Athlete and Non-Athlete Adjustment to College

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Abstract

This study examined college adjustment between athletes and non-athletes at Manhattan College, a medium-sized college participating in NCAA Division I athletics located in the Bronx, New York. Groups included a total of fifty-two athletes, fifty-six non-athletes, twenty-five female athletes, twenty-seven male athletes, twenty-six female non-athletes, and thirty male non-athletes, totaling one hundred and eight students completing the College Adjustment Scale (CAS) and a demographic questionnaire. Results indicate when comparing athletes to non-athletes, significant differences emerged on the subscales of interpersonal problems (IP), suicidal ideation (SI), substance abuse (SA), and family problems (FP). This group of non-athletes had more challenges adjusting to college than their athlete peers. There were no significant differences when comparing other groups other than male athletes to male non-athletes. In this comparison, male non-athletes had significantly more challenges in adjusting to college indicated with a significance at the <.006 level with the substance abuse (SA) subscale and just missing significance with the suicidal ideation (SI) subscale (.008).

The transition for students from high school to college can be challenging. This research study focused on how students who graduate from high school and enter college adjust to this transition. Psychological developmental theory identifies this period as demanding with students living away from home for the first time and establishing independence from parents. At this stage in life, the traditional college-age adult (eighteen to twenty-two years of age) may be faced with one or a combination of developmental issues, which may include achieving competence, managing emotions, becoming autonomous, and establishing identity (Davis and Humphrey 2000). In addition, external stressors such as athletic and academic performance, roommate challenges, and family struggles also can impact the college student (Levine and Cureton 1998).

Levine and Cureton (1998) describe college students today as diverse and divided, heavy users of alcohol, tired, and frightened. It is important to continue to gain greater understanding of this transition and for college services to be better prepared to aid the student to positively work through these issues resulting in maximizing the college experience. Through this research by examining the college adjustment period, specific challenges can be more understood and services identified to assist in meeting these needs. Few research studies have focused specifically on student athlete college

adjustment. This study contributes to our knowledge about student athlete and college adjustment.

While the general student is faced with academic and social stressors, the college athlete has additional challenges related to her/his sport. Along with the honor and prestige of being a collegiate student-athlete come stressors that the non-athlete does not have to deal with. For example, it is quite an awakening for a student-athlete who has excelled at the high school level and is now faced with the pressure and stress of having to prove one's ability all over again with the college team. The athlete has the pressure to not only perform in the classroom but also on the playing field and, in many cases, to maintain scholarship monies.

Research (Durm 1999; Jean-Van-Hell 2001) was available on different populations of college students and adjustment. For example, these researchers located studies about African American, Asian, community college, freshman, Hispanic, older students, and international students and adjustment. In contrast, limited research related to athletes and adjustment was located. Ridinger (1998) conducted a study focusing on international student-athletes and adjustment while Jackson and Krane (1993) examined freshmen male basketball players and adjustment.

This applied research project helps to contribute to the understanding of college athlete adjustment, through the use of the College Adjustment Scale (CAS), which has nine subscales (anxiety, depression, suicidal ideation, substance abuse, self-esteem problems, interpersonal problems, family problems, academic problems, and career problems). Along with administering the CAS, the subjects completed a demographic questionnaire to gain further insight into college adjustment.

More awareness of student needs related to adjustment will benefit the college environment as a whole including faculty, athletic staff, students, and student-athletes.

It can aid the college counselor in preparing and handling adjustment issues related to both athletes and non-athletes in their student body. More broadly, colleges and universities handling these challenges can help in increasing students' academic success. Addressing the student as a whole person and providing services for this person also can contribute to increasing retention at a college or university.

Levine and Cureton (1998) explain that college students today are very different than previous generations of college students. For example, they suggest that college students today are striving for change but yet seeking security. This research was designed to help continue to examine the needs of college students today. By examining athletes and non-athletes as separate entities, one can see commonalties as well as identify important differences among these groups. By examining these needs, college counseling centers, coaches, athletic departments, faculty, and administration can gain further insight on characteristics and challenges specific to today's college student.

This research contributes to a needs assessment of adjustment issues with athletes and non-athletes. Counseling centers will be better prepared to provide programming more directly related to the needs of the students. A greater understanding of specific needs of athletes is useful to know in planning services to provide.

It is helpful for coaches to be aware of an athlete's adjustment issues. If the coach is more aware he/she can help to meet these needs as well as refer the athlete to get additional help. Coaches are more likely to bring their athletes to peak performance if they address the total person. By being aware, observant, and having a genuine concern for their athletes on and off the field, there is a greater likelihood of reaching this goal. Non-athletes are more regularly serviced by departments for student services, while athletes may miss out on these services due to the time commitment of their sport. To help compensate for this void, coach awareness through education about common issues among their college athletes will help athletes get the support that they need.

For students to thrive academically, awareness of what might hold a student back is important. Having a faculty that is more in tune with the whole student can have a positive result in classroom performance. By having a better understanding of student's needs, colleges can provide appropriate and necessary services and thus increase retention.

Definition of Terms

In order for individual readers of this research to have a clearer understanding of the terms used in this study, the researchers provide the following definitions.

> Adjustment—For the purpose of this study, adjustment refers to the social, academic, and/or personal challenges, which may or may not occur during the life transition of entering college.

