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Intercollegiate Athletics

One for the Team: Exploring the Relationship Between College Sport, Campus Community, and Academic Social Integration.

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To examine the potential role that identifying with the athletics teams on campus as fan exerted upon a student's level of academic and social integration, an online survey instrument was distributed to college students (N=1790) at four large, public research universities. Results indicated that fan identification significantly detracted from one's grade point average. However, the extent to which one maintained that fan identity significantly contributed to the student's academic and social integration level. Ultimately, though, the students' perceived sense of community was found to mediate the relationship between fan identification and academic and social integration. Results suggest that the role that college athletics continue to maintain in the academic and social experiences of the overall college campus is significant. Further, this relationship is one with dynamic consequences and is a relationship that requires a more thorough revisiting of policy governing the maintenance of today's intercollegiate athletics presence.

Oﾠne limited area in current college student research is the extent to which identifying with an institution's athletics teams influences students' academic and social integration. In broad exploration, extant literature involving intercollegiate athletics yields mixed results. For instance, the presence of athletics and, more specifically, athletics success has potential to lead to an increase in donations, although the connection is tenuous (Baade & Sundberg, 1996; Daughtery & Stotlar, 2000). This same presence has also significantly impacted graduation rates of the general student body (Mangold, Bean, & Adams, 2003; Rishe, 2003), and possesses the ability to perpetuate the "Flutie Factor" by enhancing admission applications after a successful season (Toma, 1999; Toma & Cross, 1998). The literature is unclear, though, as to the extent to which of these relationships are conducive to the educational mission. For example, while admission applications might be connected to athletics success, the academic quality of those applications remains contested *(*Mixon, Trevino, & Minto, 2004*)*. There also exist numerous studies assessing the relationship between sport participation as an athlete in college upon such salient outcomes as cognition (Pascarella, Bohr, Nora, & Terenzini, 1995) and college adjustment (Melendez, 2006). Conclusive evidence regarding the impact of sport participation upon one's academic and social integration remains tentative as student-athletes have also failed

to develop a long-term commitment to goals such as degree completion (Hyatt, 2003). Still, a current dearth of development literature exists regarding the myriad ways in which the presence of big-time athletics might potentially impact the students on campus.

Utilized mostly in social psychological implications of sport, those students identifying as fans of their university's teams were found to display a significant correlation with both overall integration into the university and positive perception of the university (Wann & Robinson, 2002). A successful athletics program has also been found to improve the external perceptions of both the overall prestige and the academic prestige of the university it represents (Lovaglia & Lucas, 2005), thus contributing to the "aura of importance to the campus" (Toma, 1999, p. 81). It has also been shown that those students identifying with their university's athletics teams were found to report higher grade point averages and graduation rates (Schurr et al., 1993).

The aim of this research was to advance the area of research exploring the extent to which being a fan of the sports teams on campus affects a student's level of both academic and social integration and the student's overall grade point average. Further, several additional questions were investigated. Specifically, while integrating into the academic and social environment on campus as a fan of athletics might possess the potential to generate beneficial outcomes, the question remains whether pursuing the mission of big-time intercollegiate athletics is congruent with the overall mission of higher education (Sperber, 2000). That is, has the messenger become the message (Toma, 1999)? And is that message enhancing such elements for success as a sense of community and academic or social integration? Scant research has shown that there exists a direct connection between identifying with the presence of athletics on campus and the subsequent sense of community levels of those student respondents (Clopton, 2008). However, questions regarding the alignment of such a sense of community remain regarding its relation to the overall intention of the university. In other words, past research has failed to include whether or not said athletics-identification, and its sense of community, has any relationship with positive academic and social outcomes that are directly aligned with a university's educational mission – such as academic or social integration.
Finally, the impetus for this study was prompted by the notion in the literature to pursue additional insight into the relationship of the athletics-university dyad, cogently summed by Toma (1999) who suggested "If we are to understand our largest and most prominent universities, we must ask ourselves how on-campus sports . . . coincide with the identities that institutions construct for themselves and the identities that individuals derive from their institutional affiliations " (p. 83).

Conceptual Framework

Involvement Theory

The theoretical framework for this research study was Astin's (1999) Theory of Involvement. This theory has several fundamental factors of involvement that exhibit potential application with using an athletics program as a method of integrating a mass of students into the university community. First, involvement refers to the investment of physical and psychological energy in various objects within the campus environments. The objects may be highly generalized (the overall student experience) or highly specific (preparing for a final examination) (Astin, 1999). The object might also include engaging as a fan of the school's sports teams. Either way, those students who perceive these interactions with objects as positive and see

themselves as integrated with these objects in the campus community, are the students who are more likely to persist (Rendon, 1994). Second, regardless of its object, involvement occurs along a continuum; thus, all students are not mandated to live as rabid fans of the school's teams and still be able to involve themselves as a fan. Third, involvement has both quantitative and qualitative features (Astin, 1999). This could be the number of games one attends or the amount of dollars spent on university athletics apparel. Qualitatively, involvement would look at the extent to which the student attended the game, such as painting one's body and viewing the game without a shirt during a football game played in snowy weather conditions. The fourth and fifth claims are primarily academic in scope while pertaining to the specific academic programs and to educational policies and practices (Astin, 1999).

This involvement would theoretically lead to an increase in one's academic and social integration. By increasing opportunities to interact with others in college, the student is better able to develop strategies for handling academic and social issues (Attinasi, 1989). Thus, the more a student's experiences serve to integrate the student both academically and socially into the university, the more likely the student is to persist towards graduation. Conversely, marginal integration is more likely to lead towards early withdraw (Tinto, 1993). Integration is not limited to activities and events directly associated with particular courses, be it in or out of the classroom. Even non-academic school-based activities such as social clubs, fraternities, and sororities, by fostering identification with school and commitment to school-related values, can have beneficial academic outcomes (Marsh & Kleitman, 2002). The looming question remaining involves determining the extent to which identification with the institution's athletics teams encourages significant integration into the university (Tinto, 1993) and whether that connection would contain school-related values (Marsh & Kleitman, 2002).

