

ACADEMIC ATHLETIC JOURNAL

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National Association of Academic
Advisors for Athletics



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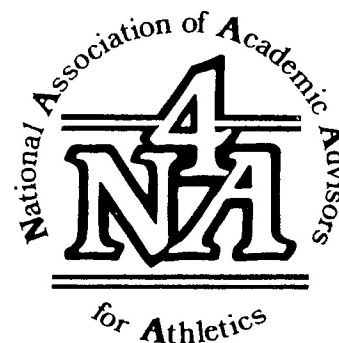
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ATHLETIC
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TABLE OF CONTENTS

Code of Ethics	1
 The Relationship Between Dependency and Sport Participation, Category of Sport, and Gender in College AthleticsPeter J. Toye, Ph.D. Wayne Lanning, Ph.D.	 6
 Developing a Professional Standard of Care for Academic Advisors of Student Athletes: Use of Information Based Formative Evaluation in Academic SupportJames E. Bruno, Ph.D.	 17
 Assisting Student Athletes in Understanding and Identifying Transferable SkillsAl Petitpas, Ph.D. Harriet Schwartz, M.S.	 37
 Female Athletes and the Athletic SystemJanice Roberts-Wilbur, Ph.D. Michael P. Wilbur, Ed.D. Joseph R. Morris, Ph.D.	 43

NATIONAL ASSOCIATION OF ACADEMIC ADVISORS FOR ATHLETICS

Code of Ethics

Preamble

The National Association of Academic Advisors for Athletics is an educational, service and professional organization dedicated to support and enhancement of the academic achievement of intercollegiate athletes. Members serve in various roles in this capacity, but are primarily responsible for the counseling and advising of student-athletes. The primary goal of the profession is to provide a support service for student-athletes to ensure that they have as much academic success as their ability can afford. The profession seeks to offset any educational disadvantages incurred as a result of participation in an intercollegiate athletic program.

To this end, the National Association of Academic Advisors for Athletics, as a group, possesses a body of specialized knowledge, skills, and attitudes known and practiced by its members. These are acquired through professional preparation, generally through graduate study, in an appropriate academic discipline at a college or university. Additionally, they are acquired through experience, in-service training and personal development after the completion of formal education.

The development of a professional organization and the increasing numbers of people and institutions involved in this function have given rise to the need for a set of organizing principles, an operational code of ethics. The development of such standards will inevitably create concern and generate discussion among members about appropriate behavior and professional conduct. Ethics is defined as a body of principles of right or good conduct. With the creation of this statement, the standards for members and for all who would aspire to membership, have been established.

Purpose of Code of Ethics

The purpose of the Code of Ethics for the National Association of Academic Advisors for Athletics is to avoid confusion in practice, and minimize dispute by, specifying standards of accountability. While allowing

for individual preferences and style, it should clarify appropriate behaviors, provide basic philosophical and theoretical premises and elucidate the proper role and function of the Academic Advisor in an intercollegiate athletic program. A professional organization exists through the voluntary association of its members. One of its main purposes shall be to examine, evaluate and improve the quality of its professional preparation and the delivery of its services. It is in this spirit that the code of ethics is established. Any person who is a member of the profession, or is aspiring to membership, shall examine these statements and review his or her own philosophy in light of these principles.

Article I

Responsibility to the Profession and its Membership

Section 1: The member shall attempt to promote the development and improvement of the profession as well as continue personal and professional growth throughout his or her career.

Section 2: The member should expect ethical conduct from other members of N4A and act accordingly.

Section 3: The member is obligated to uphold ethical standards when dealing with others within respective institutions and with non-members.

Section 4: The member should not seek self-enhancement through the public critique of other members.

Section 5: The member should not misrepresent personal professional qualifications to exceed those actually possessed and act to correct any mistakes.

Section 6: When the member provides any information to the public, subordinates, co-workers or superiors, there is an obligation to present an accurate and truthful account in accordance with the situation.

Article II

Responsibilities to the Student-Athlete

Section 1: Counseling

- A. In this relationship, the student-athlete retains full freedom of choice and decision and the advisor has no authority or responsibility to approve or disapprove of the choices or decisions of the student-athlete.

- B. The member's main concern is the integrity and welfare of the student-athlete.
- C. The act of counseling and any information that is disclosed by the student-athlete must be kept confidential.

