cultural differences and similarities within ethnic groups (Møllersen & Holte, 2008). The interaction of two cultural reference groups who share a common identity (e.g., Asian-American) generates ethnicity through the common ethnic platform and interest in maintaining cultural traditions (Johnson, 1990). As a result, ethnicity, more than the constructs of race and/or culture, responds most immediately to environmental contexts (e.g., political, historical, temporal).

Though psychologists define race and ethnicity as separate constructs, the paradigms are often used interchangeably in the literature when referring to the identities individuals take on to describe their self-construct (Casey-Cannon, Coleman, Knudtson, & Velazquez, 2011). There is controversy in the literature about whether ethnic and racial identity are separate constructs due to the social genesis of the categories, with

researchers struggling to empirically validate this distinction (Casey-Cannon et al., 2011; Helms, 2007, Phinney & Ong, 2007). The first, ethnic identity, is often determined by cultural traditions passed down from ancestors (Cokley, 2007). Common beliefs, values, and behaviors shape how people view themselves. Cultural factors influence the activities of day-to-day life, so identity formation occurs within the context of everyday activities (Jensen, 2003). Ethnic identity is a dynamic construct. Just as other identity factors mature, ethnic identity evolves constantly throughout adolescence and early adulthood. Personal experiences and interpersonal interactions shape perceptions about one's own ethnic identity and the identities of others (Gaylord-Harden, Ragsdale, Mander, Richards, & Petersen, 2007; Phinney, 1989; Umaña-Taylor et al., 2014). The construct of ethnic identity involves two dimensions: ethnic exploration and ethnic belonging (Choi et al., 2017; Phinney, 1992). Just as individuals explore their identity to develop a strong sense of self, ethnic exploration refers to the degree to which people actively explore their ethnicity and cultural history. Ethnic belonging refers to how people feel about their ethnicity. Indeed, a strong ethnic identity is typically characterized by a sense of belonging to one's ethnic group (Roberts et al., 1999). Developing ethnic identity involves developing a sense of pride and belongingness to one's ethnic heritage (Phinney, 1996) and can be broadly applied. The second, racial identity, is described in the context of an individual's development in response to oppressive societal factors born from race (Cokley, 2007). It is the extent to which a person has awareness of race and interprets life through the frame of their racial reference group (McClain et al., 2016). In contrast to the foundational considerations of culture underlying ethnic identity, the underpinning focus

of the definition of racial identity is typically a fixation on racial discrimination and marginalization (Phinney & Ong, 2007).

Despite differences, both paradigms of ethnic and racial identity development involve exploring cultural traditions and values, as well as a feeling of belongingness. In 2014, the *Ethnic and Racial Identity in the 21<sup>st</sup> Century Study Group* was assembled to develop a concise conceptualization of research on racial and ethnic identity. The Study Group's consensus was to recommend the use of one meta-construct: Ethnic and Racial Identity (ERI), due to the conceptual and empirical overlap between the two constructs in the extant literature (Umaña-Taylor et al., 2014). ERI development is a normative element of maturation (Lee Williams, Tolan, Durkee, Francois, & Anderson, 2012). This meta-construct reflects the perspective many contemporary youths experience at the intersection of their many identities (Warner & Shields, 2013), representing a generational shift away from historical distinctions made between race and ethnicity.

It is likely that culture plays an important role in the development of identity based on one's ethnic and racial background. Unfortunately, using race as a derogatory construct and holding pejorative sentiments targeting specific ethnic groups are pervasive influences in American culture (Agyemang & Singer, 2014). If racial and ethnic cultures are indeterminably interwoven, then it follows that minority status individuals likely experience cultural challenges attributed to both their ethnic background and their physical features (e.g., skin color). Longitudinal research suggests that the perception of racism can lead to negative mental health outcomes and maladaptive health-related behaviors (Paradies, 2006).

## **Problems Attributed to Ethnic Culture**

Cultural neuroscientific research demonstrates that there is potentially a neurological basis for interpreting events as problematic and attributing the experience to ethnic differences. For example, individuals demonstrate increased amygdala response (i.e., fear) toward fearful faces of their own ethnic group compared to fearful faces of other ethnic groups (Chiao et al., 2008). This suggests that there are differences in how individuals process social cues from their own cultural group as compared to members of other cultural groups. It also highlights the difficulties many face in interpreting social cues from individuals from other cultures (Chiao et al., 2008). This phenomenon could be particularly relevant if someone feels threatened or insulted in a social situation, as they will likely interpret the threat differently depending on the ethnic background of the offending individual. Relative difficulty processing outgroup social cues could increase the possibility of perceiving negative or hurtful comments. In addition, individuals anticipate negative interactions with people who are different than themselves (i.e., outgroup members), contributing to a cycle of negative attributions (Nawata & Yamaguchi, 2014).

Minority groups report that it is common to experience and endure problems due to their ethnic or racial background (Donohue et al., 2006; Harrell, 2000). Interestingly, attributing problems to one's ethnic background is related to both enhancement and degradation of ethnic identity development (Deaux & Ethier, 1998). These problems may increase motivation for exploration, such that an individual's sense of the importance of their ethnic culture is increased (Hipolito-Delgado, 2016). Ethnic culture is perceived as more important for members of ethnic minority groups than members of the dominant

group (Donohue et al., 2006). This may be because members of the ethnic majority are not often confronted with questions about their ethnic heritage (Sue & Sue, 2013), and, therefore, are less likely to actively explore their ethnic identity.

Research demonstrates that the more important or central one's ERI is to one's self-concept, the more vulnerable that person is to negative feedback, discrimination, and negative stereotyping (Cook, Puride-Vaughns, Garcia, & Cohen, 2012). In ambiguous social situations, individuals who view their ethnic identity as central to their self-concept may be more prone to attributing problems to their ethnic culture, especially if they see their ethnic group as stigmatized, as is often the case with ethnic minorities (Quinn & Chadoir, 2009). Barrett and Swim (1998) developed signal detection theory to explain how individuals infer the thoughts of others using two constructs: sensitivity and response bias (Lynn & Barrett, 2014). Sensitivity refers to the ability to detect problems attributed to one's ethnic background, and response bias is the tendency to misjudge incidences of discrimination (Contrada et al., 2000). Social contexts are often ambiguous, and individuals must work constantly to decipher interpersonal interactions. For example, it is important to be able to ascertain if another person is angry or sad to guide one's response. Low sensitivity, which is due to innate inaccuracies in human perception, involves perceptual uncertainty during interpersonal interactions. An inferior ability to discriminate or detect problems makes perceptual errors more common and contributes to bias. High sensitivity allows an individual to more accurately detect potential threats. Lynn and Barrett (2014) compared sensitivity to attempting to navigate an "obstacle-strewn room" (p. 1668). Individuals with low sensitivity navigate the room with the lights dimmed, increasing the likelihood of bumping into obstacles. Response bias, which is



categorized as liberal, neutral, or conservative, speaks to how obstacles in the room are categorized. Someone with a liberal response bias will be more likely to see items in the room as dangerous. In interpersonal interactions, even a small scowl may be interpreted as angry, due a low threshold for interpreting threatening stimuli. In contrast, someone with a conservative response bias may error in the opposite direction, underestimating threats and only interpreting strongly scowling faces as angry. Missed interpretations can have costly consequences, such as punishment, embarrassment, or danger. Donohue and colleagues (2006) determined that individuals who reported their ethnic culture was important were more likely to perceive problems due to their ethnic culture than individuals who reported their ethnic culture was not important.

There are a broad range of problems that can be perceived to be a function of one's ethnic culture (e.g., differential treatment, target of expressed overtly or covertly offensive attitudes, microaggressions due to ethnic culture). Many people become the target for offensive comments about their ethnic culture and experience arguments and interpersonal problems due to their ethnic culture. This is particularly true for individuals with ethnic minority identity status. For example, ethnic minority groups reported more problems due to their ethnic culture than Euro-American individuals (Donohue, et al., 2006).

The experience of problems attributed to ethnic culture can have serious consequences. Generally, individuals who are targets of differential treatment recognize the unfair conduct. Awareness of being discriminated against, particularly when discrimination is attributed to ethnic culture, is stressful (Clark, Anderson, Clark, & Williams, 1999; Mossakowski & Zhang, 2014), and the human body is equipped to

respond to stressful stimuli. Stress triggers a fight-or-flight response to prepare an individual to react to a perceived threat. Physiological, cognitive, and emotional resources are deployed to ensure survival when an individual faces with a threatening situation (Chen, Cohen, & Miller, 2010; Cook et al., 2012; Miller & Chen, 2010). The innate reaction to respond to threats is adaptive, and the body does not discriminate between physical and psychological threats. In the same way that physical threats trigger a response to defend oneself or flee, psychologically threatening stimuli trigger the body to prepare for a response. This reaction can be observed by measuring activation of the HPA axis and cortisol levels in the blood when a person is exposed to stress. Though short term increases of cortisol can improve cognitive performance and executive functioning, chronically elevated levels (as seen with prolonged exposure to discrimination) can impair cognitive functioning (Levy et al., 2016).

Discrimination is classified as a social stressor (Pascoe & Smart Richman, 2009), and the stress caused by discrimination has deleterious effects on mental health (Sellers et al., 2003). Humans are social beings who possess an innate drive to form social groups. From an evolutionary perspective, this adaptive drive likely grew from the safety found in numbers, allowing humans to protect and care for themselves and each other. The ability to understand and interact socially would likely have meant the difference between life and death for primitive ancestors. That innate drive remains, triggering a response to attempt to increase one's chances of survival when rejected or when one feels like an outsider. Social stress initiates a physiological coping reaction (i.e., increased blood pressure, heart rate, and cortisol) and increases the risk of a myriad of health problems, including cardiovascular disease and depression (Brondolo et al., 2008; Taylor & Turner,

2002). A burgeoning field of study links stressors related to ethnic factors to diminished physical health, including higher rates of disease and mortality (Contrada et al., 2000). Repeated exposure to problems perceived to be due to one's ethnic identity can lead to mental and physical illness (Pascoe & Smart Richman, 2009). Chronic exposure can decrease the threshold of physical response to stressful situations and make the body more prone to a physiological stress response in a potentially threatening environment (Guyll et al., 2001).

Social stressors are particularly damaging to mental and physical health (Snyder, Barry, & Valentino, 2015). When individuals encounter a threat to their psychological integrity, they often enact buffering skills to dull the pain or sting of the attack (Cross et al., 2017). The person feeling attacked takes a reactive stance to blunt the effect the insult. The better developed one's self-concept is, the more resources one is able to recruit to combat the hazardous situation (Brekhus, 2003; Levy et al., 2016). In some cases, an internalized sense of ethnic identity can buffer against psychologically detrimental symptoms (Burrow-Sanchez, 2014; Mossakowski, 2003).

Unfortunately, discriminatory behavior can be subtle and ambiguous (Contrada et al., 2000), and a threat in one context can be a source of protection in another setting to a member of a marginalized or stigmatized group (Boykin, 1986). One example of ambiguous and culturally limited perception of problems attributed to ethnic culture can be observed in the research of microaggressions. The notion of microaggressions, which are small, subtle, overt attitudes and judgments communicated daily between individuals or small groups, was introduced by researchers studying how perception of race is impacted by television viewership (Pierce, Carew, Pierce-Gonzalez, & Willis, 1978). Sue

and colleagues (2007) expanded the construct into the field of psychology, by defining microaggressions and explaining how they apply to clinical practitioners.

