



Educational Justice Journal

An Investigation of How Social Factors Contribute to Codependency in Student Athletes

Aaron Livingston
Grambling State University

Chevelle Hall
Virginia State University

This study examined social factors that may contribute to levels of codependency among student-athletes attending Historically Black Colleges and Universities. It also explored relationships between selected demographic variables and codependency scores. The study achieved a 46% response rate, with 374 of 800 student-athletes participating. Of those respondents, 211 (56.4%) were male, and 163 (43.6%) were female. Statistical analyses were used to investigate social factors influencing codependent behavior in student-athletes. Codependency was measured using the Friel Adult Child/Co-dependency Assessment Inventory, and the survey was administered to student-athletes of all ethnic backgrounds and academic classifications at the participating institutions.

Introduction

Identifying codependent traits is essential and should be a core responsibility of every athletic department. Ideally, recognizing and addressing codependency among student-athletes would be a key part of supporting their overall development. Coaches and athletic administrators should approach this issue ethically and critically, while evaluating both student-athletes and coaching staff as needed. Because research on codependency in student-athletes remains limited and clear guidelines are lacking, a systematic approach to addressing the issue is necessary.

This study examines previously underexplored issues of codependency among student-athletes at Division I Historically Black Colleges and Universities. It offers athletic departments and coaches useful information to develop intervention programs addressing codependent

behaviors. To better understand how these cognitive issues develop, athletic administrators and coaches must identify where the disconnect begins. Some researchers suggest that student-athletes are socialized differently from traditional students.

Athletic department staff have shown growing interest in how participation in competitive sports shapes student-athletes' perceptions, attitudes, and behaviors (Ryska, 2002; Berry & Howe, 2002; Haselwood et al., Hausenblas & Mack, 1999; Smith & Stewart, 2003). These factors have been associated with codependent behaviors, including eating disorders, physique anxiety, sexual aggression, and identity crises (Hausenblas & Mack, 1999; Ryska, 2002; Smith & Stewart, 2003). Because student-athlete well-being should remain a central concern for both athletic departments and universities, coaches and administrators must balance the goal of developing responsible, civic-minded students with the demand to remain competitive. As a result, clear guidelines for supporting the cognitive, mental, social, and emotional development of student-athletes are essential.

Theoretical Framework

Social Development Theory and Social Learning Theory

Social Development Theory argues that social interaction precedes development while consciousness and cognition is the product of socialization and social behavior (Vygotsky, 1978). Vygotsky (1978) focused on the connections between people and the socio-cultural context in which they act and interact in shared experiences (Crawford, 1996). According to Vygotsky (1978), human-beings use tools that develop are from a culture, such as speech and writing, to mediate their social environments. Initially children develop these tools to serve solely as social functions, ways to communicate needs. Vygotsky (1978) believed that the internalization of these tools led to higher thinking skills. Learning therefore becomes a

reciprocal experience for the students and teachers. This concept is closely related to and supported by another well-known theory called the Social Learning Theory, which suggests that people learn from one another, via observation, imitation, and modeling (Bandura, 1977). The theory has often been called a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory, and motivation (Bandura, 1997). This theory is applicable to student-athletes because they are placed in groups in which they learn through observing others' behavior, attitudes, and outcomes of those behaviors. Bandura (1997) explains that most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions, this coded information serves as a guide for action. This is a very point in understanding why codependency exists among student-athletes because student athletes also learn from one another, via observation, imitation, and modeling. By observing teammates and coaches, student-athletes form ideas of how to behave and perform, and through competition they code information and it serves as a blueprint for competition.

Social learning theory explains human behavior in terms of continuous reciprocal interaction between cognitive, behavioral, and environmental influences Bandura (1986). This section discusses in detail the foundation of social learning which explains how individuals are socialized according to how people learn from one another. As noted, the Social Development Theory argues that social interaction precedes development while consciousness and cognition are the product of socialization and social behavior in this theory; meaning that we are socialized unconsciously. The Social Learning Theory has often been called a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory, and motivation of oneself. In this theory Bandura (1969) believed in "reciprocal determinism", that is, the world

and a person's behavior cause each other, while behaviorism essentially states that one's environment causes one's behavior, Bandura, who was studying adolescent aggression, found this too simplistic, and so in addition he suggested that behavior causes environment as well. Later, Bandura soon considered personality as an interaction between three components: the environment, behavior, and one's psychological processes (one's ability to entertain images in minds and language).

The consistent pressures of everyday life are enough to warrant psychological evaluations; for student-athletes these pressures are extreme because their lifestyles are typically more demanding than those of traditional students (Crestler and Lombardo, 1999). Often, codependency is a common reaction to stressful situations. In the case of the student-athlete, it may be manifested as inappropriate behavior, including personality disorders and addictive behaviors. In addition to other definitions, "codependency refers to "a chemical response or change in the brain brought on by very specific behaviors" (Cruse & Cruse, 1990). If an individual fails to or struggles to make this transition from being a traditional student to being a student-athlete the result can lead to codependency (Friel & Friel, 1988).

