

Processes of Identity Integration: An Examination of Sports & Ethnic Identities

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Dedication

I dedicate my dissertation to my father, Fredrick Earl Walker, who had always supported my education. Thank you for teaching me about self-confidence, passion and a love of learning.

Abstract

Erikson's (1968) theory on identity development emphasizes that a coherent sense of self contributes to positive adjustment and psychological well-being. These experiences of coherence and positive adjustment are believed to partly come from the integration of a person's multiple identity domains, such as religious beliefs, sexual identity, or a professional career. Yet, there have been few studies that fully account for this process of integration across multiple identity domains. Therefore, the goals of this study were to 1) empirically examine the different ways people experience multiple identity domains and 2) explore how these identity experiences are related to adjustment. This study focused on two specific domains of identity—ethnicity and sports—among an ethnically diverse sample of college students (N= 195). The study was conducted using an embedded mixed-methods design, which relied on both qualitative and quantitative data collection and analysis. Participants' reported identity experiences concerning the significance, relatedness, and integration of the two domains (qualitative) were linked to psychological, emotional, and academic outcomes (quantitative). Results from these analyses will be discussed and framed around some of the potential differences Students of Color and White students might have concerning their identity experiences. Implications for future research on identity development will also be discussed.

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CHAPTER 1:

BACKGROUND & LITERATURE REVIEW

Identity development is a multifaceted psychological process linked to positive psychological adjustment (e.g. Rivas-Drake et al., 2014; Smith & Silva, 2011). Erik Erikson's (1986) theory of identity development provides a framework for understanding how identity development is associated with positive adjustment, emphasizing the importance of a coherent sense of self. These experiences of coherence and positive adjustment are believed to derive, in part, from the integration of individuals' multiple identity domains, such as religious beliefs, sexual identity, or a professional career. Yet how this process of integration is accounted for across multiple identity domains varies in the research literature, and has not fully realized some of Erikson's key ideas. Therefore, the goals of this study focused on 1) empirically examining the different ways ethnically diverse college students experience their multiple identity domains of ethnicity and sports and 2) exploring how variations in these identity experiences are related to psychological adjustment.

The current study is theoretically driven, primarily seeking to understand more about Eriksonian identity processes. The selected context of this theoretical study is on the identity domains of ethnicity and sports. College students spend time, energy and thought towards various pursuits and groups, including their ethnic heritage and sports (Lally & Kerr, 2005; Phinney 1990; Walker & Syed, 2013). For some college students, attending to these different areas can feel difficult or distressing (e.g. Coakley, 1992; Miller & Kerr, 2002). Erikson's theoretical perspective, which underscores individuals' own experiences of identity across domains, can help make clear how college students

understand and experience different areas of their lives. Addressing how people manage and make sense of multiple identities, such as a sports and ethnicity, can contribute to our understanding of how identity and positive adjustment are interlinked. Given the theoretical nature of the study, this study begins with an explanation of the theoretical foundations for the study, and then explains how the ideas will be applied to the specific domains of ethnicity and sports among ethnically-diverse college students.

What is Identity Integration, Theoretically?

Identity integration is a psychological experience involving multiple identity domains and is linked to positive adjustment (Syed & McLean, 2016). Erikson's notion of identity integration is defined as the heightened, conscious awareness of the sameness of the self across time and place, thus giving individuals an understanding of who they are (Erikson, 1968; Syed & McLean, 2016; Schwartz, 2001). Domains theorized to be a part of this integration process include roles and life spaces that are considered important or meaningful to the individual, as well as attachments to social groups and the broader societal context (Erikson, 1950; 1968; Syed & McLean, 2015). This complex process is not simply the integration and management of multiple social groups or roles (e.g. multiple cultures, ethnicities). It also involves the interplay across three theorized levels of identity: personal, social, and ego identity (Syed & McLean, 2016; Schwartz, 2001). These 3 layers encompass the identity domains listed above and interact to provide a person with a sense of meaning and understanding as they enact various roles or tasks in their lives. Theoretically, an examination of each of these layers offers a deeper understanding of how psychological adjustment and identity experiences are interlinked.

The first layer, *social identity*, involves the roles, tasks, and memberships with groups (e.g. social groups, cultural heritage) that individuals identify with. This could include ethnic groups (Phinney, 1992) or identification with an organization one works for (Ashforth, Harrison, & Corley, 2008), among others. Social identity also encompasses the daily experiences associated with individuals' identities—how the identities are expressed and how other people in the world respond to them. The second layer, *personal identity*, involves individuals' beliefs, attitudes, and values about their identities. These components help individuals differentiate their selves from others around them, including others who may identify with the same social groups as they do. The third layer, *ego identity*, involves the broader sense of awareness and personal meaning individuals experience throughout their day-to-day lives. Theorized to involve the internal and semi-conscious experiences of the self, it is this level of identity that provides people with the psychological experience of continuity over time (Erikson, 1974). Thus this third layer of identity appears to serve as a psychological space in which people can seek to derive meaning and purpose from their multiple self-relevant (personal) roles and experiences (social). As an interactor with the other two levels of identity, the ego identity layer provides a foundation for the identity integration process. The meaning and awareness of self, resulting from the interplay of the three layers, represents a broader definition and understanding of self that is not tied to a single domain (e.g. occupational, ethnic) or role. However, given the theoretical assumption for the semiconscious processes associated with this layer, this particular layer of identity is the least empirically examined of the three (see Schwartz, 2001 for discussion) and scholars are challenged with designing a study focused on observing this particular identity layer (Syed & McLean, 2006).

The presence of multiple domains and multiple layers of identity development may explain why research examining integration is diverse and in some ways disintegrated (see Syed & McLean, 2016). For example, the emphasis on identity integration can be on how multiple domains in an individual's life interact and make sense for them in various contexts in the present time (contextual, e.g. Walker & Syed, 2013), whereas other scholars emphasize how a person's life is experienced, constructed, and changing, developing into a personal narrative that extends across a particular time frame (Josselson, 2009). Syed & McLean (2016), in their review of the Erikson identity integration literature, reason that the diversity of methods and lenses for examining integration are all valuable for furthering our understanding of the links between identity and adjustment, but that researchers must also be clear on what aspect they are studying.

Ethnicity and Sports: Spaces to Observe Identity Integration

Our approach to studying integration represents an integration of the time and context lenses. Specifically, this study examined how individuals experience and draw meaning from multiple identity domains (context), and how they construct these past experiences into their current (present time) sense of self. This approach adds to the growing literature on integration, offering further evidence about how individuals manage and make sense of their identities. The two domains of focus in this study are ethnic and sports identity domains, which are two domains that are potentially very relevant for ethnically-diverse college students.

Ethnic identity. Ethnic identity is a domain of identity that has received a great deal of attention in recent years (Umaña-Taylor et al., 2014). Ethnic identity encompasses the subjective importance individuals place on their ethnic and racial heritages (Phinney,

1992). It is an identity domain that is highly relevant for college students (e.g. Phinney, 1990; Syed, 2010; Walker & Syed, 2013), particularly for students who identify as a member of an ethnic/racial minority group. Tajfel's (1981) social identity theory emphasizes that, for groups who are in a minority, group membership provides meaning and acts as a foundation on which individuals can base their sense of self (Brown, Glastetter-Fender & Shelton, 2000; Tajfel, 1981). Thus, further investigation of this domain can serve as an important pathway for better understanding links between identity, integration, and adjustment amongst Students of Color. Indeed, studies investigating this domain have linked elements of ethnic identity to positive psychological outcomes (e.g. Smith & Silva, 2011; Rivas-Drake et al., 2014).

Following social identity theory, the research team considers college Students of Color as a group because collectively they are underrepresented on their college campuses, in comparison to their White peers. Past research examining ethnic identity supports the notion that ethnic minorities, collectively, tend to endorse higher levels of ethnic identity than White students, but that there are few differences in the levels and correlates of ethnic identity between various ethnic minority groups (Phinney, 1992; Santos, Ortiz, Morales, & Rosales, 2007; Syed & Azmitia, 2009; Syed & Juang, 2014). Recent research has explored this more thoroughly, identifying instances when participants with a White background report a higher level of ethnic identity than expected (though still lower than their ethnic minority peers; Weisskirch, Kim, Schwartz, & Whitbourne, 2016). This area of research also illustrates that ethnic identity is an identity domain that may be especially important to ethnic minority college students (versus their White peers).

It's important to note that the Students of Color group in the present study is made up of participants who all identify with labels indicating an Asian American background. Thus our Students of Color group does not include participants who identify with labels such as African/Black-American or Latina, and can collectively be considered an Asian American sample. Yet the growing literature on Asian American identity development acknowledges the existence of unique ethnic identity experiences across specific groups categorized under the "Asian American" label (e.g. Chinese vs. Korean vs. Filipino backgrounds; Ai, Nicdao, Appel, & Lee, 2015; Seol, Yoo, Lee, Park, & Kyeong, 2016). For the analyses in this study, the research team elected to use the terminology of "Students of Color" (vs. "Asian American") to describe this pan-ethnic group. The researchers believe the "Students of Color" terminology best acknowledges and emphasizes the diversity of experience involving ethnic identity that can occur within an Asian American sample.

More broadly, the researchers in the present study elected to acknowledge all of these trends in the literatures in the examination of identity and adjustment. Thus the analyses and results are organized around Students of Color vs. White participants' identity and adjustment experiences. This framework for our analyses allows us to capture differing levels of identification that might exist both within and between SOC and White participants.

Sports identity. Another domain of identity that can be relevant to college attending adults involves athletics, or more specifically participation in sports (Lally & Kerr, 2005; Miller & Kerr, 2002). Similar to ethnic identity, there is support in the literature for links between identification with sports participation and positive

adjustment (e.g. Harper, 2009; Grove, Lavalley, & Gordon 1997). From an identity integration perspective, it makes sense then to consider this identity domain as well when investigating links between identity integration and positive adjustment across multiple domains.

Given that our framework for studying identity integration seeks to account for time, the research team found it was important to consider how time in sports might influence identity related experiences. To do this, the researchers considered how current versus past sports participation might influence identity-related experiences (e.g. currently participating in a sport vs. past participation; Wylleman & Lavalley, 2004). Specifically, the research team thought that an emphasis on past and present sports participation could help us further understand how the passage of time is linked to the management of multiple identity domains, identity integration, and positive adjustment. Thus, similar to accounting for Student of Color vs. White experiences, some of our analyses and results are organized around past vs. current sports participation. With this in mind, the research team targeted participants who either a) self-identified as currently participating in sports (e.g. intramural sports team; club sport) or b) denied current sports participation but indicated previous experiences of participating in a sport (e.g. varsity team in high school).

The context of collegiate sports participation can vary substantially, for example Division 1 sports participation vs. other types of sports participation. While the present study is interested in identity experiences related to ethnicity and sports, the primary focus is on broadly examining the experiences associated with identifying towards multiple domains across time. Thus the research team did not intend to recruit

participants who represented all the ways college-aged students identify towards sports or their ethnic heritage. Though there is documentation that the type of sport (e.g. team vs. individual based; Colley, Roberts, & Chipps, 1985; Kirkcaldy, 1982), sport status (Division I athletes; e.g. Umbach, Palmer, Kuh & Hannah, 2006) or demographic variables (e.g. race, gender; Fuller, 2013; Mignano, Brewer, Winter, Van Raalte, 2006) can impact psychosocial experiences associated with sports participation, it was beyond the scope of this project to attend to *all* the possible ways in which individual-based identity factors impact identity integration. These other arenas (e.g., type of sport, Division I athletics) are important considerations as well and are discussed in the Discussion section of this study.

While the context of collegiate sports participation can vary, some college students might experience an intersection between their sports identity and ethnic identity. For example, college students participating in sports experience ethnic and racial discrimination or alienation (Brown et al., 2003; Fuller, 2013). This area of research tends to be focused on the experiences of African/Black-American males (e.g. Brown, Billings, Mastro, & Brown-Devlin, 2015; Fuller, Harrison, & Bukstein, 2016), but offers support for the ways in which ethnicity and sport can intersect. Salience of race while engaging in sports can be associated with negative emotional experiences, lack of belonging, as well as a sense of empowerment and connection with other athletes (Bimper, 2014; Lawrence, 2005). Messner (1995) also brings to light the ways in which notions of race and sport can interact with other contexts across a person's life experience, influencing the ways a person identifies and adjusts to demands related to sports. The nature of these findings support the idea that ethnicity and sports can intersect

in meaningful ways. College students involved in sports might be attending to, managing and making sense of both of these domains, making the intersection an interesting site for understanding identity integration.

Methodological Challenges to Studying Identity Integration

In this section, I highlight the methods that have been used to capture Eriksonian identity development processes within each of these domains, indicating how the literature guided the development of our methodological approach. Moreover, the review sheds light on why focusing on ethnic and sports identity processes might deepen our understanding of how identity experiences and adjustment outcomes are interlinked.

Previous research using quantitative measures of identity and adjustment have documented a significant and positive link between levels of ethnic identity and psychological outcomes (Smith & Silva, 2011; Rivas-Drake et al., 2014). The most widely used measure of ethnic identity, the Multigroup Ethnic Identity Measure (MEIM; Phinney 1992), assesses individuals' personal attitudes and experiences towards their ethnic group membership, and therefore captures the personal and social layers of identity. Similar to ethnic identity, scholars examining sports identity experiences have made use of quantitative measures to assess this identity domain. A common measure used by scholars interested in identity processes in a sports context is the Athletic Identity Measure Scale (AIMS) (Brewer, Van Raalte, & Linder, 1993). This Likert-type measure assesses how much people identify as an "athlete" and has been applied in a variety of sports contexts, such as performance in sports and physical rehabilitation, and to different types of athletes (e.g. individual sports, team-based sports) (Brewer, Cornelius, Stephan, & Van Raalte, 2010; Visek, Hurst, Maxwell, & Watson, 2008). One of the subscales of

this measure, titled *social identity*, is considered an essential dimension to understanding how people identify with sports, explicitly asking about the influence of other people on their identification with being an “athlete”. Thus the AIMS measure illustrates the emphasis on the social features that accompany participating in and identifying with sports. Taken together, quantitative methods for measuring ethnic and sports identity tend to emphasize the personal and social layers of identity, making it difficult to observe how the ego layer, theorized to be the manager of the other two layers, contributes uniquely to integration and adjustment. One of the limitations that can accompany quantitative measures of identity is that it is difficult understand *how* identity development does or does not contribute to positive adjustment.

From an Eriksonian perspective, the emphasis on the social aspects of identity are theoretically supported, given Erikson’s description of the social layer of identity. Yet, reliance on existing measures of identity limit our ability to capture the ways the three layers (personal, social and ego) interact and contribute to integration and positive adjustment. It makes theoretical sense that ego identity in particular, theorized to be an unconscious or semi-conscious experience, has been left out of the quantitative literature involving ethnic or sports identity. In contrast, qualitative research investigating identity-related experiences concerning ethnic and sports experiences suggest that the ego layer of identity could be accounted for when linking identification with particular identity domains to adjustment outcomes. This area of qualitative research also supports the idea that the sports and ethnic identity domains can serve as an interesting space to further investigate how the three identity layers, integration, and adjustment are all experienced. This area of research is reviewed next.