> College Athlete—For the purpose of this study, a college athlete is a full-time resident student on a varsity team at the NCAA Division I level.

> College Non-Athlete—For the purpose of this study, a college non-athlete is a full-time resident student who is not participating on a varsity team at the NCAA Division I level.

> College-Age Adult—For the purpose of this study, a college-age adult will be a college student between the ages of eighteen to twenty-two years of age.

The College Student and Adjustment

For the purpose of this study, adjustment refers to the social, academic, and/or personal challenges, which may or may not occur during the life transition of entering college. Many factors related to college adjustment have been identified. It is helpful to examine the relationships between and among these factors in order to increase the

understanding of adjustment issues and perhaps predict adjustment. In addition, college-counseling centers can use research data to support useful programming.

One of the overwhelming factors that has been researched related to college adjustment is separation from parents. Developmentally, the college student is in a time of life that often this separation from parents occurs (Davis and Humphrey 2000; Levine and Cureton 1998). This separation, or more specifically separation–individuation, refers to one developing his or her own sense of self and balancing individuality with family connectedness. Relationships with parents can have an impact on adjustment to college for many college students.

Lapsley, Rice, and Shadid (1989) examined the relationship between psychological separation and adjustment to college. More specifically these researchers wanted to see if freshmen transition was "mediated" by psychological separation from parents and if there were gender differences. In their findings they saw a "pervasive" relationship between separation and adjustment existing with females who showed more psychological dependencies on mother and father.

If one is more emotionally independent from the parent relationship, the son or daughter is free of excessive need for approval, closeness, and support from parents. Lapsley, Rice, and Shadid (1989) noted that females are more dependent on parents for approval as did Lopez, Campbell, and Watkins (1986) who investigated whether there were differences between men and women in psychological separation and college adjustment. Forty-two freshmen and sophomore students were administered the Psychological Separation Inventory, Beck Depression Inventory, and the College Adjustment Inventory. Women showed to be more dependent on parents, and a negative correlation between psychological separation and both depression and college adjustment existed. In contrast men were significantly more independent of parents and did not show a negative correlation (Lopez, Campbell, and Watkins 1986).

Holahan, Valentiner, and Moos's (1994) goal was to understand how parental support relates to the psychological adjustment of a young adult to college. The sample was taken from a large public university, and students were surveyed their first year and two years later. The following areas were surveyed using separate instruments: parental support, social disposition, and psychological adjustment. The results indicate that support from both parents along with a non-conflictual relationship (defined as freedom from excessive guilt, resentment, and anger regarding parents) between parents contributed to positive college adjustment.

Palladino and Blustein (1994) hypothesized that psychological separation and parental attachment together would be a stronger predictor of college adjustment as compared to the variables separately. This was true among women but not men in terms of contribution to student development but not necessarily with college adjustment. This is in contrast to the findings with Lopez, Campbell, and Watkins (1986). Rice, Cole, and Lapsley (1990) also examined the relationship between separation—individuation, family cohesion, and college adjustment. Positive

separation feelings were deemed to be a better predictor of college adjustment than independence from parents or family cohesion.

Lopez, Campbell, and Watkins (1988) tried to identify the relationship between family structure and psychological separation and the relationship between psychological separation and college adjustment. Different separation patterns were noted between men and women. When conflict and other dysfunctional interactions have occurred in the family structure, conflict is more likely to occur related to psychological separation. For women more dysfunction may occur due to the stronger tendency to want parental approval and support. Women tend to value more family interrelationships, affectional ties, which puts them at greater risk to be challenged with adjustment issues in college.

Holmbeck and Leake (1999) used the Minnesota Multiphasic Personality Inventory I and II (MMPI) and the separation-individuation test of adolescents (SITA) to survey undergraduate college students to investigate psychological adjustment profiles. They also were concerned with different relationship strategies during late adolescence and whether these strategies were helpful or not in adjustment. Using a variety of analysis of these tests, Holmbeck and Leake (1999) found that college students who are concerned about being alone, more dependent on highly controlling parents, and deny the need of close relationships have greater adjustment challenges.

Beside separation as a factor in college adjustment, Chemers, Hu, and Garcia (2001) looked at self-efficacy and optimism and impact on academic performance and personal adjustment of the first-year college student. Self-efficacy is "the belief in one's capabilities to organize and execute courses of action required to produce given attainments" (Bandura 1997, 3). Results included that students with better academic performance were better adjusted. Higher levels of self-efficacy resulted in better adjustment. The more optimistic a student was, the better he/she adjusted to college. Students with high grade-point averages in high school showed higher levels of self-efficacy in college and performed well academically.

Predicting college adjustment and examining student's self-perceptions of adjustment and comparing perceptions with reality have been studied. Gerdes and Mallinckrodt (1994) examined the emotional, social, and academic adjustment of college students. Students were surveyed prior to enrollment to college on their perceptions of how they would adjust to college. Six years later the same student's transcripts were evaluated. Students who were in poor academic standard showed more variability with social and emotional subscales, thus emotional and social adjustment items predicted retention as well or better than academic adjustment.