Microaggressions communicate oppression and devaluation to ethnic minority groups (Sue et al., 2007; Sue, Capodilupo, Nadal, & Torino; 2008). They are often committed unconsciously, often in the form of well-meaning queries, expressions, or comments. Examples of microaggressions cited by Sue and Sue (2013) include asking Asian-Americans for help on math or science questions, denying racial or ethnic experiences, mistaking someone of an ethnic minority for a service worker, or curiosity about the cultural or religious practices of an ethnic minority group. These day-to-day interactions have deleterious effects on the mental health of minority groups.

The focus of ethnic discrimination research centers on ethnic minority group members' perception and experience of bias (Contrada et al., 2000). Due to the inherent subjectivity of measuring the *perception* of problems, it is important to highlight that the concept of microaggressions is based in experiential reality (Sue, 2017). Subjective experience must be respected. Members of the dominant culture may find it difficult to understand and empathize with the plight of those who endure microaggressions daily. Some report that members of majority races fail to develop an awareness of the experiences of marginalized groups (Agyemang & Singer, 2014; Harris Jr., 2008; Schacht, 2008; Thomas, 2008), and believe microaggressions are not real, relevant, or harmful because they have not experienced them. In contrast, evidence supports the assertion that microaggressions are not inconsequential (Sue, 2017). The relationship between microaggressions and mental health suggests positive correlations with stress, depression, anxiety, anger, and somatic complaints (Choi et al., 2017; Hyunh, 2012;

Nadal, Wong, Griffin, Davidoff, & Sriken, 2014; Ong, Burrow, Fuller-Rowell, & Sue, 2013). Overall, the perception of discrimination is significantly related to mental health problems (Chia-Chen, Szalacha, & Menon, 2014; Contrada et al., 2000; Ikram et al., 2016) and has a broad bearing on health as a whole (Pascoe & Smart Richman, 2009). Meta-analyses of perceived discrimination suggest that offensive remarks and discrimination are associated with a number of physiological and psychological consequences, including depression, psychological distress, physiological stress response, and increased risk behaviors (Pascoe & Smart Richman, 2009).

It is important to note that prejudiced and biased views are not held only by those in positions of privilege and power (e.g., majority status), but also by those who are marginalized (Hipolito-Delgado, 2016). Negative biases against one's own ethnic background can be engendered through experiencing a culture of discrimination (Crocker, Major, & Steele, 1998). Individuals may hold stereotypical schemas or biases against their own ethnic background or members of their ethnic reference group. Stereotypes are gross generalizations and exaggerated beliefs about groups of people (Allport, 1954; Johnson-Ahorlu, 2013). Often, racial and ethnic minority groups are subjects of derogatory stereotypical characterizations. The acceptance of the prejudices that depict one's own ethnicity as substandard is defined as internalized racism (Padilla, 2001), which is linked to poorer mental and physical health (see Hipolito-Delgado, 2016).

Extant literature demonstrates that individuals are affected by problems attributed to their culture in different ways. There is a growing body of literature exploring what factors influence the relationship between perceived problems attributed to ethnicity and mental health (Choi et al., 2017). In contrast to findings by Donohue and colleagues

(2006), some evidence suggests a strong identification with one's ethnic culture may serve as a protective factor when an individual is faced with offensive, racially charged remarks (Brittian et al., 2013; Umana-Taylor, et al., 2014). Individuals who identify strongly with their ethnic/racial background are less likely to endorse stereotypical beliefs about their own ethnicity and are typically protected from the effects of stereotype threat (Cross et al., 2017). Indeed, a strong ethnic identity is correlated with increased life satisfaction and meaning, better psychological functioning and self-esteem, and overall feelings of subjective well-being (Ajibade, Hook, Utsey, Davis, & Van Tongeren, 2016; McClain et al., 2016; Phinney 1992; Utsey, Hook, Fischer, & Belvet, 2008).

Identification with one's ethnic background weakens the positive association between perceived ethnic discrimination and depression (Ikram et al., 2016) and protects certain minority groups from the development of maladaptive behaviors, such as eating pathology (Baugh, Mullis, Mullis, Hicks, & Peterson, 2010). People who develop an awareness of the values shaped by their ethnic identity demonstrate the ability to discount the comments of prejudiced others (Cross et al., 2017). A meta-analysis of 184 studies uncovered a moderate relationship between ethnic identity and the well-being of individuals with ethnic minority backgrounds ( $r = .17$ ; Smith & Silva, 2011). Individuals who do not identify strongly with their ethnic background tend to experience higher levels of internalized racism and more negative views about their ethnic group (Cokley, 2002). Across a variety of ethnic minority backgrounds, people in the United States may reap benefits of strong identification with the importance of their ethnic culture (Gummadam, Pittman, & Loffe, 2016).

## **Athletic Culture**

It is important to note that culture is not limited to ethnic background. Sociopolitical environment, history, traditions, beliefs, values, and shared experiences are all a part of one's culture (Donohue et al., 2006). For athletes, the shared experiences of sport participation are represented by athletic culture (e.g., training, stretching, competing, working with a coach, etc.) and may be a salient influence on identity development. As noted, college is often a time of exploration. Numerous cultural factors (i.e., ethnic, academic, religious, athletic) may compete for centrality and salience. This may be particularly true for student-athletes, one of the most well-known special populations on university campuses (Valentine & Taub, 1999), who may struggle to understand the intersection of multiple identities.

One identity often adopted by sportspeople involves a degree of acceptance of the athletic role (i.e., athletic identity; Brewer, Van Raalte, & Linder, 1993). Individuals who exhibit high levels of athletic identity define themselves in terms of their athletic status (Weinberg, Vernau, & Horn, 2013). Though athletic identity and the effects of that identity on mental health varies as a function of specific sport, there are aspects of athletic culture that represent shared experiences across sports and levels of competition. Athletic participation breeds a unique culture with distinctive developmental needs (Engstrom & Sedlacek, 1991; Rao & Hong, 2016). For example, culturally, athletes tend to isolate themselves from the general populace (Brewer, Van Raalte, & Linder, 1991). Athletic prowess requires significant time and energy commitment, and in order to achieve elite levels of performance, competitors must make sacrifices. Each time an individual forfeits time with friends for an extra session in the gym or feels the pain of

one more repetition in the weight room, the individual steps further into the role of an athlete. Sports become an important channel of expression of the athlete's identity. Across all sport levels, individuals endorse varying degrees of identification with the athletic role (Weinberg, Vernau, & Horn, 2013); nonetheless, elite and recreational athletes express that they value their athletic experiences in similar ways (Lamont-Mills & Christensen, 2006). This suggests that the experience of shared athletic culture is not reserved for elite competitors alone.

Problems can arise because of the common experiences of athlete culture, such as association with a small social network for support and/or lack of exposure to diverse world views and perspectives. In addition, athletic culture may preclude student-athletes from addressing problems experienced due to their ethnic or athletic background. For example, the athletic culture values mental toughness, which is the ability to stay focused and under control to cope more efficiently in the face of adversity (Connaughton, Wadey, Hanton, & Jones, 2008; Reardon & Factor, 2010). Athletes typically learn the value of toughness young and are taught to "play through the pain" (Wiese-Bjornstal, 2010, p. 104). Sport culture emphasizes physical performance over physical and psychological wellbeing (Rice et al., 2016; Weinberg, Vernau, & Horn, 2013). Therefore, athletes may be less likely to address a problem unless it directly interferes with competition, even if it is negatively impacting other domains (i.e., mental health, relationships, substance use). This can be seen in student-athletes' tendency to avoid mental health treatment. For example, though athletes are referred to counseling services 10% more often than non-athlete peers on college campuses, they are significantly underrepresented in campus counseling centers (Pinkerton, Hinz, & Barrow, & 1989). Overall, athletes express less



positive attitudes about utilizing mental health services (Watson, 2005). Often, seeking help is stigmatized within the athletic culture. Many coaches view addressing mental health issues as a weakness (Gulliver et al., 2012), and athletes fear that their roles on their athletic team could be affected if they acknowledge difficulties or psychological distress (Neal et al., 2013).

### **Identity, Discrimination, and Athletes**

The increase of ethnic and racial diversity in the general populace of the United States is being reflected in the demographics of intercollegiate athletics. In their *Student-Athlete Ethnicity Report*, the NCAA administration (2010) indicated that the trend of increasing diversity in intercollegiate sport has been evident throughout the past decade. During the survey of NCAA Division I institutions for the 1999-2000 academic year, 64.4% of male athletes and 72.6% of female athletes across all sports endorsed ethnicity of “White, Non-Hispanic” (p. 13). By 2009-2010, the percentages of White athletes dropped by 1.9% for males and 2.0% for females across all sports. During that decade, the percentage of athletes in every other ethnic category (i.e., American Indian/Native American, Asian, Black/African American, Hispanic/Latino, Other, Two or more races), except for Native Hawaiian/Pacific Islander, increased. The report acknowledged that shifts in data collection and reporting methodology over the past decade could have impacted the results; however, it concluded that the demographics of the NCAA continue to slowly become more diverse.

The demographic shift of the athlete population parallels what is happening in the general populace. Unfortunately, despite the movement for cultural research in other domains, there is limited information regarding the influence or centrality of ethnic

culture or identity in athlete populations (Chung & Lim, 2016). Some evidence suggests sport may facilitate ethnic identity development when athletes participate with other individuals who share their ethnic background (Pooley, 1981). In addition, case study evidence suggests that sport participation aids identity development, self-knowledge, and emotional regulation (Stanley & Robbins, 2011). Though athletes develop a better understanding of their own ethnicity, they tend to demonstrate less openness to diversity by the end of their first year in college, as compared with non-athletes (Whitt, Edison, Pascarella, Terenzini, & Nora, 2001).

Though limited, extant research exploring culture in athletics suggests that athletes may experience problems due to cultural factors. In addition to ethnic cultural components, an athlete may experience problems attributed to athletic identity and culture. Status as an athlete may bring negative comments. Engstrom and Sedlacek (1991) concluded that student-athletes and athlete culture are “prone to prejudice in the campus community” (p. 191). Most literature pertaining to stereotypes in athletes addresses the threat of academic underperformance (Dee, 2014; Solomon et al., 1996; Yopyk & Prentice, 2005), but student-athletes also have to contend with problems based on their ethnic and racial backgrounds (Beamon, 2014). For many athletes, discrimination in the classroom can be linked to both their athletic and ethnic culture. Sixty-two percent of 538 collegiate athletes sampled in one study endorsed hearing a faculty member make negative comments about athletes in class (Simons, Bosworth, Fujita, & Jensen, 2007). Athletes may feel alienated if their classroom experiences are negative, which are likely exacerbated if they are part of an ethnic minority group (Gummadam et al., 2016).

In addition, athletes may lack organizational support for difficulties perceived to stem from their ethnic culture within the hierarchy of athletic administration. Many of the individuals in sports leadership roles, such as coaches and administrators, do not know how to communicate effectively with athletes from different ethnic backgrounds (Smith, 1991). The demographics of the athletic hierarchy is disproportionate, with a disparate number of white administrators and coaches supervising ethnically diverse collegiate athletes (Veri, 1998). Coaches are often important role models for student-athletes (Simon, Rheenan, & Covington, 1999); therefore, difficulty communicating with a coach can cause significant problems. In fact, problems in the relationship between coach and athlete is associated with increased mental health problems and psychological distress (Gearity & Murray, 2011; Phillips, 2017). Coaches who have learned and unconsciously accepted racial stereotypes may make assumptions about athletic abilities or shortcomings based on race or ethnicity (Smith, 1991). It is important for individuals in positions of authority or power to consider their own biases and beliefs to be more effective at communicating with ethnically diverse athletes.