Student-Athletes and Co-dependency

Codependency can occur in student-athletes when a lack of self-confidence and changes in mood states create a state of mental anxiety that adversely affects athletic performance. Self-confidence is one of the most frequently cited psychological factors thought to affect sport performance and has been the primary focus of research conducted by sport psychologists. Self-confidence is considered by many to be a key factor to successful performance (Feltz, 1988). An individual's positive or negative mood have long been thought to play a crucial role in an athlete's ability to perform sport specific tasks. This ability then either augments or detracts from

the athlete's overall success or failure. Players who are evenly matched in physical skills often rely on their psychological skills to gain advantage over their opponents (Covassin & Pero, 2004). In further research, Hanton, Mellanlieu, and Young found that "anxiety increases as competition approaches and that self-confidence acts as a moderating variable that either increases or decreases anxiety levels based on the perception of the upcoming event" (Covassin & Pero, 2004; 231; Hanton, Mellanlieu & Young, 2002).

Prior research investigating student-athletes identified disordered eating, physique anxiety, sexual aggression, and identity crises among the unfavorable behaviors that are demonstrated by athletes (Hausenblas & Mack, 1999; Ryska, 2002; Smith & Stewart, 2003). These specific behaviors can be classified as codependent because they have a tendency to become compulsive and they can increase in frequency, intensity, and variety during the course of development (Friel, 1985). For example, codependency among student-athletes may begin as a coping mechanism that develops over time. The time that the student-athlete spends adjusting to his/her environment is likely to lead to a behavioral dependency that was once thought to be empowering (Vygotsky, 1978).

Pinpointing the codependency of student-athletes can have realistic and practical usages in an athletic department, especially if the information is used to develop structured intervention programs. For example, to be male and to be an athlete is considered in sport to be "normal" and "masculine". By contrast, to be female and to participate in sport is also viewed by some as "masculine", which can be disconcerting to some collegiate women. Many of these women, for the first time, are weight training extensively, developing muscles, gaining weight, and creating a more "masculine" body type, which conflicts with what is typically viewed as "feminine" (Kimball & Freysinger, 2003).

The latter is a concept that all athletic administrators and coaches should be aware of because it plays a key role in the development of eating disorders, and physique anxiety. Krane (2001) discusses that women in society are typically “expected” to act in a lady-like manner. This is another very important concept for both athletic administrators and coaches to understand because it can be a source in the development of sexual aggression and identity crisis (Kimball & Freysinger, 2003).

Other social factors contribute to the demands placed on the student-athlete. Messner (1994) examined the historical and ideological construction of organized sports and identified those differences between males and females are often highlighted as being biological, natural, and common sense, thus perpetuating patriarchal ideologies that exist in society and the false belief that women are inferior to men in some way. Race and social classes are other social-structural factors that shape collegiate athletes’ experiences in sport. Stereotypes of having natural athletic ability, being “reactors” not “thinkers”, and of having limited intellectual abilities plague racial minority athletes (Gatz et al., 2002; Messner & Sabo, 1990). In addition, research reveals that in the United States, some racial minorities, as well as Caucasian athletes, view sport as a means of upward social mobility and often do not distinguish that the odds are against them ever reaching the ranks of professional sport (Sage, 1998). The latter supports a very important concept for athletic administrators and coaches to fully understand because this introduces the concept of athletic identity.

Carver, Reynolds, & Scheier (1994) describe athletic identity in terms of how an adolescent identifies with the athletic role that helps them to develop competence in other domains. Initial sport research indicates that the athletic role constitutes a meaningful dimension of self-identity and influences various responses of athletes and non-athletes alike (Brewer,

1990; Brewer, Van Raalte, & Linder, 1993; Danish, 1983; Fox & Corbin, 1996; Kendzierski, 1988). These researchers generated studies that indicated how an individual responds to self-referent situations within sport varies with the degree to which he or she identifies with the athletic role. An individual with a strong athletic identity will be more likely to interpret sport-related events in terms of how they influence his or her athletic functioning than would an individual who is less committed to the athletic role (Danish, 1983). This concept is what makes the student-athletes' experience in college unique to the experience of the traditional college student.

Statement of the Problem

The well-being of student-athletes should be a central concern for both intercollegiate athletic departments and universities. Coaches and athletic administrators face the dual challenge of developing responsible, civic-minded students while also maintaining a competitive edge. As a result, clear guidelines for supporting student-athletes' cognitive, mental, social, and emotional development are essential. However, little formal academic research has specifically examined codependency among intercollegiate student-athletes.