Team Identification

While team identification has not been established with specific academic and social integration on campus, there are numerous outcomes attached this phenomenon. Specifically, society benefits from the sports follower role because an interest in sport promotes personal interaction which leads to social cohesion and a strengthening of major social values. Yet, the impact of identifying with an institution's athletics teams upon the academic and social experience remains nebulous. Past research has shown that the presence of successful athletics does significantly contribute to the overall sense of community on campus (Clopton, 2007). This sense of community has been shown to significantly enhance the academic experience (Lounsbury & DeNeui, 1995). Individually, Branscombe and Wann (1991) discovered that strong identification with a specific sports team provides a buffer from feelings of depression and alienation while, subsequently, fostering feelings of belongingness and self worth. In effect, identifying with a sports team may replace more traditional family and community-based attachments to the larger social structure. This also resonates with the underlying mission for student affairs administrators in colleges and universities. By carefully crafting on–campus settings that nurture feelings of belongingness and self worth, student affairs practitioners attempt to create more satisfied and engaged college students. Sports spectatorship also seems to contribute to viewers' perceived quality of life and is one way in which family or group members can maintain a sense of unity (Branscombe & Wann, 1991; Iso-Ahola & Hatfield, 1986). Further, highly identified fans, in opposition to those who are less intensely connected in fandom, feel a sense of bonding with other fans of that team (Wann & Branscombe, 1990).

These fans also acquire a greater sense of satisfaction from watching their team win a game or match (Wann & Schrader, 1997). Additionally, these sports fans rate high on membership esteem (Murrell & Dietz, 1992; Schurr et al., 1988; Wann & Robinson, 2002), where membership esteem is more predictive among game attendees than non–attendees.

This relationship between group members identifying with sports teams and resultant social or psychological outcomes is meticulously illustrated through the Team Identification – Social Psychological Health Model (Wann, 2006). In this model, the relationship between college students identifying with the athletics teams on campus would most likely be described as an enduring social connection. Through this enduring social connection, the experience of identifying with a sports team or teams impacts trait well-being and the social well-being of the individual. Through this connection there becomes avenue towards improving one's social psychological health (Wann, 2006). This connection process of identifying with sports teams on a college campus has also led to a greater sense of community, something that fans on a college campus have been found to exhibit more highly than those students whom are less-identified with the school's athletics teams (Clopton, 2008). This sense of community would, theoretically, lead to greater levels of integration, higher academic achievement, and improved persistence levels (Lounsbury & DeNeui, 1995). On a broader level is the notion that questions athletics' community–building ability (Boyer, 1987; Toma, 1999 & 2003). Spectator sports in big-time intercollegiate athletics contribute to their institutions by providing a medium for expression, while providing meaning and context to groups of people and instilling in them a collective sense of purpose and fellowship (Berquist, 1992). Further, spectator sports are in an elite company with their ability to bring together people who would not necessarily come together otherwise. Because of the increasing diversity in American institutions of higher education (NCES, 2007), this ability is placed at a premium. Big-time athletics, namely football, can build campus community by strengthening morale, instilling pride, and deepening spirit. A "big win" can energize a campus, enliven the spirit of its students, and inspire its constituents. Furthermore, when students know that people are paying attention to their institution, there is a natural feeling of pride in the institution (Toma, 2003). Still a dearth of empirical research exists that can establish this phenomenon (for exception, see Clopton, 2007).

The relationship between college students and athletics identification was further strengthened when Schurr et al. (1993) discovered that those students attending their college's men's basketball games as fans or athletes were significantly higher in grade point average and graduation rates than those non-attendees. Sports involvement (as a fan or athlete) was shown to significantly increase the likelihood that students will graduate from college because of the social integration that students derive from the sports experience. This research based its empirical status on Tinto's (1993) contention that social integration is an important factor in retention of college students. However, such a conclusion is limited due to the study's use of dichotomous variables (*i.e.*, game attendee vs. non-attendee, athlete vs. non-athlete) to capture the students' connection with athletics on campus. Such a connection exists in a continuous manner where a student might attend a game, but maintain very little identification with the athletics program. Thus, the use of team identification would improve our awareness of the connection between the presence of athletics and its relationships with academic and social outcomes of college students. Based upon extant literature and using the Team Identification – Social Psychological Health Model (Wann, 2006) to model to overall relationship between identifying with sports teams on campus and accompanying outcomes, the current research study was constructed upon the following three hypotheses:

Hypothesis 1

Team identification will significantly, and positively, predict one's grade point average. Because of its hypothesized ability to integrate students into the academic community, team-identification will maintain a positive relationship with academic achievement. This notion has reverberated in past literature and this study was designed to expand upon previous findings (e.g. Schurr et al., 1993) by using a more heterogeneous sample involving multiple institutions.

Hypothesis 2

Team identification with exhibit a significant and positive relationship with one's level of academic and social integration.

In other words, the larger the extent to which one is a fan of their university's athletics teams, the greater the level of one's academic and social integration. As with the initial hypothesis, this finding would build upon previous literature (Wann & Robinson, 2002) by using both a more heterogeneous sample and an established measure of academic and social integration. Because of the integrating ability of fandom, those students identifying as fans of their institution's teams should exhibit more integration into the overall college community. More specifically, according to the involvement theory, it is expected to see the components of athletics (*i.e.*, community, competition, camaraderie) that integrate students both to each other and to the university. To account for this community-enhancement, and its potential existence in the relationship between fan identification and academic and social integration, a tertiary hypothesis was submitted utilizing the sense of community variable:

Hypothesis 3

Sense of community amongst the students will significantly impact the relationship between team identification and academic and social integration.

Method

Selection of Population and Sample

The population was limited to undergraduate students, between the ages 18-22, attending schools at the NCAA Division I, Football Bowl Subdivision (FBS) level. It is at this level of athletics that the competition is the highest and the subsequent impact on the university community has been shown to be immense (Toma, 2003). NCAA FBS athletics programs are those universities (currently, there are 120 such institutions) who choose to compete nationally at the highest collegiate level. These institutions maintain NCAA requirements in such areas as scheduling, scholarships, and football attendance (2008). A purposeful sample selection strategy was utilized for this research to control for conference affiliation. Four public universities were selected from one NCAA FBS conference. It was the use of the multi-site selection which sets this study apart from past literature which viewed team identification among college students with university integration through a single institution (Wann & Robinson, 2002). These institutions of higher education were purposely selected for their similarities, as the homogeneity

between each institution was apparent in that all four schools were research driven and strive to compete in athletics at the highest levels attainable.

