

Gender, Sport and Higher Education: The Impact of Student-Faculty Interactions on Academic Achievement

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ABSTRACT

This article ascertains the relationship between student athletes' gender and the impact of specific forms of student athlete-faculty interaction on academic achievement. Data are drawn from the Cooperative Institutional Research Program's 2000 Freshman Survey and 2004 Follow-Up Survey. The sample includes 2,952 student athletes attending four-year, predominantly white institutions. Females comprised 57 percent (N=1,688) of the sample and males 43 percent (N=1,264). Regression results reveal that both male and female student athletes' academic success is to some extent contingent upon the specific nature of their interaction with faculty. The findings also indicate that male and female student-athletes have minimal differences in their various forms of contact with faculty. The implications of these findings are discussed among student-athletes, faculty, and advisors in order to improve their roles in establishing meaningful relationships with female and male student athletes inside and outside the classroom.

For a number of decades researchers have examined the impact of traditional students' college environment on academic achievement. The college environment encompasses all that happens to students during the course of their educational programs which may affect and influence the intellectual desired outcome—to matriculate and graduate (Astin, 1993a). Much of this discussion has focused on traditional students' involvement in college, namely their interactions with peers and faculty, which are considered important factors for student success (Astin, 1993a, 1993b; Tinto, 1987). In addition, related studies have examined the effect of involvement on achievement for certain student groups. For example, Allen (1988) reported in a sample of black traditional students that their

relationship with faculty was an important predictor of academic success. Despite the research on traditional students, there is little extant research concerned with the environmental influence on nontraditional students' such as male and female student athletes (Comeaux & Harrison, 2001; Edwards, 1989; Sellers, 1992).

While evidence concerning the positive impact of male student athlete-faculty interaction is unequivocal (Comeaux, 2005), we are not certain whether the benefits accruing from particular types of interaction vary by gender. To further understand the conditional effects of student athlete-faculty interaction by gender, this study examines the relationship between student athletes' gender as well as the impact of specific forms of student athlete-faculty interaction on academic achievement. Specifically, this study examines whether selected faculty interaction measures of academic achievement differ among male and female student athletes. The authors felt it necessary to recognize and explore a group within the college community such as faculty who frequently interact with and influence student athletes' personal and academic development.

THEORETICAL FRAMEWORKS

The work of Carol Gilligan (1989) has tremendous implications for the future of student development theory and practice. Gilligan was the first to challenge the assumption that departures from the male model reflect deficiencies or deviations. The exclusion of women in the development of theory has produced a political and cultural bias that limits and distorts our understanding of the human experience. As such, Gilligan conducted a longitudinal study of thirty-four women over a twelve-year period. The findings suggest that the aspects of the relational experience are important to identify formation in women. Moreover, Josselson (1987) found that women construct identity around issues of "communion, connection, relational embeddedness, spirituality, and affiliation," resulting in an identity that is uniquely female in form (p. 1). Based on the work of Gilligan and Josselson who suggest that women are more likely than men are to define themselves through relationships, we hypothesize that female student athletes interaction with faculty will have a greater impact than males on their academic success.

Gilligan and Josselson's analytical frameworks are critical in shaping a new research agenda that will steer the student affairs profession beyond outdated and limited notions of human development theory and student development practice into a new paradigm of understanding. Such a new understanding will provide a specific developmental frame-

work for addressing the needs of women, and it will guide how we view our work, our relationships, and our campuses. Moore (1990) states:

The emergence of gender as a variable of difference has raised the question, what else is missing? With the stimulus provided by Gilligan and her feminist colleagues, the reliance on a singular, linear theory of development to explain all human experience is waning. A redesign of theory is underway that will include the multiple dimensions of gender, race, culture, and sexual orientation, reflecting a more realistic expression of the human experience and a more solid and enduring framework to use in shaping student development practice. (p. 34)

Astin's (1985) Student Involvement Theory also helps to frame our study on faculty-student athlete interactions. Student involvement on college campuses may be one of the most important factors influencing their academic success (Astin 1985, 1993a, 1993b; Tinto 1987; Pascarella & Terenzini, 1991). According to Student Involvement Theory, "the individual plays a central role in determining the extent and nature of growth according to the quality of effort or involvement with the resources provided by the institution" (Pascarella & Terenzini, 1991, p. 51). Student Involvement Theory is based on the notion that individuals invest psychological energy in aspects outside of themselves, such as friends, family, schooling, jobs and other similar variables. Astin (1984) defines "involvement" as "the amount of energy that the student devotes to the academic experience" (p. 27). Indeed, studies indicate that the more time and energy students devote to learning and the more intensely they engage in their own education (e.g., student athlete-faculty interaction), the greater their potential outcomes for achievement, satisfaction with educational experience, and persistence in college (Pascarella & Terenzini, 1991; Tinto, 1987). Because student-faculty interaction is an important predictor of academic success, we conceptualize student involvement in terms of various forms of interaction with faculty (Astin, 1993a, 1993b). Other types of involvement, such as participation in student government, volunteer work, and studying with other students are also an important part to academic success but are not the focus of this study.