Research Questions

- 1) What are the percentages of "no," "mild," "mild-moderate," "moderate-severe," and "severe" codependent assessments among Historically Black College and University Division I student-athletes.
- 2) Is there a difference between assessed codependency regarding ethnicity?
- 3) Is there a difference between the levels of assessed codependency in student-athletes regarding their parents' marital status?

- 4) Is there a difference between the level of assessed codependency in student-athletes who were raised in the inner-city (Urban) and those who were raised in rural areas?
- 5) Is there a difference between the levels of assessed codependency in student-athletes regarding their parents' socio-economic status?

Research Design

The quantitative methods utilizing cross-sectional survey procedures guided the analysis for this non-experimental investigation. The purpose of this study was to assess codependency in Division I Historically Black Colleges and Universities. The lack of data concerning codependency that exists and the absence of guidelines to ascertain the extent to which student-athletes possess codependent traits indicate that a systemic approach for addressing this problem is necessary. This research study addresses issues of codependency that was not previously known regarding its existence among HBCU Division I student-athletes.

Participants

The study had a 46% response rate, with 374 of 800 student-athletes participating. Participants were drawn from three Division I Historically Black colleges and universities. Demographic variables included ethnicity, parents' marital status, geographic location, and parents' socioeconomic status. Of the participants, 318 (85%) identified as African American, 42 (11.2%) as White, and 14 (3.7%) as Hispanic.

Data Collection Procedures

Participants in this study were full-time student-athletes enrolled at Division I Historically Black colleges and universities. The survey was administered to student-athletes of all ethnic backgrounds and academic classifications at the participating institutions. Recruitment and data collection followed a sequential process. First, athletic directors or athletic administrators at the

participating universities were contacted to obtain permission for the researcher to meet with student-athletes. After permission forms were signed, arrangements were made for the researcher to meet with student-athletes without coaches or athletic administrators present to reduce any sense of pressure. During these meetings, the researcher explained the purpose of the study and read a verbal consent statement outlining the procedures, benefits, and potential risks. Student-athletes who did not wish to participate were free to leave the meeting without penalty. Those who remained were informed that completing the demographic form and the Friel Adult Child/Codependency Assessment Inventory constituted consent to participate. This procedure was used in place of signed written consent forms at the request of the participating athletic departments. To protect participant privacy, the primary researcher alone distributed and collected all survey packets, which included the inventory and demographic questionnaire. Completed materials were collected, placed in envelopes provided by the researcher, and sealed until data analysis began.

After participants completed the questionnaires, the primary researcher sealed all responses in a package that remained unopened until analysis. Data from the Friel Adult Child/Codependency Assessment Inventory and the demographic questionnaire were then entered into SPSS version 10. A significance level of $p < .05$ was used, and the Tukey correction was applied to adjust the alpha level for individual tests and maintain the experiment wise alpha at $p < .05$. This correction was selected because it is commonly used for multiple-comparison tests.

Instrumentation

The Friel Adult Child/Codependency Assessment Inventory (Friel, 1985) has been developed and used since its creation in numerous research studies and was selected for use in this study. It was designed and developed on theory and clinical practice from working with dysfunctional families. For the study, the intent of the Friel Adult Child/Codependency Assessment Inventory is to assess codependency in student-athletes. It should be noted that the Friel Adult Child/Codependency Assessment Inventory was used to assess codependency of student-athletes at this point and time; it is not being used as a predictor of the development of more serious mental health illness nor is it being used as a formal tool to diagnosis any mental illness. Friel and Friel (1985) have determined the existence of symptoms to be core symptoms, as has been used to define codependency. Isham-Colvard (1998) reported that the Friel (1985) Codependency Assessment Inventory (CAI) was used as the measure of codependency in 62.4% of the studies reviewed in her meta-analysis of the literature. Friel and Friel (1987) used homogenous samples (significant others who were participating in family programs of a chemical dependency treatment center and professional counselors and therapists at a chemical-dependency treatment field) in the development of their instrument. The initial reliability figures, using the KR-20, were in the range of .83 to .85. The Friel (CAI) ranks respondents into the following levels of dependency: none, mild, moderate, or severe.

The Friel Adult Child/Codependency Assessment Inventory questionnaire consists of 60 true-false questions. Participants receive 1 point for every “true” response for even-numbered questions and 1 point for every “false” response for odd-numbered questions. Participants could receive a total possible score of 60 points. Scores from zero – 9 indicate no identifiable issues of codependency. Scores from 10 to 20 indicate mild codependency; scores from 21 to 30 indicate

mild-moderate codependency; 31 to 45 indicate moderate to severe codependency and scores over 45 indicate severe codependency. The time required to complete the questionnaire is approximately 15 to 20 minutes.