Section 2: Advising

- A. Advising is the area where the member exercises professional judgement and experience to suggest alternatives, strategies and behavior for the student. In this situation, the advisor can be more directive and assist the student-athlete to understand the consequences of their decisions.
- B. The member should always be aware of academic policies, procedures, requirements, programs, course offerings and any other elements of the institution that can impact the student.
- C. The member should always represent program offerings, course offerings and majors in a truthful and appropriate manner, especially when dealing with recruits.
- D. The member should keep the students' interests and aspirations in mind when scheduling, rather than impose personal values.
- E. Advised of eligibility parameters, the student should be allowed to enroll in the program he or she chooses. Students should never be forced into programs not of their choosing, merely to ensure eligibility.
- F. Students should be encouraged to challenge themselves academically, rather than taking the easiest courses available.
- G. The member should realize that academic and athletic interests are not always compatible and may come into conflict. The member should constantly seek to minimize any educational disadvantages incurred through athletic participation.

Section 3: Non-Discrimination

The member should not discriminate against student-athletes in regard to race, cred, color, age, sex or national origin.

Section 4: Objectivity

- A. The member should remain objective and open when working with a student-athlete regardless of previous academic background, test scores or evaluative comments from others.

- B. The member should not let athletic ability or performance or specific team membership influence his or her attitudes or work with a student-athlete.
- C. The member should regard each student-athlete as an individual with unique emotions and needs and act accordingly.

Section 5: Privacy

- A. The members should be aware and honor the students' legal rights to privacy of their academic records, especially grades.
- B. The member should respect privacy and counselor confidentiality in disclosing information to coaches or faculty.
- C. The member should take precautions to ensure that records, transcripts, reports and correspondence relating to students is secure from public inspection and not shared inappropriately.

Section 6: Professional Conduct

- A. The member should not interact with students in any manner that jeopardizes or compromises their professional relationship; for example any interaction of a sexual nature.
- B. The member should always be cognizant of the importance of serving as a role model and act as an advocate for academic standards and achievement.
- C. The member should not tolerate cheating, plagiarism or any other acts of academic dishonesty.
- D. The member should not participate in any form of sexual harassment, nor tolerate it by subordinates or tutors. Such conduct by faculty or coaches should be addressed in an appropriate manner.
- E. The member should never engage in any attempt to bring pressure to bear on an instructor to assign a grade or change a grade for a student. The member can make instructors aware of certain conditions or situations, but only to clarify the student's position and in the spirit of cooperation to work with the instructor in helping the student succeed.
- F. The member should never be party to the offer of tickets, trips, sideline passes, autographed memorabilia or any other items that would constitute bartering for a grade with an instructor.
- G. The member should act in the best interest of the student, to motivate them, to stimulate the spirit of inquiry, to encourage them to acquire knowledge and understanding, and to develop goals.

Article III

Responsibility to the Institution

Section 1: The member should always attempt to fulfill the mission of the institution they serve and reflect the values and standards for which it stands. The member should be committed to the concepts of teaching, research and service and be aware of how they may fit into the development of programs.

Section 2: The member should encourage the student to take advantage and be part of the total life of the institution. Through providing a service to students, member should continually direct students toward self-reliance, self-discipline and responsibility for their own lives and actions, and discourage dependence on others to take care of them or make their decisions for them.

Section 3: The member should ensure that the Athletic Advising Program is in compliance with academic requirements of the NCAA, NAIA, NJCAA or any other associational governing body, as well as any conference standards or requirements of the particular institution.

Section 4: The member should inform appropriate persons of any violations of academic or athletic rules as soon as they are discovered.

THE RELATIONSHIP BETWEEN DEPENDENCY AND SPORT PARTICIPATION, CATEGORY OF SPORT, AND GENDER IN COLLEGE ATHLETICS

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Abstract

This study investigated the relationship between the personality trait of dependency, including the related construct of locus of control, and sport participation of male and female athletes. The student athletes consisted of 68 females and 95 males from both team and individual sports. Data were collected by means of the dependency scores on the Personality Factory Questionnaire (16PF) and Rotter's Locus of Control instrument. The total sample of athletes was not found to be different from non athletes in dependency, but male athletes were less dependent than male non athletes. Female basketball athletes were more dependent than female volleyball athletes. In addition, athletes were significantly more external on locus of control than non athletes. No meaningful relationship was found between dependency and locus of control.