METHODOLOGY

Data Source & Sample

The data in this study are drawn from the Cooperative Institutional Research Program (CIRP) 2000 Student Information Form (SIF) and 2004 College Student Survey (CSS) that are sponsored by the Higher Education Research Institute (HERI). Although the reliability of the instrument has not been formally measured during the past 30 years the CIRP has generated an array of normative, substantive, and methodological research about a wide range of issues in American higher education (Sax, Astin, Korn, & Mahoney, 1996). These data include information from over 38,000 first time, full-time college freshmen in 2000 who were followed up four years after college entry, and incorporated information acquired directly from their institution.

The specific sample used for this study included male and female student athletes attending four-year colleges and universities. Given the longitudinal nature of this study only students who completed all items of interest on both surveys were included. The final sample included 2,952 revenue and nonrevenue student athletes (1,688 females; 1,264 males) attending predominantly White institutions.

RESEARCH METHODS

This study employs the "Input-Environment-Outcome" (I-E-O) model for studying the impact of college variables on students (Astin, 1993b). "Inputs" refer to the students' entering characteristics, "environment" is that which the student is exposed to during college, (i.e., faculty, peers, diverse views, etc.) and "outcomes" are the students' characteristics after interacting with the environment (Astin, 1993b). The power of Astin's I-E-O model is its ability to allow researchers to measure student change during college by comparing outcome characteristics with input characteristics. In short, this framework examines the influence of the college environment on student outcomes, by controlling for inputs or precollege characteristics and experiences.

Blocked stepwise regression analyses were conducted separately for male and female students on the dependent measure. Each block of independent variables is included in the temporal sequence in which it may have an effect on student outcome. Within each block, variables (significant at $p < .001$) enter the regression equation in a stepwise fash-

ion. The value of using a stepwise procedures design is that they allow for an examination of how regression coefficients change as each variable enters the equation (Astin, 1993b). This technique is especially useful for the present study, as analyses focus on how regression coefficients associated with student-athletes' gender change as other independent variables are added to the equation.

Outcome Variable

The outcome variable in this study is students' self reported college grade point average, a quantitative measure of academic achievement. College grades were obtained from students' self-reported grade-point average (GPA) on the follow-up questionnaire. GPA is scored on a six-point scale, from "A" to "C - or less." The pretest for this outcome is students' high school GPA (scored on an eight-point scale, from "A or A+" to "D"). The authors recognize that academic achievement encompasses much more than grade point average, however given the variables within the dataset, college GPA was the most appropriate measure of academic achievement, coupled with the fact that college GPA is the most common outcome when investigating student achievement in higher education (Astin, 1993a; 1993b).

Independent variables are blocked in the following temporal sequence: (1) students' high school achievement and high school interactions with teachers (inputs); and (2) college environmental characteristics (environment). Because the primary focus of this study is the impact of specific forms of student athlete-faculty interaction on academic achievement, independent variables are not limited to those expected to predict a given outcome; rather, many variables are included because they may shed light on the dynamics of racial composition. Independent variables can be classified into the following two categories (some variables may qualify for more than one category):

1. Those that previous research has identified as predictive of any of the outcome measures used in this study.
2. Those that are included on an exploratory basis because they may mediate the effects of the student athlete-faculty interaction by gender.

Independent Variables

Student background characteristics (Block 1) include measures of past achievement and high school environmental characteristics. The coding scheme for these variables is listed in Appendix A. Past achieve-

ment measure consist of students self-reported high school grade point average. The importance of high school GPA as a control variable when examining college GPA is well documented (Astin, 1993a, 1993b; Seller, 1992).

High school environmental characteristics consist of student athlete and teacher relation measures (See Appendix A). The significance of incorporating these measures was to eliminate self-selecting students thereby decreasing the chance of a Type I error (finding a relationship between the environment and the outcome measure when a relationship does not exist). It was impossible to eliminate all possible biasing input variables, however, the goal was to minimize the probability of a Type I error.