Qualitative research on ethnic identity and sports. Qualitative approaches have been argued to be essential for further understanding how racial and sports-related experiences intersect among individuals, especially for Students of Color (Bimper & Harrison, 2011). As cited above, this line of research tends to be focused on the experiences of African/Black-American males. Therefore, less is known about the unique experiences other minority group members who are college-aged (e.g. Chinese-Americans) might face with regards to sports and race. Nevertheless, the existing literature, though limited in its scope, does demonstrate that a qualitative approach can make clearer for identity researchers how people manage and make meaning of their multiple roles, beliefs, and attitudes to generate a coherent sense of self over time and in different contexts.

With regards to sports, qualitative research has shed light on how athletes manage academic and sports stressors associated with negative outcomes, including a sense of isolation and sense of mistrust (Melendez, 2008). Participants described feeling judged in academic and sports-related spaces, and linked their ethnic minority status to feeling stigmatized and misunderstood within both academic and sports contexts. Though quantitative measures were not used to assess levels of adjustment for participants in this study, participants' self-descriptions of their emotional experiences convey the negative outcomes that can be associated with identity experiences.

Other studies using interviews or focus groups uncover ways people's participation in sports, sense of self, and outcomes are interlinked (e.g. Gawrysiak, Cooper, & Hawkins, 2013; Harper, 2009). For example, Gawrysiak, Cooper, and Hawkins (2013) discovered that athletes interviewed described differing ways in which

they manage demands from their sports and academic pursuits. Some participants sought to balance demands from both areas of life, whereas others described leaning towards either their academic or sports roles, essentially choosing one identity domain over the other. The nature of these findings highlights how qualitative research on sports can allow researchers to further understand ways people manage or make sense of multiple identity domains. From an Eriksonian perspective, this is especially interesting for advancing our theoretical understanding of the *ego identity* layer, theorized to play a role in managing or synthesizing experiences across multiple domains of identity.

Qualitative studies outside of sports have also allowed identity scholars to further look at the management of multiple identities. In particular, Schachter's (2004) qualitative study on 30 Orthodox Jewish men and women in Israel captured some of the ways people describe and generate a sense of identity in the face of conflicting roles that identification with multiple domains can cause to emerge. Focusing on the sexual and religious identity domains, Schachter (2004) identified four configurations that participants described and used to make sense of their multiple roles. The first type, *selective repudiation*, involved participants describing how one role or identity was intentionally suppressed psychologically and behaviorally, while the other was enacted upon or thought about in their everyday lives. The second type, titled *assimilation*, described how individuals managed to synthesize competing identity domains so that they no longer presented as conflicting or suppressive towards the other domain. Participants managed to live out both identities in a way where both were understood as compatible and embedded. The third type, titled as the *confederacy of identifications* configuration, was characterized by an individual continuing to experience conflicts

across two different domains and actively not seeking to choose one or the other in fear of rejecting an aspect of the self. Finally, the fourth configuration, *thrill of dissonance*, involved individuals generating a sense of meaning and purpose founded on the conflicts that exist across their identity domains.

Configurations two (*assimilation*) and four (*thrill of dissonance*) highlight a key feature of ego identity: a sense of self-meaning. Unlike the personal layer of identity, where meanings attached to particular domains are the focus, the meaning here in ego identity is related to a broader understanding of the self. This broader understanding of self, while influenced by meanings generated from identifying individual identity domains, is not attached to a single role or group. Thus it seems that through the use of narrative data, Schachter (2004) was able to acknowledge aspects of Erikson's ego identity layer.

Syed's (2010) longitudinal study on ethnic and academic identity among college students also identified individual differences in the management of multiple identity domains. Similar to Schachter's study, some participants in this study described configurations characterized by compartmentalization, or lack of assimilation between their academic and ethnic domains of life. Other participants initially described their ethnic and academic identities as compartmentalized aspects of their selves, but later described the ways in which they understood both domains to be embedded in their everyday experiences as a college student (Syed, 2010). This finding is important, as it highlights that the management of identities across domains, in this case via embeddedness or assimilation, is a process that can occur multiple times for college aged students. From a theoretical perspective, this sheds light on the potential for identity

integration being a psychological process, not outcome, that is dependent on the management (ego identity layer) across identity domains. This finding in particular aligns well with the current study's own theoretical framework for examining identity integration, which seeks to account for elements of both time and multiple identity domains: examining how people have experienced their sports and ethnic identity domains and constructed these experiences to influence their current (present time) sense of self.

The studies reviewed above, while valuable for emphasizing the ways in which narrative data can shed light on the management of multiple identities, did not empirically link management patterns, or the qualitative experience of multiple domains, to psychological or adjustment outcomes. Yet past research has empirically linked adjustment outcomes, separately, to both ethnic and sports identity experiences (e.g. well-being, identity confusion, a sense of belonging). Studying these two domains jointly could serve as a space for us to quantitatively and qualitatively examine further how identity and positive outcomes are interlinked.

The Present Study

The goals of the present study focused on 1) empirically examining the different ways ethnically diverse college students experience their multiple identity domains of ethnicity and sports and 2) exploring how variations in these identity experiences are related to psychological adjustment. As highlighted above, some college students are tasked with managing both their ethnic and sports identity domains (Coakley, 1992; Lally & Kerr, 2005; Phinney 1990). This management is not necessarily an easy thing to do, and can be associated with negative experiences and adjustment difficulties (Coakley,

1992; Melendez, 2008; Miller & Kerr, 2002). Erikson's theoretical perspective on the significance and management of identity domains can help make clearer how college students understand and experience their own ethnicity and sports. Attending to these psychological processes can contribute to our understanding of how identity and positive adjustment are interlinked. Given our understanding of Erikson's three identity layers, identity integration, and positive adjustment the research team thought it was essential to seek to capture each of these elements of identity development in the study.

Based on a review of the sports and ethnic identity literature, the research team adopted an embedded mixed methods design to frame the use of quantitative and qualitative data. This kind of study emphasizes using the strengths of both qualitative and quantitative data and integrating them to best answer a study's goals (Creswell & Plano Clark, 2011; Office of Behavioral and Social Sciences Research, 2010). The study relied primarily on qualitative methods, used to gather data on the identity processes in question, whereas the quantitative data were viewed as secondary, used to identify levels of adjustment for answering the third research question (see below).

As indicated in the literature review, qualitative data are particularly important for understanding multiple identity processes. The qualitative studies discussed above did not address how configurations or meaning were linked to psychological adjustment or well-being. Yet these research studies illustrate that both identity configurations and the meanings people attribute to multiple identity domains can be captured and observed in qualitative research. This strength of qualitative research was deemed a good fit with the theoretical goal of addressing how ego identity and identity integration contribute to adjustment outcomes. Similar to these studies, the study was designed to make use of

qualitative data to assess for the ways participants managed their ethnic and sports identities. Specifically, a series of narrative questions were designed to prompt participants to discuss, qualitatively, the ways they manage and understand their ethnic and sports identity domains across the three layers of social, personal, and ego identity. From these narrative responses, the research team intended to observe and identify patterns in how participants manage and understand their ethnic and sports identities. To build off of the existing qualitative research the research team wished to link the qualitative data on the three identity layers and integration to quantitative indicators of psychological adjustment and outcomes. Thus broadly, the study seeks to make use of both qualitative and quantitative research methods.

The analysis of the data is made up of two broad parts and is informed by the research questions, listed below. This first part is made up of a phenomenological component, which is designed to describe the identity configuration and integration experiences of this sample (research question 1 & 2) that come from the analysis of the narrative data. Thus this portion of the analysis relies on qualitative data. The second part of the analysis is primarily concerned with examining adjustment (research question 3), which links the phenomena investigated in the first part to participants' adjustment. This portion of the analysis is both quantitative and qualitative. Thus overall, the analysis plan is mixed in that it uses both qualitative and quantitative methods to answer the research questions. With the study goals and analysis plan in mind, the research team came up with the following research questions:

Research Question 1: Identity configurations- What are the different ways participants manage their multiple identity domains?

The first research question seeks to examine what Erikson described as the social and personal identity layers. In the context of ethnic and sports identity domains, I sought to observe how participants experience these two identity layers and make sense of them in their everyday lives.

Research Question 2: Identity Integration- How does this management link to participants' personal understanding of self across time and place?

The second research question seeks to examine what Erikson described as ego identity and identity integration. In the context of ethnic and sports identity domains, the research team intended to explore how participants derive self-understanding (ego) from their ethnic and sports experiences in different settings and across time (integration). The research team also intended to link this self-understanding to the other two identity layers, social and personal. Thus, this question allowed us to observe all three identity layers and the experience of identity integration.

Research Question 3: Adjustment- How are both identity configurations and integration related to differing levels of reported adjustment?

The third research question is testing Erikson's theory that identity integration is linked to positive adjustment. Specifically, the research team sought to examine both how the identity configurations (management) involving the three layers and the experience of integration are associated with positive outcomes.

CHAPTER 2:

RESEARCH METHOD

Participants and Recruitment

Participant characteristics. Participants recruited for this study were undergraduate or graduate students attending a large university in the upper Midwest of the United States. A total of 195 participants were recruited for the study (65% women) ranging in age from 18 years old to 33 years old (M age = 20.85, SD = 2.82, mode = 19)¹. The participants varied in their year in college, with 21% first years, 27% second, 15% third, 16% fourth, 5% fifth years or more (undergraduate level), and 15% at the graduate-level. In this study, participants were able to describe their ethnic background in an open-ended response format. A total of 135 (69%) participants self-identified as White, Caucasian, or European-American. The remaining sample, based on self-identification, were placed in the study's Student of Color (SOC) group (31%). All participants in this latter SOC group identified with at least one Asian/Asian American background. Participant responses included a variety self-derived labels such as, "Asian", "Tibetan", "Asian American", "Malaysia and Taiwanese", "Chinese", "Korean" and "Korean American." As stated above, the research team elected to use the terminology of "Students of Color" (vs. "Asian American") to describe this pan-ethnic group. The researchers believe the "Students of Color" terminology best acknowledges and emphasizes the diversity of experience involving ethnic identity that can occur within an Asian American sample.

The research team also wished to focus some of our analyses on the identity experiences of past and current sports participants. In our sample, a total of 113 (58%) participants reported past or current participation in a sport, with the remainder 82 (42%)

¹ For a special note on sample size, please refer to Appendix A.

participants indicating past participation, but no current participation, in an athletic sport(s).

Due to the participants' status as college students, parent educational history was used to assess socioeconomic status (SES; 1 = no school to 9 = Doctorate/professional degree), with the data being averaged across both parents/guardians, when available (see Appendix B). The distribution of the five social classes was as follows: 1 = 0%, 2 = 0%, 3 = 2.5%, 4 = 2.5%, and 5 = 9%, 6 = 19%, 7 = 28%, 8 = 31%, 9 = 8% ($M = 6.73$, $SD = 1.31$). Further details about participant demographics are listed in Table 1 (below) and Appendices C and D.

Analyses testing for ethnic differences (Students of Color vs. White) on demographic variables indicated several differences. Age of participants was statistically significantly higher for current Students of Color ($M = 21.91$, $SD = 3.16$) compared to White participants ($M = 20.39$, $SD = 2.64$), $t(187) = 3.42$, $p < .001$, $d = .52$. Cross-classification analyses revealed that Students of Color were underrepresented at the first-year college level ($\chi^2 = 14.86$, $df = 6$, $p = .021$, $\phi = .28$, $ASR^2 = -2.1$) and overrepresented at the graduate school level ($ASR = 2.6$). SES of participants was statistically significantly higher for White participants ($M = 6.95$, $SD = 1.02$) compared to Students of Color ($M = 6.23$, $SD = 1.71$), $t(193) = -3.63$, $p < .001$, $d = -.51$. With regards to gender, females were underrepresented in the Student of Color group ($\chi^2 = 7.70$, $df = 2$, $p = .022$, $\phi = .20$, $ASR = -2.6$) and males were underrepresented in the White group ($ASR = -2.7$).

² ASR refers to adjusted standardized residual. We reference these in our cross-classification analyses in order to address how we identified which of the cell counts were determined to be significant. Under the null hypothesis that the 2 variables in each analysis are independent, the adjusted residuals will have a standard normal distribution (mean = 0, sd = 1). ASR values greater than or equal to +/- 1.96 indicate that the number of cases in that cell is significantly larger or smaller than would be expected if the null hypothesis were true, with a significance level of .05.

Additional analyses did not provide evidence for significant group differences for current vs. past sports participants for demographic variables, including ethnicity status, year in school or SES (ethnicity status $\chi^2 = 2.70$, $df = 1$, $p = .10$, $\phi = .12$; year in school $\chi^2 = 3.46$, $df = 6$, $p = .75$, $\phi = .13$; SES $t(193) = -.70$, $p = .49$, $d = .10$). Age of participants was statistically significantly higher for current sports participants ($M = 21.27$, $SD = 3.20$) compared to participants not currently participating in sports ($M = 20.30$, $SD = 2.26$), $t(187) = -2.32$, $p = .021$, $d = .35$. Gender of participants was also statistically different between current and past sports participants ($\chi^2 = 9.13$, $df = 2$, $p = .01$, $\phi = .22$). Specifically, there were more male participants than expected in the current participants group (ASR = 2.8). Similarly, female participants were overrepresented (ASR = 3.0) in the “not currently participating” sports group.

Participant recruitment procedures. To recruit potential participants, the researcher and research assistants advertised the study through the university’s Psychology Department page. The study was advertised to offer participants the opportunity to either receive a gift card (\$7-10 value) or research credit to be used in various academic courses. The research team also targeted other academic spaces for actively recruiting participants, including academic events, sporting events, extra-curricular activities, and classroom settings (e.g. introductory courses with many undergraduate students). Finally, fliers were posted on or near campus in coffee shops, athletic facilities, student residences, and academic buildings. Interested participants would contact the researcher or research assistants to go through a brief recruitment process via email. After being recruited for the study, participants were asked to consider referring people to the study who they felt might meet the criteria. This was a form of

network-based sampling employed to recruit participants of specified backgrounds (in this case sports participation and ethnicity) and aligns with the goals of the proposed study (Heckathorn, 2007; Yoshikawa et al., 2008).

A prescreen survey was first used to ensure that the overall study sample was made up of participants from both White and ethnic minority backgrounds and to ensure that we were recruiting participants with either current and/or past experiences involving sports. Questions included in the prescreen survey are listed in Appendix E. Eligible students participated in the study in a quiet computer-lab setting. They completed an anonymous online survey that usually took between 30-45 minutes to complete. A research assistant was always present in the room to ensure that participants understood the consent process and to answer any questions that may have emerged.

Table 1

Participant Demographics.