THE RELATIONSHIP BETWEEN DEPENDENCY, SPORT PARTICIPATION, AND GENDER IN COLLEGE ATHLETICS

Research focusing on personality differences between athletes and non athletes has resulted in discrepant and unclear results. Franke (1985) found that personality traits of high level sportsmen were no different from the general population. On the other hand, a number of studies have reported that athletes were significantly different in personality from non athletes (Yeater, 1977; Kirkcaldy, 1982). Morgan (1980) concluded that athletes did differ from non athletes on a variety of psychological traits and these differences were most salient when the elite performer was considered. Overall, the majority of literature does suggest the existence of personality differences between athletes and non athletes, although those differences appear to be related to differing methodologies and definitions.

One of the factors least controlled for in sport personality research has been whether the sample was composed of team or individual sport athletes (Kirkcaldy, 1982). The research reported in that area was once again mixed and inconclusive. While some researchers failed to find differences between the two groups, the majority suggest that personality differences do exist between group and individual sport athletes (Cratty, 1973; Mercenaro, 1979; Schurr, Ashley, and Joy, 1977).

The present study is concerned with the construct of dependency among college athletes. The research on dependency is rather extensive. The primary conceptual dilemma which seems to permeate the literature on dependency is the ambiguous nature of the term itself. Dependence has been called different things by different people.

Bowen referred to a dependent person as being fused or undifferentiated while Minuchin termed the same dependent condition as enmeshment (Nichols, 1984). The Diagnostic and Statistical Manual of Mental Disorder (DSM III-R) (1987) states:

the essential feature is a personality disorder in which the individual passively allows others to assume responsibility for major areas of his or her life because of a lack of self confidence and an inability to function independently; the individual subordinates his or her own needs to those of others to whom he or she is dependent in order to avoid any possibility of having to be self reliant (p. 325).

This clinical definition is typically deceptive in its simplicity and lack of preciseness. While all people are dependent in varying degrees in many things, the degree and duration of dependency determines its effect on our lives. Gould and Kolb (1964) stated that dependent behavior is considered abnormal when it is the dominant technique of adjustment throughout life.

Within athletics, dependence may be fostered more than within the non athletic world. What may be considered normal amounts of dependency within the context of sport may be considered abnormal anywhere else. Psychiatrist David Marcotte stated that sports encourage dependency from the time an athlete leaves home until he finishes his playing career (Ryan, Ogilvie, Morgan, Pierce, and Marcotte, 1981). The possibilities exist that the highly controlled environment of sport attracts dependent people and continues to foster dependent behavior (Franke, 1985). The problem of the present study was to explore the construct of dependence within college athletes. It was designed to investigate the relationship between dependence and an athlete's sex, category of sport (team versus individual), and specific type of sport.

The following null hypotheses were tested:

H01: There is no relationship between dependence and athlete/non-athlete status.

H02: There is no relationship between dependency and category of sport played.

H03: There is no relationship between dependency and specific sport participation.

H04: There are no relationships among sex of athlete, category of sport, and dependency.

Hypotheses 2 and 3 were tested separately for male and female athletes.

Instrumentation

The construct of dependence was measured in two separate ways. The first measure used was the second order factor for dependence/independence obtained from the Sixteen personality Factor Test (16PF) developed by (Cattell, Eber, and Tatsuoka, 1970). The 16PF has been researched extensively and is considered one of the best personality inventories available today (Karszon and O'Dell, 1976). Bolton (1978) reported that the norms, reliability, and established criterion relationships are generally good. Schurr et al., (1977) emphasized the importance of second order factors of the 16PF.

Cattell's second order factor for dependency is a multivariate construct consisting of the traits humility, trust, practicality, conservatism, and group dependence (Cattell et al., 1970). The 16PF is an inventory of 16 scales designed to assess a variety of primary source traits fundamental to normal personality functioning. In addition, five major second-order factors are derived from various combinations of primary source traits. The second-order factors provide a useful way to summarize relationships between

traits (Karson and O'Dell, 1976), and substantial support has been found for these factors (Bolton, 1978). Five forms of the 16PF are available with each providing the same basic 16 scores. Forms C and D are most used by adults. Form C was used in the present study.

The second measure of dependence used was the score obtained on Rotter's Internal-External Locus of Control Scale (Rotter, 1966). The Rotter scales consists of a 29-item, forced choice test which includes six filler items intended to make the purpose of the test more ambiguous. The items deal exclusively with the subject's belief about the nature of the world. Specifically, the test measures expectance of reinforcement. Some methodological problems within the instrument do exist, but the scale is still recommended as a valid measure of Internal-External control expectancy (Robinson and Shaver, 1973).