Measures of the college environment consist of various forms of interaction with faculty (Block 2). The importance of student-faculty relationship is well documented as a valuable aspect of the college student experience (Astin, 1993b; Milem & Berger 1997; Pascarella et al., 1983). Given the lack of research in this content area, the present study is a necessary beginning to advance our knowledge on the environmental factors that influence the academic success of male and female student athletes.

RESULTS

Frequency of Faculty Interaction by Gender

The analysis of female student athlete-faculty interaction is uncharted therefore we explored environmental measures descriptively, using male student athletes as the comparison group. Table 1 displays the average hours per week that student athletes communicate with faculty members outside of class. Female student athletes reported spending about

	Male		Female	
Response	Percent (N)		Percent (N)	
Not At All	6.9	(87)	5.2	(88)
Occasionally	53.4	(675)	48.0	(810)
Frequently	39.7	(502)	46.8	(790)
Total	100.0	(1264)	100.0	(1688)

the same amount of time with faculty outside of class as their male counterparts; the highest representation of both female and male student athletes spent less than one hour per week with faculty on campus.

Table 2 provides the breakdown of female student athletes along with comparable proportions of male student athletes in the sample who were asked how much opportunity faculty provided to discuss coursework with them outside of class. Forty-eight percent of female student athletes reported that faculty occasionally provided an opportunity to meet outside of class to discuss coursework as compared to approximately fifty-three for male student athletes.

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Descriptive data on student athletes by gender also revealed that female student athletes reported slightly more frequent assistance with study skills from faculty members than male student athletes (female, 16.1%; male, 13.5%); female student athletes also reported that faculty provided more frequent encouragement for graduate school than male student athletes (female, 33.9%; male, 26.4%) whereas male student athletes reported that faculty provided negative feedback about their academic work at a slightly higher percentage than female student athletes (female, 4.9%; male, 7.7%). In short, it appeared that minimal differences exist between male and female student athletes regarding the frequency of specific forms of interaction; female student athletes reported having slightly more interaction or contact with faculty than their male counterparts in most student athlete-faculty interaction forms.

Which Variables Account for the "Effects" of Achievement by Gender?

Because this study is concerned primarily with selected faculty interaction measures of academic achievement and whether they differ among male and female student athletes, the presentation of results focuses on the relationship between that environmental measure and the outcome. The effects of precollege variables on the outcome are presented and discussed only when they appear to vary by gender.

In order to assess the "effect" of selected precollege variables and environmental measures on academic achievement, the standardized regression coefficient (Beta-In) was examined at each step in the regression. The Beta-In (as reported in SPSS-X regression results) is the Beta coefficient a variable would receive if it entered the regression equation at the next step; all variables have a Beta-In irrespective of whether they enter a regression.

Table 3 and 4 provide summary tables of simple correlations for the outcome, as well as Beta-In at each step: (1) after controlling for precollege (input) characteristics; and (2) after controlling for measures of the environment. The purpose of this section is to examine the relationship between that environmental measure and the outcome by determining how this relationship changes throughout the regression, without addressing specifically why such changes occur (that discussion is saved until the next section)

Table 3. Variable Affecting Academic Achievement (College GPA) of Male Student Athletes (N=1,264)

Step	Variable	R	Beta ^a Presented After Each Step											
			1	2	3	4	5	6	7	8	9	10	11	12
	<i>Inputs</i>													
	High School Grade Point Average	.49	.50	.49	.49	.49	.48	.47	.45	.45	.44	.44	.44	.43
	A Guest in a High School Teachers Home	.49	.04	.04	.04	.04	.02**	.02**	.02	.02	.02	.02	.02	.02
	High School Teacher Advised Me	.49	-.02	-.03**	-.03**	-.03**	-.04	-.05	-.04	-.04	-.04	-.04	-.04	-.04
	Asked High School Teacher for Advice	.49	.03*	.02	.03**	.03**	.01	.01	.01	.01	.01	.01	.01	.01
	<i>Environment</i>													
	Faculty Provided Letter of Recommendation	.55	.23	.23	.23	.23	.23	.17	.20	.20	.19	.18	.19	.19
	Faculty Encouraged Graduate School	.56	.20	.19	.20	.20	.12	.12	.14	.13	.12	.11	.12	.12
	Faculty Assisted With Study Skills	.57	.01	.01	.02	.01	-.08	-.11	-.11	-.11	-.12	-.13	-.12	-.11
	Faculty Provided Respect	.57	.13	.13	.13	.13	.07	.05	.06	.06	.05	.04	.05	.04
	Faculty Provided Intellectual Challenge	.57	.12	.12	.12	.12	.06	.04	.06	.05	.05	.04	.04	.05
	Faculty Provided Help in Achieving my Professional Goals	.57	.16	.16	.16	.16	.07	.03*	.06	.05	.04*	.04*	.05*	.05*
	Faculty Provided Emotional Support	.57	.20	.19	.20	.20	.12	-.04	-.01	-.02	-.03**	-.03**	-.03**	-.03**
	Faculty Provided Negative Feedback about Academic Work	.58	-.05	-.05	-.05	-.05	-.08	-.09	-.07	-.07	-.07	-.07	-.07	-.07