Overall, the social stress of perceived discrimination can weaken the body's immune response, which can increase vulnerability for illness and injury (Gee, Spencer, Chen, Takeuchi, 2007). High levels of stress are associated with burnout and a sense of despair (Lee, Kang, & Kim, 2017). Stress can be particularly threatening for athlete populations who require physical and psychological resources to avoid injury and perform physically. In the face of chronic stress, athletes may reach a state of severe emotional, mental, and physical exhaustion (Lee et al., 2017). They may suffer from

depression and a sense of inadequacy, which may manifest as overtraining syndrome or a psychological disorder and may threaten their identity as an athlete.

Research demonstrates that athlete preferences for seeking and receiving help from sport psychology consultants, topic preferences, and even acceptance of utilizing medication are influenced by cultural factors (Naoi, Watson, Deaner & Sato, 2011). The field of psychology, particularly sport psychology, must rise to the challenge of meeting the needs of culturally diverse athletes by improving cultural awareness through research and training (Martens, Mobley, & Zizzi, 2000). Promotion of well-being requires creating conditions that decrease risk for harmful or damaging behaviors and help provide purpose in life (Schwartz et al., 2011b). Armed with a multicultural understanding of the mental health needs of their athletes, coaches and mental health professionals can facilitate access to mental health treatment (Brown & Blanton, 2002).

### **Sport Level**

Collegiate sport competition typically takes place at three levels: varsity, club, and intramural. The National Collegiate Athletic Association (NCAA) is the largest intercollegiate varsity athletic association in the U.S., overseeing the sport participation of over 480,000 student-athletes per year (NCAA, 2015). Colleges also often host club sports programs that compete with teams from other colleges but are not sanctioned by the NCAA or National Association of Intercollegiate Athletics (NAIA) and are not granted varsity status. Participation in club sport on college campuses is estimated to involve more than two million student-athletes (Pennington, 2008). Finally, there are intramural sports, which are organized to promote athletic participation within college

communities. Over 8.1 million students participate in intramural competition, which is governed by the National Intramural-Recreational Sports Association (NIRSA, 2015).

Perhaps due to the high-profile nature of varsity sports, administrators typically focus on the demand for intervention development designed specifically for varsity athletes (e.g., Cimini et al., 2015). University athletic departments often employ specialized personnel to address the psychological needs of varsity athletes, but do not offer these services to club and intramural athletes (Hayden, Kornspan, Bruback, Parent, & Rodgers, 2013).

Extant literature suggests that athletes at all levels of collegiate competition represent a unique population on college campuses and share experiences that are separate from non-athlete peers. For example, one study found that collegiate athlete groups (i.e., varsity, club, and intramural athletes) exhibited significantly more high-risk alcohol consumption behaviors than non-athletes (Marzell, Morrison, Mair, Moynihan, & Gruenewald, 2015). In another study, a comparison of global mental health complaints, symptoms of depression, days of alcohol use, days of binge drinking, and days of marijuana use suggest that there are no differences in mental health and substance use according to level of collegiate sport participation (Phillips, 2017). Unfortunately, researchers frequently overlook the needs of club and intramural athletes, despite the revealed need to target all levels of collegiate student-athletes (Donohue et al., 2016).

The evidence is clear that varsity athletes are in need of services. It is equally clear that club and intramural participants are also in need of services and should also be considered as a part of the athlete population. Indeed, club and intramural athletes demonstrate higher probability of reporting smoking and alcohol use than non-athlete

college students (Andes, Poet, & McWilliams, 2012; Primack, Fertman, Rice, Adachi-Mejia, & Fine, 2010;). Athletes, as a whole, represent a specific population with specific needs and cultural considerations to address when developing treatments to assist in enhancing performance and optimizing mental health.

### **Athlete Mental Health**

Research provides mixed results about the benefits and costs of sport participation. Some literature suggests participation in athletics is associated with greater physical and psychological health benefits (Hudd et al., 2000; Khodabakhshi & Khodae, 2011; Kimball & Freysinger, 2003; Shores, Becker, Moynahan, Williams & Cooper, 2015). Athletic participation can provide an ideal environment for learning to overcome challenges and adversity (Galli & Vealey, 2007). However, athletes face unique demands imposed by others and/or themselves (Mann, Grana, Indelicato, O'Neill, & George, 2007). Student-athletes face stress that is multi-dimensional. It is dynamic and can be experienced as both helpful and harmful, shifting over time and situations (Kimball & Freysinger, 2003).

Evidence suggests that college athletes are at higher risk for mental health problems, including substance abuse and injury related adjustment problems, than non-athlete students (Appaneal, Levine, Perna, & Roh, 2009; Geisner, Grossbard, Tollison, Larimer, 2012; Nattiv, Puffer & Green, 1997). College students, in general, have a high likelihood of engaging in high-risk behaviors (Schwartz et al., 2011b). Research suggests that athletes make significantly more high-risk lifestyle choices, such as binge-drinking and gambling, than non-athlete peers (Geisner et al., 2012; Nattiv et al., 1997). Substance use is a major area of mental health concern for university student-athletes, as athletic

culture can be accepting of hazardous alcohol consumption to promote team bonding and cohesion (Zhou, O'Brien, & Heim, 2014). In general, individuals who participate in sports consume more alcohol than non-athlete peers and are more likely to participate in binge drinking. These risky lifestyle choices are associated with severe mental health consequences, including suicidal impulsivity and depression (Rao & Hong, 2016; Zhou et al., 2014).

There is a need to address the mental health needs of collegiate athletes, who are at-risk for physical, psychological, and academic difficulties (Donohue et al., 2015; Donohue et al., 2016; Phillips, 2017). Ten to 15 percent of student-athletes suffer from clinically significant distress, which is disproportionately high compared to the general college population (8-9%; Watson & Kissinger, 2007). One study found that the prevalence of athletes who exhibit clinically significant symptoms of depression was at least 24% (Wolanin, Hong, Panchoo, & Gross, 2016). Athletes are often depicted in a romanticized or idealized role; however, they are subject to *at least* the same risk for mental health problems as non-athletes (Gill, 2008; Malinauskas, Cucchiara, Aeby, & Bruening, 2007; Reardon & Factor, 2010).

The demand to embrace mental health optimization within sport psychology is increasingly apparent (Donohue et al., 2015). The culture of athletic participation is unique and requires specific attention during treatment development. For example, sport culture typically emphasizes physical performance, winning, and success without concern for potentially harmful physical and psychological consequences, such as injury or burnout, which are significant problems in athlete populations (Rice et al., 2016; Weinberg et al., 2013). Unfortunately, the prevalence, risk factors, and prognosis of

mental health problems in athlete populations are not well understood (Reardon & Factor, 2010). Several common elements of the athletic experience, such as rigorous attention to diet, restricted eating, aggression, exhaustion, and/or alcohol use (Giel et al., 2016; Marasescu, 2013; Vinci, 2000; Zhou et al., 2014), may resemble symptoms of psychological disorders and can be etiologies or direct symptoms of mental health problems (Armstrong & VanHeest, 2002).

### **Clinical Application**

In clinical practice, it is important to develop an understanding of diversity (Donohue et al., 2006). The inability to understand and adopt a multicultural worldview may interfere with rapport and stagnate treatment. Clinicians unable to understand motivation and behaviors through a cultural lens may struggle to provide therapeutic intervention in a relevant and meaningful way (Stanley & Robbins, 2011). The APA is attempting to bridge the divide between clinicians and clients by addressing psychological training programs and requiring accredited graduate training programs to provide instruction on multicultural perspectives (Rogers, Ponterotto, Conoley, & Wiese, 1992). Clinicians are increasingly encouraged to develop an understanding of the multicultural guidelines to facilitate provision of effective therapeutic intervention (Donohue et al., 2006); however, there is a continued need to research and understand these perspectives and the psychological influence they hold. Mental health providers must assess how ethnic identity and perceived discrimination are affecting the individual (Donovan et al., 2013).

An important distinction of multicultural competence comes from an understanding of *etic* versus *emic* approaches (Sue & Sue, 2013). The etic approach relies



on the cultural perspective that human beliefs and behaviors are culturally universal. The concept is represented in Erikson's original theories on identity development, as he suggested that there are common elements of identity development across cultures (Erikson, 1950). In psychology, the etic perspective is propagated by mainstream research studies, which have been criticized for drawing conclusions about all human nature from primarily "WEIRD" participant pools ("Western Educated, Industrialized, Rich, and Democratic"; Henrich, Heine, & Norenzayan, 2010, p. 61; Cheung, 2012). Indeed, the majority of published psychological research neglects 95% of the world's population (Arnett, 2009). Overall, the etic approach suggests that there is minimal modification necessary in the diagnosis and treatment of an individual based on cultural factors.

The emic approach, on the other hand, appreciates the role of cultural factors in human development and in the understanding of normal and abnormal values and behaviors. The "inside perspective" follows the psychological tradition of attempting to see and understand from the native or insider's point of view (Morris, Leung, Ames, & Lickel, 1999, p. 781). This perspective of cultural relativism suggests that current standards for psychological intervention and clinical practice are inadequate when approaching treatment with racial and ethnic minority groups (Sue & Sue, 2013). There are alternative counseling strategies to go above the standards of etic guidelines. For example, multicultural counseling/therapy (MCT) advocates for the implementation of interventions that include universal and culturally-bound strategies to support and promote healing within the therapeutic process (Sue & Torino, 2005)

Several measures are designed to capture the degree to which an individual from a racial/ethnic minority group differs from the dominant Western, Caucasian culture, but there is limited evidence pertaining to the application of those measures in clinical practice (Zane & Mak, 2003). In 2006, Donohue and colleagues developed the Semi-Structured Interview for Consideration of Ethnic Culture in Therapy Scale (SSICECTS). The interview was designed in two phases: first, the research team developed the Consideration of Ethnic Culture in Therapy Scale (CECTS), which measures how important ethnic culture is to the individual and the extent to which that person has experienced problems they perceived to stem from their ethnic background. Second, the team developed the semi-structured interview to guide practitioners in approaching cultural diversity in therapy. The results of this study suggest that individuals who are sensitive to problems perceived to be attributed to ethnic background are more impacted by their opinions about the importance or centrality of their ethnic culture than they are by participation in cultural activities. That is, beliefs and attitudes about the importance of one's ethnic culture are more important than the behavioral expression of one's ethnic background (Donohue et al., 2006). These findings are particularly salient for researchers and clinicians working in multicultural settings, as individuals may or may not overtly demonstrate their cultural values (e.g., speaking in their native language), but their opinions about their own ethnic identities can impact their sensitivity to problems. The original psychometric validation of the CECTS suggests that the scale is potentially relevant to all ethnic groups, particularly members of ethnic minorities (Donohue et al., 2006). The efficacy of a clinician working with ethnically diverse populations relies on

an understanding of the client's ERI, as well as an awareness of the clinician's own ethnic and racial background (Dana, 1998).

Contemporary clinicians face different challenges than the pioneers of psychological treatment. Instead of assisting clients to make sense of inconsistencies between conscious and unconscious identities (e.g., Freudian psychoanalysis) or helping individuals to make changes in their behaviors (e.g., Skinnerian behaviorism), modern clinicians often help clients to formulate a core sense of who they are and integrate their various identities (McWilliams, 1999). As a result, there is a need to explore the various kinds of identities that individuals may try on and how certain identities, such as ERI, are impacted by social relationships. Identity factors related to race have a constant psychological presence, influencing the lens through which an individual interprets experience (Omi & Winant, 1994). Therefore, these factors and components of ethnic identity cannot be "filtered out" of clinical intervention (Butryn, 2002, p. 332). Mental health intervention development should consider the psychological impact of ethnicity and cultural factors, particularly for ethnic minority groups (Brittian et al., 2013).