	Age	Year in school	SES
SOC <i>n</i> = 60	21.91 (3.16)* 18-30**	4.25 (2.95) 1-9	6.23(1.71) 2.5-9
White <i>n</i> = 135	20.39 (2.64) 18-33	3.13 (2.33) 1-9	6.95 (1.02) 4.5-9
Past participants <i>n</i> = 89	20.30 (2.26) 18-30	3.18 (2.37) 1-9	6.81 (1.16) 3-9
Current participants <i>n</i> = 126	21.27 (3.20) 18-33	3.77 (2.73) 1-9	6.67 (1.41) 2.5-9

Note. Data entered in the first line for each cell refers to the mean, followed by the standard deviation in parentheses. The second line entered in each cell refers to the range.

Measures

Demographic questionnaire. A series of questions were included in the online-survey to assess participants' background information, including their ethnic background, academic major, year in school, and their parents' occupational and educational backgrounds (see Appendix D for questions and Table 1, above, for data). Additional questions assessed their past and current sports participation.

Qualitative data: Erikson identity layers. Seven open-ended questions (Appendix F) prompted participants to provide descriptions of their identity-related experiences involving Erikson's three identity layers within two identity domains: sports and ethnicity/race. These questions were designed to target the first two of the three research questions (RQ1: What are the different ways participants manage their multiple identity domains? RQ2: How does this management link to participants' personal understanding of self across time and place?). All questions were piloted and revised prior to recruiting participants for the study (see Appendix G for further notes about this process).

Questions were worded to prompt participants to consider and respond to both identity domains. Specifically, the prompts were meant to generate data that would allow the researchers to observe participants' experiences concerning their personal, social, and ego layers of identity and identity integration. In order to encourage participants to provide robust narrative data, they were asked to write at least 1-2 paragraphs in answering each prompt listed below. This method of open-ended prompts in surveys has been used successfully in previous research (e.g. Syed & Azmitia, 2008). Question 1 and

2 correspond to Research Question 1. These prompts encouraged participants to discuss the personal significance of ethnicity and sports, and were designed to ask participants to identify how these domains are experienced with regards to Erikson's personal identity layer:

1. *How important is your cultural/ethnic/racial background to how you see yourself? Why is it important or not important to who you are? (personal)*
2. *How important is athletics/sport to how you see yourself? Why is it important or not important to who you are? (personal)*

Question 3, 4, 5 & 6 also correspond to Research Question 1. These prompts encouraged participants to discuss the social significance of ethnicity and sports, asking participants to expand on the roles or pursuits they may take on in relation to each of these domains. Question 3 and 4 were designed to ask participants to identify how these domains are experienced with regards to Erikson's social identity layer. Question 5 prompted participants to consider how one domain is related to the other. This prompt provided space for participants to describe how they understand or manage both domains. Question 6 also prompts participants to consider how each of their identity domains may have intersected at a point in their lives.

3. *What role does your cultural/ethnic/racial background play in your everyday experiences? (social)*
4. *What role does athletics/sport play in your everyday experiences? (social)*
5. *Now that you've spent time describing your race/ethnicity and sport-related experiences, does your cultural/ethnic/racial background influence your*

participation in sport? Do you see the two areas of your life related in any way? (ego)

6. *Think of a time when your culture/race/ethnicity was especially salient to you during an athletic event or experience (i.e. a sports game that you participated in or watched). (ego)*

Question 7 corresponds to Research Question 2. This question prompted participants to link previous events or experiences associated with their ethnic or sports identity to their current understanding of self. Thus this question was designed to assess identity integration: how participants may experience a sense of self that cuts across time (past to present) and space (across domains).

7. *How do you make sense of the previous experience in terms of how you see culture/race/ethnicity and athletics fitting into your life today? (identity integration)*

Preparing the narratives for analysis. For each participant, responses to the narrative prompts were combined into single narratives for review, so that one narrative corresponds to each participant, for a total of 215 narratives. Each prompt had been designed to build off of the previously asked question(s). Thus it was sufficient and necessary to consider participants' answers to all of the prompts for having the greatest understanding of their identity-related experiences in answering research questions 1 and 2.

The research team was blind to how each participant had responded on the adjustment measures and with how they identified ethnically/racially and with regards to participating in sports (e.g. current athlete or past athlete), as much as was feasible (some

participants discussed these issues directly in their responses). These steps were employed to ensure that the reviewers were blind to factors that will be focused on in Part 2 of the analysis (see below).

Thematic analysis. Braun and Clarke (2006) lay out the following six steps for conducting a thematic analysis. Steps 1 thru 5 were used for Phase 1 of my analysis. Step 6 was used in Phase 2:

1. Becoming familiar with the data: the researcher and research team will review each of the narratives to become familiar with the content.
2. Research team members separately identify themes or features systematically and generate initial codes.
3. Research team members discuss codes together and systematically go through the data for more codes and re-organizing of themes.
4. All of coded data is re-organized under existing themes and refined as needed to create a thematic map of the data.
5. Thematic map of data is defined and described. Narrative excerpts serve to describe the themes and present ways in which themes may relate to other themes or sub-themes.
6. Report is produced. A logical account of the themes, their definitions, and significance are illustrated.

Our study used a method of thematic analysis for analyzing the responses to all seven narrative prompts. This approach emphasizes using qualitative data from multiple cases (participants) to understand the meanings and experiences for answering the research questions. This approach's emphasis on personal meaning aligned well with the

study's theoretical emphasis on identity integration. In addition, thematic analysis provides a framework for a careful analysis of participants' experiences while still allowing for existing theory (i.e., Eriksonian) to inform the ways in which the data are analyzed (Braun & Clarke, 2006). For example, codes or themes related to the literature on Eriksonian identity were targeted and considered in steps 2 and 3. This particular approach in thematic analysis has been described as theory-driven coding (Braun & Clarke, 2006) for breaking down and making sense of some of the complex and rich experiences individuals report concerning their identity development (e.g. Syed, Juan, & Juang, 2011). A list of themes and codes identified in the thematic analysis process are listed in Appendix H.

Research team & reliability ratings. There were a total of two members in the research team regarding this phase of analysis. One member, a female self-identified Filipino-American undergraduate psychology research assistant, had been involved in the project from the early stage of developing the dissertation proposal for a combined total of eight semesters. The lead member (the first author of this paper, a multiethnic female Counseling Psychology graduate student) served as the other member on this team. Research team members independently reviewed a random subset of the narrative data and jointly discussed and documented themes. After doing this, another subset of narratives would be reviewed and discussed. This process was repeated in order to develop a coding manual. This manual served as a guide for how to categorize participants' narrative responses into themes. Each of the team members read through and discussed the contents of the manual in order to jointly understand the coding process.

Throughout the coding process, the lead member served as a “master coder” who independently coded the majority of the narratives (about 60%) using the coding manual. The undergraduate team member served as a “reliability” coder. At three separate time points, the reliability coder would independently code a subset (about 20) of narratives. Codes derived by this coder were compared to the master coder’s codes. This process served as a process for assessing reliability of ratings done by each coder.

A Kappa statistic and percentage of agreement was calculated at several points of the coding process to assess inter-rater reliability (Thompson et al., 2004). In the initial reliability check, percentage of agreement and the Kappa statistic ranged from fair to substantial agreement (κ range of .20 – .64; % of agreement range of 62-100% agreement). After this initial reliability check, narratives containing discrepancies between coders were reviewed and discussed. Narratives that seemed especially difficult or easy to code were cited in the coding manual to guide the coding process for the next batch of narratives. These narratives were also discussed by the two members of the coding team. The master coder adjusted the content in the coding manual in order to better describe and define various coding categories, including those categories that tended to have lower levels of agreement. Narratives from the first reliability check for which there were discrepancies between coders were reviewed and discussed in order to identify agreed upon codes. In order to ensure that agreed upon codes were not biased towards just one of the team member’s views (e.g. just the master coder’s), the research team jointly tracked the number of times the final codes aligned with each of the team member’s initial codes.

The research team repeated this process for two more time points. Reliability ratings in these second and third phases of coding improved (κ range of .58 - .92; % of agreement range of 78-100%). Similar to the initial coding process, narratives that contained coding discrepancies or seemed especially difficult to code were discussed. Each of the discrepancies between coders were reviewed and discussed in order to identify agreed upon codes

Coding categories. In answering the first two research questions, the themes capturing participants' reported identity experiences corresponded to the significance, relatedness, and integration of the two domains, sports and ethnicity (please see Table 2, below). *Significance* refers to whether participants find either or both domains to be important to them. Additionally, we examined if one domain seemed more significant to a participant (variance of significance). *Relatedness* refers to if participants experienced their sports and ethnicity domains to interact or intersect in their lives. *Integration* refers to whether or not participants highlight how their sports and/or ethnicity experiences contribute to their understanding of their current sense of self. Additional details about the definitions and processes of coding for each of these three themes are reviewed below.

Table 2

Coding categories and definitions

Coding category	Brief description	Coding option
Significance	Does the participant discuss how each domain has been important in their life?	Ethnicity domain: “Yes” or “No” Sports domain: “Yes” or “No”
<i>Variance in significance</i>	Does one domain seem more significant than the other? If so which one?	Yes, sports domain: “1” Yes, ethnicity domain: “2” No, neither domain: “3”
Relatedness	Does the participant experience these domains to be related to each other, or separate in their life?	Yes, related: “1” No, unrelated: “2”
Integration	Does the participant discuss how their experiences concerning sports and/or ethnicity influence their current sense of self?	Yes, integrated: “1” No, no integration present: “2”

Research question 1: What are the different ways participants manage their multiple identity domains?

First theme: Personal significance of sports and ethnic identity domains. As described above, the first six (of the seven) narrative prompts were designed to encourage participants to share about how they experienced and managed their ethnic and sports identity domains. Participants were encouraged to discuss the social and personal significance of ethnicity and sports in their everyday lives. This first theme on personal

significance focused on whether participants expressed sports and ethnic identity domains to be personally significant in their lives (yes/no). In line with our theoretical approach focusing on three identity layers, this particular theme focused on whether participants experienced personal connection (personal layer of identity) with each domain, given some of the roles or experiences (social layer of identity) they may have within a sports and ethnicity context. The coders reviewed each narrative and tracked, separately for each domain, whether the participant expressed the domain (sports or ethnicity) to be at all personally significant in their life. After this coding process, it was possible for participants to receive codes such as “yes-yes”, “no-yes”, “yes-no” or “no-no” with regards to personal significance for the sports and ethnicity domains, respectively. We had originally intended to code participants for expressing varying levels of personal significance across the two domains, beyond simply yes or no (e.g. “very significant”, “somewhat significant” and “not significant”). While several narrative responses provided support for this coding process, most narratives did not provide enough content to make distinctions between “very” and “somewhat” in terms of significance level for each domain.

Whereas the first part of the coding process identified if each of the two domains was significant to participants, a second part of the coding process focused on whether or not one of the domains was *more* significant than the other for those participants indicated both domains were significant (i.e., “yes-yes”). Thus, we examined for each narrative if the level of significance across domains seemed to vary, depending on the domain the speaker was referring to. Participants who provided narrative content implying that one domain (e.g. sports) was more personally significant than the other

domain (e.g. ethnicity) received codes documenting a differing level of personal significance (either sports or ethnicity domain being more significant). Participants expressing both domains to be significant (“yes-yes”) who did not express differing levels of significance across domains were categorized as “neither” to note that levels of personal significance did not seem to differ. In addition, participants who had earlier expressed that neither domain (“no-no”) was personally significant to them were also categorized as “neither.” Finally, participants who had initially expressed that just one of the domains had been personally significant to them (e.g. “yes-no” or “no-yes”) were automatically categorized to have differing levels of personal significance across the two domains.

Second theme: Relatedness of sports and ethnic identity domains. This theme was also used to examine how participants experienced and managed their ethnic and sports identity domains. This second theme builds off of the interplay of the social and personal layers focused on in the first theme, looking now at the ego identity layer. With this theme, we were curious about how participants have experienced both of the domains in their lives jointly, with the possibility of one domain intersecting with the other, which allows insights into the ego identity layer. Specifically, it allowed us to capture the ways in which participants manage and make sense of multiple identity domain experiences, rather than just a single identity domain. Narratives were coded in a yes/no format to track if they expressed their two identity domains (sports and ethnicity) to intersect in their lives. Participants not reporting overlap between the two domains, or participants expressing that these two domains were not related to them were coded with a “no.” Participants who shared how they experienced the two domains to be related, or cited

examples of when both aspects of their identity were salient to them at the same time, were coded with a “yes.”

Research question 2: How does participants’ management of their multiple identities link to their personal understanding of self across time and place?

Third theme: Identity integration status. In our approach to studying identity integration, we sought to account for both time and multiple identity domains. Specifically, we wished to examine how participants experience and drew meaning from multiple identity domains (context), and how they constructed these experiences into their current (present time) sense of self. While participants’ responses to each of seven narrative prompts had been combined into single narratives for review, the research team tended to focus on participants’ responses to the final prompt (question 7). This question had been designed specifically to prompt participants to share about identity integration experiences.

In terms of defining “identity integration” in the coding process, the research team focused on tracking whether or not participants discussed their sports and/or ethnicity identity domains as influencing how they currently psychologically experience their broader sense of self. Thus narratives describing how participants’ current sense of self was informed by their sports or ethnicity experiences were coded to be “integrated.” Responses coded as “integrated” tended to involve descriptions that highlighted meanings or lessons learned from sports or cultural experiences that then influenced a current understanding of self that the participant provided. Excerpts solely listing actions or behaviors associated with ethnicity and/or sports, that were not linked to a current self-understanding, were coded as “no integration present.” Similarly, if participants

described lessons learned from past events, without reference to how this learning had influenced their current definition of self, the narrative was coded as “no integration present.” To be coded as “integrated,” participants had to specify *how* their ethnic and/or sports experiences impact(ed) their current internal (psychological) experience of themselves.

Adjustment measures. Adjustment was conceptualized in this study as five separate measures of psychological experiences. Each of these measures assesses a psychological experience that is theorized to be directly associated with Erikson’s description of identity integration. All of the items in these measures are listed in Appendix I. They include the satisfaction with life scale, campus belonging, academic adjustment, identity confusion, and identity coherence.

Satisfaction with life scale. (Diener, Emmons, Larsen, & Griffin, 1985; Diener, Inglehart, & Tay, 2013). This scale is a five-item self-report measure of global life satisfaction rated on a five-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The total score computed from this measure is designed to represent a single factor of life satisfaction (Corrigan et al., 2013). Scores from the measure demonstrate good stability across different situations, such as work or leisure settings, and is a significant predictor for positive and negative major life outcomes, such as marriage, childbirth, or divorce (Diener & Larsen, 1984; Luhmann, Lucas, Eid & Diener, 2013). A sample item from this measure is, “I am satisfied with my life.” In our sample, $\alpha = .87$.