Results and Conclusions

Descriptive statistics for assessed level of Codependency that exist in student-athletes regarding ethnicity are provided. Table 1 provides the mean and standard deviation Codependency scores that were computed for each group of students by their ethnicity. The mean Codependency score for African American athletes was 26.40 (SD=7.04) and 22.02 (SD=8.31) for white athletes, respectively. Moreover, the mean Codependency score for Hispanic athletes was 21.50 (SD=6.70).

Table 1 Frequency Distribution of Participants by Gender

Variable	Number	Percent
Gender		
Male	211	56.4
Female	163	43.6
Total	374	100.0

Age

The variable age was categorized into three subgroups for this investigation. One hundred ninety-four (51.9%) student-athletes reported their age between 17 thru 19, and 170 (45.5%) of them indicated their age between 20 thru 22. Additionally, 10 (2.7%) student-athletes expressed their age as 23 years and above. See Table 2 for these analyses.

Table 2 Frequency Distribution of Participants by Age

Variable	Number	Percent
Age		
17-19	194	51.9
20-22	170	45.5
23 and above	10	2.7
Total	374	100.0

Ethnicity

Regarding the variable ethnicity, there were 318 (85%) student-athletes who identified their ethnic status as Black and 42 (11.2%) indicated their ethnic identity as white. On the other hand, 14 (3.7%) student-athletes reported their ethnic background as Hispanic. See Table 3 for these findings.

Table 3
Frequency Distribution of Participants by Ethnicity

Variable	Number	Percent
Ethnicity		
Black	318	85.0
White	42	11.2
Hispanic	14	3.7
Total	374	100.0

Parents' Socio-Economic Status

Three parents' socio-economic status, low, middle and upper, were designated for this study. There were 106 (28.3%) student-athletes who indicated their parents' socio-economic status as low and 246 (65.8%) said their parents' socio-economic status was middle. Moreover, 22 (5.9%) student-athletes reported their parents' socio-economic status as upper. See Table 4 for these results.

Table 4 Frequency Distribution of Participants by Parents' Socio-Economic Status

Variable	Number	Percent
Parents' Socio-Economic Status		
Low	106	28.3
Middle	246	65.8
Upper	22	5.9
Total	374	100.0

Parents' Marital Status

There were 120 (32.1%) student-athletes who reported their parents' marital status as married. By contrast, 254 (67.9%) student-athletes indicated their parents' marital status as single. See Table 5 for these analyses.

Table 5**Frequency Distribution of Participants by Parents' Marital Status**

Variable	Number	Percent
Parents' Marital Status		
Married	120	32.1
Single	254	67.9
Total	374	100.0

Geographic Location

Geographic location of student-athletes was measured by two distinct groups. One hundred sixty-nine (45.2%) student-athletes indicated that they attended rural high schools and 205 (54.8%) said they attended urban high schools. See Table 6 for these results.

Table 6 Frequency Distribution of Participants by Geographical Location

Variable	Number	Percent
Geographical Location		
Rural	169	45.2
Urban	205	54.8
Total	374	100.0

Sport Activities

There were ten (10) sport activities participated by student-athletes in the present study. One hundred nineteen (31.8%) student-athletes participated in football, 40 (10.7%) in basketball, 45 (12%) softball, 21 (5.6%) in volleyball and 54 (14.4%) in track. On the other hand, 9 (2.4%) student-athletes reported they participated in tennis, 10 (2.7%) in golf, 43 (11.5%) in baseball, 12 (3.5%) in soccer and 20 (5.3%) in cross country. See Table 7 for these findings.

Table 7 Frequency Distribution of Participants by Sport

Variable	Number	Percent
Sport		
Football	119	31.8
Basketball	40	10.7
Softball	45	12.0
Volleyball	21	5.6
Track	54	14.4
Tennis	9	2.4
Golf	10	2.7
Baseball	43	11.5
Soccer	13	3.5
Cross Country	20	5.3
Total	374	100.0

Ethnicity

Regarding the variable ethnicity, there were 318 (85%) student-athletes who identified their ethnic status as Black and 42 (11.2%) indicated their ethnic identity as white. On the other hand, 14 (3.7%) student-athletes reported their ethnic background as Hispanic. See Table 8 for these findings.

Table 8 Mean and Standard Deviation Results Regarding Codependents cores by Ethnicity

Ethnicity	Mean	Standard Deviation
African American	26.40	7.04
White	22.02	8.31
Hispanic	21.50	6.70

Shown in Table 9 illustrates a One-Way Analysis of Variance results of the Codependency scores of student-athletes attending Historically African American Colleges and Universities regarding their ethnicity. Statistically significant differences were found in the Codependency scores of the various ethnic groups of student-athletes ($F=9.399$, $df=2/371$, $p<.001$).