To select the sample for the study, students were randomly chosen out of campus directories. Upon selection, each student's e-mail address was obtained on the website of each institution's campus online directory. Once a complete list of names and e-mail addresses was established, the subjects were uploaded into four lists on www.surveymonkey.com for each institution.

Instruments for Data Collection

Demographical information for each respondent was collected through individual responses to race, gender, age, school year, grade point average, campus residence, etc. Age responses were used to limit the sample and grade point average was utilized as a continuous variable in the regression. The remaining demographical variables were dummy-coded into the regression analyses as control variables.

Academic and Social Integration Scale (ASIS)

The dependent variable for this study was ascertained by the Academic and Social Integration Scale (Pascarella & Terenzini, 1980) which examines the extent of academic integration through students' academic performance and level of intellectual development. Social integration, conversely, is primarily a function of quality peer-group interactions and the quality of student interactions with faculty. These levels subsequently lead to commitment to the institution and commitment to one's goals. The five scales of this instrument explore integration via the areas of: a) peer-group interactions, b) interactions with faculty, c) faculty concern for student development, d) academic and intellectual development, and e) goal/institutional commitment. Each factor utilizes a Likert scale, ranging from one to five, and consists of seven, five, five, seven, and six items, respectively. This instrument has been utilized in numerous studies investigating the academic and social integration among students (Cabrera, Nora, & Castaneda, 1993; Terenzini & Pascarella, 1993). Used as a control device, the ASIS has established reliability with Cronbach's α values for each of the five sub-scales ranging from .71 to .84 (Pascarella & Terenzini, 1980).

Sport Spectatorship Identification Scale (SSIS)

The second instrument was the Sport Spectatorship Identification Scale (SSIS) (Wann & Branscombe, 1993) which measures the extent to which individuals identify with a particular a sports team or program. This seven-item scale asks the subjects such questions as "How important to you is it that the (school's teams) win?" "During the season, how closely do you follow the (school's teams)?" and "How much do you dislike (the school's) greatest rivals?" (Wann & Branscombe, 1993). With a Cronbach's $\alpha = .91$, all of the seven items were significantly interrelated and the average item-total correlation was .59 (Wann & Branscombe, 1993). The SSIS has been used in many research studies to assess an individual's team identification level and the extent to which that affects: a) intrinsic and extrinsic motives (Wann et al., 2001), b) seasonal changes in spectators' identification and involvement with teams (Wann, 1996), c) hostile and instrumental aggression (Wann et al., 1999), d) willingness to

consider illegally assisting their team (Wann et al., 2001), e) integration into, and perceptions of, the university (Wann & Robinson, 2002), and f) alumni contributions (Wann & Somerville, 2000).

Campus Atmosphere Scale (CAS)

The third instrument was the Campus Atmosphere Scale (CAS). Developed by Lounsbury and DeNeui (1995), this scale was the first and only scale to measure the psychological sense of community (PSC) for an on-campus setting. The fourteen-item scale uses a five-point Likert scale and asks respondents to rate such statements as "There is a real sense of community here," "There is a lot of positive school spirit among the students here," and "I feel very attached to this school" (Lounsbury & DeNeui, 1995). Lounsbury and DeNeui (1995) reported that the fourteen items forming the collegiate psychological sense of community measurement ultimately had a Cronbach's α of .92. The CAS has subsequently been used as a valid measure in several research studies since its inception (DeNeui, 2003; Lounsbury & DeNeui, 1995).

The internal consistency of the three instrument scales was established using alpha reliability (Cronbach & Gleser, 1965). For each scale, the data resulted in a higher Cronbach's value than was originally reported in their initial offerings and are displayed in Table 1. (See Appendix Table 1.)

Method of Data Collection

A pilot study involving 500 students was conducted as an exploratory trial run to exploit any necessary changes in the data collection process. To improve upon the response rate of 27.6% by the pilot study, a "prenotification letter" was added to the data collection process. The prenotification letter allows contact with the potential subjects and offers the process of e-mail transmission a method of determining which e-mail addresses will bounce back before the surveys are sent. This precontact with potential respondents in e-mail surveys is encouraged (Shannon & Bradshaw, 2002) and has even been found to increase the response rate in such electronic surveys (Cook, Heath, & Thomson, 2000).

Five days following the pre-notification e-mail, a message was sent armed with the link to www.surveymonkey.com where the survey instruments were housed. The list of subjects included all of the original names and addresses with the exception of those respondents who declined participation or replied via e-mail indicating that they were graduate students and would not fit the criteria of sample selection. Over the course of the thirteen-day study, respondents who wished to decline participation were not sent any further correspondence.

Responses

Surveys were sent to 10,000 randomly selected students, with the surveys being completed by 2,277 students for an overall response rate of 23.50%. A total of 1,104 students declined to participate, while 6,526 students offered no response at all. The remaining 310 subjects were removed from the sample after the e-mail message was returned and unable to be delivered. Additionally, because this investigation was limited to the traditional-aged full-time (12 or more enrolled hours) undergraduate population of the four collegiate campuses, 332

surveys were deemed inappropriate due to said population limitations and were not included in the data analyses. Further, 103 respondents failed to complete more than one scale and were subsequently discarded. The final tally of responses came to 1,790 for a final usable response rate of 21.52%. This response rate was low, but deemed acceptable with electronic surveys (e.g. Shannon & Bradshaw, 2002).

Demographics

Of the total sample included in this study (n = 1,790), a large majority (59.9%) of the respondents were women (n = 1,073) while the remaining subjects were men (40.1%, n = 717). While overall scale means are displayed in Table 1, results across gender for the integration, team identification, and sense of community variables are shown below in Table 2. Both males and females reported moderately-high levels of each of the variables. Notably, independent sample t-tests revealed that while no difference occurred between respondents regarding academic and social integration or sense of community levels, there was a significant difference between the extent of team identification between the male and female students.
An even distribution exists in the years represented by the sample, where there is a 3.2% differential between the smallest and largest amount of students represented from each school year, excluding fifth-year seniors. Demography was found consistent with the overall population figures retrieved from each university's office for institutional research website regarding gender, Greek participation, campus and state residential status, ACT/SAT scores, and race. Based upon the similarities in the aforementioned demographic figures, it was determined that the sample was an acceptable representative of the overall student population (See Appendix Table 2.)