Locus of control was used as a measure of dependency in this study because the theoretical definition of dependency previously stated dependent behavior as that in which a person allows others to take responsibility because of an inability to function independently. A person who perceives that he or she can function in an independent, autonomous manner is demonstrating an internal locus of control while a person who feels unable to be reinforced, or to function independently, demonstrates a more external locus of control (Rotter, 1966). Tripathi (1983) concluded that the externally controlled, highly approval-motivated subjects in his study were more dependent than low approval-oriented, internally controlled subjects. Krug (1981) stated that individuals who scored high (toward independence) on the second order dependence-independence factor of the 16PF tended to show an internal, rather than external, locus of control. Conversely, those scoring low on the second order factor should demonstrate a more external locus of control.

Subjects

The sample of the study consisted of 163 (n = 68 females and 95 males) student athletes in a Division I university athletic program in the Rocky Mountain region. They were selected from the following groups: male team sports of football, basketball, and baseball; male individual sports of track, skiing, golf, and swimming; female team sports of basketball and volleyball; and female individual sports of track, skiing, golf, and swimming. Using stratified sampling procedures outlined by Gay (1981), an equivalent number of student athletes was chosen from each of the sports that comprised the specific category (team vs. individual).

Procedures

Coaches of each sport were contacted to request permission to use members of their specific program for the study. All members of each program were then informed that the purpose of the study was to compare characteristics of team and individual sport athletes and everyone had the right to refuse participation.

Subjects were chosen by using a table of random numbers for sports consisting of more student athletes than needed (football, track, and baseball) while entire teams were tested in sports comprised of fewer participants in order to obtain the needed quota. Each participant was given the opportunity to be informed of his/her specific test results following the testing session. The sample sizes for each cell varied due to the fluctuating number of athletes available in each category.

The distribution was as follows:

1. Male team athlete: $n = 49$; football 20; basketball 13; baseball 16.
2. Male individual sport athletes: $n = 46$; track 15; skiing 10; golf 5; and swimming 16.
3. Female team athletes: $n = 25$; basketball 15; volleyball 10.
4. Female individual sport athletes: $n = 43$; track 14; skiing 10; swimming 14; golf 5.

The relationship between the dependents measures and athlete/non-athlete status were tested using t-tests for independent samples. Two-way factorial analysis of variance was used to test the relationships among the independent variables of gender and category of sport and the dependent measure of dependence. In addition, the relationship between the two measures of dependence was analyzed using the Pearson product-moment correlation coefficient. Relationships between the dependency measures and specific sport participation were tested using one-way analysis variance using the least significant difference (LSD) post hoc test where appropriate.

The non-athlete group consisted of the general population norm group for each of the measures used. For the 16PF, means were calculated for male and female college students by taking the primary factor scores found in the Tabular Supplement No. 2 to the 16PF Handbook (Cattell et al., 1972) and culating the second order factor score on the published worksheet. The mean scores and standard deviations for the locus of control general population were taken from Robinson and Shaver (1973). The test norms for both instruments were used for statistical comparison because they best represent the general population. Due to the large size of the normative samples, the test norms were considered a better indicator of general population scores than would have been obtained by developing local norms from a comparable number of non student athletes.

Results

The Pearson product-moment correlation coefficient obtained indicated no statistically meaningful relationship ($r = -.0064$; $p = .468$) between the 16PF dependency measure and the locus of control measure. That suggests difference aspects of the general construct of dependence were being measured by the two instruments and will be discussed separately. Table 1 contains the means and standard deviations for each of the measures of male and female athletes and the means for the general population.

Table 1
Means, standard deviations, and t-test results for difference between male and female athletes and the general population.

16PF						Locus of Control					
Source	Mean	SD	DF	T	P =	Source	Mean	SD	DF	T	P =
All Athletes	5.37	1.44	162	1.54	.137	All Athletes	10.61	3.62	162	8.25	.001
Male/Athlts	5.34	1.35	94	3.14	.002	Male/Athlts	10.18	3.89	94	4.95	.001
Fem/Athlts	5.41	1.57	67	-.46	.644	Fem/Athlts	11.20	3.13	67	7.30	.001
Gen Pop	5.20					Gen Pop	8.3	3.90			
Male Pop	4.90					Male Pop	8.2	4.00			
Fem Pop	5.50					Fem Pop	8.5	3.90			