### **Sport Psychology**

Sport psychology is an applied, multidisciplinary field integrating psychology, sport science, and medicine (Weinberg, 1987). Sport psychology consultants aim to assist elite and recreational athletes achieve peak athletic performance and life satisfaction (Donohue et al., 2006). Some practitioners are employed by university athletics departments to work specifically with student-athletes (Hayden et al., 2013). The psychology of sport and performance is a growing field, with an increasing focus on the mental health needs of athletes (Donohue et al., 2015). The emergence of multicultural

research and training programs within this domain demonstrates an increased push to understand and apply effective strategies for addressing ethnic identities, particularly in ethnic minority groups.

The meta-construct of ERI was intended to reflect experiences from both an individual's ethnic background and racialized experiences as a member of a certain group in the United States (Umaña-Taylor et al., 2014). Of course, the problems experienced because of ethnic culture vary across ethnic groups. Unfortunately, one of the accepted narratives in the dominant, white culture of the United States includes the acceptance of "racial innocence" (DiAngelo, 2012, p. 9). Euro-American people are often positioned as 'just people' and therefore outside of racial categories, while individuals of ethnic minorities are typically referenced as members of a racial group. The majority of applied sport psychology consultants are white, which contrasts the diverse demographic make-up of most collegiate athletic programs (Butryn, 2002). In the United States, Euro-American (i.e., White) heritage inherently puts one in a position of power. Without awareness of the influence of cultural factors in athlete populations, practitioners may struggle to develop rapport with their clients (Donohue et al., 2006). Racial obliviousness is insidious and reinforces social hierarchies of power and privilege (DiAngelo, 2012), which must be consciously examined and explored by psychological practitioners. Understanding the experiences of those who are not granted the power of privilege is critically important for effective clinical work.

Most literature regarding ethnic and racial identity focuses on ethnic minority groups, which is attributed to the difficulties that Caucasian people, as the majority in the United States, have in seeing themselves as racial beings (Dyer, 1997). However, there is

a movement to examine the ethnic culture of White Americans and how that culture impacts not only members of that group, but also members of other ethnic groups (Butryn, 2002). Often, this research targets the privileges granted by virtue of White skin color in the United States, and the powerful position Euro-Americans unwittingly hold as members of the dominant ethnic group (Kwate & Goodman, 2014; McIntosh, 1988; Roediger, 1992). It is important to continue exploring the experience of Caucasian ethnic culture to minimize the risk of treating ethnic minorities as the “other” and the dominant culture as the norm.

Effective multicultural counseling requires development of multicultural awareness and understanding (Middleton, Ergüner-Tekinalp, Williams, Stadler, & Dow, 2011). In sport psychology, evaluation of athletes’ cultural experiences is lacking. It is imperative to research the impact of ethnic and athletic culture on the individuals that sport psychologists serve. Developing an understanding of the mental health implications of discrimination and creating interventions for addressing ethnicity in treatment can facilitate psychological intervention (Donohue et al., 2006).

### **CHAPTER 3: Aims of the Current Study**

Every person is born and raised in a cultural context, rife with beliefs, values, and traditions (Sue & Sue, 2013). One's ethnic environment can be particularly salient during critical developmental stages, such as during childhood when a person is often immersed in the cultural traditions of family and friends. As noted, cultural influences can define how autobiographical information is interpreted and can play a key role in the development of one's self-concept. Interestingly, disruption in one's self-concept is one of the leading motivations of seeking psychological treatment (Lorentzen et al., 2015). If one's self-concept is rooted in one's cultural experiences, problems perceived to be due to one's cultural background could be particularly injurious. Research clearly supports the finding that the perception of problems attributed to one's ethnic background have a detrimental effect on psychological well-being (Choi et al., 2017). The subjective experience of one's ethnic culture may rely upon the importance people ascribe to that background within their overall self-concept (Rowley et al., 1998). As a result, measuring the importance of a person's ethnic culture is essential to understanding the association between that person's experience of problems attributed to their cultural background and their mental health and interpersonal relationships.

Extant literature draws the conclusion that ethnic identity and cultural factors are important to mental health and interpersonal relationships for the general populace; however, there is a dearth of information about the associations between these factors in collegiate athletes. College students report ethnicity-related experiences such as experiences of prejudice or discrimination, feelings of connectedness or belongingness, awareness of being different than others in their ethnic group or outside of it, and

examples of being ethnically underrepresented (i.e., being the numerical minority in a certain situation or context), though reports vary based on strength of ethnic identity (Syed & Azmitia, 2008). In addition, the distinctive culture of sport participation may be uniquely influenced by ethnic culture and perception of problems attributed to one's ethnic cultural background. The goal of the present study was to examine the relationships between problems perceived to be due to ethnic culture and how the importance of ethnic culture influences mental health and relationships in student-athletes. For the purpose of this study, the exploration of ethnic culture focused on the experiences of athletes in the United States who occupy status as members of the ethnic majority (i.e., White/Caucasian/European descent), as compared to athletes who occupy status as members of ethnic minority groups (e.g., African-American, Latino/a, Asian-American, Pacific Islander, Multiracial, etc.).

In addition, extant literature has examined the construct of athletic identity (Benson, Evans, Surya, Martin, & Eys, 2015; Lee et al., 2017, Brewer et al., 1991); however, there is a dearth of information pertaining to athletes' perceptions about the importance of their athletic culture and the problems that they experience because of their athletic culture. It is unclear what the impact of these experiences are on athlete mental health; therefore, in addition to examining the impact of ethnic culture in an athlete population, this study aimed to examine the influence of athletic culture on athlete mental health and relationships.

The present study was conducted to begin exploring relationships between problems attributed to culture, the importance of culture, mental health problems and

relationship problems. The study also aimed to explore the potential moderating impact of importance attributed to culture.

### **Hypotheses**

- 1) Problems attributed to ethnic culture (ECP) will be positively associated with both mental health problems (SCL-90-R GSI) and relationship problems (SARI-Total) in athletes, after potentially controlling for ethnicity (minority/majority) if there are baseline differences between groups for mental health problems and/or relationship problems.
- 2) Problems attributed to ethnic culture (ECP) will be positively associated with the importance of ethnic culture (ECI) in athletes, after potentially controlling for ethnicity (minority/majority) if there are baseline differences between groups for importance of ethnic culture.
- 3) Importance of ethnic culture (ECI) will influence the associations between problems attributed to ethnic culture (ECP) and both mental health (SCL-90-R GSI) and relationship problems (SARI-Total) in athletes, such that individuals with low ECI will have a positive relationship between ECP and SCL-90-R GSI scores and ECP and SARI-Total scores, and individuals with high ECI will have no relationship between ECP and SCL-90-R GSI scores and ECP and SARI-Total scores, regardless of minority or majority ethnic group status.
- 4) Problems attributed to athletic culture (ACP) will be positively associated with both mental health problems (SCL-90-R GSI) and relationship problems (SARI-Total) in athletes, after potentially controlling for ethnicity (minority/majority) if



there are baseline differences between groups for mental health problems or relationship problems.

- 5) Problems attributed to athletic culture (ACP) will be positively associated with the importance of athletic culture (ACI) in athletes, after potentially controlling for ethnicity (minority/majority) if there are baseline differences between groups for importance of athletic culture.
- 6) Importance of athletic culture (ACI) will moderate the associations between problems attributed to ethnic culture (ACP) and both mental health (SCL-90-R GSI) and relationship problems (SARI-Total) in athletes, such that individuals with low ACI will have a positive relationship between ACP and SCL-90-R GSI scores and ACP and SARI-Total scores, and individuals with low ACI will have no relationship between ACP and SCL-90-R GSI scores and ACP and SARI-Total scores, regardless of minority or majority ethnic group status.

## CHAPTER 4: Methods

### Participants

Participants in this examination were student-athletes ( $n = 78$ ) who participated in a larger study evaluating the effectiveness of a modified version of Family Behavior Therapy (FBT; Donohue & Allen, 2011) in collegiate athletes (Donohue et al., in press). Eligibility requirements were the following: (a) at least 18 years of age; (b) compete in NCAA, intercollegiate club, or intramural sports; (c) endorse substance use in the previous four months; (d) agreed to participate in a treatment outcome study examining the effects of goal-oriented programming with athletes; and (e) reported at least one adult willing to participate in the participants' treatment.

Participant ages ranged from 18 to 25 years ( $M = 20.33$ ,  $SD = 1.65$ ). The sample was predominately non-Caucasian (minority ethnic identity; 57.7%), including 16 Black or African Americans (20.5%), 16 Latinos (20.5%), 10 Asian Americans or Pacific Islanders (12.9%), and 3 participants identified as "Other (multiple or not listed)" (3.8%). There were 33 Caucasian participants (42.3%). The majority of the participants were NCAA athletes ( $n = 46$ ; 59.0%), 10 were club athletes (12.8%), and 22 were intramural athletes (28.2%). The participants were 53.8% male ( $n = 42$ ) and 46.2% female ( $n = 36$ ).

### Measures

**Demographics Form.** A demographics form was used to obtain information, including gender, age, ethnicity, and sport level (Varsity, Club, Intramural).

### *Culture*

**Consideration of Ethnic Culture in Therapy Scale.** The Consideration of Ethnic Culture in Therapy Scale (CECTS; Donohue et al., 2006) is an assessment tool

designed to measure the importance of one's culture (Ethnic Cultural Importance, ECI) and problems perceived to occur due to that culture (Ethnic Cultural Problems, ECP). The 6 items of this scale are endorsed using a 7-point Likert-type scale (i.e., 1= extremely disagree, 4 = unsure, 7 = extremely agree). Participants were instructed to select their ethnicity using a forced-choice format (i.e., Caucasian, African American, Hispanic American, Native American, Asian American, Other, Multi-Ethnic) and then to respond to all items based on their experiences within their ethnic culture. The first scale, the ECI, assesses the importance of the individual's ethnic culture. It includes four items, (i.e., My ethnic culture is a big part of my everyday life; My ethnic culture is of great importance to me; There are many things I like about my ethnic culture; My ethnic culture should be addressed in therapy; Cronbach's  $\alpha = .84$ ). The second scale, the ECP, assesses problems attributed to one's ethnic culture. It consists of two items (i.e., Others have said things to me about my ethnic culture that have been offensive to me; I have experienced problems due to my ethnic culture; Cronbach's  $\alpha = .87$ ). Scaled scores were calculated by adding item responses within each scale. Higher ECI reflects a more important or central ethnic identity, and higher ECP score indicates more problems due to ethnic identity.

**Consideration of Athletic Culture in Therapy Scale.** The CACTS is an adaptation from the Consideration of Exercise or Sports Participation in Therapy Scale (CESPTS; Donohue et al., 2006). It is the same as the CECTS, however the term "ethnic culture" is replaced with "athletic culture." For example, the first item reads, "Athletic culture is a big part of my everyday life," instead of "My ethnic culture is a big part of my everyday life." The scale has two subscales, the Athletic Cultural Importance scale (ACI) and Athletic Cultural Problems scale (ACP), which reflect the content to the scales

of the CECTS. No previous research has reported Cronbach's alpha for this measure. In the current study internal consistency of the CACTS ACP was acceptable (Cronbach's  $\alpha = .79$ ). Internal consistency of the CACTS ACI was poor (Cronbach's  $\alpha = .48$ ).