Campus belonging and academic adjustment. Campus belonging and academic adjustment are the second and third indicators of adjustment that were measured. These two measures are subscales that are a part of the 67-item *Student Adaptation to College*

Questionnaire (Baker & Siryk, 1989; 1999). This broader measure is made up of four main subscales, two of which will be used in this study. The first subscale, *institutional attachment*, consists of 15 items and assesses participants' sense of belonging to their institution and campus environment. A sample item from this subscale is, "I feel that I fit in well as a part of the college environment." The second subscale, *academic adjustment*, is made up of 24 items and examines students' success in coping with various academic pursuits, including academic performance and motivation (Taylor & Pastor 2007). A sample item from this subscale is, "my academic goals and purposes are well defined." Previous studies using either or both subscales demonstrated good reliability and validity (Kurtz, Puher, & Cross, 2012; Soucy & Larose, 2000). The SACQ subscales can be administered at any time during a student's college career and a score for each subscale can be calculated (Baker & Siryk, 1999). Construct validity was demonstrated when scores on the two subscales were significantly linked in the appropriate directions to college GPA (Baker & Siryk, 1989), psychological distress (Baker & Siryk, 1999) and occupational goal setting (Carlson, 1986). Participants respond to a 9-point Likert-type scale ranging from (1) "applies very closely to me" to (9) "doesn't apply to me at all." The two subscales have been used in a limited fashion on student-athlete populations (see Melendez, 2009). In our sample, $\alpha = .90$ for academic adjustment, $\alpha = .59$ for campus belonging (institutional attachment)).

Identity coherence and confusion. The 12-item identity subscale from the Erikson Psychosocial Stage Inventory (EPSI) was used to capture two psychological experiences of focus. These two experiences are *identity confusion* and *identity coherence*. Identity coherence refers to the psychological experience of having clarity and

satisfaction towards the self. Confusion, meanwhile, refers to the questioning and unsureness of self that a person might experience. While theoretically related, the absence of one of these does not imply the experience of the other. Thus these constructs are theoretically related but separate identity experiences (Schwartz, Zamboanga, Wang, & Olthuis, 2009; Syed et al., 2013). The EPSI identity scale has a six-item identity coherence subscale and a six-item identity confusion subscale that past research documents scores demonstrating good reliability and validity (Hope, Milyavskaya, Holding, & Koestner, 2013; Rosenthal, Guerney, & Moore, 1981; Schwartz, Zamboanga, Wang, & Olthuis, 2009). For example, Schwartz (2007) detected good reliability estimates from an ethnically diverse sample ($\alpha = .83$) where majority of participants identified with at least one ethnic minority background. In a separate study, scores on the two subscales were appropriately linked significantly to relationship functioning and identity confusion was linked to behavior problems (Schwartz, Pantin, Prado, Sullivan, & Szapocznik, 2005). Items from both subscales are measured on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item from this coherence scale includes, "I know what kind of person I am." A sample item from the confusion subscale is, "I change my opinion of myself a lot." In our sample, coherence $\alpha = .72$ and confusion, $\alpha = .75$.

CHAPTER 3:

RESULTS

Data Analysis

The analysis consists of two broad parts. This first part is made up of a

phenomenological component, which is designed to describe the identity configuration and integration experiences of the sample (research question 1 & 2). This portion of the analysis is primarily qualitative, but also involves quantitative analysis of the qualitative data. The second part of the analysis links the phenomena investigated in the first part to participants' psychological adjustment (research question 3). This portion of the analysis is both quantitative and qualitative. Thus overall, the analysis plan is mixed in that it uses both qualitative and quantitative methods to answer the research questions.

Part 1: Phenomenological Analyses

Research question 1: What are the different ways participants manage their multiple identity domains?

As described in detail above, two main themes were the focus for answering the first research question: 1) level of significance of sports and ethnic identity domains and 2) relatedness of sports and ethnic identity domains. The first theme focused on whether participants expressed sports and ethnic identity domains to be personally significant in their lives, whereas the second theme examined whether or not one domain intersected with the other.

First theme: Level of personal significance. Some participants tended to highlight that one domain was “somewhat” or “a little” important, and then would go on to share that the other domain was “very important” to them. Other participants shared that only one of the domains (e.g. sports) was significant to them. These kinds of patterns in the narratives were identified and coded to represent that participants were describing differing levels of significance between each of their identity domains.

For example, here a participant discusses ways their participation in dance feels

more significant in their life, compared to their ethnic background.

My cultural/ethnic/racial background does not really play into my everyday experiences. Like I said before, I do not really identify with my ethnic roots. Personally, I don't see being white very special. Athletics/sports do play a role in my everyday experiences because they help me to upkeep relationships. Sports give me a starting base to talk to people. I love finding and meeting other people that danced and talking about these experiences with them. I feel like that I connect easier with individuals that had these same experiences as me
(Participant A, female identifying as “White”, previously participated on a dance team).

Here another participant discusses ways their cultural background feels more influential in their life, compared to sports.

I feel that I strongly adhere to my cultural and ethnic expectations as a person and I am proud that these backgrounds constitute how I carry myself on a daily basis. It is important to me because they influence my social relationships and interactions. I see myself as someone who is communal and sociable, and I believe a large part of this comes from an Asian culture that emphasizes on the idea of collectivism. I don't think athletics or sports play an important role to how I see myself. Although I enjoy playing sports once in a while, I have other hobbies and interests that I feel more comfortable in sharing and talking about and that would give others a better perception of who I am as a person (Participant B, female identifying as “Asian/Chinese”, previously participated in volleyball and badminton).

Out of the 195 participants, 88 participants (45%) described the sports domain to be more significant than the ethnicity domain, 33 participants (17%) described the ethnicity domain to be more significant than the sports domain, and 73 participants (37%) indicated equal levels of significance, that is, neither domain was more or less significant than the other identity domain. Within this latter group of “equal significance,” 70 participants (96%) were coded to reflect that each of the domains were significant in their lives. Just 3 participants in our overall sample provided narratives that were coded to express that *neither* domain was significant. One excerpt is provided below from a participant who was coded in this category. Interestingly, this participant shared about how their participation in a sports activity (in this case, marching band) changed over time. Implications of this finding are expanded on in our Discussion section.

Because I am white, I hadn't even considered my racial background before coming to the U and taking classes in gender studies, etc, and learning to view myself as a raced individual. Even now, it's not wholly important to who I am. Neither athletics nor sports are very important to how I see myself. I intentionally divorced my self-image from marching band after my second year in college. It was very important to me in high school, but the culture, competitiveness, and politics in what should be a cooperative activity became too much to me

(Participant C, male identifying as “White”, previously participated in marching band).

The preceding analyses highlight the variability with which participants viewed the ethnicity and sports domains to be personally significant to their lives. Next we examined if there were differences between Students of Color and White participants in the

variability of significance. To do this, we conducted a cross-classification analysis of significance status (sports more significant, ethnicity more significant, or neither being more significant) and ethnicity status (White vs. Student of Color). A Pearson Chi-Square test revealed differences between Students of Color and White participants ($\chi^2 = 37.38$, $df = 2$, $p < .001$, $\phi = .44$; Table 3). Adjusted residuals were calculated as a follow-up to the significant chi-square to identify the specific nature of the deviation.³ The frequency of Students of Color reporting the sports domain to be more significant than the ethnicity domain was less frequent than expected (ASR = -5.4). In contrast, Students of Color reported their ethnicity domain to be more significant than the sports domain at a higher frequency than expected (ASR = 4.9). Due to the low rates ($n = 3$) of participants coded as “neither domain being significant”, this category was combined with the “equal significance” group ($n = 70$). No significant differences (ASR = 1.7) among White participants or Students of Color were detected amongst this combined group.

³ ASR refers to adjusted standardized residual. These are referenced in the cross-classification analyses in order to address how the research team identified which of the cell counts were determined to be significant. Under the null hypothesis that the 2 variables in each analysis are independent, the adjusted residuals will have a standard normal distribution (mean= 0, sd= 1). ASR values greater than or equal to +/- 1.96 indicate that the number of cases in that cell is significantly larger or smaller than would be expected if the null hypothesis were true, with a significance level of .05.

Table 3

Chi-square analysis results for ethnicity status and domain significance

Ethnicity status	Domain more significant?		
	Sports	Ethnicity	Neither
Students of Color	10 (27.2)	22 (10.2)	28 (22.6)
ASR	-5.4	4.9	1.7
White students	78 (60.8)	11 (22.8)	45 (50.4)
ASR	5.4	-4.9	-1.7

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

We next conducted a cross-classification analysis to examine significance of identity domains based on sports participation status (current participation vs. not current participation). A Pearson Chi-Square test indicated no differences in domain significance for current participants and past participants ($\chi^2 = 2.55$, $df = 2$, $p = .28$, $\phi = .11$; Table 4).

Table 4

Chi-square analysis results for sports participation status and domain significance

Participation status	Domain more significant?		
	Sports	Ethnicity	Neither
Past participation only	34 (37.2)	18 (13.9)	30 (30.9)
ASR	-.9	1.6	-.3
Current participation	54 (50.8)	15 (19.1)	43 (42.1)
ASR	.9	-1.9	.3

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

Second theme: Relatedness of sports and ethnicity. The majority of participants in the overall sample (56%) experienced their sports and ethnicity domains to be related. Below is an excerpt that was coded to demonstrate relatedness between two domains. In this example, the participant shares about a common thread they've experienced across domains. Her participation in sports facilitated the maintenance and expression of her cultural values.

The two backgrounds do have similar influences. The 'never give-up' mentality exists in both athletics and in my cultural background. My cultural background did influence me to find and stick with a sport because of the dedication required in athletics. My cultural background disallows for laziness, lack of drive, and feeling 'useless'. Being involved in athletics has helped me to maintain the dedication necessary to grow as an individual (Participant D, female identifying as “Caucasian”, current participation in club softball).

Another participant explains an unforgettable moment during a sports event when their cultural heritage was especially salient to them.

The 2002 World Cup held in Korea was an amazing moment I would never forget. Because Korea made it to the semi-finals, which was the first time in our history, people were celebrating all over the nation and for those few days, worries and concerns seemed to be out of the way for Koreans. I believe that sports can play a major role in creating a whole new atmosphere for the society (Participant E, male identifying as Asian, current participation in soccer).

Narratives coded as “unrelated” (44%) tended to contain content that explicitly stated how the domains were not related:

I don't see my background influencing my participation in sports nor do I view them as related (Participant F, female identifying as “Caucasian”, past participation in volleyball and softball).

I don't think they are related. My race doesn't define me and it didn't give me values to go by. Playing sports helped me build my character and I don't think that has anything to do with my ethnicity. (Participant G, female identifying as “White”, past participation in soccer).

No, my cultural/ethnic/racial background did not influence my participation in sport in anyway. In my personal life, the 2 areas are not very related. (Participant H, female identifying as Chinese/Vietnamese, past participation in running and swimming).

A cross-classification analysis was conducted to examine differences in identity relatedness between White participants and Students of Color. A Pearson Chi-Square test revealed significant differences ($\chi^2 = 7.23$, $df = 1$, $p = .007$, $\phi = -.19$; Table 5). Adjusted residuals = 2.7 indicating that Students of Color reported their ethnicity and sports domains to be related at a greater frequency than expected, whereas White participants were less likely than expected to view them as related (ASR = -2.7).

Table 5

Chi-square analysis results for ethnicity status and domain relatedness

Ethnicity status	Domains related?	
	Yes	No
Students of Color	42 (33.4)	18 (26.6)
ASR	2.7	-2.7
White students	66 (74.6)	68 (59.4)
ASR	-2.7	2.7

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

Next we conducted a cross-classification analysis to examine differences in relatedness among participants currently or not currently participating in sports. A Pearson Chi-Square test did not reveal significant differences ($\chi^2 = .046$, $df = 1$, $p = .85$, $\phi = -.01$ Table 6).

Table 6

Chi-square analysis results for sports participation status and domain relatedness

Participation status	Domains related?	
	Yes	No
Past participation only	45 (45.6)	37 (36.4)
ASR	.2	-.2
Current participation	63 (62.4)	49 (49.6)
ASR	-.2	.2

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

We were also interested in if relatedness between the two domains was associated with domain significance (one domain being more personally significant than another). A Pearson Chi-Square test revealed significant differences in the connection between significance and relatedness ($\chi^2 = 13.42$, $df = 2$, $p = .001$, $\phi = .26$; Table 7). Specifically, participants demonstrating their ethnic identity domain to be more significant than their sports identity domain were more likely than expected to also demonstrate their sports and ethnicity domains to be related (ASR = 2.9). Similarly, participants demonstrating their sports identity domain to be more significant than their ethnicity were more likely to see their sports and ethnicity domains to not be related (ASR = 3.2).

Table 7

Chi-square analysis results for domain relatedness and domain significance

Domains related?	Domain more significant?		
	Sports	Ethnicity	Neither
Yes	38 (49)	26 (18.4)	44 (40.6)
ASR	-3.2	2.9	1.0
No	50 (39)	7 (14.6)	29 (32.4)
ASR	3.2	-2.9	-1.0

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

Due to the previously documented ethnic differences in significance and relatedness, we conducted the same analyses separately for Students of Color and White participants to see if similar results would emerge for both groups.

Within the Students of Color group, a Pearson Chi-Square test revealed significant differences between participants who either demonstrated their ethnicity or their sports domains to be more significant to them ($\chi^2 = 10.45$, $df = 2$, $p = .005$, $\phi = .42$ Table 8). Specifically, Students of Color citing their sports domain as more significant were more likely than expected to experience their ethnicity and sports domains as unrelated (ASR = 3.0). Similarly, Students of Color citing their ethnicity domain as more significant were somewhat more likely than expected to see their ethnicity and sports domains as related (ASR = 2.1).

Table 8

Chi-square analysis results for domain significance and domain relatedness, Students of Color only

Domains related?	Domain more significant?		
	Sports	Ethnicity	Neither
Yes	3 (7.0)	19 (15.4)	20 (19.6)
ASR	-3.0	2.1	.3
No	7 (3.0)	3 (6.6)	8 (8.4)
ASR	3.0	-2.1	-.3

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

Within the White participants group, a Pearson Chi-Square test did not reveal significant differences between participants who either demonstrated their ethnicity or their sports domains to be more significant to them. ($\chi^2 = 1.81$, $df = 2$, $p = .41$, $\phi = .12$; Table 9). It is notable, however, that the pattern of results is in the same direction as the Student of Color group, just much weaker.

Table 9

Chi-square analysis results for domain significance and domain relatedness, White participants only

Domains related?	Domain more significant?		
	Sports	Ethnicity	Neither
Yes	35 (38.4)	7 (5.4)	24 (22.2)
ASR	-1.2	1.0	.7
No	43 (39.6)	4 (5.6)	21 (22.8)
ASR	1.2	-1.0	-.7

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

Research question 2: How does participants’ management of their multiple identities link to their personal understanding of self across time and place?

Third theme: Identity integration status. This analysis focused on *how* participants’ ethnic and/or sports experiences impacted their current internal (psychological) experience of themselves (integrated or not integrated). Less than half of the sample (42%) was coded as “integrated.” Several narratives coded as “integrated” are shared below to serve as examples.

In the first example, a participant discusses how her background as Asian-American and her identification as an athlete are interrelated. The participant expresses how her current values and approach to competitiveness are rooted in both domains.

I think it comes down to shaping and solidifying my values. They both fit and have both shaped me to be a different kind of athlete and person. For instance, as an athlete, there is pressure to win and as an Asian-American, there is pressure to try to be one or the other. But I've found a place where I can try to win to the best

of my abilities without compromising my values as an athlete. And I've found my place as an Asian American to be a mixture of Asian and American culture (Participant I, female identifying as Asian American, past participation in badminton and track/field).