Note: bolded values are not significant

Data Source: 2000 Freshman Survey (CIRP) & 2004 College Student Survey (CSS), Higher Education Research Institute, UCLA

Variables Not Entering Equation:

Number of Hours Per Week Talking with High School Teachers Outside of Class
 Number of Hours Per Week Talking with Faculty Outside of Class
 Faculty Provided Opportunity to Discuss Coursework Outside of Class
 Faculty Provided Opportunity to Work in Research Project
 Faculty Provided Advice About Educational Programs
 Faculty Did Not Take My Comments Seriously

^aThe coefficient for any variable not yet in the equation shows the beta that variable would receive if it were entered into the equation at the next step

Table 4. Variable Affecting Academic Achievement (College GPA) of Female Student athletes (N=1,688)												
Beta ² Presented After Each Step												
Step	Variable	R	1	2	3	4	5	6	7	8	9	10
<i>Inputs</i>												
	High School Grade Point Average	.49	.49	.49	.49	.47	.46	.44	.44	.43	.43	.42
	Hours Per Week Talking with High School Teachers Outside of Class	.49	-.04	-.04	-.05	-.06	-.06	-.06	-.06	-.06	-.06	-.06
	Asked High School Teacher for Advice	.49	.01	.03**	.03**	.01	.01	.01	.01	.01	.01	.01
<i>Environment</i>												
	Faculty Provided Letter of Recommendation	.53	.19	.20	.19	.19	.14	.17	.15	.14	.14	.15
	Faculty Encouraged Graduate School	.54	.18	.18	.18	.12	.12	.14	.11	.10	.10	.10
	Faculty Assisted With Study Skills	.55	-.05	-.04	-.04	-.11	-.13	-.13	-.15	-.16	-.16	-.15
	Faculty Provided Help in Achieving my Professional Goals	.56	.16	.16	.16	.09	.05	.10	.10	.08	.07	.07
	Faculty Provided Intellectual Challenge	.56	.13	.13	.13	.08	.06	.08	.06	.06	.06	.07
	Faculty Provided Respect	.56	.12	.13	.12	.08	.05	.07	.06	.05	.05	.03*
	Faculty Provided Negative Feedback about Academic Work	.57	-.09	-.09	-.09	-.11	-.11	-.09	-.09	-.10	-.09	-.09

Note: Bolded values are not significant

Data Source: 2000 Freshman Survey (CIRP) & 2004 College Student Survey (CSS), Higher Education Research Institute, UCLA

Variables Not Entering Equation:

High School Teacher Advised Me
A Guest in a High School Teacher's Home
Number of Hours Per Week Talking with Faculty Outside of Class
Faculty Provided Emotional Support and Encouragement
Faculty Provided Opportunity to Discuss Coursework Outside of Class
Faculty Provided Opportunity to Work in Research Project
Faculty Provided Advice About Educational Programs
Faculty Did Not Take My Comments Seriously

⁵The coefficient for any variable not yet in the equation show the beta that variable would receive if it were entered into the equation at the *next* step

Relationships Explained by Input Effects

When precollege (input) characteristics are controlled (Block 1), female student athletes' high school grade point average has the strongest effect on their college GPA (Beta=.42, $p < .001$, see Table 4); a similar relationship was also found for male student athletes (Beta=.43, see Table 3). The only other high school characteristic significant for females was hours per week talking with high school teachers outside of class. This variable had a negative effect on females' college GPA (Beta= -.06); that is females student athletes who talked frequently with their high school teachers outside of class more often received lower grades in college. For male student athletes the input characteristic "a guest in a high school teachers home" had a positive effect on college GPA (Beta=.02), suggesting that male student athletes who were frequent guest in a high school teachers home were more likely to receive higher grades in college.