### ***Mental Health and Relationships***

**Symptom Checklist-90-Revised.** The Symptom Checklist-90-Revised (SCL-90-R; Derogatis & Lazarus, 1994) is an extensively utilized screening tool designed to measure a broad range of symptoms of psychological problems. The assessment provides an overview of symptom presentation, measuring the severity of symptoms experienced over the past week. This instrument has 90 items that are rated on a 5-point severity scale ("0" = not at all, "4" = extremely) with higher scores indicating more psychological symptoms and distress. The SCL-90-R measures nine primary symptom domains: Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. The Global Severity Index (GSI) measures overall psychological distress. The internal consistency coefficients for the nine symptom dimensions range from low (Psychoticism; Coefficient alpha = .77) to high (Depression; Cronbach's  $\alpha = .90$ ), supported by two sources (Derogatis, Rickels, & Rock, 1976).

**The Student-Athlete Relationship Instrument.** The SARI (Donohue, Miller, Crammer, Cross, & Covassin, 2007) is an assessment tool designed to measure sport-specific problems in athletes' relationships with their coaches, teammates, family, and peers, including lack of support, pressure to perform, etc.. Initial validation of the SARI suggests that it measures unique dimensions of overall happiness in typical athlete relationships (Donohue et al, 2007). This instrument consists of 71 items (e.g., It is a

problem for me that at least one of my coaches has a negative attitude toward me; It is a problem for me that at least one of my teammates has a negative attitude toward me; etc.) and uses a 7-point agreement scale (1 = extremely disagree, 7 = extremely agree), with higher scores indicating the athlete's perception of more problems in the relationship. The SARI-Coach scale is represented by 19 items pertaining specifically to athletes' perception of problems with their coaches. Initial psychometric evaluation of the SARI-Coach scale yielded high internal consistency (Coefficient alpha = .96). The SARI-Teammate scale consists of 18 items pertaining specifically to athletes' perception of interpersonal problems with their teammates. Initial psychometric evaluation of its internal consistency was also high (Coefficient alpha = .93). The SARI Family Member scale has 16 items, representing athletes' perception of problems with members of their family. Its internal consistency was also high (Coefficient alpha = .92). The SARI Peers scale consists of 10 items and assesses athletes' perceptions of problems with peers. Internal consistency for this scale was sufficient during initial psychometric evaluation (Coefficient alpha = .87). The sum of SARI items for each scale was utilized to calculate a total score (SARI-Total), which provided an overall estimate of interpersonal problems. Internal consistency of the measure was good (Cronbach's  $\alpha = .96$ ).

## **Procedure**

The current study involves secondary data analysis. The data, collected during the pre-assessment phase of a randomized control trial, are a rich source for the exploration of questions about athlete mental health to drive further research and provide direction for intervention. Secondary data analysis permits examination of alternative dependent variables in rich data sets when original or raw data are available (Church, 2001). The

data used in the present study were collected utilizing rigorous data collection methodology. Data management staff underwent extensive training prior to participation in data collection. Extensive protocol checklists were used to guide assessment administration and data entry methods to minimize errors and standardize procedures. Data managers followed step-by-step instructions to provide instructions to participants and to collect and store data. Data entry was completed by two separate two-person teams and cross checked by a quality assurance coordinator to ensure accuracy.

Participants were recruited to participate in a performance-enhancing treatment program with five key aims: boost sport performance, enhance relationships, reduce substance use, decrease risk behaviors, and improve mental health. When participants were determined to meet preliminary criteria and consented to participate in the larger study, they were scheduled for a pre-treatment assessment with a trained assessor to gather information on demographics, mental health, substance use, sport performance, HIV risk behavior, and relationships. The pretreatment assessment lasted approximately 2.5 hours, and participants were compensated for their time with a \$25 gift card or cash. Of a relatively large battery of tests and measures administered, only four were utilized in this study (see measures section above).

Following data collection, the dataset was de-identified and utilized for secondary analysis in this study. This protocol is consistent with the ethical guidelines established by the American Psychological Association and was approved by the Institutional Review Board for the protection of human participants at the University of Nevada, Las Vegas as exempt research.

## Statistical Plan

The current study is exploratory in nature. In any study, there are a multitude of statistical tools that can be employed to test hypotheses. To explore the hypotheses of this study two statistical analyses were considered: 1) hierarchical multiple regression (HMR), and 2) correlation and partial correlation. There are benefits and drawbacks to use of each statistical strategy.

HMR would provide the ability to determine relative influence of predictor variables and the interaction term. It would be possible to control for baseline differences in the first step of the model, while creating space to identify relationships associated with those baseline differences. The exploratory nature of this study highlighted one of the main disadvantages of HRM. Regression analysis predicts causal relationships, and the focus of this study is too exploratory to predict causal patterns.

The use of correlation and partial correlation indicates a more piecemeal approach; however, addressed our conceptualization of the hypotheses based on a review of the extant literature. Comparisons of correlations and partial correlations provided a model to explore moderating effects of the importance of ethnic and athletic culture. Unfortunately, there are also drawbacks to this method. Controlling for baseline differences between ethnic minority and majority groups impedes the ability to see the interaction of ethnicity minority/majority status on study variables. In addition, lumping all ethnic minority groups into one category for statistical power deemphasizes the potentially unique experiences of various minority groups.

Due to the exploratory nature of the aims of this study, correlational strategies were chosen to investigate relationships between study variables. It is our hope that future

researchers will continue to explore the intersectionality of ethnic and athletic culture and identity and the interaction of importance of culture on mental health in athletes. IBM SPSS Statistics for Windows, Version 25.0 (released 2017) was used for the majority of statistical analyses. To compare partial correlations, the web-based MML-WBCORR, within-between correlation pattern analysis program (Fouladi & Serafini, 2018) was utilized.

### **Power Analysis**

Conventional wisdom suggests that it is usually best to base power analyses on small effect size values because a study with sufficient power to detect a small effect size will have sufficient power to detect medium and large effect sizes as well (Murphy, Myers, & Wolach, 2016). As a result, it was decided that a small effect size (0.3; Cohen, 1988) would be utilized in the current analyses. The use of pre-existing data defined the sample size ( $n = 78$ ). G\*Power estimated that this would produce a power of .91, which is slightly higher than desired power of .80. For hypotheses 3 and 6, smaller group comparisons were used. It was predicted a median split would give sample sizes of approximately 39 for two independent groups. For this analysis G\*Power estimated a power of .73, which is slightly lower than desired power of .80. As a result, analyses will be interpreted with caution.



## CHAPTER 5: Results

### Descriptive Results.

Table 1 shows means and standard deviations of the study variables and demographic characteristics

Table 1.  
*Means and Standard Deviations of Study Variables (n = 78).*

Measure	M	SD	Min	Max	Skewness		Kurtosis	
					Statistic	SE	Statistic	SE
ECP	7.42	3.58	2.00	14.00	.06	.27	-1.02	.54
ECI	18.82	5.06	7.00	28.00	-.42	.27	-.60	.54
ACP	8.49	3.30	2.00	14.00	-.23	.27	-.73	.54
ACI	24.65	2.74	17.0 0	28.00	-.76	.27	.14	.54
SCL-90-R GSI	.54	.53	.01	2.33	1.61	.27	2.34	.54
SARI total	156.69	56.86	63.0 0	300.00	.14	.27	-.64	.54

*Note:* ECP = Ethnic Culture Problems scale; ECI = Ethnic Culture Importance scale; ACP = Athletic Culture Problems scale; ACI = Athletic Culture Importance scale; SCL-90-R GSI = Symptom Checklist-90-Revised; SARI total = Student-Athlete Relationship Instrument Total scale.

**Outliers.** The data were inspected for outliers. Using leverage statistics, no significant outliers met criteria for removal from analysis (Tabachnick & Fidell, 2007). Therefore, no cases were removed.

**Normality.** The data were inspected for normality utilizing skew and kurtosis statistics (see Table 1). Most of the study variables followed a reasonably normal distribution. The SCL-90-R GSI was slightly skewed; however, no transformations were performed to normalize the data, as the distribution of scores was representative of what would be expected of the population.

### **Preliminary Analysis.**

An ANOVA was conducted to assess potential baseline differences between minority and majority ethnic groups (i.e., Caucasian = 1, African American, Hispanic American, Native American, Asian American, Other, or Multi-Ethnic = 2) in terms of mental health problems, relationships, and importance of ethnic and athletic culture. The results indicated that there were no significant baseline differences between minority and majority groups ( $p > .05$ ) for severity of mental health symptoms and importance of athletic culture. There were significant baseline differences between minority and majority groups ( $p > .05$ ) for relationship problems (SARI-Total;  $F(1, 76) = 5.05, p = .03$ ) and importance of ethnic culture (ECI;  $F(1, 76) = 30.87, p < .001$ ). Therefore, ethnicity (i.e., ethnic group status: Minority/Majority) was controlled for in analyses of SARI-Total and ECI.

Table 2.  
*Means and Standard Deviations of ANOVA.*

	M	SD
ECI		
Majority	15.67	4.75
Minority	21.13	3.92
ACI		
Majority	24.64	5.06
Minority	24.67	2.53
SCL-90-R GSI		
Majority	0.47	0.32
Minority	0.59	0.64
SARI Total		
Majority	173.15	44.77
Minority	144.62	62.03

*Note:* ECI = Ethnic Culture Importance scale; ACI = Athletic Culture Importance scale; SCL-90-R GSI = Symptom Checklist-90-Revised; SARI total = Student-Athlete Relationship Instrument Total scale.

### **Primary Analysis.**

The primary analyses involved examination of the relationships between problems attributed to culture and endorsement of mental health complaints and interpersonal problems. The following hypotheses were examined:

**Hypothesis 1:** To examine the first hypothesis, Pearson product moment correlations were computed to determine the relationship between ECP and SCL-90-R GSI scores. Partial correlation was used to calculate the relationship between ECP and SARI-Total scores while controlling for ethnicity due to baseline differences during the preliminary analyses. Results indicate severity of problems attributed to ethnic culture (ECP) was not significantly associated with endorsement of mental health problems (SCL-90-R GSI;  $r(76) = .17, p = .07$ ). In contrast, ECP was significantly positively

associated with troubles in relationships with coaches, family members, teammates, and/or peers (SARI total) after controlling for minority/majority status ( $pr(75) = .21, p = .04$ ). Though there was no significant relationship between ECP and SCL-90-R scores, the relationship between ECP and SARI-Total scores suggests that the experience of more problems attributed to ethnic culture is associated with more interpersonal problems with coaches, family members, teammates, and/or peers when controlling for ethnic minority/majority status.

**Hypothesis 2:** To examine the second hypothesis, partial correlation was used to calculate the relationship between ECP and ECI while controlling for ethnicity. The severity of problems attributed to ethnic culture (ECP) was positively associated with the importance of ethnic culture (ECI) in athletes ( $pr(75) = .54, p \leq .000$ ). This hypothesis was confirmed.

**Hypothesis 3:** To examine the third hypothesis, correlations for the association of problems due to ethnic culture and both mental health and relationship problems were compared for people who endorse high importance of ethnic culture to people who endorse low importance of ethnic culture. ECI was dichotomized into a high importance of ethnic culture group (High ECI) and a low importance of ethnic culture group (Low ECI) using a median split. Scores above the cutoff ( $\geq 20$ ) were included in the High ECI group, and scores below median were included in the Low ECI group.