In this next excerpt, the participant talks about how her sports experiences illustrate the values she has attached to her cultural heritage.

I see that culture and athletics are highly integrated into my life today, and not just two separate entities. My culture's values of independence, personal responsibility, and ambitious work towards success are reflected in my athletic experience. As my upbringing was focused on "keeping one's eyes on one's mat," my coach and team follows the same rule - focus on yourself and getting your own job done. In the eyes of my culture and athletics, doing so will have the greatest impact on the team. In my culture and in my athletics, self-improvement is highly valued. (Participant J, female identifying as White, current participation in in collegiate sport (cross-country)).

In a separate narrative, the participant shares how some of the positive aspects of his involvement in a sport has brought forth to other areas of his life.

They both fit together, as they both make up who I am today. Cricket can be a long lasting game, which has helped with my concentration and other aspects of my life. Most people do not know about (or choose not to watch) cricket, and in my opinion, I feel that my culture and the sports within my culture have made a positive impact on my life (Participant K, male identifying as Asian American, current participation in intramurals (volleyball, karate)).

Interestingly, some participants coded as “integrated” described how just one of the two domains influenced their current sense of self. For example, in the next excerpt, the participant only highlights how his involvement in athletics impacts his work ethic.

I see my sports experience as very important to who I am today. I am a leader and a hard worker because sports taught me that is how to win (Participant L, male identifying as White, past participation in hockey and baseball).

In another excerpt, the participant links just her cultural background, not her involvement in sports, to her pursuit of maintaining traditions, as well as hopes for the future.

I think about the things my grandma taught me and I try to continue those thoughts/traditions today. I know I can always learn more about my own cultures that I was raised with, but I would enjoy to teach those things to my children one day as well. (Participant M, female identifying as Irish, Norwegian and Polish, past participation in tennis and dance team).

One hundred twenty-four participants (58%) did not describe how their current identity was informed by their ethnic and/or sports identity domains. Their narrative responses were coded as “no integration present”. Excerpts from some narratives coded in this way are provided below.

In these excerpts, participants shared their thoughts or beliefs about athletics and ethnicity. However, the participants did not provide content that illustrates how they link these thoughts or ideas to their current sense of self or identity.

I can see that cultural or ethnic background and geographical location is able to influence how a person chooses a sports to participate in or to watch

(Participant N, female identifying as Asian, currently participates in running/track).

I live in Minnesota which is a hockey loving state. I played hockey in a rural area where it was mostly white residents (Participant O, male identifying as White, past participation in hockey and football).

After thinking about it, that sports didn't play a huge role in my life and it could be culturally linked. However, my brother and sister were athletic and played many sports in high school. So I might be just an outlier within my family

(Participant P, male identifying as Malaysian, currently participating in table tennis).

Sometimes certain races are viewed as "better" at a sport. That may make them get chosen over someone else. I feel that sometimes sports can be a little bit more favorable to a specific race based on stereotypes (Participant Q, female identifying as White, past participation in tennis).

In line with our earlier analyses, we also examined if the presence of integration differed between White participants and Students of Color. A Pearson Chi-Square test did not reveal significant differences between White participants and Students of Color ($\chi^2 = 0.089$, $df = 1$, $p = .77$, $\phi = -.021$ Table 10).

Table 10

Chi-square analysis results for integration status and ethnicity status

Ethnicity status	Integration present?	
	Yes	No
Students of Color ASR	26 (25.1) .3	34 (34.9) -.3
White participants ASR	55 (55.9) -.3	79 (78.1) .3

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

We also explored if the presence of integration differed between past and current sports participants. A Pearson Chi-Square test did not reveal significant differences between past sports participants and current sports participants ($\chi^2 = 0.005$, $df = 1$, $p = .94$, $\phi = .005$ Table 11).

Table 11

Chi-square analysis results for integration status and sports participation status

Participation status	Integration present?	
	Yes	No
Past participation only ASR	34 (34.2) -.1	48 (47.8) .1
Current participation ASR	47 (46.8) .1	65 (65.2) -.1

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

Finally, to further examine the second research question we examined the association between integration status and both personal significance and domain relatedness. A Pearson Chi-Square test did not provide evidence for a relation between domain significance and integration status ($\chi^2 = 2.77$, $df = 2$, $p = .25$, $\phi = .12$ Table 12).

Table 12

Chi-square analysis results for integration status and domain significance

Domain more significant?	Integration present?	
	Yes	No
Sports	33 (36.7)	55 (51.3)
ASR	-1.1	1.1
Ethnicity	12 (13.8)	21 (19.2)
ASR	-.7	.7
Neither	36 (30.5)	37 (42.5)
ASR	1.7	-1.7

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

However, a Pearson Chi-Square test revealed that individuals coded to have a “related” configuration pattern were significantly more likely to also be categorized in the “integrated” category ($\chi^2 = 6.81$, $df = 1$, $p = .009$, $\phi = .19$ Table 13). The frequency of having both an “integrated” and “related” configuration pattern was greater than what would be expected by chance (ASR = 2.6). In contrast, participants expressing an “unrelated” configuration pattern between their ethnic and sports domains were more likely than expected to be categorized as “no integration present.”

Table 13

Chi-square analysis results for integration status and domain relatedness

Domains Related?	Integration Present?	
	Yes	No
Yes	54 (45.1)	54 (62.9)
ASR	2.6	-2.6
No	27 (35.9)	59 (50.1)
ASR	-2.6	2.6

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

In sum, for Part 1 of the analyses we detected several significant links between some of our groups and their identity experiences. In brief, ethnicity status (SOC vs. White) was associated with the significance of domains and relatedness between domains, but not with integration status. In addition, a relationship between the significance of domains and relatedness of domains was only detected within our SOC subsample. Sports participation status (current vs. past) was not associated with significance, relatedness, nor with integration status. Integration status was also not associated with domain significance. The only significant relationship we detected for identity integration was with relatedness between domains.

Part 2: Identity and Adjustment

Research question 3: How are identity configurations (relatedness) and integration associated with psychological adjustment?

This portion of the study was primarily quantitative. It was informed by the coding categories derived from the qualitative analyses and statistical findings from Part

1 of the analyses. We used two types of quantitative analysis to examine how group membership (SOC vs. White; past versus current sports participant), relatedness, and integration were related to scores on each of the five measures of adjustment measures. In the first analysis, we employed a series of factorial ANOVAs and t-tests to test for mean group differences. In our second type of analysis, we included the same groups but this time focused on extreme levels of adjustment (very high or very low), instead of mean levels.

Correlations between the five adjustment measures are listed in Table 14. The research team also examined if age was statistically linked to each of the five adjustment measures as well, since SOC were on average older than White participants. No significant correlations were detected (Academic adjustment, $r(187) = -.031, p = .67$; Campus belonging, $r(187) = -.035, p = .629$; Satisfaction with life, $r(187) = -.095, p = .19$; Identity confusion, $r(187) = .008, p = .92$; Identity coherence, $r(187) = -.0475, p = .523$). Additional descriptive statistics for each of the five measures, categorized by group status (SOC vs. White, current vs. past sports participant) are listed in Table 15.

Table 14

Correlations between the five adjustment measures

Measure	1	2	3	4	5
1. Academic adjustment	—				
2. Campus belonging	.51**	—			
3. Satisfaction with life	.33**	.26**	—		
4. Identity confusion ⁺	.41**	.23**	.42**	—	
5. Identity	.39**	.14	.50**	.63**	—

coherence

Note. Items on this scale were scored so that higher scores on this measure reflect higher levels of positive adjustment (lower level of confusion). ** Correlation significant at the 0.01 level (2-tailed)

Table 15
Descriptive statistics (mean, SD, range) for adjustment measures, by group

	Adjustment measures				
	1	2	3	4	5
SOC	5.81 (.91) 3.27-7.19	5.79 (1.25) 2.83-8.17	3.83 (.62) 2.0-5.0	3.34 (.75) 1.83-4.83	3.42 (.74) 1.2-5.0
White	6.20 (.77) 3.47-7.27	6.33 (1.07) 3.21-8.72	4.09 (.52) 2.5-5.0	3.74 (.66) 1.5-5.0	3.81 (.80) 1.2-5.0
t-test	-2.98* (<i>d</i> = - .46)	-3.09* (<i>d</i> = - .46)	-3.04* (<i>d</i> = - .45)	-3.68** (<i>d</i> = -.57)	-3.19* (<i>d</i> = - .51)
Past participants	6.00 (.87) 3.47-7.20	6.26 (1.08) 2.86-8.35	4.02 (.56) 2.5-5.0	3.64 (.71) 1.5-5.0	3.67 (0.76) 1.6-5.0
Current participants	6.13 (.81) 3.27-7.27	6.09 (1.19) 2.83-8.72	4.00 (.57) 2.0-5.0	3.60 (.71) 1.83-5.0	3.69 (.83) 1.0-5.0
t-test	-.99 (<i>d</i> = - .57)	1.05 (<i>d</i> = .15)	-.24 (<i>d</i> = - .031)	.38 (<i>d</i> = - .056)	-.16 (<i>d</i> = - .025)

Note. Data entered in first line of cells refer to the mean, followed by the standard deviation in parentheses. Underneath these cells, the range is provided. 1 = campus belonging; 2 = academic adjustment; 3 = identity coherence; 4 = identity confusion; 5 = satisfaction with life. * $p < 0.05$ level (2-tailed). ** $p < 0.01$ level (2-tailed). *d* refers to Cohen's *d* effect size

Part A: Statistical differences on adjustment measure scores. The first set of analyses involved conducting a series of two-factor analysis of variance. The first factor was domain relatedness (related vs. unrelated configuration). The second factor was identity integration status (integrated vs. not integrated). Domain significance was not included in this set of analyses because it is not theoretically specified to be related adjustment in the way that domain relatedness and integration are. As shown in Table 16, however, neither the effect of integration status or relatedness, nor the interaction between the two effects, was significant for any of the five adjustment measures.

Table 16

2-way ANOVA results for each of the five adjustment measures

Adjustment variable	Integration Status	Relatedness	Interaction
Academic adjustment	$F(1, 210) = .002, p = .96$ $\eta p^2 < .001$	$F(1, 210) = 1.36, p = .25$ $\eta p^2 < .001$	$F(1, 210) = 2.02, p = .16$ $\eta p^2 < .001$
Campus belonging	$F(1, 210) = .07, p = .80$ $\eta p^2 < .001$	$F(1, 210) = 0.21, p = .65$.21 $\eta p^2 < .001$	$F(1, 210) = .09, p = .77$.09 $\eta p^2 < .001$
Satisfaction with life	$F(1, 210) = 1.12, p = .29$ $\eta p^2 < .001$	$F(1, 210) = 0.40, p = .53$ $\eta p^2 < .001$	$F(1, 210) = .13, p = .72$ $\eta p^2 < .001$
Identity confusion	$F(1, 210) = .006, p = .94$ $\eta p^2 < .001$	$F(1, 210) = .41, p = .52$ $\eta p^2 < .001$	$F(1, 210) = .002, p = .96$ $\eta p^2 < .001$
Identity coherence	$F(1, 210) = .086, p = .77$ $\eta p^2 < .001$	$F(1, 210) = .64, p = .43$ $\eta p^2 < .001$	$F(1, 210) = .15, p = .78$ $\eta p^2 < .001$

We conducted similar analyses to examine group differences between SOC and White participants and between past and current sports participants, to test for significant group differences on each of the adjustment measures. As shown in Table 15, significant findings were detected when comparing SOC and White participants. Specifically, for the SOC group, mean scores on all of the adjustment measures were significantly lower than the mean scores for White participants. Effect sizes (Cohen's *d*) are included in this section of Table 15. No significant differences between past and current sports participants were detected on any of the five adjustment measures (for t-scores, see Table 15).

Part B: Descriptive differences on adjustment measure scores. Whereas the Part A focused on the group differences in average adjustment scores, Part B examines group differences in extreme levels of adjustment (very high and very low). Using the five adjustment measures, we identified the highest and lowest scoring participants (top/lowest 5%, about 11 participants) for each of the five adjustment measures. In some cases, more than the top/lowest 5% (e.g. 22 instead of 11) were selected because additional participants reported the same scores as the initial 11 individuals. A total of 82 (of 194) participants were identified to belong to at least one of the following high or low adjustment groups. Given the study's focus on ethnicity and sports participation (e.g. Student of Color vs. White; past vs. current sports participation), we tracked membership to these groups throughout the analyses. Within this subsample of 82 participants, 29 (35.4%) were Students of Color and 45 participants (55%) reported current sports participation. We also tracked participants' codes regarding domain relatedness (related

vs. not) and identity integration status as well in our analyses of these high and low adjustment groups.

High adjustment groups. There were 8 Students of Color (17%) and 22 participants reporting current sports participation (47%) who were identified in at least one “high adjustment group” for any of the five adjustment measures (N = 49). Students of Color were significantly less likely to be categorized in any “high adjustment” group ($\chi^2 = 5.50, df = 1, p = .019, \phi = .17$ Table 17, ASR = 2.3)

Table 17

Chi-square analysis results for ethnicity status and high adjustment (overall) group membership

High adjustment group member?	Ethnicity status	
	SOC	White
Yes	8(14.5)	39 (32.5)
ASR	-2.3	2.3
No	52 (45.5)	96 (102.5)
ASR	2.3	-2.3

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

In contrast, a Pearson Chi-Square test did not reveal a relationship between sports participation status (past vs. current sports participation) and membership in at least one high adjustment group ($\chi^2 = 3.15, df = 1, p = .076, \phi = -.13$). We also did not detect a relationship between being a member of this high adjustment group and domain relatedness (related vs. unrelated configuration) ($\chi^2 = .38, df = 1, p = .54, \phi = .04$; ASR = 0.2). Finally, no significant relationship was detected between high adjustment group membership and integration status ($\chi^2 = 1.52, df = 1, p = .22, \phi = -.089$; ASR = -1.6).

Low adjustment groups. There were 22 Students of Color (56%) and 25 participants who reported current sports participation (64%) who were identified in the “low adjustment group” for any of the five adjustment measures (N = 39). A Pearson Chi-Square test revealed that Students of Color were significantly more likely ($\chi^2 = 15.05$, $df = 1$, $p < .001$, $\phi = -.28$; Table 18; ASR = 3.9) to also be categorized in at least one “low adjustment” group.

Table 18

Chi-square analysis results for ethnicity status and low adjustment (overall) group membership

Low adjustment group member?	Ethnicity status	
	SOC	White
Yes	22 (12.0)	17 (27.0)
ASR	3.9	-3.9
No	38 (48)	118 (108)
ASR	-3.9	3.9

Note. Data entered in the first line for each cell refers to the actual cell count, followed by the expected cell count (in parentheses). The second line entered in each cell refers to the adjusted standardized residual (ASR).