Relationships Explained by Environmental Effects

As described earlier, while the entry of high school grades (input) had a strong effect on academic achievement for both male and female student athletes, the entry of the college environment led to generally smaller effects in the relationship between faculty measures and the outcome. Of course, the relatively smaller "mediating" power of the environmental block was due in part to the natural correlation between inputs and environments; much of the potential "impact" of the environment had already been accounted for by students' high school grades.

With respect to female student athletes, the data revealed that the environmental measures, faculty provided a letter of recommendation and faculty provided encouragement for graduate school, had fairly strong positive relationships with college GPA (Beta = .15; Beta = .10,

respectively; see Table 4). Likewise, male student athletes who received a letter of recommendation ($\text{Beta}=.19$, $p<.001$) and encouragement for graduate school by faculty ($\text{Beta}=.12$) had the strongest positive influence on college GPA. Although these two variables had a slightly stronger effect on college grades for male as compared to their female counterparts, the differences were relatively minimal.

For female student athletes the following college environment variables had a moderate but significant positive effect on their college GPA: faculty provided help in achieving professional goals ($\text{Beta}=.07$), faculty provided intellectual challenge and stimulation ($\text{Beta}=.07$) and faculty provided respect ($\text{Beta}=.03$). For male student athletes the same relationship was found although to an even lesser extent. The following variables had a moderate to weak but positive effect on college GPA for males: faculty provided help in achievement professional goals ($\text{Beta}=.05$), faculty provided intellectual challenge and stimulation ($\text{Beta}=.05$) and faculty provided respect ($\text{Beta}=.04$).

College environment variables that affect grades negatively for female student athletes included faculty provided assistance with study skills ($\text{Beta}=-.15$) and faculty provided negative feed back about academic work ($\text{Beta}=-.09$). In other words, female student athletes who received more assistance from faculty with study skills and more negative feedback regarding their coursework received lower college GPAs. For male student athletes the following variables influenced college GPA negatively: faculty provided assistance with study skills ($\text{Beta}=-.11$), faculty provided negative feedback about work ($\text{Beta}=-.07$), and faculty provided emotional support and encouragement ($\text{Beta}=-.03$). The latter findings for female and male student athletes are not surprising since students typically tend to seek assistance with their study skills and receive negative feedback when they are not performing well academically.

DISCUSSION OF FINDINGS

Although the focus of the study was on environmental predictors of academic achievement, precollege and college environmental characteristics provides some evidence that male and female student athletes' are affected slightly different. For example, high school GPA continues to be a strong predictor of academic achievement in college for both male and female student athletes. Female student athletes' high school GPA, however, was a slightly stronger predictor of college GPA as compared to their male counterparts, indicating that perhaps female student athletes

matriculate from high schools and environments more prepared for college entry (Coakley, 2001; Harrison & Lawrence, 2002).

Regression results also showed that college environmental measures were fairly strong predictors of academic success for male and female student athletes in this study, lending support to Student Involvement Theory. As discussed earlier, much of the effect of the environment is already accounted for by the input characteristics (high school GPA) in the previous block, since student input characteristics are naturally correlated with college environments. Nevertheless, it is clear that both male and female student athletes' academic success is to some extent contingent upon the specific nature of their interaction with faculty; student-athletes also showed minimal differences in their various forms of contact with faculty in this study. For example, faculty who provided a letter of recommendation, encouragement for graduate school and help in achieving professional goals makes a fairly strong contribution to both male and female student athlete's academic success. Further, as the regression analyses indicate, faculty were more likely to provide help to both male and female student athletes with study skills. Again, such a finding is not surprising since students generally tend to seek guidance with their studies when they are performing well. Clearly, there seems to be a gender balance relative to the various forms of student athlete-faculty interaction and the subsequent influence on their educational outcome. Controlling for such factors is critical if we are to understand how student athletes are affected by their particular subenvironments.

CONCLUSION

Limitations & Implications for Future Research

While the present study produced useful findings and has implications for institutional practices pertaining to student athletes, as outlined in previous section, it is not without limitations. The data sampled is not random, and thus generalizations from this study should be made with caution and consideration of these factors.