Table 9 Analysis of Variance Summary Table Regarding the Assessed Codependency Scores of Students Athletes by Ethnicity

Source of Variance	Sum of Squares	df	Mean Square	F	P	Eta ²
Between	968.529	2	484.264	9.399	.000***	.048
Within	19114.552	371	51.522			
Total	20083.080	373				

***Significant at the .001 level

Further data analysis using the Tukey post hoc test (See Table 10) revealed that African American student-athletes exhibited significantly higher Codependency scores than their White and Hispanic counterparts. No other mean differences were observed. Accordingly, it appeared that African American athletes tend to have greater degree of co-dependency.

Descriptive statistics for assessed level of Codependency that exists in student-athletes to their parents' marital status are provided in Table 5. The independent *t*-test was computed to assess the differences between the Codependency scores of student-athletes whose parents were married and those whose parents were single. As indicated in Table 12, the mean Codependency score for athletes whose parents were married was 24.06 (SD=7.96) and for those student-athletes whose parents were single, the mean Codependency score was (SD=26.51). A statistically significant difference was found between the Codependency scores of athletes whose parents were married and those whose parents were single ($t=-2.895$, $df=206.200$, $p<.01$). Thus,

it appeared that student-athletes whose parents were single had significantly higher Codependency scores than those whose parents were married.

Table 10 Tukey Results Regarding Codependent Scores of Student-Athletes by Ethnicity

Mean 1 African American	Mean 2 White	Mean 3 Hispanic	Observed Mean Difference	P
26.40	22.02		4.38	.001***
26.40		21.50	4.90	.033*
	22.02	21.50	.52	.970

***p, .001, *p<.05

Table 12 *t*-Test Differences between Assessed Codependency Scores of Student-athletes with regard to Parents' Marital Status

Statistics	Married (n=120)	Single (n=254)
Mean	24.06	26.51
SD	7.96	6.90
SE	.73	.43
Mean Diff		-2.45
<i>t</i>		-2.895***
df		206.200

NOTE: Assumption of Homogeneity of Variance was violated ($F=9.870$, $p<.01$), equal variances were not assumed *** $p<.001$

Presented in Table 13 are the independent *t*-test results pertaining to the differences between the Codependency scores of student athletes who attending urban and rural high schools. The mean Codependency score for students' athletes who attended rural high schools was 26.28 (SD=7.23). Additionally, the mean Codependency score for student-athletes who attended urban high schools was 25.26 (SD=7.41). A statistically significant difference was not found between Codependency scores of student-athletes who attended rural and urban high schools. It appeared that regardless of the type of high school attended, student-athletes have similar Codependency scores.

Illustrated in Table 14 are the mean and standard deviation results regarding the Codependency scores of student-athletes based on their parents' socio-economic status. The mean Codependency scores for student-athletes whose parents' socio-economic status were identified as upper and middle class were 26.41 (SD=7.41) and 25.28 (SD=7.61), respectively. In addition, the mean Codependency score for student-athletes whose parents' socio-economic status was low was 26.61 (SD=6.62).

Table 13 *t*-Test Differences between Assessed Codependency Scores of Student-athletes regarding Geographic Location

Statistics	Rural (n=169)	Urban (n=205)
Mean	26.28	25.26
SD	7.23	7.41
SE	.56	.52
Mean Diff		1.02
<i>t</i>		1.84
df		372

Reported in Table 15, the One Way ANOVA was computed to examine the differences between the Codependency scores of students regarding their parents' socio-economic status. No statistically significant differences were found between the Codependency scores of student-athletes regarding their parents' socio-economic status ($F=1.334$, $df=2/371$, $p>.05$).). Eta-square explains that .007 percent of the variability in the assessed codependency score can be accounted for by Parents' Socio-Economic Status. Accordingly, it appeared that parents' socio-economic status had no influence on student-athletes' Codependency scores.

Table 14 Mean and Standard Deviation Results Regarding Codependent scores by Parents' Socio-Economic Status

Ethnicity	Mean	Standard Deviation
Low	26.61	6.62
Middle	25.28	7.61
Upper	26.41	7.41

Table 15 Analysis of Variance Summary Table Regarding the Assessed Codependency Scores of Students Athletes by Parents' Socio-Economic Status

Source of Variance	Sum of Squares	df	Mean Square	F	P	<i>Eta</i> ²
Between	143.417	2	71.709	1.334	.265	.007
Within	19939.663	371	53.746			
Total	20083.080	373				

Conclusions

Analysis of data from the present study indicated that almost seventy-five percent of the student-athletes who participated in the study experienced some level of codependency as assessed by the Friel Adult Child/Codependency Assessment Inventory. A notable finding was the lack of influence that gender had on the Codependency behavior of student-athletes as indicated by the results of an independent samples t-test. These findings were not consistent with those of Anderson (1994), Uhle (1994), and Malloy and Berkey (1993). All of those researchers found that women were more likely to possess codependent behavior than their male counterparts were.