In contrast, a Pearson Chi-Square test did not reveal a relationship between sports participation status (past vs. current sports participation) and membership in at least one low adjustment group ($\chi^2 = .76$, $df = 1$, $p = .38$, $\phi = .062$). We also did not detect a relationship between being a member of this low adjustment group and domain relatedness (related vs. unrelated configuration) ($\chi^2 = .68$, $df = 1$, $p = .41$, $\phi = .059$, ASR = 0.8). Finally, no significant relationship was detected between low adjustment group membership and integration status ($\chi^2 = 2.42$, $df = 1$, $p = .12$, $\phi = -.11$; ASR = 1.1).

Given the nature of these findings, we wished to further examine how adjustment group status (high and low) might be related to ethnicity status (SOC vs. White). We next examined ethnicity status for each of our adjustment measures separately, focusing again on the highest (high adjustment) and lowest scoring (low adjustment) participants for each of these measures. We developed 2x2 contingency tables tracking membership in each adjustment high or low adjustment group (yes or no) and group status (SOC vs. White), for a total of 10 tables. We then tested the statistical significance of the n-sizes within each cell for each of these tables. Since some of the cells contained less than five participants, we used Fisher's exact test. Table 19 (below) summarizes the means and ranges for the high and low adjustment groups for each measure.

Table 19

Mean scores and ranges for the highest and lowest scoring individuals for each adjustment measure

Adjustment variable	High group	Low group
Academic adjustment	8.20 (range 7.92 to 8.72)	3.37 (range 2.83 to 3.79)
Campus belonging	7.11 (range 7.00 to 7.27)	3.76 (range 3.27 to 4.08)
Satisfaction with life	5.0 (no range)	1.68 (range 1.0 - 2.0)
Identity coherence	4.89 (range 4.83 – 5.0)	2.77 (range 2.0 - 3.0)
Identity confusion	4.75 (range 4.67 to 5.0)	2.11 (range 1.5 to 2.33)

Academic adjustment. There were a total of 9 participants for the high academic adjustment group, with 4 identifying as Students of Color (44%). Fisher's exact test ($p = .46$) did not detect probability differences between White participants and Students of Color with being a member of this high adjustment group.

For the "low academic adjustment" group ($n = 10$), 6 of these participants identified as Students of Color (60%). Fisher's exact test ($p = .071$) did not detect probability differences between White participants and Students of Color with being a member of this low adjustment group.

Campus belonging. Ten participants belonged to the "high belonging" group, with 2 participants identified as Students of Color (10%). Fisher's exact test ($p = .73$) did not detect probability differences between White participants and Students of Color with being a member of this high adjustment group.

The "low belonging" group was made up of 9 participants. Six participants identified as Students of Color (67%). Fisher's exact test ($p = .026$) demonstrated the probability was higher for Students of Color participants to belong to this low adjustment group.

Satisfaction with life. Thirteen participants belonged to the "high satisfaction" group." One participant (7.6%) identified as a Student of Color. Fisher's exact test ($p = .069$) did not detect probability differences between White participants and Students of Color for membership in this high adjustment group.

Ten participants made up the "low satisfaction" group, with 3 of them identifying as Students of Color (30%). Fisher's exact test ($p = 1.0$) did not detect probability

differences between White participants and Students of Color with being a member of this low adjustment group.

Identity confusion. The high adjustment group on identity confusion was made up of 19 participants, with 3 of them identifying as a Student of Color. Fisher's exact test ($p = .19$) did not detect probability differences between White participants and Students of Color participants with being a member of this high adjustment group.

For the "low adjustment" group, a total of 12 participants belonged to this group, 8 of them identified as Students of Color (66.7%). Fisher's exact test ($p = .0091$) demonstrated the probability was higher for Students of Color participants to belong to this low adjustment group.

Identity coherence. 18 participants were in the "high identity coherence" group. Two of the participants identified as Students of Color. Fisher's exact test ($p = .06$) did not detect probability differences between White participants and Students of Color participants with being a member of this high adjustment group.

There were 15 participants in the "low identity coherence" group. Nine participants (60%) identified as Students of Color. Fisher's exact test ($p = .018$) demonstrated the probability was higher for Students of Color participants to belong to this low adjustment group.

Participants in multiple adjustment groups. We were also interested in exploring further participants who identified belonging to more than one high or low adjustment group. We tracked participants who either a) were placed in two or more high adjustment groups or b) were placed in two or more low adjustment groups.

First, we looked at the ways in which participants in the “two or more” high adjustment groups (n=15) identified with regards to their ethnicity (SOC vs. White). Fisher’s exact test ($p = .16$) did not detect probability differences between White participants and Students of Color participants with being a member of this high adjustment group. We also examined identity (sports and ethnic identity domains) configuration patterns (related vs. not related) with being a member of this group. Fisher’s exact test ($p = 1.0$) did not detect probability differences between participants experiencing their two domains being related and participants experiencing their two domains as unrelated, with being a member of this high adjustment group. We did not detect probability differences for integration status ($p = .10$) between participants categorized in the “integrated” category versus “not integrated” category.

Multiple low adjustment groups. Next, we looked at the ways in which participants in the “two or more” low adjustment groups identified with regards to their ethnicity (SOC vs. White). There were a total of 15 participants in this group. Fisher’s exact test ($p = .077$) did not detect probability differences between White participants and Students of Color participants with being a member of this low adjustment group. We also examined identity (sports and ethnic identity domains) configuration patterns (related vs. not related) and integration status (integrated vs. no integration detected). We did not detect probability differences for configuration pattern, nor for integration status, with being a member of this low adjustment group ($p = .43$ and $p = .592$ respectively).

CHAPTER 4:

DISCUSSION

The purpose of this study was to empirically examine the different ways ethnically diverse college students experience their ethnicity and sports identity domains. This study also explored how these identity experiences were related to participants' adjustment. In particular, we were interested in how identity experiences concerning ethnicity, sports and adjustment might differ between Students of Color (SOC) and White participants. Our SOC group consisted of participants identifying with a variety of Asian American backgrounds (e.g. Korean, Malaysian, Chinese, Indian, Vietnamese, Tibetan). Two other groups we focused on in our analyses were participants reporting either current participation in sports or only past participation in sports.

Our analyses, framed across three research questions, detected a link between domain relatedness and identity integration, but no relationship between domain significance (sports, ethnicity or neither) and identity integration. For our SOC subsample, a relationship between domain significance and domain relatedness was detected. Neither domain relatedness, nor identity integration, was significantly linked to positive or negative adjustment outcomes. This study also did not detect significant differences between past and current sports participants on these identity and adjustment experiences. Some of our analyses did detect significant differences between SOC and White participants. Below we consider each of these findings in greater detail for each of our research questions and make recommendations for further research.

Significance and Management of Multiple Identity Domains

Our first research question examined the different ways participants manage their two identity domains. In line with our theoretical approach focusing on Erikson's three identity layers, this portion of our analysis focused on the social and personal layers of

Identity. Specifically, participants' experience of personal connection (personal layer of identity) towards each domain, given some of the roles or experiences (social layer of identity) they may have separately within sports and ethnicity contexts. In particular, we were interested in if participants demonstrated a stronger connection towards one domain than the other. Slightly less than half of our sample (about 45%) described the sports domain to be more significant than the ethnicity domain. A smaller group of participants (about 17%) described their ethnicity domain to be more significant than the sports domain. The remaining group of participants (about 38%) indicated equal levels of significance, that is, neither domain was more or less significant than the other identity domain. Within this third group, just three participants provided narratives that were coded to express that *neither* domain was significant. The remaining participants indicating equal levels of significance provided narratives that were coded to reflect that each of the domains were significant in their lives.

Our analyses detected that Students of Color (SOC) were more likely than their White peers to demonstrate their ethnicity domain to be more significant to them than their sports domain. White participants on the other hand, were more likely than SOC to demonstrate stronger identification with their sports identity domain. Thus, SOC participants and their White peers demonstrated differences between these two domains of identity. From an Eriksonian perspective, this finding offers support that people can differ with regards to how much they identify towards a particular identity domain. This finding is not too surprising, as it has been demonstrated in previous research using quantitative measures to assess levels of identification, towards ethnic identity for example (e.g. Phinney, 1992; Walker & Syed, 2013). Though our SOC group was limited

in that it was only made up of participants who identified with Asian American (vs. Latino or Black-American groups) backgrounds, our finding is in line with previous research on ethnic identity research amongst ethnic minority groups.

The next area of analysis was important to us, as we believed it was a way for us to begin addressing how Erikson's third layer identity, ego identity, interacts with the other two layers. This layer, described as the synthesizer, or manager of the other two identity layers, is theorized to contribute to people being able to derive meaning or understanding of their roles and relevancies associated with multiple identity domains. In our study, we sought to capture this particular layer by focusing on the ways in which participants psychologically experienced their ethnic and sports domains to be separate or related parts of their lived experiences.

The majority of our sample (56%) shared experiences indicating the relatedness between their sports and ethnicity domains. Interestingly, SOC were more likely than their White peers to experience their sports and ethnic identity domains as related. Further analysis of just the SOC group in our study detected that SOC participants who more strongly identified with their sports domain than ethnicity domain were also more likely than what was expected by chance to experience their ethnic and sports identity domains to be unrelated. This finding was not detected within our White participant group. These findings seem to offer further support for differences in identity experiences between ethnic minority and White groups, highlighting that these two groups might differ with how multiple domains of identity are experienced and made sense of. Potentially, it may be the case that SOC are more likely than their White peers to experience a "spill over" of ethnic identity into other domains (e.g. sports, academics),

especially if their ethnic identity is significant to them. Similar patterns have been detected in other studies examining SOC and ethnic identity experiences (Syed, 2010; Walker & Syed, 2013). This is an area of research that is especially important to continue considering, as it focuses on ego identity, a layer of identity that has received less empirical attention than the other two layers. Furthermore, being that our SOC group was comprised of participants identifying with Asian American backgrounds, it is recommended that future work explicitly include SOC participants from non-Asian backgrounds in order to more substantially address how ethnicity might “spill over” into other domains for other ethnic minority groups.

Importantly, these findings on our Students of Color group also highlights the potential for within-group differences that might exist with regards to identification towards multiple identity domains. Specifically, our findings highlighted the potential for the management of multiple identity domains to differ amongst SOC participants who either see their sports domain as more significant, ethnicity domain as more significant, or neither domain being more significant than the other. While our study was not designed to address these differences further, past literature has emphasized the existence of within-group differences for the ways identity development is managed and experienced (e.g. Benet-Martínez & Haritatos, 2005). In particular, previous research focusing on college athletes illustrates the extent to which stronger identification towards a sport is associated with weaker identification towards other domains (Brewer, Van Raalte, & Linder, 1993; Petitpas & Champagne, 1988). A similar process may have taken place within our SOC sample, resulting in participants with stronger identification towards their sports domain to be less likely to see their ethnicity and sports domains as

being related. Still, this same pattern of identification was not detected within our White sample. It is not clear from the present study if a similar pattern of findings would be detected for other ethnic minority groups, in comparison to their White peers. The participants in the present study were of only Asian American backgrounds. Yet identity researchers do acknowledge group differences in identity development across various Asian American groups (Ai, Nicdao, Appel, & Lee, 2015; Seol, Yoo, Lee, Park, & Kyeong, 2016). Thus the research team does not believe that the present study's SOC group can be considered a strictly homogenous group. Further examining identity domain relationship patterns amongst specific ethnic groups could make clearer how White and various ethnic minority groups experience multiple domains and integration. The researchers recommend further research to address differences in how participants of diverse ethnic groups experience, configure and manage multiple identity domains.

Interestingly, our analyses did not detect the same kinds of findings when we focused our same analyses on two other kinds of groups: past and current sports participants. We did not detect these two groups to differ with regards to whether they demonstrated experiencing their ethnic and sports domains to be related, nor with regards to experiencing one domain to be more significant to the other. The nature of these findings are intriguing, as we had focused some of our analyses on these two groups to account for time as it might relate to identity development. Specifically, we thought that an emphasis on past and present sports participation could help us further understand how the passage of time is linked to the management of multiple identity domains. In one way, our null findings could be interpreted to expand on how the interplay of Erikson's three identity layers interact. Current engagement in social roles associated with

particular domains, in this case sports, might not be required for participants to derive personal meaning and a sense of personal significance from this particular domain. If current engagement were required for this to occur, we would have expected past participants to have been less likely to demonstrate their sports domain as being personally significant.

However, another lens we consider in our interpretation of our findings focuses on the ways in which students participate in athletics. For example, there is literature that emphasizes the ways people are able to derive a sense of identity with athletics by watching or being a spectator of sports (Wann & Weaver, 2009). In the analyses we performed, we did not account for this type of identification. It is possible that past sports participants who denied current participation may have actually been engaging in sports on an avenue other than playing on a sports team or athletic activity. We recommend further exploring how sports spectators and identification towards particular sports teams intersects with the identity experiences participants in athletic groups or individual sports have (e.g. Appelbaum et al., 2012). From an Eriksonian perspective, this area of inquiry could also further our understanding of how the social layer of identity is involved in identity development for this particular domain.

One other area we addressed for the first research question has to do with the small sub-sample of participants coded to demonstrate that neither identity domain was significant to them ($n = 3$). Due to the small sample size, we elected to not conduct further analyses to compare these participants' identity experiences to the other participants in our study. Yet we believe that purposely comparing the identity experiences of participants demonstrating low or no identification towards particular domains could help

make clearer the interplay among social, personal and ego layers of identity. In particular, we find it interesting to consider what the implications are for participants who socially engage in multiple identity domains that have very little personal significance to them. Similar areas of research exist for domains such as professional or vocational identity (e.g. Truss, Shantz, Soane, Alfes, & Delbridge, 2013). Our recruitment strategy relied on participants to self-select themselves to participate in our study. Since our study was advertised to be a study on “Sports and Culture”, we speculate that participants at least somewhat interested in either or both of these domains were most likely to decide to participate. As a result, it’s possible that very few participants with no interest in either domain ended up participating in our study.

Identity Integration and the Management of Identity Domains

This portion of our study focused on the linking the management of identity domains to the experience of identity integration. We were especially interested in examining identity integration because of the theoretical links it has with positive and healthy adjustment (Erikson, 1968). Experiences of coherence and positive adjustment are believed to partly come from the integration of a person’s multiple identity domains. Our approach to studying identity integration sought to account for both time and multiple identity domains. Specifically, we wished to examine how people have experienced and drawn meaning from multiple identity domains (context) and constructed these experiences into their current (present time) sense of self. To do this, we focused on narratives specifying how participants’ ethnic and/or sports experiences impacted their current internal (psychological) experience of themselves.

Our analyses detected that just under half our sample (about 43%) demonstrated integration. Interestingly, we detected that integration was more likely than expected for participants reporting their sports and ethnicity domains to be related, compared to participants sharing that their domains were separate. From our theoretical framework, this finding supports our stance of emphasizing the ego identity layer, or manager of identity, when seeking to account for identity development and integration. In our study, participants deriving an understanding of the interrelatedness of sports and ethnicity domains were more likely than by chance to demonstrate the integration of these domains into their current sense of self. This finding supports the theoretical claim that the ego identity layer is linked to the process of identity integration (Erikson, 1986).