ECP was not correlated with SCL-90-R GSI scores for individuals with high ECI,  $r(42) = .23, p = .06$ , or for individuals with low ECI,  $r(36) = .01, p > .47$ . The pattern of the correlations (i.e., moderate and positive correlation for high ECI and small or neutral correlation for low ECI) matches the hypothesized pattern. To compare the correlations

of ECP and SCL-90-R GSI scores for people with high ECI and low ECI, Fisher's Z-test was used (Cohen & Cohen, 1983; Preacher, 2002). The difference between these correlations was not statistically significant (Fisher's  $z = 0.92, p = .18$ ). This does not support the hypothesis that ECI plays a moderating role in the relationship between perception of problems attributed to ethnic culture and mental health complaints. The low power of this analysis increases the likelihood of Type II error. Future research should explore the moderating role of perception of problems attributed to ethnic culture and mental health complaints with a larger sample of athletes.

To compare the partial correlations of ECP and SARI-Total scores (controlling for minority/majority ethnicity) for people with high ECI and low ECI, MML-WBCORR within-between correlation pattern analysis program was used (Fouladi & Serafini, 2018). ECP was not correlated with SARI-Total scores for individuals with high ECI,  $pr(39) = .17, p = .14$ , or for individuals with low ECI,  $pr(33) = .17, p = .16$ . The difference between these correlations was not statistically significant ( $\chi^2(2) = 2, p = 0.999$ ) and the direction of relationships did not match they hypothesized pattern of moderation. This does not support the hypothesis that ECI plays a moderating role in the relationship between perception of problems attributed to ethnic culture and interpersonal difficulties.

**Hypothesis 4:** To examine the fourth hypothesis, correlation was used to calculate the relationship between ACP and SCL-90-R GSI scores and partial correlation was used to calculate the relationship between ACP and SARI-Total scores while controlling for ethnicity. The hypothesis was confirmed.

The severity of problems attributed to athletic culture (ACP) was significantly positively associated ( $r(76) = .30, p = .01$ ) with endorsement of mental health problems

(SCL-90-R GSI). This finding suggests that student-athletes who experience more offensive comments about their athletic culture endorse higher levels of mental health complaints. In addition, the severity of problems attributed to athletic culture (ACP) was significantly associated ( $r(75) = 0.55, p < .001$ ) with endorsement of troubles in relationships with coaches, family members, teammates, and/or peers (SARI total) after controlling for ethnic minority/majority status. This finding suggests that student-athletes who attribute more problems to their athletic culture endorse more interpersonal difficulties.

**Hypothesis 5:** To examine the fifth hypothesis, correlation was used to calculate the relationship between ACP and ACI. There were no baseline differences; therefore, correlation was used to test the relationship between ACP and ACI. Severity of problems attributed to athletic culture was positively associated with the importance of athletic culture in athletes ( $r(76) = 0.46; p < .001$ ). This hypothesis was confirmed, suggesting that athletes who feel that the culture of sports is an important part of their lives also perceive that they experience more offensive comments due to their identity as an athlete.

**Hypothesis 6:** To examine the sixth hypothesis, correlations for the association of problems due to athletic culture and both mental health and relationship problems were compared for people who endorse high importance of athletic culture to people who endorse low importance of athletic culture. ACI was dichotomized into a high importance of athletic culture group (High ACI), and a low importance of athletic culture group (Low ACI) using a median split. Scores above the cutoff ( $\geq 25$ ) were included in the high ACI group, and scores below median were included in the low ACI group.

ACP was significantly correlated with SCL-90-R GSI scores for individuals with high ACI,  $r(45) = 0.40, p = .003$ , but was not correlated with SCL-90-R GSI scores for individuals with low ACI,  $r(33) = 0.15, p = .20$ . The pattern of the correlations (i.e., moderate and positive correlation for high ACI and small or neutral correlation for low ACI) matches the hypothesized pattern. To compare the correlations of ACP and SCL-90-R GSI scores for people with high ACI and low ACI, Fisher's Z-test was used (Cohen & Cohen, 1983; Preacher, 2002). The difference between these correlations was not statistically significant ( $z = 1.14, p > .05$ ). This does not support the hypothesis that ACI plays a moderating role in the relationship between perception of problems attributed to ethnic culture and mental health complaints. The low power of this analysis increases the likelihood of Type II error. Future research should explore the moderating role of perception of problems attributed to athletic culture and mental health complaints with a larger sample of athletes.

To compare the partial correlations of ACP and SARI-Total scores (controlling for minority/majority ethnicity) for people with high ACI and low ACI, MML-WBCORR: Within-Between correlation pattern analysis program [computer software] was used (Fouladi & Serafini, 2018). ACP was significantly correlated with SARI-Total scores for individuals with high ACI,  $pr(42) = .54, p < .001$ , and for individuals with low ACI,  $pr(30) = .60, p < .001$ . The difference between these correlations was not statistically significant ( $\chi^2(2) = .58, p > .75$ ) and did not follow the hypothesized direction of predicted moderating relationships. This does not support the hypothesis that ACI plays a moderating role in the relationship between perception of problems attributed to athletic culture and interpersonal difficulties.

## **CHAPTER 6: Discussion**

The present study was aimed at determining how athletes' perceptions of problems related to their ethnic and athletic culture are related to mental health complaints and interpersonal difficulties. This study also aimed to explore how an individual athlete's experience of the importance of culture moderated those relationships. The results do not suggest that athletes' perceptions of problems due to ethnic culture are related to mental health problems, but do suggest perception of problems due to ethnic culture are related to relationship problems. Importance of ethnic and athletic culture and perception of problems attributed to each culture are each positively related. Perception of problems due to athletic culture are associated with both mental health and relationships problems. No evidence was found to support the hypotheses that importance of culture functions as a moderating factor in the relationships between perceived problems and mental health and relationship difficulties; however, this finding should be interpreted with caution due to the low power of the statistical analysis due to sample size.

### **Problems due to Ethnic Culture.**

In 1990, Duda and Allison predicted that ignoring ethnic factors during exploration of psychological components of sport performance would leave the field "biased and distorted at best" (p. 115). The results of this study do not support a relationship between athletes' perception of problems attributed to their ethnic background and mental health problems. This may provide some support to the assertion of Williams and Anshel (1997) that athletic culture does not perfectly parallel general psychology literature in that athletes may emphasize mental and physical preparation for



competition above the boundaries of ethnic culture. The common in-group identity model suggests that the creation of a “superordinate group identity” can reduce conflict between members of ethnically diverse subgroups (Levin, Sinclair, Sidanius, & Van Laar, 2009, p. 301). It may be that college students who participate in sport develop a common in-group that reduces emphasis on intergroup inequities stemming from ethnicity. The common in-group of athletes may, in effect, override the conflicts of ethnic subgroups due to equal roles of individuals within the athletic hierarchy in relation to other college students. As a result, mental health is less affected by problems attributed to ethnic identity.

In contrast, problems attributed to ethnic background were related to relationship problems with coaches, teammates, family members, and peers when controlling for minority/majority status. The findings indicate that athletes who endorse more experience with problems attributed to their ethnic culture report more interpersonal difficulties with coaches, peers, family members, and teammates. As a social stressor, problems attributed to ethnic culture and discrimination based on ERI have significant social ramifications. The perception of a devalued social identity through the stigmatization of one’s ethnic culture may lead one to feel negatively evaluated and excluded (Major & O’Brien, 2005). The current study examined aggregate data on problems student-athletes endorsed experiencing in interpersonal relationships. Future exploration of the specific groups (e.g., teammates, family members, coaches, peers) may shed light on the multicultural climate of student-athletes’ interpersonal landscapes.

### **Importance of Ethnic Culture.**

The results of this study reinforce two key pieces of information about the importance of ethnic culture. First, the preliminary analysis supports extant literature that

individuals of minority and majority cultural groups experience the importance of ethnic culture in different ways. Extant literature suggests that in the United States, minority groups and people of color are more acutely aware of their cultural heritage and ethnicity than White people of the dominant culture (Sue & Sue, 2013). DiAngelo (2012) described whiteness as “empty” because it is normalized and “unmarked” (p. 3). Though the dominant culture in the United States sets norms and impacts the lens through which the world is viewed, members of the majority may fail to recognize themselves as having any culture at all. Persons of color do not have the privilege of racial ignorance and are more apt to recognize that race is always a factor (Dyer, 1997). Second, the findings of this study indicate that athletes who experience more problems attributed to their ethnic culture also endorse more importance of their ethnic culture. This is consistent with aforementioned findings that suggest individuals who endorse higher importance of their culture are more sensitive to the perception of problems due to their ethnic culture (Donohue, et al., 2006).

It is important to note that the heterogeneity among individuals within various ethno-cultural groups is extensive (Hall, 2001) and, understandably, the experiences between various minority groups vary as well. Perceptions and stereotypes of various ethnic groups differ; therefore, the experiences of individuals from different minority groups likely reflect distinctive kinds of discrimination and problems related to their culture (Donovan et al., 2013). Further exploration of the current hypotheses could shed light on experiences of specific ethnic groups. It is likely important to explore the mental health impact of identification with specific minority ethnic backgrounds in future

research efforts to inform multicultural competence and understand the unique challenges faced by members of various ethnic cultures.

### **Problems due to Athletic Culture.**

In contrast to the findings regarding problems related to ethnic culture, the present study suggests that problems attributed to athletic background are significantly related to both mental health and relationship strain. In addition, the direction of these relationships supports the hypothesized pattern of correlations. It was predicted that there would be a significant, positive relationship between problems attributed to athletic culture and mental health complaints, such that endorsement of more problems would correlate with more mental health problems. Similarly, it was predicted that there would be a significant relationship between problems attributed to athletic culture and relationship distress, such that more problems would correlate with higher relationship dissatisfaction. Both hypotheses were confirmed.

The results of this study support extant literature that suggests athletes in emotionally abusive or unsupportive social environments suffer negative psychological consequences, such as low mood, low self-esteem, anger problems, and/or difficulties with anxiety (Phillips, 2017; Stirling & Kerr, 2013). An inhospitable social environment where athletes experience offensive comments due to their ethnic identity could be overruled by their sense of community with others in athletic culture. However, offensive comments about athletic culture have more damaging effects, perhaps due to a more centralized role of the athletic identity for collegiate competitors in comparison to ethnic or racial identity. Some people distance themselves from their negatively stereotyped group identification to reduce the influence on their self-worth (Major & O'Brien, 2012).

In some cases, athletes find it easier disassociate from their ethnicity, which they did not choose, to protect their self-concept when they experience problems. In contrast, athletes may find it more difficult to distance themselves from the identity that they did choose through their sport participation, which they work tirelessly to achieve and which defines their social networks and sense of self. Future research could tease apart what kinds of offensive comments or problems individuals are experiencing as a result of their athletic culture and where (i.e., from whom) the comments are coming to better understand the dynamics of the aforementioned relationships.

### **Importance of Athletic Culture.**

In the current study, student-athletes were asked to identify their primary sport and asked to rate the importance of their athletic culture, whether their athletic culture was a big part of their life, whether there were many things they enjoy about their athletic culture, and whether a psychology professional should address their athletic culture during treatment. The more athletes agreed with the aforementioned questions about the importance of their sport culture, the more they agreed that they experienced problems due to their athletic culture and that others have said offensive things about their athletic culture. This was the first study to evaluate the internal consistency of the CACTS, as it was developed out of the CECTS (Donohue et al. 2006). The internal consistence for the CECTS was good for both the ECP and ECI scales (.82 and .78, respectively). The internal consistency for the ACP scale was .79 and for the ACI scale was .48.