Inspection of Table 1 reveals that both male and female athletes, as well as the total group, were significantly more external than the non athletes on the locus of control scores. On the 16PF measure only males differed from the normative group. These findings do not support previous research that found no locus of control differences between team sport and non participants (McKelvie and Duban, 1980), nor Lynn et al.'s (1969) findings that sport participants were more internal than non participants. The results of the present study indicate that athletes may exist in an environment that is controlled by what Rotter (1966) called a "powerful other," namely, the coach. Also, sport success or failure can readily be attributed to luck or fate as in the home field advantage or a team that "can't win" when they wear a certain color jersey. This is consistent with attribution theory literature which suggests that losing players casually attribute their loss to external factors such as luck (Brawley and Roberts, 1984) rather than internal factors such as lack of ability. An external locus of control may be functional for athletes to maintain their competitive motivation in the face of failure by attributing poor performance to luck—where there is luck there is still hope!

Table 2 contains the means and standard deviations for each sport type on both measure of dependency.

Table 2
Means and standard deviations for each sport type on the two dependent measures.

Source	16PF Scores		Locus of Control	
	Mean	SD	Mean	SD
Male Team Sports				
Football	5.26	1.35	10.45	4.32
Basketball	5.24	1.24	10.61	2.93
Baseball	5.52	1.58	10.37	3.46
Individual Sports				
Skiing	5.08	1.31	9.60	3.69
Track	5.37	1.65	9.73	5.12
Golf	6.18	1.38	8.40	4.04
Swimming	5.33	.96	10.63	3.65
Female Team Sports				
Basketball	5.05	1.09	11.07	3.26
Volleyball	6.11	1.17	11.00	2.26
Individual Sports				
Skiing	5.69	2.00	12.00	2.94
Track	4.67	1.45	10.86	4.09
Golf	5.38	1.42	12.20	1.48
Swimming	5.86	1.88	10.93	3.34

The results of the analysis of variance revealed few statistically meaningful relationships between any of the combinations of variables. Comparisons were made between males and females in all sports as well as between group and individual sports and also between specific types of sports totally as well as by sex. The only analysis that reached a meaningful level of significance was between female team participants on the 16PF measure. Results indicated that female basketball players were more dependent than female volleyball players.

This difference is difficult to explain but may be due to the style of play required for each sport. Basketball has traditionally required more adherence to set patterns of movement with each player relying on the other for help. While the same is true for volleyball, the pattern is more random

and unrehearsable, depending on ball placement, and more conducive to independent response and reaction. Young female basketball players may have grown up with the awareness that independent functioning was not acceptable in the sport.

In general, the present study found some interesting results. The finding that male athletes were more independent than the general population does not support the notion that college athletes function well in a controlled environment but once outside that environment they need and seek out support from others to manage their lives for them. Perhaps we can find our explanation for this best by considering dependency as related to situational factors within a subject's psycho-social milieu at a given time (Goldin, Perry, Margolin, and Strotzky, 1972). Male athletes may be dependent upon others (coaches, trainers, players) to help their performance, but this dependence is more cooperative than problematic. With the help of others perhaps the male athlete takes control of his own situation and functions in an independent fashion. This interpretation supports the position of Bowers (1973), who believed that people's behavior is highly related to the situations within which they find themselves. The lack of meaningful relationship between gender and category of sport failed to support Cratty's (1973) findings that individual sport athletes were less dependent than team sport athletes. The idea that team sport fosters dependency due to reliance on others was not supported by this study.

In contrast, the locus of control results indicated significant differences between athlete and non athletes, with athletes being more external. Gender differences on locus of control revealed that male athletes were more internal than female athletes while both of them were more external than the general population. These data supported Feather's (1967, 1968) research that found women significantly higher than men on external locus of control. Male individual sport athletes were mostly internal, and female individual sport athletes were mostly external. This discrepancy may well be due to the influence of social sex role stereotypes that expect more internal autonomous functioning by males but place females in a context where they are expected to need someone, including coaches, to exercise control over them.

It is necessary to note, however, that both male and female athletes were found to be more external than non athletes. The entire spectrum of sport may be conducive to the fostering of an external locus of control. Both sexes may find themselves in an outer controlled environment, but the data suggest that the situation may be intensified for females more than for males.

Discussion

The study provides cogent information for those working with athletes. The results tended to dispel notions that athletics contributes to the development of dependency in athletes. This is an important finding because it can help prevent people from working with athletes with a frame of reference based on stereotype and conjecture rather than on research-based evidence. The data revealed from this study suggested that the athletic population is essentially no different from the non athletic population on dependency. In fact, male athletes were less dependent than male non athletes. Also, no difference exists between team and individual sport athletes or between any specific sports and dependency, except for women's volleyball and basketball.