A plausible explanation for the current findings might be that male and female student-athletes are socialized alike in terms of depending on outside sources for their existence. For example, socialization takes place through participation in sport. Therefore, the structure of social relations in sports influences the participants' development of social skills (Nucci & Young-Shim, 2005). Socialization through participation in sports provides learning environments where participants have the opportunity to learn competition, cooperation, role-playing, and discipline regarding rules, regulations, and goals (Bloom & Smith, 1996).

The relationship between the Codependency scores on the Friel Adult Child/Codependency Assessment Inventory and the ethnicity of student-athletes were found to be statistically significant in the present study. Specifically, African-American was found to have a higher degree of Codependency than their White peers. This appears congruent with previous research that shows vast differences among races regarding co-dependency, particularly between African American and Whites (Arslanian, Suprasongsin, & Janosky, 1997). These researchers conducted a research project that investigated whether African American and Whites showed

differences in the prepubertal period of life. The result of the study supports that race versus environmental factors (physical activity/fitness and energy balance) should be carefully scrutinized as potential factors responsible for such differences.

An explanation for these findings in the present study might be that African American student-athletes are exposed to more extreme circumstances than White student-athletes are. It has been stated that popular culture's deluging society with images of African American males as athletes and entertainers is detrimental to the academic and social growth of this group. African American males are over-represented in the sports world, which was recently attributed to the intentional and intensive socialization of African Americans into sports. The consequences that have emerged from this phenomenon include an over identification with athletic achievement to the detriment of academic achievement (Beamon & Bell, 2006).

This research project supports the findings of Beamon & Bell (2006) in that African American student-athletes are forced to deal with outside influences such as intentional and intensive socialization. Consequently, African American student-athletes are more likely to receive social support for playing basketball from coaches, friends, and especially teachers, who provide encouragement for them to participate in sport. Moreover, support for playing basketball is associated with professional sport aspirations for African American males more so than White males (Harris, 1994). Thus, codependent behavior becomes a true mechanism that they are forced to deal with.

The study by Arslanian, Suprasongsin, & Janosky (1997) provides evidence that race and environment are potential factors in the differences that exist between people during the course of development. This parallels the fact the codependent and compulsive behaviors develop over time. It is believed overall that the findings in this study related to ethnic differences are very

important because we live in a race conscious society. In addition, these findings may indicate that athletic coaches and administrators should be aware of their own influences on African American athletes that could have an impact on potential codependent behavior.

One of the findings in this study was that the Codependency scores of student-athletes whose parents were married were lower than those whose parents were single. This finding could be very important to athletic administrators and coaches when recruiting athletes and developing an appropriate support system for them. The findings in the current study parallel a study by Jeynes (2004) which shows that children from single parent and recently divorced households drink alcohol in greater quantities and were more likely to be under the influence of alcohol, while at school. More research should be done with student athletes to gain more insight into this finding.

Regarding whether an athlete attending high school in a rural or urban setting makes a difference in their Codependency score, no statistically significant difference was found. This suggests that the size and location of high school attended may have little impact on student-athletes Codependency scores. More research is warranted in this area to provide more insights to explain this finding.

Finally, there was no statistically significant difference found regarding student-athletes' Codependency score and their parents' socio-economic status. This was surprising because research that investigates the personality of human beings as a whole considers attributes of social status (Arvydas, 2007). Considering this information, one would expect that a difference would be observed here, because of the "at-risk" status that is often associated with individuals from low socio-economic backgrounds.

References

- Amato, P.R. (1994). Life-span adjustment of children to their parents' divorce.
Future of Children: Children and Divorce, 4, 143-164.
- Arsalanian, S., Suprasongsin, C., & Janosky, J. (1997). Insulin Secretion and sensitivity
 In Black versus White Prepubertal Healthy Children. *The Journal of Clinical
 Endocrinology & Metabolism*, 82(6), 1923-1927.
- Bandura, A. (1986). *Social Foundations of Thought and Action*. Englewood Cliffs, NJ:
 Prentice-Hall.
- Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.
- Bandura, A. (1969). *Principles of Behavior Modification*. New York: Holt, Rinehart & Winston.
- Beamon, K., & Bell, P. (2006). Academics versus athletics: An examination of the
 Effects of background and socialization on African-American male student-
 Athletes. *Social Science Journal*, 43(3), 393-403.
- Brewer, B.W., Van Raalte, J., & Linder, D.E. (1993). Athletic identity: Hercules'
 muscles or Achilles' heel? *International Journal of Sport Psychology*, 24,
 237-254.
- Brooks-Gunn J, Duncan, GJ, Klebanov PK, & Sealand N. (1997). Do neighborhoods
 Influence child and adolescent development? *American Journal of Sociology*,
 99(2),353-95.
- Brooks-Gunn J, Duncan, GJ, & Aber JL, eds. (1997). *Neighborhood Poverty:
 Vol. II: Policy Implications in Studying Neighborhoods*. New York: Russell
 Sage Found.