The findings of this study contribute to the literature of sport psychology. The results confirm a positive relationship between the experience of problems due to athletic culture and the importance of athletic culture. This could suggest that individuals who see

their athletic culture as highly important in their life could be more sensitive to offensive comments directed at athletic culture as a whole or at the individual's identity as an athlete. In addition, the finding of this study could suggest that individuals who experience more offensive comments and/or problems about their culture begin to embrace the culture as more central to their self-concept to defend against potential attackers. More research is needed to better understand the relationship uncovered in the present analysis.

### **Limitations and Future Directions.**

As in all studies, there were some limitations in the current study. First, self-report data were used in the present analyses. Therefore, biases may be present, and comparison to actual behavior may not be completely accurate. Student-athletes may internalize cultural biases for the need for strength and mental toughness (Connaughton et al., 2008; Reardon & Factor, 2010; Wiese-Bjornstal, 2010) and as a result may underreport mental health symptoms and interpersonal problems. However, in a setting focused on performance enhancement (as was the case during data collection during this study), athletes may be more motivated than other populations to improve their own performance, which could prompt more honest reporting.

Second, the sample was obtained from a university in the Southwestern United States consistently rated as one of the most diverse universities in the country. Generalizations to other populations should be made with caution. The sample was ethnically diverse, with a majority of participants endorsing non-Caucasian ethnic backgrounds, which may not reflect the population of college students and/or student-athletes across the United States as a whole or at any particular college. In addition, data

were collected from a larger study of participants who endorsed substance use in the previous four months. This restriction of range may also impact the generalizability of the results, though 81.4% of college students endorse alcohol use (American College Health Association, 2008). It is possible that athletes who do not report alcohol or drug use or do not meet lifetime criteria for a substance abuse diagnoses may have different experiences with mental health problems and/or interpersonal difficulties, which could impact relationships explored in this study.

Third, the relatively small sample size used for correlation analyses in this study may impact the findings reported above. The limited number of participants increased the likelihood of Type II errors, or “false negatives,” suggesting that the results of this study may underestimate the statistical significance of comparisons of correlations and partial correlations. In addition, the sample size available for the analysis of this study may reduce the generalizability of study results, as the sample may not be representative of the population of student-athletes as a whole. As a result, study results should be interpreted with caution.

### **Summary and Clinical Implications.**

Most of the relationships explored in this study reflect those hypothesized based on extant literature, suggesting that this research supports and expounds upon current findings. There is significant progress to be made by researchers in the field of sport psychology to understand the unique cultural dynamics of collegiate athletes and the intersectionality of ethnicity and athletics. As noted by Ratts, Singh, Nassar-McMillan, Butler, and McCullough (2016), “the social construction of identity is a more dynamic

and complex social phenomenon than had been originally conceptualized” (p. 31). This sentiment appears to hold particularly true for the collegiate student-athletes.

Clinically, understanding the dynamics of culture is beneficial when working with sportspeople from different backgrounds to reduce the potential for problematic interactions, such as microaggressions that could turn an athlete away from exploring mental health or relationship problems (Ong & Harwood, 2018). Student-athletes hold a unique position in social hierarchy, as they are often viewed as privileged. However, may not see themselves in that light. Indeed, the current study suggests that athletes experience significant stress as a minority population on college campuses. Experiencing problems attributed to those minority identities (ethnic or athletic) contributes to problems in relationships, which can surface in interactions with peers, teammates, coaches, and/or family members. Engagement in sport participation may mirror systems that contribute to oppression in the general population. Often, athletes are dehumanized, and chronic dehumanizing interpersonal interactions can be the basis of oppression (Macleod, 2013; Ratts et al., 2016), particularly for individuals who also possess an ethnic minority identity. When working with student-athletes, it is important for clinicians to consider this unique social position in context with the individual’s other identities. The collection of identities adopted by any student-athlete must be understood within the context of their environment and with consideration of identity centrality and should never be examined in isolation (Jones & McEwen, 2000).

The current study results suggest that examining cultural and identity factors is an important component of intervention with student-athletes. Measures, such as the CECTS and CACTS, and interventions, such as the Semi-Structured Interview for Consideration

of Ethnic Culture in Therapy or the Semi-Structured Interview for Consideration of Athletic Culture in Therapy, can be used to assess and address culture in athletic populations (Donohue et al., 2006). Exploring problems experienced due to athletic culture and athletic identity may be a window into understanding pathological mental health symptoms. Clinicians may benefit from asking athletes if their cultural environment is a big part of their lives and exploring what they like about their culture and their identity within that culture. Results of this study also suggest that it is important to assess problems attributed to cultural factors and the impact those experiences have on interpersonal relationships.

Governing bodies in the field of counseling, such as the APA and ACA (American Counseling Association), recognize the importance of multicultural competence. It is important to note that multicultural competence must begin with the counselor focusing internally on culturally informed values, beliefs, and biases (Ponterotto, & Toporek, 2003; Ratts et al., 2016; Roysircar, Arredondo, Fuertes, Sue, Arredondo, & McDavis, 1992; Sue & Sue, 2013). individuals who practice sport performance enhancement without oversight of such national governing bodies would likely do well to adhere to the guidance of ethical guidelines governing the critical importance of multicultural competence (e.g., Multicultural and Social Justice Counseling Competencies).

Minority stress in the context of student-athletes is relatively understudied and an understanding of the intersectionality of ethnic and athletic culture is absent in extant literature. The current findings may suggest that it is important to help college athletes explore cultural influences to reduce the impact of problems attributed to their



intersecting identities. Future research may further investigate the specific problems experienced by athletes in the context of their cultural identities and protective factors that defend against mental health and relationships problems. Understanding the intersectionality of cultures in this particular population may create pathways to develop and research therapeutic interventions that can address the mental health struggles that may stem from uniquely experienced difficulties.

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- Zhou, J., O'Brien, K., & Heim, D. (2014). Alcohol consumption in sportspeople: The role of social cohesion, identity and happiness. *International Review for the Sociology of Sport*, 49, 278-293. doi:10.1177/1012690213493105

## CURRICULUM VITAE

### **BIOGRAPHICAL**

Corey R. Kuhn  
(formerly Corey R. Phillips)

Email: Coreyraekuhn@gmail.com

### **EDUCATION**

**Ph.D., Clinical Psychology (in progress)** 08/2014 - *Anticipated Graduation: 08/2019*  
University of Nevada, Las Vegas (*APA Accredited*)

Dissertation: The effects of problems attributed to culture on the mental health of athletes

**M.A., Clinical Psychology** 08/2014 - 08/2017

University of Nevada, Las Vegas (*APA Accredited*)

Thesis: An evaluation of the effects of the coach-athlete relationship on athlete mental health

**B.S. (Honors), Psychology** 08/2009 - 12/2013

Dual minors: Coaching & Business Administration  
Roberts Wesleyan College, Rochester, NY.

Honors Thesis: To play or not to play: Psychological factors impacting rehabilitation following sport injury

### **CLINICAL EXPERIENCE**

**Pre-Doctoral Health Service Psychology Internship** 08/2018-07/2019

*Texas A&M University, Student Counseling Services  
Psychology Intern*

- Participate in training to become an entry-level psychologist
- Provide individual, short-term psychodynamic psychotherapy
- Co-facilitate 10-week semi-structured Embracing Your Self Worth group
- Participate in campus-wide outreach services
- Participate in regular didactic seminars
- Develop training rotation in program development with Texas A&M sport psychologists
- Engage in Training Committee tasks (e.g., intern selection process, APA site accreditation self-study)
- Develop relevant clinical skills in supervision, professionalism, consultation, multicultural competence, crisis intervention, and mental health care

**UNLV Counseling and Psychological Services (CAPS)** 08/2017 – 05/2018

*University Campus Counseling Center  
Doctoral Practicum Student*

- Provide individual, short-term psychodynamic psychotherapy
- Conduct weekly intakes for individual therapy
- Co-facilitate 8-week didactic mindfulness & yoga group
- Participate in campus-wide outreach services during orientation and tabling events
- Provided psychological first aid following mass-shooting incident near campus
- Participate in weekly interdisciplinary consultation meeting to discuss treatment disposition

**UNLV Disability Resource Center & Academic Success Center**      05/2017 - 05/2018

*Campus Disability Resource Center  
Doctoral Practicum Student*

- Conduct learning disability, ADHD, and psychodiagnostic assessment to inform accommodations and intervention
- Consult in weekly document review with staff members to provide psychological expertise and provide recommendations based on psychodiagnostic and psychoeducational assessment reports
- Work directly with student-athletes and the student-athlete resource center to enhance academic resource provision
- Provide strengths-based feedback about assessment results and recommendations for improving performance academically and in life

**Sandstone Psychological Practice**

08/2016 - 08/2017

*Private Practice*

*Doctoral Practicum Student, Specialty: Identity Development*

- Provided individual long-term psychodynamic psychotherapy
- Conducted phone intakes and triage for clients interested in therapeutic services
- Conducted ADHD, learning disabilities, adult autism, and weight-loss surgical evaluations, wrote comprehensive reports, and delivered strength-based feedback to clients
- Developed and introduced an interpersonal process women's group
- Co-facilitated two interpersonal process groups: a women's group and young adult group
- Collaborated with other professionals as a consultant and coordinator of client care
- Provided supervision to other graduate student therapists
- Developed specialty in identity development by reviewing extant literature on psychodynamic theory on identity and personality structure and multicultural identity development frameworks, and pursuing additional supervision in narrative therapy and career counseling

**The P.R.A.C.T.I.C.E at UNLV**

08/2015 – 08/ 2016

*Psychology Department Mental Health Clinic*

*Doctoral Practicum Student*

- Provided short and long term individual CBT, DBT, & ACT oriented psychotherapy to university students and community referrals
- Conducted intakes for psychological services including semi-structured clinical interview, brief standardized pre-treatment screening, and provided treatment recommendations to clients after consultation with a multi-disciplinary team
- Conducted psychodiagnostic and psychoeducational assessments for students and older adults with concerns about ADHD, learning disabilities, memory functioning, and standardized testing accommodations, wrote comprehensive reports, and delivered feedback to clients
- Co-facilitated weekly skill-based DBT group and substituted as a co-facilitator for young adult interpersonal group
- Conducted pre-group screenings of potential group members
- Participated in the development of clinical policy and completed all required case management tasks in accordance with clinic policy

**The Optimum Performance Program in Sport**

07/2014 - 08/2016

*Psychology Department Research Clinic*

*Therapist/Performance Coach (NIDA; 1 ROI DA031828; Family Behavior Therapy for Collegiate Athletes)*

- Provided brief, manualized psychotherapy to university student-athletes
- Conducted structured intakes for performance programming
- Facilitated psychoeducational workshops for teams and coaches
- Participated in campus-wide outreach services during orientation and tabling events
- Assisted in the development of organizational strategies to facilitate daily operations
- Coordinated quality assurance and recruitment teams to oversee data management and recruit participants
- Provided training and supervision to peers and undergraduate research assistants

**THERAPY GROUPS/WORKSHOPS FACILITATED**

- Embracing Your Self Worth

09/2018-11/2018

*Texas A&M; co-facilitator*

Semi-structured group focused on exploring topic of worthiness through vulnerability, self-compassion, and exploration of barriers to self-worth.