Locus of control information derived from this study is also relevant for those who work with athletes. Rotter (1966), asserted that internals would show more overt striving for achievement than externals who feel they have little or no control over their rewards and punishments. If this is so, those working with athletes may find themselves involved with large populations of people who believe they are not in control of what happens to them academically, socially, or athletically. While external locus of control is neither good or bad, it may be come problematic for the athletes who finish their careers and leave with the attitude that others or luck will guide their lives. External locus of control can be changed to a more internal frame of reference (Rotter, 1966), through the counseling process. Inherent is a quality counseling intervention with student-athletes would be an emphasis on personal responsibility for behavioral choices and a logical consequences of such choices especially in the area of academic performance.

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DEVELOPING A PROFESSIONAL STANDARD OF CARE FOR ACADEMIC ADVISORS OF STUDENT ATHLETES: USE OF INFORMATION BASED FORMATIVE EVALUATION IN ACADEMIC SUPPORT

by

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Abstract

Assisting ill prepared student athletes, many of whom are recruited from our nation's inner city schools, in their adjustment to a rigorous college level academic program is a formidable challenge for an academic support program. This study attempts to underscore the need for establishing, what might be termed, a "standard of professional care" for academic support personnel that is based on the formative evaluation of the student athlete's instructional needs. In this study the use of the information referenced testing (IRT) concept for addressing student athlete information needs is explored and the results of an experiment involving several N4A institutions are reported.*

* The author is extremely grateful to the UCLA athletic department (Judith Holland, Joe Ward) for providing initial encouragement for using the IRT concept for its student athletes (see Bruno, Holland, & Ward, 1987). Special thanks to the wonderful cooperation and enthusiastic support from the N4A institutions that participated in the 1988 IRT experiment reported in this study. Academic advisors and support personnel from Louisiana State University (Jeff Orr), Indiana University (Anitra House), University of Oregon (Twinkle Morton), California State University-Fresno (Martha Wilson), University of California-Berkeley (Bruce Cohen), University of California-Los Angeles (Fred Stroock), and the California Community Colleges: Mt. San Antonio (Evans Roderick), Pasadena City College (Robert Cody) and Los Angeles Southwest Community College (Lise Spillman) coordinated the delivery IRT program at their school and made significant practical suggestions in using IRT for academic support.

A. INTRODUCTION

The academic support of the student athlete poses a major professional challenge for athletic department academic support and counseling programs. The problem of having ill prepared (information wise) student-athletes attend our colleges and universities has precipitated recent NCAA policies and legislation in this area—notably proposition 48 (specifically rule 5-1-J which requires that a student athlete must have a minimum score of 700 on the SAT and a C average in a core of 11 high school courses in order to compete as freshman) and the more recent NCAA proposition 42 (governing scholarships for freshman student athletes who do not meet the standards expressed in proposition 48). The academic preparation issue regarding student athletes has also been given wide attention in the news media (Newsweek, 1989). Unfortunately much of this attention has been negative and has caused serious embarrassment to the college, the NCAA and to the student athlete. But from a policy perspective one should question whether we are concerned about the innate abilities of these student-athletes to do college level work or the information base that these student-athletes possess to do college level work. These are separate questions that require further professional understanding and delineation by the NCAA. Research in the area of student academic attainment seems as clear as any finding in the social science literature, namely that the latter problem of an “unstable” information base usually dominates over standard measures of innate ability or aptitude such as the SAT in predicting attainment.* The subsequent academic attainment of most students — especially inner city students whose instructional program and high school preparation is at best “suspect,” (Bloom, 1981; Hunter, 1985) is heavily dependent upon information. While innate ability might permit the student to perform academic tasks quicker and possibly at a superior level of quality, it is usually the lack of information or misinformation (knowing wrongly) which places the greatest barrier to the educational attainment of most students.