Baker, McNeil, and Siryk (1985) looked at college student's perceptions and the reality of adjustment. Prior to entering college, students were surveyed to find out their perceptions of how they would adjust in college. At the end of their freshmen year, the same students were surveyed on an adjustment inventory. Overwhelmingly students adjusted poorer than what they perceived they would adjust except for one area of

adjustment. Students were more accurate in predicting the personal and emotional adjustment. Baker, McNeil, and Siryk (1985) stated that perhaps students are more aware of self, so students can more accurately predict how they will adjust in the personal and emotional areas. In contrast, students are not as accurate in the social and academic areas because college is a new environmental experience with which they are less familiar and, thus, less likely to predict factors related to adjustment.

The College Athlete and Adjustment

The transition from high school to college is a challenging one. A student who is also an athlete may have additional concerns that a non-athlete may not experience. Some studies, including Sowa and Gressard (1983) and Eiche, Sedlacek, and Adams-Gaston (1997), specifically examined college athletes and adjustment.

Sowa and Gressard (1983) used Chickering's (1969) Student Developmental Task Inventory to look at collegiate athletes and non-athletes and the achievement of developmental tasks. The three major scales are developing autonomy, developing purpose, and developing mature interpersonal relationships. In the three sub-scales (educational plans, career plans, and mature relationships with peers), athletes showed a significant difference, but findings also showed athletes scored lower than non-athletes on all sub-scales in the achievement of developmental tasks as defined by Chickering (1969). There were no significant differences between male and female responses, both within athletes and non-athletes. While the general public may believe that the athletic experience results in many positive results, Chickering (1969) indicates that athletes struggle with formulating educational and career goals and obtaining levels of satisfaction from the educational experience. Athletes have shown to have more difficulty in developing mature relationships with peers. This may be due to the demanding time constraints placed on athletes, which limits general interaction with their peers and does not foster the ability or skill of achieving and maintaining these relationships.

Pascarella and Smart (1991) using the Cooperative Institutional Research Program (CIRP) looked at African American and Caucasian men and the effect of athletic participation on a variety of educational outcomes including social involvement, academic achievement, bachelor degree attainment, occupational status and income in the earlier career, political and civic values, and measures of intellectual and social self-esteem nine years after initial enrollment. Data was collected from the CIRP in 1971 and 1980. Findings show that athletic participation had a positive impact on motivation to completing the bachelor's degree and overall satisfaction of the college experience. In addition, Pascarella and Smart (1991) indicate athletics had a positive impact on interpersonal and leadership skills.

In contrast to Pascarella and Smart (1991), the findings from Sowa and Gressard (1983), in general, create an image of a college athlete who is challenged in areas of autonomy, independence, and decision-making. A deficit in these areas overflows into their ability to have mature relationships with their peers. This supports that athletes

are a group with special needs that should be addressed by counseling centers. Pascarella and Smart's (1991) results paint a much more positive picture of the college athlete. However, Sowa and Gressard's (1983) findings are in agreement with positive leadership skills but find the college athlete has difficulty maintaining mature relationships with peers so interpersonal skills are wavering.

Eiche, Sedlacek, and Adams-Gaston's (1997) findings include the following. Athletes indicated that their high school did not prepare them while non-athletes indicated adequate preparation. Athletes expressed greater uncertainty in choosing a major and are more likely to change their major than non-athletes. Both groups expressed the value of completing graduating requirements to get a better job. However, non-athletes expressed higher interest in looking at the degree as a stepping-stone to graduate school. Athletes expressed an easier time to adjusting to the social life in college and have shown to have more leadership skills. However, non-athletes are more likely to participate in intramurals, follow a variety of the sport teams as a fan, and look to join the Greek system. The Greek system refers to membership in a fraternity or sorority. Being involved in these activities allows for more variety in social situations, thus meeting different people.

Jackson and Krane (1993) intensely interviewed four male freshmen athletes, each for 80 minutes. They focused on academic, social, and athletic adjustment. All athletes indicated the importance of obtaining a college degree. However, they equally expressed the amount of time that basketball takes up in their day allowing them only two hours a day of study time. Three out of the four basketball players had to deal with athletic stress of being a former high school star and now a second string player at the college level. This affected their motivation and confidence. Like the general college student, these athletes expressed the challenge of managing their time and prioritizing their commitment to academics and athletics. Although they do not feel they miss out on campus life due to the time constraints of basketball, their statements indicate otherwise. It was noted that a close bond exists among team members, and it is likely that they would turn to a teammate for support in handling academic, social, and athletic challenges in college.

Literature Summary

Many studies (Holahan, Valentiner, and Moos 1994; Holmbeck and Leake 1999; Lapsley, Rice, and Shadid 1989; Lopez, Campbell, and Watkins 1986, 1988; Palladino and Blustein 1994; Rice, Cole, and Lapsley 1990) have been conducted related to college adjustment and how parental separation impacts this adjustment. Females tend to be more dependent on parents for approval and thus are more impacted by separation issues from parents and college adjustment (Lapsley, Rice, and Shadid 1989; Lopez, Campbell, and Watkins 1986, 1988). Having support from both parents and a non-conflictual relationship with parents contributes positively to college adjustment (Holahan, Valentiner, and Moos 1994).

Chemers, Hu, and Garcia (2001) examined the relationship between self-efficacy and optimism and college adjustment. The more optimistic a student was the better he/she adjusted to college. Holmbeck and Leake (1999) found that college students who are concerned about being alone, more dependent on highly controlling parents, and deny needs of close relationships have greater adjustment challenges.