Analysis of Data

To analyze the data for the initial hypothesis, a hierarchical regression equation was constructed utilizing the independent variable (team identification) to predict the dependent variable (college GPA).   The hierarchical regression equation was constructed based off of Astin's (1993) Input-Environment-Outcome (I-E-O) Model. The I-E-O model, used throughout college student development research, arranges variables for college students according to *inputs*, such as traits and characteristics students bring with them to college; *environments*, such as programs, social influences, university policies; and *outcomes*, the subsequent consequences resulting from the experience of the environment (Astin, 1993). Using I-E-O, then, variables were arranged via separate models beginning with *input* characteristics: gender, race, standardized test score, and state residence; *environment* characteristics: club participation, Greek membership, campus residence, hours enrolled, hours worked off campus, and fan identification; and *outcome*: both grade point average and academic and social integration. Separate regression analyses were ran for each outcome variable. Control variables were dummy-coded prior to inclusion, while academic and social integration (ASIS), team identification (SSIS), and sense of community (CAS) were derived from their respective scales. In examining the overall relationship between team identification and the students' levels of academic and social integration, a second hierarchical regression analyses was executed to expose any significant contributions in the relationship. Results are displayed for the second regression analysis in Table 3 in the following section.

The third hypothesis included the sense of community variable upon the regression equation between fan identification and integration. Consistent with the nature of the conceptual framework, steps were taken to examine for potential mediation (see Baron & Kenny, 1986) of the sense of community variable upon team identification and academic and social integration. Pearson correlations were obtained between the dependent variable (academic and social integration), the independent variable (team identification) and the potential mediator (sense of community). Results were calculated via Sobel's test to determine possible mediation (Baron & Kenny, 1986; Sobel, 1982).

Results

Hypothesis One

The initial hypothesis stated that as respondents in the study became more highly-identified as fans of their institution's athletics program, results would indicate a higher grade point average. The data revealed that a significant relationship did exist between team identification and grade point average ($R^2_\Delta = .03$; $F_\Delta [1,1642] = 48.33$; $p < .001$). A notable finding occurred when this significant relationship revealed a negative direction ($\beta = -.17$; $t[1642] = -6.95$; $p<.001$), suggesting a rejection of the stated hypothesis. In other words, the greater the extent that the student respondents identified with their school's athletics teams, the lower the reported grade point average.

Hypothesis Two

The larger scope of this study aimed at searching for a significant relationship between team identification and academic and social integration after controlling for demographical and background variables. Incorporating all data together, results indicated that the extent to which students identified as a fan did, in fact, significantly – although modestly – predict the level of academic and social integration ($R^2_\Delta = .06$; $F_\Delta [1,1636] = 112.47$, $p < .001$). In other words, the greater each respondent identified as a fan of his or her school's athletics teams ($\beta=.25$, $p<.001$) the greater the level of academic and social integration. While this result supported the second hypothesis and the Team Identification – Social Psychological Health Model (Wann, 2006); this finding ran counter to the initial finding in this article where team identification significantly detracted from one's grade point average. These findings are presented in the third regression step in Appendix Table 3.

Also noteworthy in this finding was the significant presence of race as a factor in predicting one's academic and social integration ($\beta=0.05$, $p<.05$). Dummy-coded for control, the race variable was postured so that all racial minorities were coded with a zero and white, non-Hispanic respondents received a one. The findings, then, suggested a direct relationship between identifying as "white, non-Hispanic," and reporting higher levels of academic and social integration. Past research has also supported this notion suggesting that students of color perceive campus climate differently than white students (Rankin & Reason, 2005). Further discussion on this finding is found in the following section (See Appendix Table 3.)

Hypothesis Three

In examining the mediating effects of sense of community on the relationship of team identification to the academic and social integration of college students, four separate conditions needed to be satisfied (Baron & Kenny, 1986). The first two steps were to find significant relationships between the predictor variable (team identification) and the outcome variable (academic and social integration), and the predictor variable and the potential mediator (sense of community). Table 3 shows these significant relationships. Moreover, the first step was also satisfied by the first regression analysis used to test Hypothesis 2. The next step is to include the mediating variable (sense of community) along with the predictor variable (team identification) in the linear regression to predict the outcome (academic and social integration). This analysis revealed significant predictability of sense of community when added to the model ($\beta = 31.49$, $p < .001$). This presence negated the significant presence of team identification in the relationship, suggesting the mediating potential of sense of community (*Sobel's test*$=19.00$, $p<.001$) on the relationship between team identification and academic and social integration ($R^2_{\Delta} = .33$; $F_{\Delta}[1,1635]=991.29$; $p<.001$). It should also be noted that, with sense of community added into the final model, the race variable decreased in presence ($\beta=.02$, $p=.33$) which also eliminated its significance – perhaps, lending further credence to the power of community to overcome potential racial barriers in achieving academic and social integration. Another variable to experience a decrease was state residence ($\beta=-1.34$, $p<.05$). This decrease actually strengthened the magnitude of the variable and propelled the presence from a non-significant value to one with significance. In other words, in-state residence detracted from the students' academic and social integration levels when both team identification and sense of community where included in the final model. A final impact of note was the mediation of sense of community upon the relationship between Greek membership and integration ($\beta=-0.60$, $p=.30$). As shown in step 3 Table 3, Greek membership negatively impacted the students' level of integration ($\beta=-1.60$, $p<.05$). Yet, conversely with team identification, the negative significance of Greek membership was negated by the sense of community of the students. This raises further questions regarding the direction of the sense of community amongst individual communities on campus in regard to the overall campus culture.

These findings supported hypothesis three which suggested that sense of community would play a significant role upon the relationship established in hypothesis two. However, further clarification is required to deduce potential ramifications of this particular finding.