Over the past several decades, the Scholastic Aptitude Test (SAT) has been represented as a “scientific” filter or *prima facie* evidence for screening students for college admission. The notion of “scholastic aptitude” formed the theoretical and moral justification for using the SAT for admission. The NCAA now relies on these SAT measures, in part, for formulating policies which are used for determine athletic eligibility (proposition 48 and 42) of the student athlete. The combined SAT scores of 700 on both SAT Verbal (350) and SAT Quantitative (350) or the 3rd percentile (97 out of 100 students score higher) is set as the minimum academic standard

* An excellent case in point is Tony Rice, quarterback at Notre Dame who although scoring 690 on the SAT, is performing well as a psychology major (Newsweek, January 30, 1989). There are numerous other cases (both student-athlete and regular student) where students are “outperforming” what the SAT has predicted.

for a freshman student athlete to participate in sports. One might legitimately argue if the 3rd percentile is worthy of even being considered as a standard. An SAT score of 700 is in reality an arbitrary figure with little instructional or educational significance. Clearly, many student athletes do not perform well on tests that are specifically designed to produce a normal distribution of scores. These types of tests, called norm referenced tests tend to favor, regardless of innate aptitude, “information rich” academically prepared students from excellent instructional high school programs. The questions asked on a typical SAT exam are not basic “information” type questions, but trick questions or riddles that have a built in “difficulty” factor. A factor that is essential for ultimately achieving a normal distribution of scores. The SAT is thus a “norm” referenced test and not a “criterion” referenced test as many are led to believe. In psychometric terms, this property of a test item is called discriminant validity. If too many students get a particular test item correct on this type of exam, then the question is deleted from future exams. Ability to correctly answer these “riddles” on the SAT is assumed to be predictive of college aptitude and performance. This assumption is extraordinarily difficult to test (either way) since there are multitude of important factors which might influence the academic attainment for a specific student.

Recently the SAT has come under extreme negative criticism and research scrutiny. Psychometrically, the “myth” of Scholastic Aptitude is being exposed as a sham (Owen, 1985). Socially (Nairn & Nader, 1980; Olson, 1987), economically (Hill, 1987; Princeton Review, 1988), legally (Bruno & Hogan, 1985; Fairtest, 1989; Neill and Medina, 1988), and culturally (with its possible gender bias against female students [Rowe, 1987]), the SAT has come under attack.* Surprisingly, girls do poorer than boys on the SAT yet have higher graduation rates and GPA's in college. Even SAT researchers are at loss to “explain” this phenomenon. SAT test scores have also been found or at least suspected of being significantly affected by test preparation (Princeton Review, 1988). This phenomenon introduces an element of economic bias in addition to possible gender and cultural bias. If test wiseness or test preparation (White, 1985a, 1985b, 1985c) rather than knowledge is an important factor in the determining the final SAT score, then these tests can be considered as inherently slanted against inner city minority students who can't afford to “purchase” this important information. In short, if tests such as the SAT are psychometrically, socially, or economically flawed (according to some researchers), why aren't NCAA policies which affects so much of the life of a student athlete (when and where he or she goes to school, if they will compete in sports, and which in turn affects how much they will earn in the future, where will they live and ultimately even, who will they marry, etc.) not receiving the utmost

* Fairtest is presently contemplating legal action against the NCAA for using the SAT for determining eligibility (see NCAA News, January 18, 1989).

research and professional scrutiny from the NCAA (see Owen, 1985 and Nairn & Nader, 1980). Most likely, the SAT is used because there is nothing else "available" that is better to use as a common measure for determining eligibility.

The SAT is also considered as "scientific" and "objective". Yet it is only the scoring of the test (optically scanned) that is objective and the "science" is based on an extremely narrow view of aptitude. (Neill and Medina, 1988) These issues aside, it is important, for public relations purposes, to show that something is being done by the NCAA regarding the college admission of poorly prepared student-athletes.* If one views the challenge of the ill prepared student athlete in an affirmative mode, then possibly we should pay less attention to the score received on a very suspect type of exam (such as the SAT) and more attention to auditing (then addressing) the actual information base of these student athletes. While the former (the SAT) might predict (in a few cases) who will get the A's in college, the latter type of testing procedure (information audit with intervention) might better assist the student athlete in deriving educational benefit from their college experience. Certainly competence in the basic skill areas (information wise) are necessary and should be considered as fundamental for the future academic attainment of the student athlete. For student athletes to derive the maximum benefit from their investment in school—education not a diploma, mastery of basic skills is essential.**

B. PUPOSE

In the summer of 1988 (and continuing in the summer 1989), a small group of N4A institutions explored the use of a new type of testing procedure called information referenced testing (IRT) for the academic support of its student athletes. Preliminary designs of the IRT concept applied to student athletes was reported in to the N4A's Academic Athletic Journal (Bruno, Holland, & Ward, 1987). The goal of this research was not only to derive more sophisticated measures which might have better "predictive" qualities (how well would the student athlete perform in school), but better "diagnostic-prescriptive" qualities. The effort here was not to focus and

* Certainly the fact that other students are admitted to the university based on their SAT scores gives rise to the notion of a double standard. Many would argue that the SAT should not even be used for regular college students (Owen, 1985, Nairn & Nader, 1980). Many schools have dropped the use of the SAT (Chronicle of Higher Education, 11/11/87) and the president of the ACE has gone on record as seeking an end to the use of standardized tests in admissions (Chronicle of Higher Education, 11/25/87).