Some researchers (Gerdes and Mallinckrodt 1994; Palladino and Blustein 1994) have attempted to predict college adjustment. Academics appear to connect positively with college adjustment, while social and emotional adjustment can predict adjustment as well or better than academics (Gerdes and Mallinckrodt 1994).

The studies reviewed indicate some contradicting results related to athletes and how they adjust in college. For example, Sowa and Gressard's (1983) results show athletes struggle with developing mature relationships while Pascarella and Smart (1991) indicated athletes thrive with their interpersonal relationships.

Jackson and Krane (1993) reported that athletes find time management a challenge with the juggling of academics and athletics, although the athletes felt they did not miss out on campus life in general. Eiche, Sedlacek, and Adams-Gaston (1997) showed that athletes expressed an easier time to adjusting to social life in college than non-athletes adjust. Athletes also indicated that their high school did not prepare them while non-athletes indicated adequate preparation.

Sowa and Gressard (1983) indicated athletes struggled with formulating educational and career goals. Both Jackson and Krane (1993), and Eiche, Sedlacek, and Adams-Gaston (1997) found that athletes noted importance of completing a degree.

In general, athletes tended to be motivated to obtain a degree while there were mixed conclusions on social life adjustment. There may be mixed results with these studies because of the scales used, types and sizes of the universities, a variety of participants from different athletic teams, and the varied academic integrity of institutions.

Research Hypothesis: College athletes will adjust better to college than college non-athletes.

Methods
Research Design
The College Adjustment Scale was administered as the quantitative element of a causal-comparative study investigating the hypothesis that there is a significant difference (indicated by an independent t-test at $p < .006$) in college adjustment between athletes and non-athletes. The demographic questionnaire administered to the same group included two open-ended questions, which added additional insight from the results of the CAS. These questions were "Briefly describe the most challenging

part of your adjustment to college life" and "How has being a student athlete helped or hindered your ability to adjust to college life?"

Subjects

The subjects in this research study consisted of one hundred and eight randomly chosen full time college freshmen and sophomores, athletes and non-athletes who coexist in the same dormitory on the campus of Manhattan College, a medium-sized four-year NCAA Division I institution in the New York City metropolitan area. A total of 522 students (first year and sophomores) were randomly assigned housing in this particular dormitory. The college's total undergraduate population is 2,900. The sample was a good representation of the college's first-year and sophomore classes in terms of major and representation on a variety of varsity teams. It was expressed to them that their responses would be confidential and that participation in this study would benefit the college in its awareness of the needs of its students.

Instruments

The College Adjustment Scale (CAS) along with a demographic questionnaire was given to each of the participants in the study. The researchers scored the CAS by hand. The CAS was published in 1991 by William D. Anton and James R. Reed as a quick and economical method to screen college students for any developmental or psychological problems as reviewed by Martin and Starr (1998). The CAS is a 108 item self-report with nine subscales (twelve items in each subscale). The subscales are anxiety, depression, suicidal ideation, substance abuse, self-esteem problems, interpersonal problems, family problems, academic problems, and career problems. Test takers are asked to respond to the accuracy of each item as it pertains to them. These items are presented as a four-point Likert type rating scale ranging from Not At All True to Very True. Table 1 provides a listing of the College Adjustment Scale (CAS) nine subscales and two sample questions for each.

Table 1: College Adjustment Scale (CAS) sample of questions for each subscale.

(Choices to respond: false/not at all true, slightly true, mainly true, and very true)

CAS Subscales Sample Questions

Academic Performance (AP)	I have poor study skills. I seldom feel prepared for exams.
Anxiety (AN)	I seem to be worried constantly about something. I think I'm showing the signs of a lot of stress.
Interpersonal (IP)	A lot of people irritate me. I have close and satisfying relationships.
Depression (DP)	The smallest tasks seem to tire me out. Most mornings I wake up calm and rested.

Career Problems (CP)	I can't seem to find a major that fits me. I don't know what to do with my life.
Suicide Ideation (SI)	I can no longer cope with life. I have nothing to live for.
Substance Abuse (SA)	I party too much. I use drugs or alcohol as a way to cope with my problems.
Self-esteem (SE)	I feel good about myself. I trust my judgment.
Family Problems (FP)	I avoid talking to my parents. My family doesn't understand me.

Martin and Starr (1998) report a reliability coefficient range between .80 and .92 with a mean of .86. Only a measure of internal consistency was reported. Validity was reported on the sub-scales as having sufficient discriminate and predictive validity. Campbell, Palmieri, and Lasch (2006) conducted a study that established validity of the College Adjustment Scale (CAS) by using a comparison with the MMPI College Maladjustment Scale.

The CAS is limited in that it does not have an eating disorder scale and in its standardization sample, which contained only about 10 percent of a population over age thirty and limited representation of race. Problem Checklists such as the CAS have been helpful for a variety of reasons. It may be used as a needs assessment of an individual or group, a possible look at progress in the counseling of an individual or group; and although there is no diagnostic link, it may be used adjunctively as a part of a battery of assessment measures in gaining insight to a client (Davis and Humphrey 2000; Martin and Starr 1998). For the purpose of this study, the CAS is an appropriate tool.