Discussion

Because intercollegiate athletics often exist as the "front porch" to the university (Sperber, 2000; Toma, 1999 & 2003), institutions must constantly self-scrutinize this unique relationship and the enhancement or diminishment it enacts upon the overall university mission. As a subset to this relationship between the presence of athletics and academic and social environment surrounding the student body, the current data provide two interesting points for discussion. Specifically, both refute previous literature, such as in the case of the grade point average finding. This reiterates a need for further research to provide clarification for the mediating ability of sense of community over the relationship between identifying with the athletics teams on campus and one's accompanying academic and social integration.

First, the most prominent finding of the study was the initial ability of team identification to significantly predict academic and social integration through a positive relationship. This notion was based on a similar finding which showed that team identification was significantly related with overall integration into the university (Wann & Robinson, 2002) and supports the Team Identification – Social Psychological Health Model (Wann, 2006) where numerous social outcomes, such as integration, can be anticipated out of the enduring social connections built between students identifying with the sports teams on campus. Connecting integration levels with those who identify with the athletics teams on campus resonates throughout the involvement theory (Astin, 1999), suggesting that following the teams on campus does exist as a legitimate form of social involvement. Further, that particular social involvement does enhance the integration and the persistence levels of those involved (Pascarella & Terenzini, 1980; Tinto, 1997).

A distinguishable finding from this equation was the impact of race within the relationship between team identification and integration. Those students identifying as "white, non-Hispanic" experienced a significant increase in their reported level of academic and social integration, meaning that any student of color experienced a significant negative impact upon their integration levels. This finding echoed the sentiments of previous literature in connection with athletics (Melendez, 2007; Schurr et al., 1985) and college student outcomes (Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). Further, this finding also echoes questions from previous literature where race and athletics have shown a divisive potential. For instance, students of color perceive the climate in their campus community as more racist and less accepting than their white counterparts (Rankin & Reason, 2005) and it is the perception of supportive environments within the campus community that significantly encourage the acquisition of salient academic and social outcomes (Flowers & Pascarella, 1999; Whitt et al., 2001). Similarly, athletes have experienced negative stereotyping and prejudicial attitudes from their non-athlete counterparts (e.g. Engstrom & Sedlacek, 1991, 1993) and a significant divide exists between faculty and the student body over the perceptions of goals and processes (Trail & Chelladurai, 2000) and priorities (Putler & Wolfe, 1999) of intercollegiate athletics program. Particularly because of the proven power of impacting social psychological health through team identification (Wann, 2006) more research is needed to explore the presence of race in this relationship in a university context and beyond.

The finding of the relationship between team identification and integration, however, was subsequently impacted by a significant mediation from the respondents' perceived sense of community levels. Interestingly, this mediation reversed the impact of team identification where identifying with the athletics teams on campus actually significantly *diminished* one's reported academic and social integration level. One factor that might account for this is sampling. This study was the first to use multiple campuses in which to draw its sample. Many of the studies in fandom literature utilize a single campus (e.g. Branscombe & Wann, 1991; Schurr et al., 1988; Wann & Robinson, 2002). Second, the assessment of integration was much more intricate and thorough; utilizing the Academic and Social Integration Scale (Pascarella & Terenzini, 1980) when compared to previous literature (Wann & Robinson, 2002) and was the first to utilize explicit demographical and environmental variables for control.

The mediating power over the significant relationship between fan identification and integrations levels has indirectly reverberated in past literature when, for example, campus life was not found to contain any significance in predicting overall student satisfaction and, yet, the campus climate did (Elliott, 2003). Findings here were comparable, as the power of the larger

overall construct of sense of community – analogous to campus climate – outweighed the power of fan identification – a single aspect of campus life. Future research needs to examine the pathways between fan identification, sense of community, and academic and social integration, and the path in which these specific measurements matriculate towards such outcomes as satisfaction and persistence.

Ultimately the notable point of impact that is brought to life here is the idea that although using the institution's athletics programs has been shown to integrate many facets of individuals and improve the sense of community (Clopton, 2008; Toma, 2003), it may not be the community that reinforces the values embedded in the mission of the university (Marsh & Kleitman, 2002). Those students who highly-identify with their institution's athletics teams have also been found to be more likely to consider illegally assisting their teams through both academic and athletic cheating (*i.e.*, writing a paper for a student-athlete or helping a student-athlete acquire steroids) (Wann, Hunter, Ryan, & Wright, 2001) or by displaying a willingness to anonymously injure a rival team's coach or star player (Wann, Peterson, Cothran, & Dykes, 1999). Further, these negative associations, or profane friendships (Spady, 1970), might continue to detract from academic performance if the social activities that often accompany them replace activities more conducive to academic integration, such as studying or attending class. Perhaps it was a similar element that contributed to sense of community similarly mediating the relationship between the fraternity and sorority members in the study and their academic and social integration. As with team identification, once the community variable was introduced into the analysis, Greek membership waned in the extent to which it contributed towards the student's integration levels, even failing to maintain significance in the final step. Ultimately, more research is necessary to explicate the overall picture of the extent which team identification impacts both academic and social integration, its relationship with sense of community and the overall presence with satisfaction and persistence.

This idea also manifested itself the rejection of the initial hypothesis, when those students identifying as fans of the university's athletics teams actually exhibited significantly lower grade point averages. The significant negative relationship refuted previous literature (Schurr et al., 1993), also another study that utilized data from a single institution, perhaps accounting for some of the dissenting results. Another factor that might clarify the situation is in the measurement of fan identification. Previously, students' connection to the school's athletics teams was assessed by either attending the game being surveyed or playing in it (Schurr et al., 1993). The Sport Spectatorship Identification Scale (Wann & Branscombe, 1993) provided a more elaborate approach to team identification with a continuous existence – an approach to measuring involvement that was defined in the involvement theory (Astin, 1999). Regardless, these results provide some illumination into the academic environment created by those college students who identify with athletics teams on campus. The broadened emphasis on college sport has enhanced the presence of big-time athletics teams from the campus level to the national level. College students, mostly those identifying their school's teams, are able to either attend games or consume college sport via television on most days of the week. The issue is whether this increased presence exists as a barrier to academic integration, while encouraging the social integration. It was this thesis that drove the work of Sperber (2000), indicting large prominent universities with promoting big-time athletics at the expense of the quality of undergraduate education. What should be examined is the presence of the social integration of those college students engaging in college sport consumption and the extent to which it predicts the persistence of those students in comparison to the predictability of their academic integration levels. This

comparison is beyond the scope of this study, but this relationship has been established in college student literature (Bean & Bradley, 1986) and explicated by Tinto (1993) who reasoned that the presence of a strong social integration will compensate for lower academic performance *i.e.*, grade point average. In the same vein, a similar study was able to significantly predict grade point average through the satisfaction outcome, while the inverse did not hold true (Bean & Bradley, 1986).