Closed group – 10 sessions



- Mindfulness/Yoga Group 08/2017 - 11/2017  
*UNLV CAPS; co-facilitator*  
Didactic group focused on providing mindfulness meditation skills (e.g., body scan, mindful eating, formal and informal mindfulness practice)  
Closed Group – 8 sessions
- Women’s Support Process Group 03/2017 - 06/2017  
*Sandstone Psychological Practice; Co-developer & Co-facilitator*  
Interpersonal Process Group focused on providing a safe, warm, nurturing environment for women to come together to support one another through life’s daily challenges and women’s issues. Major themes included struggles with friends and romantic partners, managing chronic pain, and emotion regulation
- Young Adult Process Group 05/2017 - 08/2017  
*Sandstone Psychological Practice; Co-facilitator*  
Interpersonal Process Group focused on providing a safe, warm, nurturing environment for young adults to come together to support one another. Major themes included career and identity development, interpersonal relationships, drug and alcohol use, and understanding sexuality
- Dialectical Behavior Therapy Group 02/2016 – 08/2016  
*The P.R.A.C.T.I.C.E. at UNLV*  
Didactic Group focused on providing DBT skills and support to a variety of clients with diverse cultural backgrounds and diagnoses. Open group with 12-week curriculum
- Adolescent Process Group 08/2016  
*The P.R.A.C.T.I.C.E. at UNLV; substitute co-facilitator*  
Interpersonal Process Group focused on providing compassion and support to clients. Major themes included gender identity, disputes with parents, and interpersonal relationships
- Sport Performance Enhancement Workshops 08/2014 - 08/2016  
*The Optimum Performance Program in Sport; Co-developer & Facilitator*  
 Worked with supervisor to develop sport performance workshops, then presented didactic CBT material to a variety of athletic teams, including Women’s Soccer, Women’s Golf, Swim & Dive Team, Cheer & Dance, Women’s Volleyball

## **TEACHING EXPERIENCE**

*Teaching Evaluation Average = 4.54; Department Average = 4.41*

- Tutor, Academic Success Center (UNLV)

*Spring 2017*

- Introduction to Psychology, 2 sections (UNLV)  
Average class size = 30 students
- Introduction to Psychology, 2 sections (UNLV)  
Average class size = 28 students

*Spring 2017*

*Fall 2016*

## **RESEARCH EXPERIENCE**

### **Family Research and Services; UNLV**

*07/2014 - 08/2016*

*Coordinator, Recruitment, Engagement, and Dissemination*

*(NIDA; 1 ROI DA031828; Family Behavior Therapy for Collegiate Athletes)*

Duties: Maintained caseload, implemented evidence-based protocols, evaluated

treatment adherence, coordinated recruitment treatment outcome study, established

program meeting agendas and minutes, coordinated supervision, coordinated quality

assurance activities, organized outreach

Supervisor: Bradley Donohue, Ph. D.

### **Psychology Dept; Roberts Wesleyan College, Rochester, NY**

*08/2011 - 12/2012*

*Research Aid (General Attachment Theory and the manipulation of attachment)*

Duties: Conducted literature review, designed research method, developed manipulation of attachment, drafted manuscript components

*Research Aid (Altruism, values, and Belief in a Just World construct)*

Duties: Conducted literature review, developed measure of Belief in a Just World, drafted manuscript components

Supervisor: Rodney Bassett, Ph. D.

## **Additional Grant-Funded Research**

Great Plays Grant Program (\$10,000)

*08/2015 – 08/2016*

*Co-Principal Investigator, Great Plays Alcohol Abuse Prevention, Alcohol*

*Beverage Medical Research Foundation (ABMR 2350-259-775R)*

Evaluated recruitment methods for attracting student-athletes to participate in drug and alcohol abuse treatment

## **Articles in Peer-Reviewed Journals**

Galante, M., Donohue, B., Gavrilova, Y., **Phillips, C.**, Burnstein, B., Aubertin, P., & Corral, A. (2017) The relationship between problem-solving skills and factors

associated with performance in the world's elite circus artists. *Journal of Performance Psychology*. 11, 1-17.

Donohue, B., Dowd, A., **Phillips, C. R.**, Plant, C., Loughran, T. A., Gavrilova, Y. (2016). Controlled Evaluation of a Method of Recruiting Participants into Treatment Outcome Research: Preliminary Results in a Sample of Collegiate Athletes. *Journal of Clinical Sport Psychology*, 10, 272-288.

Bassett, R., & Roberts Wesleyan College Research Group (2013). An empirical consideration of grace and legalism within Christian experience. *Journal of Psychology and Christianity*. 32, 43-69.

### **Conference Presentations**

**Phillips, C. R.** & Corey, A. (January 2017) *An evaluation of the effects of the coach-athlete relationship on athlete mental health*. Presentation at the annual conference of the Center for Performance Psychology, National University's Sanford Education Center, Carlsbad, CA.

Gavrilova, Y., Galante, M., Gavrilova, E., **Phillips, C.** & Donohue, B. (January 2017) *The semi-structured interviews for sport and ethnic culture in mental health and sport performance programming: A rapid method of enhancing athletes' engagement*. Workshop conducted at the annual conference of the Center for Performance Psychology, National University's Sanford Education Center, Carlsbad, CA.

Donohue, B., Gavrilova, Y., Galante, M., **Phillips, C.**, & Burnstein, B. (September, 2016). Piloting The Optimum Performance Program in Circus: Exploration into an Important Domain of Performance Psychology. Panel presented at the annual conference for the Association of Applied Sport Psychology, Phoenix, AZ.

Galante, M., Gavrilova, Y., **Phillips, C.**, Corral, A., Corey, A., Burnstein, B. & Donohue, B. (September, 2016). TOPP Performance: Anxiety and Problem-Solving Skills in Circus Artists. Poster presented at the annual conference for the Association of Applied Sport Psychology, Phoenix, AZ.

Gavrilova, Y., **Phillips, C.**, & Galante, M. (January, 2016). *An Evidence-Supported Timeline Functional Analysis Method of Performance Optimization*. Workshop conducted at the annual conference of the Center for Performance Psychology, National University's Sanford Education Center, Carlsbad, CA.

**Phillips, C. R.**, Dowd, A., Loughran, T., Donohue, B. (April 2015). *A cognitive behavioral theory to assist in mental health rehabilitation following sport injury*. Poster presented at the Western Psychological Association Annual Convention, Las Vegas, NV.

Garner, C., Gavrilova, Y., **Phillips, C.**, Gillis, D. & Donohue, B. (April, 2015). *A Systematic Method of Recruitment of Collegiate Athletes*. Western Psychological Association. Las Vegas, NV. ID: 8449

Gavrilova, Y. & **Phillips, C.** (February, 2015). *Pre-performance and post-performance mindset training in the context of therapy: A workshop aimed at establishing optimum mindset in performers*. Workshop conducted at the annual conference of the Center for Performance Psychology, National University's Sanford Education Center, Carlsbad, CA.

### **PROFESSIONAL POSITIONS & SERVICE**

-Graduate Assistant; University of Nevada, Las Vegas 08/2014 – 05/2018  
-Academic Success Center/Disability Resource Center Assessment Specialist  
-Instructor, Introduction to Psychology  
-Team Coordinator, Family Research and Services

-Club Volleyball Assistant Coach 2010 - 2014  
Implemented skill-based training on the basic principles of the game of volleyball to 12 to 14-year-old girls. Emphasized teaching strategic knowledge of the game and enjoying the process of improving incrementally

-Tutor; Roberts Wesleyan College 2010 - 2013  
Provided peer tutoring for the following undergraduate courses: general psychology, developmental psychology, algebra, and biological basis of behavior

-Student Ambassador, Office of Admissions; Roberts Wesleyan College 2011 – 2012  
Provided campus tours for prospective students and assisted with various admissions functions, such as making phone calls to prospective students and alumni

### **Consultation**

Disability Resource Center, UNLV 05/2017 – 05/2018  
-Provide psychological expertise to interpret assessment reports and guide accommodation recommendations

Academic Success Center, UNLV 05/2017 – 04/2018  
-Consult with staff members to coordinate campus resources  
-Evaluate academic screening measures and policies to provide recommendations for systematic improvements

-Provide psychological expertise to interpret assessment reports and guide accommodation and intervention recommendations for student-athletes

Sean Murphy, Leadership Counseling Services, LLC *11/2014 - Present*

- Maintain regular blog posts and weekly video segments on topics such as identity development, self-care, values, motivation, and interpersonal relationships
- Conducted outreach workshop for entrepreneurs at Alchemist Accelerator

University of Nevada, Las Vegas Athletics Department *07/2014 - 09/2016*

- Developed and implemented sport performance programming and psychoeducational workshops with teams and individual athletes
- Cultivated and maintained relationships with athletic coaches and administrative staff, athletic directors, compliance officers, and sports medicine team

**Other Volunteer Positions & Community Outreach**

Compeer Rochester; Rochester, NY *07/2013 - 12/2013*

- Connected disabled veterans with volunteer mentors to assist with tasks of daily living and provide emotional and psychological support

OASIS Adaptive Sports; Rochester, NY *07/2013 - 12/2013*

- Assisted disabled veterans reconnect and regain mental and physical health through outdoor recreational activities
- Established relationships with local outdoor recreation facilities, such as a horse-back riding ranch and ski resort, to enable disabled veterans to have a place to experience outdoor activities
- Established relationships with local resources to assist in connecting veterans to VA benefits

Westwood Commons Assisted Senior Living, North Chili, NY *08/2009 – 12/2013*

- Assisted in the organization of holiday activities with residents of an assisted senior living facility
- Regularly visited and participated in activities to develop relationships with residents

Adopt-A-School; Fairbanks Elementary, North Chili, NY *08/2011 – 05/2013*

- Volunteered to read and lead activities with students at a local elementary school as a representative of Roberts Wesleyan College Athletics

Volunteer Coach *2010 - 2012*

- Facilitated volleyball clinics for Northern Nevada Middle Schools and for urban youth in Puerto Rico

Brookdale Reno, Assisted Living Facility, Reno, NV *08/2008 – 05/2009*  
-Coordinated activities for elderly residents of an assisted living home

### **Committee Involvement**

Training & Intern Selection Committee Student Counseling Services at Texas A&M University	<i>2018-2019</i>
Clinical Student Committee, UNLV Positions held: Treasurer (2015 - 2016); Secretary (2014 - 2015)	<i>2014-2018</i>
Web Presence Committee, Applied Association of Sport Psychology	<i>2015</i>
Student Athlete Advisory Committee, Roberts Wesleyan College Positions held: President (2012 - 2013)	<i>2012 - 2013</i>

### **AWARDS & HONORS**

- Patricia Sastaunik Scholarship Recipient (2017)
- Summer Session Scholarship Recipient (2016, 2017)
- Magna Cum Laude (Roberts Wesleyan College)
- Dean's List—Highest honors (2009-2013)
- Trustee Scholarship Recipient (2009-2013)
- NAIA/NCAA Scholarship Recipient (2009-2013)
- Team Captain in two National Volleyball Championship Tournaments (2009, 2013)
- Three time NCAA Team Captain (2010-2013)

### **REFERENCES**

Dr. Jason Hindman, Texas A&M Student Counseling Services  
Clinical Supervisor/Training Director  
979-845-4427  
[Jhindman@scs.tamu.edu](mailto:Jhindman@scs.tamu.edu)

Dr. Janell Mihelic, Sandstone Psychological Practice  
Clinical Supervisor  
702-405-0904  
[drjmihelic@gmail.com](mailto:drjmihelic@gmail.com)

Dr. Michelle Paul, University of Nevada, Las Vegas  
Associate Director of Clinical Training  
702-895-1532

[michelle.paul@unlv.edu](mailto:michelle.paul@unlv.edu)

Dr. Bradley Donohue, University of Nevada, Las Vegas  
Research Advisor  
702-895-2468

[Bradley.Donohue@unlv.edu](mailto:Bradley.Donohue@unlv.edu)

*Updated: 12/2018*