In addition, a demographic questionnaire was used with all subjects to look further at some of the issues that the CAS will bring forward. An analysis of the results of the CAS provided information on these groups as separate entities as well as looking at a combination of comparisons of the following groups at this college: male athlete, male non-athlete, female athlete, female non-athlete. Again the researchers looked at any themes or issues that arose in these groups.

Data Collection Procedures

The College Adjustment Scale was administered in a lounge in a resident hall on the campus of Manhattan College. As students walked by the lounge, two of the researchers asked whether they were a freshman or sophomore living in the resident hall and asked whether they would take approximately twenty minutes to complete a demographic questionnaire and the CAS for a research study. Upon completion, students were given a slice of pizza. The CAS was organized in folders marked Male

Athlete, Female Athlete, Male Non-Athlete, and Female Non-Athlete. When students agreed to complete the CAS, they were asked whether they were on a varsity team, and depending on their answer, they were given the appropriate folder. Having the CAS organized in this way allowed the researchers to keep track of the number of subjects obtained in each category. At the end of the evening, the researchers noted a shortage of male and female athletes. To help obtain these, on the following night, at a women's basketball game, student-athletes known by the researchers from teaching a gymnastics class, were approached and asked whether they met the criteria (male or female athlete, living in a resident hall, freshman or sophomore) and would they complete the CAS. By the end of this process, one hundred and eight CAS's were completed. The researchers then scored the CAS and statistically analyzed the data.
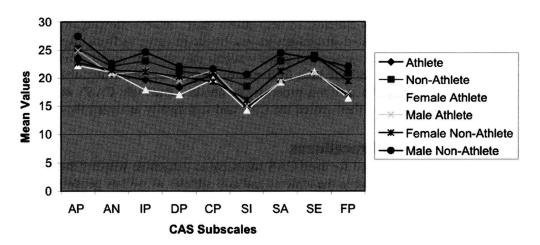
Statistical Analysis Procedures

Independent t-tests were used for each CAS sub-scale to determine whether there was a significant difference between the athletes and non-athletes as well as gender within these groups. An additional demographic questionnaire with two open ended questions was formulated to help the researcher gain insight from the results of the CAS. These two open-ended questions included "How has athletics helped or hindered your adjustment to college?" and "Describe the most challenging part of your adjustment to college."

Results

This study focused on examining college adjustment between athletes and non-athletes at a medium sized college. Groups included a total of fifty-two athletes, fifty-six non-athletes, twenty-five female athletes, twenty-seven male athletes, twenty-six female non-athletes, and thirty male non-athletes, totaling 108 students completing the College Adjustment Scale (CAS) and a demographic questionnaire. The CAS consists of nine subscales including Academic Problems (AP), Anxiety (AN), Interpersonal Problems (IP), Depression (DP), Career Problems (CP), Suicidal Ideation (SI), Substance Abuse (SA), Self-Esteem Problems (SE), and Family Problems (FP). When the CAS is scored, the higher the score on a subscale indicates more of a problem area. For example, the highest score possible on a sub-scale is 30, so if student A scored 25 and student B scored 15 on the substance abuse (SA) subscale, student A would have more difficulty with alcohol and/or other drugs and this may be affecting college adjustment in a negative way. The means of all groups on each particular subscale can be viewed in Figure 1.

Figure 1.

Means of All Groups

After looking at the means of all the groups in each subscale, in comparison with the national norms, the following observations may be noted. It is important to remember that the higher the score, the more likely an issue exists in that particular subscale. The non-athletes had a mean above the national norm in all of the nine subscales. The male non-athlete group also had a mean above the national norm in all of the nine subscales. The male athlete group had means above the norm in all subscales except self-esteem (SE) and family problems (FP). The athlete group, male and female combined, had a mean below the norm in all subscales except depression (DP), suicide ideation (SI), and substance abuse (SA). Female athletes had a mean below the norm in all subscales except, career problems (CP) and substance abuse (SA). Female non-athletes had a mean below the norm on the subscales of academic problems (AP), anxiety (AN) and career problems (CP). They had means above the national norm in the six other subscales.

Using Statistical Package for Social Sciences (SPSS), analysis consisted of nine one-way ANOVASs with athlete, non-athlete, female athlete, male athlete, female non-athlete, male non-athlete as the independent variable and each of the nine subscales of the CAS as dependent variables. Due to the number of repeated tests on the same sample, Bonferroni critical value procedure for alpha inflation was applied by decreasing the significance level from .05 to .006 (.05 divided by nine). T-tests were completed to compare the means of the groups.

Results of t-tests comparing all athletes to all non-athletes are shown in Table 2. Results indicate when comparing athletes to non-athletes, significant differences emerged on the subscales of interpersonal problems (IP), suicidal ideation (SI), substance abuse (SA), and family problems (FP). This group of non-athletes had more

challenges adjusting to college than their athlete peers. Thus athletes showed significantly better adjustment than non-athletes on the subscales of interpersonal problems (IP), suicidal ideation (SI), substance abuse (SA), and family problems (FP).

Table 2: T-test results for comparing athletes versus non-athletes.