Limitations and Recommendations for Future Research

There exists much to discover regarding the impact of team identification and integration for today's college students and further research efforts seem merited. In this study certain limitations existed with such factors as homogeneity of region and institutional level that might diminish the external validity. While this study was an improvement upon the one-campus approach that pervades much of the current literature, a sample taken from more institutions might provide greater insight into this phenomenon. Among these institutions should include varying degrees of size, control (public or private), level of competition, academic tradition or performance, and more. This study was also limited by the amount of confounding variables that influence both a student's level of academic and social integration, and one's perception of a sense of community, and for which could not be accounted or controlled amongst the current sample. A broader collection of demographical variables might enhance the level of control and validity of these results.

Additionally, one variable not included in the scope of the current study is university identification (Luhtanen & Crocker, 1992). With the current findings, it is unknown which of the respondents who identified highly with the athletics teams did so due to a strong identification with the university, and vice versa. This fact is an important consideration and one to be cognizant of when interpreting these results. Incorporating this measure into future research will eradicate the ambiguity that currently resides in the relationship between the three measurements analyzed in the current study. Continuing to utilize the notion of identity salience (Stryker, 1980) which states that individuals construct multiple identities through the social identity theory (Tajfel & Turner, 1986) and that these identities are given varied weights in accordance with their relative importance to the self, the current study should be replicated with the addition of the aforementioned university identification measurement, as well as a measurement for student identification. According to identity salience, college students would differ in outcomes (academic performance, social satisfaction, persistence) because they arrange their identities (student, member of the university community, fan) differently and allot personal resources such as time, energy, and money accordingly. Perhaps, it is through this identity hierarchy that would provide more answers into the presence of race in academic and social integration levels, and the relationship with one's fan identity or team identity. Consistent with the initial findings here, Rankin & Reason (2005) discovered that race did significantly influence the perceptions of campus climate. Of course, when accounting for sense of community, the significant contribution of race was negated in predicting integration from team identity. Future research should examine the implications from the balance of one's racial identity, fan identity, team identity, and university or student identity.

Data Collection Limitations

Low response rates and nonresponse bias exist as major players in limiting the validity of the results of this study. Survey research is becoming increasingly difficult to conduct (Crawford, Couper, & Lamias, 2001), and response rates for this type of research is falling precipitously (Dey, 1997).

Further, issues such as changing one's internet service provider, or "churning," along with individuals holding multiple e-mail addresses both contribute to the lowering of the response rate and the possibility for under-representation (Bradley, 1999). Also, as with all survey research designs, the generalizability of the survey results are dependent on the representativeness of the responding sample (Shannon & Bradshaw, 2002).

Conclusions and Implications for Higher Education

Findings from the current study suggest several potential implications for practice and research in higher education. First, the use of team identification as a medium for integrating students into the university's academic community needs to be examined. While colleges and universities have traditionally accepted the idea that athletics teams on campus enhance the social community (Sperber, 2000) a dearth of research exists regarding the academic connection (for exception see Mangold et al., 2003). Presently, team identification significantly enhanced the academic and social integration of the student respondents. While it was beyond the scope of this study, the integration score should be parceled to find the specific relationship into both academic integration and social integration levels. A more thorough understanding of the two aspects of integration would enlighten higher education administrators upon the tradeoffs from college sport that affect their student body. Specifically, more questions should evaluate the potential benefits of a larger team identity amongst the student body (*i.e.*, satisfaction, persistence) and the drawbacks (*i.e.*, lower grade point average). The newfound negative relationship between team identity and grade point average reinforces the need for universities to be aware of the academic and social climate which they are creating from maintaining college sport at the highest level. The most prominent example exists with the myriad football and basketball contests that are held every day of the week. While student-athletes receive the academic support to off-set some of the rigors of their athletic requirements, non student-athletes are asked to support their institution's teams – with time, energy, and money – yet are offered no additional academic reprieves in relation to the "rigors" of their team identity behavior. This falls into the litany of arguments that maintain college sports are antithetical with the institutional mission of education (Sperber, 2000).

Finally, the sense of community on campus continues to exert a prominent, and powerful, influence upon the climate and culture surrounding the student body (Strange & Banning, 2001). In particular, the sense of community negated the positive contribution of fan identity upon integration and, conversely, indicated a negative presence of fan identity within integration levels. This particular finding is critical for higher education and student affairs administrators, as the power of the sense of community from communities created and supported on campus becomes more important than the individual communities themselves. This has been reinforced in previous literature where the overall campus culture significantly impacted student satisfaction, while the more-specific campus life measure did not (Elliott, 2002). This also suggests that although a campus community might not lead to direct academic benefits (*i.e.*, team

identity detracting from grade point average), the sense of community that results from that membership (see Clopton, 2008) might possess the larger impact potential. Still, when sense of community is used to predict academic and social integration, team identity did negatively influence the integration outcomes. Because of this, perpetual examination by higher education administrators into the student communities on campus must be able to assess whether it is the community membership (team identity) or the sense of community derived from that membership that propels students to certain desired outcomes, such as persistence, integration, or satisfaction. Moreover, the congruency of the mission of these communities with the mission of the specific institutions must be assessed, evaluated, and placed into the balance of academic integration, social integration, and desired outcomes.

References

Astin, A. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, *40*(5), 518 – 529.

Attinasi, L.C., Jr. (1989). Getting in: Mexican Americans' perceptions of university attendance and the implications for freshmen year persistence. *Journal of Higher Education, 60,* 247-277.

Baade, R.A., & Sundberg, J.O. (1996) Fourth down and gold to go? Assessing the link between athletics and alumni giving. *Social Science Quarterly, 77(4)*, 789–803.

Barron, R.M. & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51(6)*, 1173-1182.

Bean, J.P. & Bradley, R.K. (1986). Untangling the satisfaction-performance relationship for college students. Journal of Higher Education, 57, 393-412.