Our group-level analyses did not detect differences between SOC and White participants, nor between past and current sports participations, on the prevalence (yes/no) of integration. Membership to these groups was not significantly statistically linked to whether or not participants' narratives were coded to demonstrate integration. We interpret these findings to suggest that pathways towards integration might rely more on individual-based experiences that are not completely tied to just a person's ethnic background, sports participation status, or reported significance of a particular domain.

One area of identity research to consider in this context is the ethnic and racial discrimination literature. This literature offers another, somewhat different, arena for observing the interplay of Erikson's three identity layers and integration. This literature expands on the ways social engagement and personal significance of ethnicity can contribute or hinder a person's positive adjustment, aspects of identity emphasized by Erikson's theory on the personal and social layers of identity (e.g. Park, Schwartz, Lee,

Kim & Rodriguez, 2013; Romero, Edwards, Fryberg & Orduña, 2014). Continuing to address how experiences involving racial or ethnic discrimination interacts with other identity domains, such as the sports domain (Fuller, 2013), and influences the meanings people generate about themselves could make even more clear how the three layers of identity, the process of integration, and adjustment are interlinked across identity domains. In addition, existing literatures on ethnic/racial discrimination do account for experiences and processes that can be specific to particular ethnic and racial groups (e.g. Black vs. Asian American experiences; Greene, Way, & Pahl, 2006; Tran & Sangalang, 2016). Thus, similar to identity development research, the existing literature on racial/ethnic discrimination experiences does acknowledge experiences and processes specific to particular ethnic, racial and pan-ethnic groups.

Identity Experiences and Adjustment Outcomes

In this portion of our analysis, we focused on linking the management of domains and identity integration to positive and negative adjustment outcomes. This part of the analysis was primarily quantitative and was informed by the coding categories we had derived from our qualitative analyses and findings in answering the first two research questions. Initially, we had examined if particular identity configurations (domains related vs. not) or the presence of identity integration was linked with better adjustment. A total of five adjustment outcomes were considered. In contrast to our expectations, we did not detect more positive adjustment outcomes on any of the measures for participants demonstrating integration of their ethnicity and sports domains. Participants coded as experiencing their two identity domains as related did not also demonstrate better adjustment. These findings did not fit our expectation, given Erikson's theory on identity

integration being associated with positive adjustment outcomes. Specifically, we expected to detect a positive association between the presence of identity integration and positive adjustment.

Methodologically, our coding system employed in this study to detect identity integration was restricted to a “yes” vs. “no” format. This dichotomous format restricts us from detecting the degree to which a person might be experiencing identity integration. As a result, potential links between identity integration and outcomes may not have been detected. Similarly, the detection of identity integration might require researchers to use more in-depth approaches to understand participants’ internal experiences concerning multiple identity domains. The method we used to review participants’ experiences (i.e. self-report typed responses) may not have provided participants with a space to soundly share about the ways in which they have experienced and configured their identity domains to influence their current sense of self.

Interestingly, in the second set of analyses addressing the third research question, we detected group differences on some of the adjustment outcomes. Firstly, in our mean-level analyses SOC demonstrated poorer outcomes on all five measures of adjustment, compared to their White peers. Secondly, after identifying the best adjusted participants across each of the five measures, we were able to detect that Students of Color (SOC) were underrepresented in the collective “high adjustment” group. We did not detect similar differences between past and present sports participants at this level of analysis. The nature of the findings on SOC was maintained when we looked at “high adjustment” group membership within each of the five adjustment groups as well. Specifically, SOC were underrepresented in the groups demonstrating the highest levels of life satisfaction

and identity coherence. Similarly, SOC were overrepresented in the groups demonstrating the lowest levels of identity confusion and campus belonging. Based on our study, it's difficult to answer why SOC at the mean-level SOC were demonstrated poorer adjustment. The current study also cannot completely account for why SOC at the extreme-level analyses were overrepresented in some of the low adjustment groups and underrepresented in some of the high adjustment groups. As stated earlier, SOC and White participants did not seem to significantly differ with regard to identity integration status. Thus our theoretical framework linking identity integration to positive adjustment does not seem to align with and explain this pattern of results.

Other literatures focused on college adjustment and Students of Color document some of the risks and difficulties Students of Color can face at college that negatively impacts their adjustment, including Asian American subgroups (e.g. Southeast Asian groups; Hausmann, Ye, Schofield, & Woods, 2009; Palmer & Maramba, 2015; Suarez-Balcazar, Orellana-Damacela, Portillo, Rowan, & Andrews-Guillen, 2003). The discrimination literature cited above (e.g. Park, Schwartz, Lee, Kim & Rodriguez, 2013) also documents the ways in which race and ethnicity status are linked to negative adjustment outcomes. It is possible that the pattern of results we found were also picking up on some of the barriers to adjustment Students of Color experience in college, outside of the realm of ethnicity and sports identity integration. We suggest interlinking these important literatures concerning integration, discrimination, and college student adjustment to further examine how we can understand and promote positive identity experiences and adjustment outcomes for Students of Color.

Theoretical Implications

The current study sought to link Erikson's (1968) theory on identity development to adjustment outcomes, taking into account the process of identity integration and experiences associated with two domains of identity. This was carried out through the use of self-report data, where we invited ethnically diverse participants to share about the ways they experienced their sports and ethnicity domains of identity. The study's design attended to each of Erikson's three identity layers (social, personal, and ego) both in the methodology used and analyses conducted. This was an important aspect of the study, since the third layer, ego identity, has received less focus on in existing literature. We hope our study provides a potential framework for how this third layer of identity can be included and conceptualized in identity research. In addition, the nature of our findings emphasizes the importance of considering all three layers of identity in identity research. The nature of our findings bring forth that participants across a variety of ethnic groups and sports backgrounds navigate and manage multiple identity domains in a variety of ways. Accounting for experiences and personal significance, as well as how people manage and configure multiple domains, is an essential part of identity integration research.

Limitations

There are several limitations in our study that we wish to highlight. Firstly, for examining identity integration, our study relied on coding narrative content that participants had provided as a part of a larger survey. Then, our coding process required participants to explicitly share how their ethnic and/or athletic experiences were influential of how they experience their current sense of self, in order to be coded as "integrated". It is possible that there are other methods for giving space to participants to

share about how their current identity is informed by multiple identity domains (e.g. semi-structured interviews, focus groups). Slightly more than half of our sample had narrative responses that were coded to as “integration not demonstrated.” It is possible that within this subsample, there were people who may have expressed the integration of their sports and ethnic identity domains, had another method for examining this process been available. Thus it is possible that we did not successfully capture the experience of integration with the methodology we used. As cited above, observing identity integration might require researchers to use more in-depth approaches that provide participants with opportunities to expand on how their identity domains are influential of their current sense of self (e.g. interviews, diaries). We acknowledge this possibility and recommend that future research further address ways of observing and accounting for this psychological process of identity integration across domains (Syed & McLean, 2015).

Furthermore, we also recommend considering other methodologies to examine how the passage of time accompanies the process of managing and generating meaning towards multiple identity domains. Identity integration emphasizes the sense of coherence and sameness of self across various contexts and time. One way we addressed the aspect of time for identity integration in our study was by comparing identity experiences for participants with past or present experiences with sports. Yet none of our analyses detected differences in identity management or identity integration between these two groups of participants. This does not necessarily mean that current or past experiences do not influence the management of identity. Longitudinal designs in particular could offer a clearer illustration of how the three layers of identity interact and influence identity integration and adjustment outcomes. This is important to us to

consider, since previous research has provided evidence for the dynamic nature of managing multiple identities, documenting that how people manage and make sense of multiple domains can change over time (Syed, 2010).

In addition, we challenge identity scholars to continue to make use of both qualitative and quantitative methods for examining identity development and identity integration. Integrating the strengths of both of these frameworks could offer scholars opportunities to examine more in-depth the interplay of the social, personal and ego identity layers and how they inform identity integration and positive adjustment. Our study only addressed two domains of identity, an ethnic and sports one. Mixed methodologies could advance our understanding of how other domains of identity (e.g. academic, Walker & Syed, 2013; gender identity, Melendez, 2006) interact with ethnic and sports identity domains. For example, there is evidence that for some college students, participation in sports can serve as an avenue for more strongly identifying to a campus setting or academic institution (Melendez, 2006).

The nature of this finding could be interpreted to mean that sports can potentially serve as an arena for some people to develop a stronger identification towards their academics, or at least towards academic spaces. Accounting for the possible overlap between domains, in this case an academic and sports one, requires us to continue considering the interplay of multiple identity domains. Another area of inquiry that we did not focus on considers the type of sports arenas participants might be spending time in with regards to their sports endeavors. For example, there is research documenting the unique experiences sports participants can have with regards to type of sport (individual vs. team; e.g. Evans, Eys, & Bruner, 2012) or academic setting where sports are engaged

in (e.g. Division I vs. II; Sturm, Feltz, & Gilson, 2011; Watt & Moore, 2001). In addition, our sample consisted of participants identifying as White/European-American or towards an Asian American background. The extent to which the findings from this study could be applied to other ethnic minority groups is an important question to apply in future research. This is especially important to consider, since the existing literature on identity development does acknowledge that members of specific ethnic groups (e.g. Black vs. Latino vs. Korean) can experience identity-related events differently (e.g. Greene, Way & Pahl, 2006; Palmer & Maramba, 2015). These are all important areas of identity research that we recommend continuing to consider. Increasing our ability to methodologically link more identity domains to identity integration and adjustment outcomes requires us to be able to soundly account for the interactions and complexities across and within domains, as well as across and within specific ethnic/racial groups. Using the strengths of both quantitative and qualitative methodologies might create an ideal arena to conduct this type of research.

Conclusion

The current study examined the different ways ethnically diverse college students experience their ethnicity and sports identity domains. Levels of significance, relatedness and the integration of these two domains was accounted for and linked to adjustment outcomes. While our study did not detect adjustment outcomes to be better for integrated participants, we did detect that participants expressing relatedness between the two domains to be more likely to demonstrate integration. We also found that Students of Color membership was associated with poorer adjustment outcomes. These findings

underline the importance of further understanding the interconnections among identity domains, identity integration and positive outcomes.

CHAPTER 5:
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CHAPTER 6:

APPENDICES

APPENDIX A

Special Note about Sample Size

The original full sample consisted of 215 participants (64% women) ranging in age from 18 years old to 33 years old (M age = 21.0, SD = 3.03, mode = 19). A total of 135 (63%) participants identified as White, Caucasian, or European-American, with the remaining sample (n = 80) forming the original Students of Color (SOC) group. Majority of participants in this sub-group identified as Asian American (n = 60, 75%). Due to their large representation in the SOC group, we selected out the Asian American participants for the SOC analyses. Other groups in the original SOC group included African American or African (n = 7), Multi-ethnic (n = 9) and Latino or Hispanic (n = 4). Thus the final sample reported on above consisted of 195 participants total (White subgroup, n = 135; SOC subgroup, n = 60).

For the analysis of the qualitative data it is recommended to have between 5-25 participants in a phenomenological study who have experienced the same *phenomenon* (Creswell, 2012). In the present study, the phenomenon is the experience of race/ethnicity and sports. Since the research team sought to recruit participants several different groups (e.g. past vs. present sports participation; ethnic minority and White backgrounds), the research team expected to recruit at least 5-25 participants from each of these groups to be represented in our qualitative analyses, or between 20-100 participants total. This targeted range is similar to the number recruited in one of the key qualitative studies cited above (N = 30; Schachter, 2004), which described four different identity configurations.

While a range of 20 to 100 participants would be methodologically sufficient for a qualitative study of just phase 1, our study intended to also use quantitative data and generate two groups for part 2 of the analysis plan. The research team intended to create two groups in part 2 of the analysis based on level of adjustment, with the possibility of testing for group differences on frequency of a narrative code between these two groups or by qualitatively comparing the content of themes. While the research team did not predict ahead of time which code(s) or how many codes will be analyzed across the high and low adjustment groups, the researchers wished to have substantial members of both gender groups and from different ethnic backgrounds represented within the high and low adjustment groups. With this in mind, the research team used another study as a guide for our recruitment process. This study used qualitative methods to analyze the content of narratives across different groups.

Syed and Azmitia's (2008) study analyzed narrative content of 191 participants, comparing narrative themes across ethnic groups. Though this study did not purposefully sample participants based on adjustment scores for further analysis, the study does illustrate how a sample close to 200 participants allows for researchers to successfully compare narrative data in qualitative and quantitative formats based on group memberships. With this in mind, the research team believed that a targeted sample size of 200 participants would allow us to successfully code narrative data and compare data across the high and low adjustment groups.

APPENDIX B
Coding Scheme for Calculating Socioeconomic Status

No school (1)

Elementary school (2)

Middle school/Junior high (3)

Some high school (4)

High school diploma (5)

Associates degree or equivalent (2-year degree) (6)

Bachelor's degree (4-year degree) (7)

Master's degree (8)

Doctorate or Professional degree (9)

APPENDIX C
Additional Demographic Information about Participants' Sports

List of athletic activities participants report participation in when describing their sports experiences

- swimming
- weight lifting
- running
- fencing
- judo
- taekwondo
- mixed martial arts
- gymnastics
- wrestling
- boxing
- cycling
- skiing
- alpine skiing
- tumbling
- shot put
- horseback riding
- mountain biking
- yoga
- karate
- pole vault
- soccer
- basketball
- volleyball
- softball
- lacrosse
- baseball
- hockey
- captain's ball
- ultimate frisbee
- football
- cheerleading
- rugby
- dodge ball
- netball
- track
- badminton
- tennis
- table tennis
- squash
- cricket
- golf
- cross country
- Nordic skiing
- rowing
- dance
- bowling
- figure skating
- marching band

APPENDIX D

Additional Demographic Information about Participants' Academic Majors

Participants' reported academic majors (open-ended responses)

Social sciences and human Services & health services: Psychology, counseling psychology, child psychology, clinical psychology, educational psychology, marriage and family therapy, sociology, anthropology, youth studies, law, speech language hearing sciences, political science, family social science, history, kinesiology, nursing, physical therapy, dentistry

Math, engineering, and science: Biomedical engineering, biology, aerospace engineering and mathematics, computer science, chemistry, physiology, electrical engineering, biochemistry, nutrition, statistics, mathematics, neuroscience, ecology evolution and behavior, chemical engineering, mechanical engineering, biology society and environment, food science, medical school, genetics, pharmacology, industrial and systems engineering, microbiology, public health, environmental engineering, computer engineering, materials science and engineering

Communications, languages, and cultural studies: Spanish, ASL interpreting, African-American and African studies, journalism, mass communication, strategic communication, Chicano studies, global studies, American studies, communication studies, Russian, English, cultural studies

Art, Design, and the Performing Arts: Art, apparel design, interior design, music, product design

Business: Business, supply chain and operations management, finance, economics, marketing, international business, accounting, entrepreneurial management, management information systems, retail merchandising, supply chain management, business and marketing education, sport management

Individually Designed Majors: Individualized studies

APPENDIX E

Questions Used in the Pre-screening Questionnaire and Demographic Measure

Pre-screen survey:

- What is your age?
- How do you identify with regards to gender?
- Please describe how you identify with regards to ethnicity and/or race
- Do you participate in sports now while in college?
- Which sport(s) do you participate in?
- Please describe the nature of these sports experiences (e.g. intramural sports, recreational sports, club sports):
- Did you participate in sports prior to college?
- Which sport(s) did you participate in?
- Please describe the nature of these sports experiences:
- When did you stop participating in sports?