Athletes (N = 52) vs. Non-Athletes (N = 56)

Subscales	All Athletes		All Non-Athletes		T-Score	Significance	Interpreted Significance
	M	SD	M	SD			
AP	23.6	8.2	25.2	6.4	-1.147	.254	N.S.
AN	20.8	6.7	22.1	7.0	−.959	.340	N.S.
IP	19.6	5.5	23.0	6.6	−2.813	.006	<.006
DP	18.3	5.8	21.2	6.7	−2.385	.019	N.S.
CP	20.6	8.4	20.5	7.2	.015	.988	N.S.
SI	14.7	4.4	18.5	7.9	−3.089	.003	<.006
SA	19.2	6.2	23.0	7.4	−2.807	.006	<.006
SE	21.0	6.0	24.0	6.2	−2.565	.012	N.S.
FP	16.8	5.1	20.8	6.6	−3.512	.001	<.006

(N.S. = Not significant, <.006 = significant)

Results of t-tests comparing female athletes to male athletes are shown in Table 3. In comparing the female athletes to the male athletes, there was no significance in college adjustment between male and female athletes. Whether an athlete is male or female, their college adjustment was similar.

Table 3: T-test results for comparing female athletes versus male athletes.

Female Athletes (N = 25) vs. Male Athletes (N = 27)

Subscales	Female Athletes		Male Athletes		T-Score	Significance	Interpreted Significance
	M	SD	M	SD			
AP	22.2	7.4	24.9	8.8	−1.198	.236	N.S.
AN	21.0	6.8	20.6	6.8	.175	.862	N.S.
IP	17.8	4.8	21.3	5.6	−2.368	.022	N.S.
DP	16.9	5.0	19.5	6.2	−1.649	.106	N.S.
CP	19.7	7.5	21.3	9.2	−.691	.493	N.S.
SI	14.2	4.4	15.0	4.4	−.653	.561	N.S.

SA	19.2	6.5	19.3	6.0	−.057	.955	N.S.
SE	21.1	6.3	20.9	5.7	.115	.909	N.S.
FP	16.3	4.4	17.2	5.8	−.633	.529	N.S.

(N.S.=Not significant, <.006 =significant)

Results of t-tests comparing female athletes to female non-athletes are shown in Table 4.

Table 4: T-test results for comparing female athletes versus female non-athletes.

Females Athletes (N = 25) vs. Female Non-Athletes (N = 26)

Subscales	Female Athletes		Female Non-Athletes		T-Score	Significance	Interpreted Significance
	M	SD	M	SD			
AP	22.2	7.4	22.7	6.0	−.281	.780	N.S.
AN	21.0	6.8	21.4	5.4	−.247	.806	N.S.
IP	17.8	4.8	21.1	6.3	−2.060	.045	N.S.
DP	16.9	5.0	20.2	5.9	−2.142	.037	N.S.
CP	19.7	7.5	19.3	7.1	.202	.841	N.S.
SI	14.2	4.4	16.0	4.2	−1.471	.148	N.S.
SA	19.2	6.5	21.2	8.1	−1.003	.321	N.S.
SE	21.1	6.3	24.0	6.8	−1.614	.113	N.S.
FP	16.3	4.4	19.4	5.0	−2.349	.023	N.S.

(N.S.=Not significant, <.006 =significant)

In comparing the female athletes to the female non-athletes, there were no significant differences among the female population. In other words, whether a female was an athlete or non-athlete did not affect overall college adjustment.

Results of t-tests comparing male athletes and male non-athletes are shown in Table 5. In comparing athletes to male non-athletes there was significance at the < .006 level with substance abuse (SA) subscale. Just missing the < .006 level of significance at.008, was the subscale of suicidal ideation (SI). On all of these subscales male non-athletes scored higher than male athletes. These results indicate that male athletes showed significantly better adjustment on the subscale of substance abuse (SA) and better on suicidal ideation (SI) than male non-athletes. All other subscales were not significant comparing male athletes vs. male non-athletes.

Table 5: T-test results for comparing male athletes versus male non-athletes.

Male Athletes (N = 27) vs. Male Non-Athletes (N = 30)

Subscales	Male Athletes		Male Non-Athletes		T-Score	Significance	Interpreted Significance
	M	SD	M	SD			
AP	24.9	8.8	27.4	5.9	−1.252	.216	N.S.
AN	20.6	6.8	22.6	8.1	−1.005	.319	N.S.
IP	21.3	5.6	24.6	6.6	−1.998	.051	N.S.
DP	19.5	6.2	22.0	7.4	−1.358	.180	N.S.
CP	21.3	9.2	21.6	7.2	−.123	.903	N.S.
SI	15.0	4.4	20.6	9.6	−2.771	.008	N.S.
SA	19.3	6.0	24.4	6.6	−3.060	.003	<.006
SE	20.9	5.7	23.4	5.8	−1.998	.051	N.S.
FP	17.2	5.8	22.0	7.6	−2.649	.011	N.S.

(N.S.=Not significant, <.006 =significant)

Results of t-tests comparing female non-athletes and male non-athletes are shown in Table 6. In comparing the female non-athletes to the male non-athletes, there were no significant differences at the < .006 level. The academic problem (AP) subscale at .005 just missed the < .006 level of significance. Male non-athletes had a higher mean than female non-athletes on all subscales except self-esteem (SE). These results indicate that female non-athletes showed overall better adjustment as compared to male non-athletes except on the one subscale of self-esteem (SE).