Berquist, W. (1992). *The four cultures of the academy*. San Francisco: Jossey – Bass.

Boyer, E.L. (1987). *College: The undergraduate experience in America*. New York: Harper and Row, Publishers. The Carnegie Foundation for the Advancement of Teaching.

Branscombe, N.R. & Wann, D.L. (1991). The positive social and self – concept consequences of sports team identification. *Journal of Sport and Social Issues*, *15*, 115 – 127.

Chickering, A. (1969). *Education and identity*. San Francisco: Jossey-Bass, Inc.

Clopton, A.W. (2007). Predicting a sense of community amongst students from the presence of intercollegiate athletics: What roles do gender and BCS-affiliation play in the relationship? *The Sport Management and Related Topics (SMART) Journal, 3*(1).

Clopton, A.W. (2008). College sports on campus: Uncovering the link between fan identification and sense of community. *International Journal of Sport Management*, *9*(4) 343-362.

Cook, C., Heath, F., & Thomson, R. (2000). A meta-analysis of response rates in web- or internet-based surveys. *Educational and Psychological Measurement*, 60(6), 621 – 626.

Crawford, S.D, Couper, M.D., & Lamias, M.J (2001). Web Surveys: Perceptions of Burden. *Social Science Computer Review, 19*, 146-162.

Cronbach, L.J. & Gleser, G.C. (1965). *Psychological tests and personnel decisions, 2ⁿᵈ Ed*. Urbana, IL: University of Illinois Press.

Daughtrey, C., & Stotlar, D. (2000). Donations: Are they affected by a football championship? *Sport Marketing Quarterly*, *9*(4), 185–193.

Dey, E.L. (1997). Working with low survey response rates: The efficacy of weighting adjustments. *Research in Higher Education*, 38(2), 215 – 227.

Elliott, K.M. (2002). Key determinants of student satisfaction. *Journal of College Student Retention*, *4*(3), 271-279.

Engstrom, C. M., & Sedlacek, W. E. (1991). A study of prejudice toward college student-athletes. *Journal of Counseling and Development, 70*, 189-193.

Engstrom, C. M., & Sedlacek, W. E. (1993). Attitudes of residence hall students toward student-athletes: Implications for advising, training, and programming. *Journal of College and University Student Housing, 23*, 28-33.

Flowers, L., & Pascarella, E.T . (1999). Does college racial composition influence the openness to diversity of African American students? *Journal of College Student Development, 40*, 377-389.

Iso – Ahola, S.E. & Hatfield, B. (1986). *Psychology of sports: A social psychological approach*. Dubuque, IA: Brown.

Lounsbury, J.W. & DeNeui, D. (1995). Psychological sense of community on campus. *College Student Journal*, *29*, 270-277.

Lovaglia, M.J., & Lucas, J.W. (2005). High–visibility athletic programs and the prestige of public universities. *The Sport Journal*, *8(1).*

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18*(3), 302-318.

Mangold, W.D., Bean, L., & Adams, D. (2003). The impact of intercollegiate athletics on graduation rates among major NCAA division I universities: Implications for college persistence theory and practice. *The Journal of Higher Education*, *74(5),* 540-562.

Marsh, H.W. & Kleitman, S. (2002). Extracurricular school activities: The good, the bad, the nonlinear. *Harvard Education Review, 72*, 464-514.

Melendez, M.C. (2006). The influence of athletic participation on the college adjustment of freshmen and sophomore student athletes. *Journal of College Student Retention, 8*, 39-55.

Mixon, F.G., Trevino, L.J., & Minto, T.C. (2004). Touchdowns and test scores: exploring the relationship between athletics and academics. *Applied Economics Letters, 11*(7), 421-424.

Murrell, A.J. & Dietz, B. (1992). Fan support of sport teams: The effect of a common group identity. *Journal of Sport and Exercise Psychology*, 14, 28 – 39.

NCAA (2008). Retrieved from: http://www.ncaa.org

NCES. (2007). The condition of education. National Center for Education Statistics, U.S. Department of Education: NCES 2007-064. http://nces.ed.gov/pubs2007/2007064.pdf. Retrieved October 21, 2007.

Pascarella, E.T., Bohr, L., Nora, A., & Terenzini, P.T. (1995). Intercollegiate athletic participation and freshmen-year cognitive outcomes. *The Journal of Higher Education*, 66, 369-387.

Pascarella, E.T. & Terenzini, P.T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education*, 51, 60-75.

Putler, D. S., & Wolfe, R. A. (1999). Perceptions of intercollegiate athletic programs: Priorities and tradeoffs. *Sociology of Sport Journal, 16*, 301-325.

Rankin, S.R. & Reason, R.D. (2005). Differing perceptions: How students of color and white students perceive campus climate for underrepresented groups. *Journal of College Student Development, 46*(1), 43-61.

Rendon, L. (2004). Validating culturally diverse students: Toward a new model of learning and student development. *Innovative Higher Education, 9*(1), 33-51.

Rishe, P.J. (2003). A reexamination of how athletic success impacts graduation rates: Comparing student-athletes to all other undergraduates. *The American Journal of Economics and Sociology, 62(2),* 407-427.

Schurr, K.T., Wittig, A.F., Ruble, V.E., & Ellen, A.S. (1988). Demographic and personality characteristics associated with persistent, occasional, and non-attendance of university male basketball games by college students. *Journal of Sport Behavior*, 9, 3-17.

Schurr, K.T., Wittig, A.F., Ruble, V.E., & Henrickson, L.W. (1993). College graduation rates of student athletes and students attending college male basketball games: A case study. *Journal of Sport Behavior*, 16, 33-41.

Shannon, D.M. & Bradshaw, C.C. (2002). A comparison of response rate, response time, and costs of mail and electronic surveys. *The Journal of Experimental Education*, 70(2), 179 – 192.

Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. In S. Leinhart (Ed.), *Sociological methodology 1982* (pp.290-312). San Francisco: Jossey-Bass.

Spady, W.G. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, 2, 38-62.

Sperber, M. (2000). *Beer and circus: How big-time college sports is crippling undergraduate education*. New York, NY: Henry Holt.

Strange, C. C., & Banning, J. H. (2001). *Educating by design: Creating campus learning environments that work*. San Francisco: Jossey-Bass.