The lack of causal direction among the environmental measures and the dependent variable was another limitation of this study. That is, do student athletes who interact with faculty, depending on the form of interaction, receive higher grades or is it because those with higher grades are more likely to pursue interaction or contact with faculty? Future qualitative studies that explore student athletes' experiences with faculty

inside and outside the classroom might be successful in answering such uncertainties. Additionally, the voices of student athletes themselves are critical to addressing this issue at both the theoretical and practical level (Benson, 2001). Future investigation should also examine other environmental variables both in high school and college (e.g. peer interaction, student support services, etc) that may influence and further explain college GPA. This information will be most useful to faculty and administrators who are voluntarily or involuntarily exposed to the sport model and its constraints, as they attempt to improve the college experience of male and female student athletes in American higher education.

Implications for practice

The results of this study combined with findings from previous studies on student-faculty interaction (Comeaux, 2005; Pascarella, et al., 1983; Terenzini, et al., 1984) have important implications for program design and developmental strategies to assist college and universities in improving both male and female student athletes' academic success and overall college experience. Beyond that, this study argues for institutions encouraging a wide range of forms of faculty communication and mentoring that are responsive to the needs of male and female student athletes of different abilities, needs, and/or interests.

Since the quality and nature of student athletes-faculty interaction is essential to both academic achievement and the overall college experience, mandatory academic and social activities (e.g. research projects, faculty attendance at sporting events and team lunches, etc.) between student athletes and faculty members should be encouraged (Comeaux, 2005; Milem and Berger 1997; Pascarella et al., 1983). In doing so, faculty members will become more exposed to the culture of this special population of students and began to cultivate meaningful relationships. As such, meaningful interaction goes far beyond mere contact/interaction and includes learning about differences in experience and perspectives as well as getting to know each other in an intimate enough way to discern common goals and personal qualities. And lastly, higher education perhaps needs to reconsider the reward structure and think creatively about new incentives in order to: (1) succeed in its efforts to improve student-faculty interaction; (2) be responsive to the needs of certain student groups; and (3) improve faculty morale of dealing with the impact of intercollegiate athletics.

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Footnotes

1 Comeaux's research (interdisciplinary in nature) examines the ways in which the interaction patterns between students' race, ethnicity, and gender and characteristics of the social environment (or events) influence subsequent educational experiences and outcomes.

2 Harrison studies race relations, sport and higher education and the effects of media images on African American male student-athlete career aspirations and desires.

3 Bets reported in the final step

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APPENDIX A. Student Background & Involvement Characteristics		Measures
Block	Variables	
Block 1 (input)	<p><i>Background measures</i> Average high school grades (self-report)^a</p> <p><i>Interaction with Faculty</i> (high school)</p>	<p>Asked a teacher for advice after class Talking with teacher outside of class^b Was a guest in a teacher's home^b Number of hours per week talking with high school teachers outside of class^c Number of hours per week talking with faculty outside of class^c</p>
Block 2 (environment)	<i>Interaction with Faculty</i> (college)	<p>Faculty provided encouragement for graduate school^d Faculty provided emotional support & encouragement Faculty provided assistance w/ study skills Faculty provided advice about education programs Faculty provided opportunities to discuss coursework Faculty provided letter of recommendation Faculty provided respect Faculty provided intellectual challenge Faculty provided help in achieving professional goals Faculty provided negative feedback about academic work Faculty provided opportunities to work on research project Faculty did not take my comments seriously</p>

^a Eight-point scale: 1 = "D" to 8 = "A or A+."

^b Three point scale: 1 = "not at all" to 3 = "frequently."

^c Response choices include: None, Less than 1, 1 to 2, 3 to 5, 6 and over

^d Three point scale: 1 = "not at all" to 3 = "frequently."

Athletes' Feelings of Isolation Determined by Campus Design

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West Texas A&M University

AB

Many college student-athletes on campus and their social experiences with other athletes (Pinkerton, 1998) athletes often rely on their athletic department and provide support, which may reduce student-athlete isolation it is equated to environmental determinates on the campus and campus design influenced the isolation. Therefore, physical isolation allows student-athletes somewhat free of other departments having to rely on other campus services. Athletes' use of counseling and support services in athletic departments. Presented is a campus design may affect student-athlete service use, and will propose an intervention theory.

Athletes' Feeling of Isolation

The college student-athlete's experience. As a result of the individual athlete's needs, some researchers have found a minority (Remer, Tongate & Wadsworth, 1998) in addition to the developmental tasks of the athlete, the college student-athlete is often isolated from them because of their athletic schedule (e.g. practice, travel) and student-athletes from the non-athletic