Table 6: T-test results for comparing female non-athletes versus male non-athletes.

Female Non-Athletes (N = 26) vs. Male Non-Athletes (N = 30)

Subscales	Female Non-Athletes		Male Non-Athletes		T-Score	Significance	Interpreted Significance
	M	SD	M	SD			
AP	22.7	6.0	27.4	5.9	−2.922	.005	<.01
AN	21.4	5.4	22.6	8.1	−.667	.508	N.S.
IP	21.1	6.3	24.6	6.6	−2.016	.049	<.05
DP	20.2	5.9	22.0	7.4	−1.001	.321	N.S.
CP	19.3	7.1	21.6	7.2	−1.194	.238	N.S.
SI	16.0	4.2	20.6	9.6	−2.276	.027	<.05

SA	21.2	8.1	24.4	6.6	−1.611	.113	N.S.
SE	24.0	6.8	23.4	5.8	.063	.950	N.S.
FP	19.4	5.0	22.0	7.6	−1.472	.147	N.S.

(N.S.=Not significant, <.006 =significant)

Qualitative Findings

Along with the CAS, the 108 students also filled out a questionnaire that included demographic information (gender, year, major, etc.) as well as two open-ended questions which allowed students to comment on the most challenging part of adjusting to college life (see Appendix A). Athletes were specifically questioned how participating as a student-athlete has helped or hindered their ability to adjust to college life. All students were asked if they had sought help from the college counseling center. Eight percent of the students stated they had sought help at the college counseling center.

Three common themes were expressed by the student-athletes in support for athletics aiding adjustment. These included the opportunity to meet people and make friends, structure/time management, a feeling of responsibility and being a member of a team. Challenge areas expressed by student-athletes consisted of time management due to balancing sports along with other responsibilities such as high academic standards, fatigue, meeting people outside of the team, and being away from home. The non-athletes expressed feelings of homesickness, meeting people and making friends, time management and handling the freedom college brings. Both athletes and non-athletes indicated time management, academic workload, roommate, and financial concerns.

Discussion

This study looked at the differences and/or trends between athletes and non-athletes adjustment to college. The College Adjustment Scale (CAS) was administered to one hundred and eight students who were organized into six groups for analysis. They also completed a demographic sheet. These groups were all athletes ($n = 52$), all non-athletes ($n = 56$), female athletes ($n = 25$), male athletes ($n = 27$), female non-athletes ($n = 26$), and male non-athletes ($n = 30$). The students who participated in the study all resided in the same dormitory, were either freshmen or sophomores and attended a medium sized college.

Means and Standard Deviations were computed for all groups on each of the nine subscales of the CAS. Along with the CAS, the one hundred and eight students also filled out a questionnaire that included demographic information (gender, year, major, etc.) as well as two questions, which allowed students to comment on the most challenging part of adjusting to college life.

In comparing athletes and non-athletes, there were significant differences at the < .006 level on the subscales of interpersonal problems (IP), substance abuse (SA), family problems (FP), and suicidal ideation (SI). These results indicate that athletes fared better than non-athletes in these four areas (suicidal ideation, interpersonal problems, substance abuse, and family problems). In looking at the female athletes vs. the male athletes, there was no significance at the < .006 level on any of the subscales. These results indicate that whether an athlete is male or female, his or her adjustment is similar.

In comparing female athletes vs. female non-athletes, there was no significance at the < .006 level on any of the subscales. Thus, females whether they are athletes or non-athletes, adjust to college similarly. In comparing the male athletes to the male non-athletes there was significance at the < .006 level with substance abuse (SA). Just missing the < .006 level of significance was the subscale of suicidal ideation (SI). Male athletes had lower mean scores on all subscales compared to the male non-athletes. Thus, male athletes showed better overall college adjustment compared to male non-athletes.

When comparing the female non-athletes to the male non-athletes, there was no significance at the <.006 level with all sub-scales. Just missing the < .006 level of significance at.005 was academic problems (AP). These results tell us that female non-athletes were better adjusted than male non-athletes on the subscale of academic problems (AP).

In looking at the comparisons of the groups in this study, overall it appears athletes adjusted better than non-athletes. All females were better adjusted than all males in the academic problem (AP), interpersonal skill (IP), and career problem (CP) subscales as indicated by lower mean values.

Pascarella and Smart (1991) indicated that athletes thrive with their interpersonal relationships while Eiche, Sedlacek, and Adams-Gaston (1997) showed athletes have an easier time adjusting to social life than non-athletes. This research supports their findings with the significance found on the subscales of interpersonal problems (IP) and substance abuse (SA) of the non-athletes as compared to the athletes. All athletes fared better with interpersonal relationships and substance abuse. In addition all non-athletes had more problems with depression, self-esteem, family, and suicidal ideation. In contrast, Sowa and Gressard (1983) found athletes struggle with developing mature relationships. Athletes indicated it was difficult to meet people outside of the team in the qualitative component of this study.