- Carlson, M. J. & Corcoran, M. E. (2001). Family Structure and Children's Behavioral and Cognitive Outcomes. *Journal of Marriage and Family*, 63(3), pp. 779-792.
- Carver, C.S., Reynolds, S.L., & Scheier, M.F. (1994). The possible selves of optimists and pessimists. *Journal of Research in Personality*, 28, 133-141.
- Cherlin, A. J. (1991). Longitudinal studies of effects of divorce on children in Great Britain and the United States. *Science*, 1386-1389.
- Cose, E. (1993). *The Rage of a Privileged Class*. New York: Harper Collins.
- Covassin, T.C., & Pero, S. (2004). The Relationship Between Self-Confidence, Mood State, And Anxiety Among Collegiate Tennis Players. *Journal of Sport Behavior*, 27, 230-242.
- Covey, L.S. & Tam, D. (1990). Depressive mood, the single-parent home, and adolescent cigarette smoking. *American Journal of Public Health*, 80, 1330-1333.
- Crawford, K. (1996) Vygotskian approaches to human development in the information era. *Educational Studies in Mathematics*, (31), 43-62.
- Crester, G. and Lombardo, W. (1999). Examining codependency in a college population. *College Student Journal*, 33(4), 629-637.
- Danish, S. J. (1983). Musing about personal competence: The Contributions of sport, health, and fitness. *American Journal of Community Psychology*, 11, 221-240.
- Dornbusch, S.M., Carlsmith, J.M., Bushwall, S.J., Ritter, P.L., Leiderman, H., Hastorf, A.H., & Gross, R. T. (1985). Single parents, extended households, and the Control of adolescents. *Child Development*, 45, 326-341.

- Elliott, D. S., Wilson, W. J., Huizinga, D., Sampson, R. J., Elliott, A., & Rankin, B. (1996). The effects of neighborhood disadvantage on adolescent development. *Journal of Research in Crime and Delinquency*, 33, 389-426.
- Feagin, Joe R. & Sykes, Melvin P. (1994). *Living with Racism: The Middle-Class Experience*. Boston, MA: Beacon.
- Feagin, Joe R. & McKinney, Karyn D. (2003). *The Many Costs of Racism*. Lanham, MD: Rowman and Littlefield.
- Feltz, D. (1988). Self-Confidence and Sports Performance. *Exercise and Sport Sciences Reviews*, 16, 423-458.
- Fox, K. R., & Corbin, C.B. (1986). an extension to a model of physical involvement: A preliminary investigation into the role of perceived importance of physical abilities. In J. Watkins, T. Reily, & L. Burwitz (Eds). *Sports Science*, 223-228.
- Gatz, M., Messner, M.A., & Ball-Rokeach, S.J. (2002). *Paradoxes of youth and sport*. Albany, NY: State University of New York Press
- Greenberg, M. T., Lengua, L. J., Coie, J. D., & Pinderhughes, E. E. (1999). Predicting developmental outcomes at school entry using a multiple-risk model: Four American communities. *Developmental Psychology*, 35, 403-417.
- Hanton, S., Mellalieu, S.D. & Young, S.G. (2002) A Qualitative Investigation of the Temporal Patterning of the Precompetitive Anxiety Response. *Journal of Sports Sciences*, 20(11), 911-928.
- Harris, O. (1994). Race, Sport, and Social Support. *Sociology of Sport Journal*, 11(1), 40-50.