Demographic questionnaire:

- Do you participate in sports now while in college?
- Did you participate in sports prior to college?
- If yes, which sport(s) did you participate in?
- If you no longer participate in sports (ie collegiate, NCAA or in intramurals or club), when did you stop participating in sports?
- What race/ethnicity do you identify with? (please list as many as you feel are important to who you are)

APPENDIX F
List of Narrative Prompts

1. How important is your cultural/ethnic/racial background to how you see yourself?
Why is it important or not important to who you are? (personal)
2. How important are athletics/sports to how you see yourself? Why is it important or not important to who you are? (personal)
3. What role does your cultural/ethnic/racial background play in your everyday experiences? (social)
4. What role does athletics/sports play in your everyday experiences? (social)
5. Now that you've spent time describing your race/ethnicity and sport-related experiences, does your cultural/ethnic/racial background influence your participation in sport? Do you see the two areas of your life related in any way? (ego)
6. Think of a time when your culture/race/ethnicity was especially salient to you during an athletic event or experience (i.e. a sports game that you participated in or watched). (ego)
7. How do you make sense of the previous experience in terms of how you see culture/race/ethnicity and athletics fitting into your life today? (ego-integration)

APPENDIX G
Special Notes About Pilot Data for Narrative Prompts

It was important to pilot each of the seven narrative questions prior to recruiting participants for the study (van Teijlingen & Hundley, 2002). This set of prompts were initially presented to graduate level students and faculty members in the research team's research lab who were familiar with qualitative research and/or the management of sports and race in an academic context. Members of the research lab consulted with our research team and their feedback or recommendations were integrated into the methodology accordingly.

Secondly, several undergraduate research assistants were asked to review the revised set of questions and report on any issues, comments or suggestions they had about the wording or meaning of questions. This method of piloting questions can be useful to identify confusing constructs and find out what potential participants might think about while reading the survey questions on a computer screen (Brach, 2000; Fonteyn & Fisher, 1995). Information gathered from this procedure was used to check that participants tended to respond to the narrative prompts in ways that align with the research team's goals in designing the set of questions.

APPENDIX H

Coding Manual and Themes Focused on in Qualitative Analyses

Code the meanings and descriptions participants provide about their sports and ethnic identities. This process involves coding for content and meaning participants describe about these two domains.

Coding Manual Goals

Allows coder to tally the kind(s) of meanings that participants discuss about their ethnic and sports identities including,

- Domain specific types (are the domains significant) (*social/personal*)
- Shape/configuration-specific meanings (about the relationship between domains OR why they aren't related) (*ego*)
- Relevant(s) domain to current psychological self (*integration*)

Context: Participants responded to the following 7 questions. Responses read by the coder are in order of these questions. Responses to each question are separated by spacing. IE response to question 1 is in the first paragraph, and so on...

Coding Instructions & Definitions

Instructions: Coder(s) is/are to review this entire manual before beginning the coding process. It is also highly recommended that participant review each narrative response (1 per participant) from beginning to end before coding it. Coder also uses the excel coding sheet to track codes. It is also recommended that coder review the descriptions below before and as they code for each category.

1. Race/Ethnicity Specific meaning (social/personal layer): 2 sub-parts for this section, part "a" and "b".

- a. **First part: Significant domains-** Which domain(s) are significant to the participant? Responses focused for this coding section tend to come up in the first four paragraphs (responses to first four questions)

1. Ethnic/racial/cultural (yes or no)
2. Sports (yes or no)

E.g. of a "yes" response (assign a "0" on code sheet if no, "1"

if yes)

“I feel that this is very important to who I am...I feel that my Chinese background is also a huge part of how I see myself.”

E.g. of a “yes” response that initially reads as a “no”

“I do not really feel a strong connection to my racial background because it's pretty diverse. I enjoy the traditions my family keeps but don't feel many ties to my culture....A small role, generally I think that being a white male you blend in to the Minnesota community and I don't feel like being a white male shapes my everyday life in a dramatic fashion, for good or for bad.”

E.g. of a “no response”:

“I really enjoy being involved in athletics, but I don't think that they play a role in defining who I am.”

OR

3. Participant suggests neither domain is significant. In this case the coder must have decided to select “no” to both parts 1a-1 and 1a-

2. E.g. of this kind of response:

“It is neither important or not important to me, because I have never really given it much thought. To me, my racial background has never been something that has effected me in a negative way, so I don't think about it much.” ... [AND] “It isn't very important to how I see myself, but I think it's important to get regular exercise, because it helps you stay fit and healthy, both physically and mentally. The sports I played in high school do not

really define me, it was just an experience and something I did as a hobby.”

b. **Second part: Level of significance:** Does one domain seem more significant than the other? (only if participant says or suggests this)

1. 1 for “sport”, 2 for “culture”, 3 for “neither”. E.g. of sports being more significant:

“I believe my cultural/ethnic/racial background is somewhat important to me, but in no way totally defines me as a person.....” [and then] “I believe athletics are very important to how I see myself. I grew up playing sports and loving every minute of it. Today, I couldn't imagine not being a participant in any sport.” (sports > ethnicity)

E.g. of sports and culture being equally significant (coder would have selected “0/No” for 1b-1). This code can occur even if the participant seems to spend more time discussing one domain more than the other. IE the coder focuses on language used in descriptions of both domains, not length of words spent on descriptions.

“My racial background is what makes me unique in this country where everybody follows a stereotype.Doing a sport has always awaken passion in me. My background is a big part of my life...Sports are the remark of my day” (sports significance = ethnicity significance)

2. **Shape specific meaning (ego):** What does the participant say about the configuration between the domains (ie describes relationship or why there isn't a

relationship between sports and culture domains). Majority of responses to code for this section come up in final 3 paragraphs, especially the last paragraph if participant isn't discussing "integration." Some other aspects of the relationship may have come up in response to questions 1 and 2. Things tied to here and now if it's psychological in nature should be considered for identity integration (see below) and are usually brought up in the final 2 paragraphs of the narrative responses (questions 6 and 7).

- a. **2 domains are related.** Participant describes realizing something, learning something new, lessons learned, recognizing a clash (ie relationship) between two domains.

E.g. Participant links observations about race to sport and relevancy of sport to their cultural group

"Like I stated before, the city where I grew up in was a city where everyone pushed themselves to become the best. Everyone had some sort of experience with everything-- athletics, academics, and other clubs...I feel that this was one of the connections between being Chinese and my participation in sports" [and] "The only other connection that I can really see between being Chinese and participating in national badminton is the fact that badminton is a relatively Asian sport...This could have also been another reason I felt like I belonged with these badminton players, and another reason why I continued playing badminton during the times that I did"

Another example

"I guess I see more people of the same race playing certain sports than other, but I don't think that my racial background

has necessarily influenced my participation in a sport. I have never felt that I could or couldn't play a sport because of it...”

E.g. Participant describes how cultural (ethnic) shift from one place to another informs their sports experience.

“Before I moved to US, I was raised in the culture where soccer is the most important sport, so I played and watched soccer constantly. However, when I moved to US, no one really didn't care about soccer, so I had to adjust to other sports such as football, NBA, and NHL”

E.g. of a response to final question that isn't coded as integration, and instead is coded here as meaning derived from both domains.

“This experience really put together the fact that culture and athletics can find common ground and can really impact a person's life.”

***Participants may initially describe there not being a relationship between their ethnicity domain and then proceed to describe some sort of connection. They are to be coded as “related”, not “unrelated”. Here are some examples

“I think that there isn't really a strong tie between being a caucasian and being a runner. I don't see any relation between them because generally the eastern african's are traditionally exceptional distance runners and all the other

racers are trying to catch those individuals.....have a lot of Swedish and French-Canadian background and I am a United States citizen so during these times I feel like a little bit of my culture is on display.”

“I don't tend to think about how my color effects my life. However, since I am part of a team, I do notice the general consistencies when it comes to the generic race of my sport...Can't help but wonder if my ethnicity played a role in fitting me into this 98% white sport.”

“I don't really think that my cultural background has influenced my decision to play a sport. I come from a particularly white city, where culture didn't really matter when it came to playing sports. / / I can see where the two areas may collide. Competing against other schools in sports that had more of a diverse student body was where I could see how the two areas collide. One time where I think that my cultural background was especially salient was when my high school football team (consisted of all white males) played another high school football team that consisted of primarily African American males.”

- b. **“Unrelated” domains.** Participants state domains are unrelated/correlated. May share why/how the 2 domains aren't related

E.g. *“I do not recall an experience that it [i.e. the convergence of domains] was.”*

E.g. *“I am not sure my culture/race/ethnicity has much to do with my preference for sports. I think it has more to do with....”*

E.g. Discussing why they are not connected, based on differences or observations.

“Not that much. People in my country like watching sports but not so much doing them. This is one of the things that I enjoy the most in the States.”

E.g. *“I do not see my culture/race/related to my preference for sports. I think it has more to do with the way my parents raised me.”*

3. Psychological Integration meaning- This is the final coding category. Majority of these responses comes from final last 2 paragraphs of participants' narratives, especially the last one. Participants' descriptions here must involve some aspect of how one or both domains influence a part of their current sense of self.

- a. Participants may not talk about who they are going forward (Future self)
“I have come to the conclusion that I will never be very athletic and my kids and future descendants will never be very athletic. The majority of Indians are not very athletic due to thousands of years of not being athletic and I do not see that changing anytime soon. However, just because I do not play a sport does not mean I cannot be involved in a sport. There are many more aspects involved than just playing a sport which is why someday I hope to become a sports medicine doctor since I love athletics and want it to be a part of my life moving forward.”

This participant tells the reader about how what they've done/felt in the

past regarding sports/culture informs who they are today/or going to be “tomorrow.” How they experience others or observe the world without informing reader about their own psychological experience doesn’t count. IE remarks about the world or others without taking ownership for how it impacts their life doesn’t count as integration.

E.g. “Asians tend to work together and gather together. Not an exception in sports.”

Descriptions of “take away lessons” or behaviors or observations of others that does not address a question like, “so what does this mean for you now?” or their current sense of self do not count here as integration. These kinds of responses are instead likely to be coded as domain-specific meanings in part 2, or coded as descriptions of configurations in part 4. For integration (here and now), there are 2 parts:

b. Part 1: Does the participant link either of 2 domains to their self today?

1. Yes vs. No (1, 0). Participant might say yes but not describe how. This equals “no integration present”. Example:

I think karate has influenced me the most. I wouldn't be the same person had I not spent the years I did practicing karate. I don't think my race combined with my sports experiences affects my life. I believe sports and my race both affect my life, but separately.

If “Yes”: Consider how participants describe it.

- **Actions/ experiences/opportunities linked to (individual) domain-specific roles or domain-specific meanings.** IE how they approach something psychologically in their current life b/c of their identification towards a specific

domain (not just based on behaviors/actions, has to involve their internal experience of how they view their self).

Participant explicitly links each or just 1 domain separately to their current self.

Example: *“As a result of my background, I feel that I push myself a lot harder than many of my friends do. I'm still trying to be one of those people who is good at everything...and even a GPA that would please most others does not satisfy me, because I'm always thinking about how I could have studied harder, I could have done better, I could have made less dumb mistakes...etc.”*

(cultural background linked to their psychological approach to academics)

- **Actions/ experiences/opportunities or Meanings (Clashes or interactions) stemming from both domains**, or lessons learned from 2 domains jointly that impact who they currently. For this section, key is that they link it to current self psychologically, not just something they learned in past or do behaviorally in everyday life now)

Example: *“I guess that taking pride in something that I associate is the only way that I can make sense of the previous experience today because I no longer play hockey. Instead I just watch it as an avid fan and can identify with other people who share my background and love of hockey.”*

Here is a good example of an excerpt where the first half is coded in part 4 as meaning about the relatedness between sport and ethnicity. Second half is linked to here and now and is an example of “integration”

“That experience was crazy to me. I guess I see it as an opportunity to have both things that define who you are come together. Football was important to our whole town and having

an all African American team come in was an experience that made us realize that hey, there are other cultures out there that are just as good at football as we are” [coded in part 4 for both-domain meaning] “..... It kind of hit me like we as Caucasian people love football, but they are African Americans and they love football too. This experience really put together the fact that culture and athletics can find common ground and can really impact a person” [part 2, integration]

Example of case where it ISN'T coded as integration b/c not linking to current psychological self:

“I am not sure my culture/race/ethnicity has much to do with my preference for sports. I think it has more to do with the way my parents raised me. I was told never to give up and just keep going. This is something that you have to do often in sports.”

Another example of case not coded as integration b/c participant DOES NOT discuss psychological experience of self. Just their behaviors.

“I think even if I was a different ethnicity my schedule of daily death would remain the same. (just to make myself clear I love my sport and my coaches are awesome) “

8. I'm not really smart enough for the academic work I am expected to be doing now.*
9. Getting a college degree is very important to me.
10. I haven't been very efficient in the use of study time lately.*
11. I enjoy writing papers for courses.
12. I really haven't had much motivation for studying lately.*
13. Lately I have been having doubts regarding the value of a college education.*
14. I am satisfied with the number and variety of courses available at college.
15. Recently I have had trouble concentrating when I try to study.*
16. I'm not doing well enough academically for the amount of work I put in.*
17. I am satisfied with the quality or the caliber of courses available at college.
18. I am attending classes regularly.
19. I am enjoying my academic work at college.
20. I am having trouble getting started on homework assignments.*
21. I am satisfied with my program of courses for this semester/quarter.
22. Most of the things I am interested in are not related to any of my course work at college.*
23. I am very satisfied with the professors I have not in my courses.
24. I'm quite satisfied with my academic situation at college.

*Negatively worded items

*** Prompt reworded from original manual to match the online survey procedures.

All positively worded items were reverse coded so that higher scores pertained to higher levels of positive adjustment.

Institutional Attachment (Campus Belonging) (Student Adaption to College Questionnaire, SACQ; Baker & Siryk, 1999)

These statements describe college experiences. Read each one and decide how well it applies to you at the present time (within the past few days). For each statement, select the number at the point in the continuum that best represents how closely the statement applies to you. Select only one number for each statement. ***

Please use the scale below to indicate how much you agree with each of the following statements. Remember, there are no right or wrong answers, just let us know what is true for you.

Strongly Disagree **Disagree**
Neither Agree nor Disagree **Agree**
Strongly Agree

1. I've got a clear idea of what I want to be.
2. I've got it together.
3. I like myself and am proud of what I stand for.
4. I change my opinion of myself a lot.*
5. I have a strong sense of what it means to be female/male.
6. The important things in life are clear to me.
7. I know what kind of person I am.
8. I can't decide what to do with my life.*
9. I find I have to keep up a front when I'm with people*
10. I don't really feel involved.*
11. I feel mixed up.*
12. I don't really know who I am. **

*Negatively worded items