Stryker, S. (1980). *Symbolic interactionism: A socio-structural version*. Menlo Park, CA: Benjamin/Cummings.

Tajfel, H. & Turner, J.C. (1986). The social identity theory of intergroup behavior. In Worchel, S. & Austin, L.W. (Eds.) *Psychology and Intergroup Relations*. Chicago, IL: Nelson-Hall.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: The University of Chicago Press.

Toma, J.D. (1999). The collegiate ideal and the tools of external relations: The uses of high – profile intercollegiate athletics. *New Directions for Higher Education*. No. 105. Jossey – Bass Publishers. 81-90.

Toma, J. D. (2003). *Football u: Spectator sports in the life of the American university*. The University of Michigan Press; Ann Arbor, Michigan.

Toma, J.D., & Cross, M.E. (1998). Intercollegiate athletics and student college choice: Exploring the impact of championship seasons on undergraduate applications. *Research in Higher Education*, *39(6)*, 633-646.

Trail, G., & Chelladurai, P. (2000). Perceptions of goals and processes of intercollegiate athletics: A case study. *Journal of Sport Management, 14*, 154-178.

Wann, D.L. (2006). Understanding the positive social psychological benefits of sport team identification: The Team Identification – Social Psychological Health Model. *Group Dynamics: Theory, Research, and Practice, 10,* 272-296.

Wann, D.L. & Branscombe, N.R. (1990). Die – hard and fair – weather fans: Effects of identification on BIRGing and CORFing tendencies. *Journal of Sport and Social Issues*, 14 (2). 103 – 117.

Wann, D.L. & Branscombe, N.R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24. 1 – 17.

Wann, D.L., Hunter, J.L., Ryan, J.A., & Wright, L.A. (2001). The relationship between team identification and willingness of sport fans to consider illegally assisting their team. *Social Behavior and Personality, 29*(6), 531-536.

Wann, D.L. & Robinson, T.N. (2002). The relationship between sport team identification and integration into and perceptions of a university. *International Sports Journal*, 6, 36-44.

Wann, D.L., Peterson, R.R., Cothran, C., & Dykes, M. (1999). Sport fan aggression and anonymity: The importance of team identification. *Social Behavior and Personality: An International Journal, 27*, 597-602.

Wann, D.L. & Somerville, D.J. (2000). The relationship between university sport team identification and alumni contributions. *International Sports Journal*, 4(1), 138 – 144.

Whitt, E.J., Edison, M.I., Pascarella, E.T., Terenzini, P.T., & Nora, A. (2001). Influences on students' openness to diversity and challenge in the second and third years of college. *The Journal of Higher Education, 72*(2), 172-204.

Appendix

Table 1

Selected Characteristics from Reliability Analyses of Campus Atmosphere Scale (CAS), Sport Spectatorship Identification Scale (SSIS), and Academic and Social Integration Scale (ASIS)

	α	M	SD	F	p
CAS Original	0.92	--	--	--	--
CAS current study	0.93	3.91	0.78	88.14	<.001
SSIS Original	0.91	--	--	--	--
SSIS current study	0.94	5.52	0.64	17.38	<.001
ASIS Original	0.84	--	--	--	--
ASIS current study	0.88	3.68	0.58	81.46	<.001

Table 2

Independent Samples T-Test for Gender

variable	M		$S.D.$		t	Sig. (2-tld)
	Male	Female	Male	Female		
Sense of Community	3.90	3.91	0.70	0.74	-0.18	0.86
Fan Identification	5.66	5.43	1.85	1.71	2.67	0.01
Academic/Social Integration	3.65	3.69	0.60	0.61	-1.17	0.24

Table 3

Summary of Hierarchical Regression Analysis for Predicting Academic and Social Integration   ($n = 1790$)

Variable	Regression Equation Predicting Integration from Input Variables (Step 1 values)			Regression Equation Predicting Integration from Environment Variables (Step 2 values)			Regression Equation with Fan Identification, Before Including Sense of Community (Step 3 values)			Regression Equation with Sense of Community Included (Step 4 values)		
	B	$SE\ B$	β	B	$SE\ B$	β	B	$SE\ B$	β	B	$SE\ B$	β
Step 1												
Gender	0.39	0.57	0.02	0.09	0.56	0.004	0.51	0.54	0.02	-0.12	0.43	-0.01
Race	2.46	0.81	0.08*	2.05	0.79	0.06**	1.70	0.76	0.05*	0.58	0.60	0.02
ACT/SAT Score	-0.52	0.25	-0.05*	-0.49	0.25	-0.05*	-0.48	0.24	-0.05*	-0.35	0.15	-0.05*
State Residence	-0.20	0.69	- 0.01	-0.04	0.68	- 0.001	-0.07	0.65	- 0.002	-1.34	0.52	-0.05*
Step 2												
Campus Residence				0.04	0.69	0.002	-0.01	0.67	<0.001	-0.85	0.53	-0.04
Club Participation				3.05	0.62	0.12***	2.50	0.60	0.10	1.00	0.45	0.04
Greek Membership				-2.36	0.73	-0.08**	-1.60	0.71	-0.05*	-0.60	0.56	-0.02
Hours Enrolled				1.11	0.54	0.50*	1.22	0.53	0.05*	1.30	0.42	0.06**
Hrs Worked off Campus				-0.15	0.25	-0.02	-0.11	0.24	-0.01	0.42	0.19	-0.04*
Grade Point Average				1.01	0.30	0.09**	1.43	0.29	0.12***	1.59	0.23	0.14***
Year in School				1.58	0.27	0.17***	1.70	0.26	0.18***	1.60	0.21	0.18***
Step 3												
Fan Identification Score							0.22	0.02	0.25***	-0.07	0.02	-0.07*
Step 4												
Sense of Community										0.76	0.02	0.68***

Note. $R^2 =.01$, $p<.05$ for Step 1; $R^2_{\Delta}=.46$, $p<.001$ for Step 2; $R^2_{\Delta}=.11$, $p<.001$ for Step 3; $R^2_{\Delta}=.33$, $p<.001$ for Step 4

*values significant at the .05 level   ** values significant at the .01 level   *** values significant at the .001 level

Sobel's test $=19.00$, $p<.001$