A number of studies (Davis and Humphrey 2000; Holahan, Valentiner, and Moos 1994; Lapsley, Rice, and Shadid 1989; Levine and Cureton 1998; Lopez, Campbell, and Watkins, 1986, 1988) focused on college adjustment and separation from parents without looking specifically at athletes, but rather they focused on the general student body and gender differences. Relationships with parents have an impact on college adjustment. The results of this study showed that non-athletes struggled more than athletes with family problems which are defined by the CAS as "a measure of

difficulties experienced in the relationships with family members" (Anton and Reed 1991, p. 1). In comparing athletes to non-athletes, non-athletes showed greater difficulty with the subscale of family problems (FP). These results allude to the idea that regardless of gender, athletics has helped in the adjustment to college in the area of family problems (FP).

In contrast, Lapsley, Rice, and Shadid (1986 and 1988) indicated that females showed more dependence on parents. In this study, female athletes fared slightly better than male athletes and female non-athletes fared slightly better than male non-athletes on the subscale of family problems. This indicates that females showed better adjustment than males within their own cohort of athletics or non-athletic involvement. Perhaps these women are getting support from both parents along with a non-conflictual relationship as Holahan, Valentiner, and Moos (1994) suggested in their study as helpful in positive college adjustment. (Note: Male athletes did, however, demonstrate a better adjustment score than female non-athletes on the family problem subscale.)

This study indicates no significant difference in the subscales of academic problems (AP) and career problems (CP) between athletes and non-athletes. These results are in contrast with Chickering (1969) who indicated that athletes struggle with career goals.

In relation to academic performance, Eiche, Sedlacek, and Adams-Gason (1997) indicated that high schools did not prepare athletes academically for college. Jackson and Krane (1993) reported that male basketball players felt that the time commitment of their sport did not allow for academic success in college. Sowa and Gressard (1983) indicated athletes struggle with educational and career goals. In contrast to these studies, this study showed, apparently, that whether one was an athlete or a non-athlete, the college is meeting the academic and career needs of students. On both the academic problem (AP) and career problem (CP) subscales, athletes and non-athletes scored similarly demonstrating few problems in these areas.

Levine and Cureton (1998) identified external stressors such as athletic and academic performance, roommate challenges, and family struggles as impactful on the college student. The findings in this research parallel Levine and Cureton's (1998) identified external stressors. Students identified these same stressors in the qualitative component of this study.

In summary in this study, athletes appeared to adjust better overall than non-athletes. This is supported by the significant findings on the subscales of interpersonal skills (IP), suicidal ideation (SI), substance abuse (SA), and family problems (FP). On these particular subscales, athletes scored significantly lower than non-athletes, resulting in the interpretation that non-athletes have more problematic issues in these areas.

In examining the overall results of this study, the most important point to be gleaned would be that athletes appear to adjust better overall to college adjustment compared to non-athletes. Significant differences on particular subscales were only found when comparing athletes vs. non-athletes and male athletes vs. male non-athletes. With this

result, the group that struggled the most with college adjustment, at least in this study, was male non-athletes. Male non-athletes had the highest mean value on all subscales except they were slightly lower on self-esteem (SE) compared to female non-athletes. A higher score on the College Adjustment Scale (CAS) indicates it is a more problem area. The implications of this result raise concern for the population of male non-athletes in adjusting to college.

The limitations of this particular study need to be noted. A larger population completing the College Adjustment Scale (CAS) would give more insight into this topic as well as using different size colleges and universities. Even so it was a good representation from this particular college which competes at the NCAA Division I level. A variety of institutions would have different available resources for athletes and non-athletes. These services can have an impact on how students cope and hence adjust to college.

Further examination on these populations concerning college adjustment is warranted. It is suggested to not only focus on college adjustment but also to examine what services are available for students. For example, what counseling services are available, substance abuse education and programming, career services providing guidance for students, writing centers, and tutoring services? Other research questions were identified after conducting this study. For example, (1) Do athletes really adjust better, if so why? (2) What are athletic administrators, coaches, and staff actions that help/hinder college adjustment for athletes? (3) Are athletes held to an increased level of accountability? Does this help in adjustment? (4) Why do non-athletes, especially male non-athletes, not adjust as well? Do non-athletes have similar services available as athletes? Are they utilized? (5) What are other variables that institutions need to be aware of to help in college adjustment? (6) How does college adjustment connect with retention issues in higher education?

College adjustment is an important developmental process that students experience. Through more research on this topic, colleges and universities can gain further insight how to help students to be more successful in this transition.

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Appendix A—Demographic Questionnaire

Please answer thoughtfully. Your participation in this research will help improve student support on the campus of Manhattan College. Thank you for participating in this study. Your responses will be confidential.

"Adjustment" refers to social, academic and/or personal challenge that occurs during the life transition of entering college.

Gender: _____ Date: _____

Year (Freshman, Sophomore, Junior, Senior): _____

Major: _____

Dorm that you reside in: _____

1. Are you a member of one of XXX's Division I Athletic Teams? (yes/no) _____

2. If you responded, "Yes," which team? _____

3. How has being a student athlete helped or hindered your ability to adjust to college life?

   _____

   _____

   _____

4. Have you ever sought help from the XXX College Counseling Center?

   (yes/no)_____

5. If yes, could you describe why you sought help?

   _____

   _____

   _____

6. If no, was it because you had no need (yes/no)_____, or explain another reason(s).

   _____

   _____

   _____

7. Briefly describe the most challenging part of your adjustment to college life:

   _____

   _____

   _____

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