- Haselwood, D.M., Joyer, A.B., Burke, K.L., Geyerman, C.B., Czech, D.R., MunKasy B.A., & Zwald, A.D. (2005). Female Athletes' Perception of Head Coaches' Communication. *Journal of Sport Behavior*, 28, 216-230.
- Hausenblas, H.A., & Mack, D.E. (1999). Social Physique Anxiety and Eating Disorder Correlates Among Female Athletic and Non-athletic Populations. *Journal of Sport Behavior*, 22, 502-512.
- Jencks C, Mayer S. (1990). The social consequences of growing up in a poor neighborhood. In Inner-City Poverty in the United States, ed. L Lynn, Jr. *MGH McGeary*, pp. 111-85. Washington, DC: Natl. Acad. Press.
- Jeynes, W. H. (2001). The Effects of Recent Parental Divorce on Their Children's Consumption of Alcohol. *Journal of Youth and Adolescence*, 30(3), 305-319.
- Kimball, A. & Freysinger, V. J. (2003). Leisure, Stress, and Coping: The Sport Participation of collegiate Student-Athletes. *Leisure Sciences*, 25, 115-141.
- Kochman, T. (1981). *Black and White Styles in Conflict*. Chigago, IL: University of Chicago Press.
- Krane, V (2001). We can be athletic and feminine but do we want to? Challenging hegemonic femininity in women's sport. *Quest*, 53, 115-133.
- Lewis, D. A., & Riger, S. (1986). *Crime as stress: On the internalization of a social problem*. In E. Seidman & J. Rappaport (Eds.), *Redefining social problems* 185-200. New York: Plenum Press.
- Mabry, B.J. & Kiecolt, J. K. (2005). Anger in Black and White: Race, Alienation, and Anger. *Journal of Health and Social Behavior*, 46(1), 85-101.

- Mayer, J. S. (1989). Growing up in poor neighborhoods: How much does it matter? *Science*, 243,1441-45.
- McCrae, R.R., Yang, J., & Costa Jr. P.T. (2001). Personality Profiles and the Prediction of Categorical Personality Disorders. *Journal of Personality*, 69(2), 155-174.
- McLanahan, S. S. (1997). *Parent absence or poverty: Which matters more?* In G. J. Duncan & J. Brooks- Gunn (Eds.), *Consequences of growing up poor* 35-48. New York: Russell Sage Foundation.
- McLanahan, S., & Sandefur, G. (1994). *Growing up with a single parent: What hurts, what helps*. Cambridge, MA: Harvard University Press.
- Messner, M. A., & Sabo, D. F. (1990). *Sport, men and gender order: Critical feminist perspectives*. Champaign, IL: Human Kinetics.
- Messner, M. A. (1994). *Sports and male domination: The female athlete as contested ideological terrain*. In S. Birrell & C. Cole (eds.). *Women, sport, and culture* (pp. 65-80). Champaign, IL: Human Kinetics Publishers.
- Parish, T. S. (1991). Ratings of self and parents by youth: Are they affected by family status, gender, and birth order? *Adolescence*, 26, 105-112.
- Popenoe, D. (1988). *Disturbing the nest: Family change and decline in modern societies*. New York: Aldine de Gruyter
- Popenoe, D. (1992). *The controversial truth: Two-parent families are better*. The New York Times, p. 13.

- Ryska, T.A. (2002). The Effects of Athletic Identity and Motivation Goals on Global Competence Perceptions of Student-Athletes. *Child Study Journal*, 32(2), 109-112.
- Roosa, Mark W., Deng, Shiyong, Ryu, Ehri, Burrell, Ginger Lockhart, Tein, Jenn-Yun, Jones, Sarah, Lopez, Vera, & Crowder, Sakina. 2005. Family and Child Characteristics Linking Neighborhood and Child Externalizing Behavior. *Journal of Marriage and Family*, 67(2), 515-529.
- Sage, G. (1998). *Power and Ideology in American Sport*. Champaign, IL: Human Kinetics.
- Simons, R. L., Johnson, C., Beaman, J., Conger, R. D., & Whitbeck, L. B. (1996). Parents and peer group as mediators of the effects of community structure on adolescent problem behavior. *American Journal of Community Psychology*, 24, 145-171.
- Smith, D., & Stewart S., (2003). Sexual Aggression and Sports Participation. *Journal of Sport Behavior*, 26, 384-387.
- Small M.L. & Newman K. (2001). Urban poverty af-ter The Truly Disadvantaged: the rediscovery of the family, the neighborhood, and culture. *Annu. Rev. Sociology*, 27, 23-45.
- Stacey, J. (1990). *Brave new families: Stories of domes-tic upheaval in late 20th century America*. New York: Basic Books.
- Steinberg, L. (1987). Single parents, stepparents, and the susceptibility of adolescents to antisocial Peer Pressure. *Child Development*, 58, 269-275.

- Stern, M., Northman, J.E., & Van Slyck, M.R. (1984). Father absence and adolescent problem behaviors: Alcohol consumption, drug use, and sexual activity. *Adolescence, 19*, 301-312.
- Thornton, A., & Camburn, D. (1987). The influence of the family on premarital sexual attitudes and behavior. *Demography, 24*, 323-340.
- Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Wilson, W. J. (1987). *The truly disadvantaged: The inner city, the underclass, and public policy*. Chicago: University of Chicago Press.
- Wu, L.L., Cherlin, A.J., & Bumpass, L.L. 1997. *Family structure, early sexual behavior, and premarital births (Discussion paper no. 1125-97)*. University of Wisconsin at Madison, Institute for Research on Poverty.