** Suppose a student athlete was attending the Julliard School of Music and didn't know how to read music. While the student athlete might eventually get a degree from Julliard, he or she would certainly not get a Julliard education. There is a major qualitative difference between a diploma and an education.

concentrate only on the statistical significance of the procedure (in prediction) but the educational significance (what can be done to actually help the student athlete). In short, we were exploring the use of a procedure which might have an affirmative, proactive, and "opportunity" for educational intervention type of quality. This latter feature of an assessment program is extremely important for academic support personnel since many student athletes come from (1) homes with low human capital investments (educational level of parents), (2) homes that are generally information poor in terms of the basic skills, and more importantly, (3) schools where they were advanced through the various grade levels with almost no systematic formative evaluation (the monitoring process by which we can ascertain if a student is actually learning). Unfortunately, the phenomenon of "social" promotion, not "information" promotion, is most evidenced at the same inner city schools that are producing many of the "blue chip" student athletes for NCAA schools. Huge numbers of students from these schools (athlete and nonathlete) thus have significant gaps and misinformation in their information and knowledge bases.* In short, many students, including student athletes, fall through the cracks in many inner city instructional programs since there is no formal mechanism (either at home, or at school, or with their peer group) to determine if these students have a reliable information base upon which to base future learning. The culture of poverty in the inner city produces large numbers of students who "drop out" and student athletes who would under most circumstances "drop out" if they weren't participating in a sports program. The students, including the student athlete, are not only economically poor, but are information poor as well.

C. THE INNER CITY STUDENT ATHLETE

In an excellent article on how testing affects inner city, low-achieving students, James Raffini (1986) postulates that students defend their ego by developing a sense of apathy towards school — especially testing. In

* It is extremely unfortunate that due to the failure of many large urban school districts to deliver a quality instructional program, the NCAA has to address the problem in a higher education environment. The process of insuring that student athletes possess the "basic skills" should begin in elementary school (where it is far easier to solve), not in college. While the total number of student athletes in the proposition 48 category (below 700 on the SAT mainly) is low (estimated at approximately 600), most of these student athletes are black from inner city schools and in the two highly visible and revenue producing college sports of basketball and football. Issues surrounding the enforcement of proposition 48 raised questions of discrimination and possible racism. The problem is exceedingly complex and underscores the "equal opportunity" vs. "academic preparation" tradeoff question. The NCAA might entertain "taking charge" of the academic preparation of student athletes from inner city schools by sponsoring formative evaluation type programs beginning as early as Junior High School. As these students begin to "bond" to sports skills they should also begin a parallel bonding to academic skills. In terms of equal opportunity it will also present a wider range of college choices for the student athlete upon graduation from high school.

addition to the apathy problem, most of these inner city students are not empowered with information to do anything to improve their learning situation. Their bonding, therefore, to educational institutions and values is extremely weak because of poor information in the basic skill areas.

Raffini postulated the direct relationship between academic achievement and self-esteem. The bottom line for the student is that it is not too "satisfying" to be in an education "game" where you are constantly "humiliated" because you don't have the skills and information necessary to participate and attain.* As Raffini (1986) states:

Below average students protect themselves against failure in an educational competition they cannot win. But they could win if schooling tied success to effort, time on tasks and performance standards—rather than ability.

D. STANDARD OF CARE FOR ACADEMIC SUPPORT

The challenge expressed by the above situation for advisors in academic support programs is to define what might best be described as a "standard of professional care" for working with the ill prepared (information base) student athlete. The centerpiece for the "standard of care" is enhanced formative evaluation or sophisticated and systematic audits of the actual information base of the student athlete. What is proposed here is a medical view of assessment and testing for academic support. With this type of model students can respond to assessment questions with an I don't know, I am sure, I am nearly sure, etc. or "less restrictive" type of response. What is produced with this procedure is not a grade equivalent or percentile score, but an individually prescribed education plan (IEP)—or a plan of action based on an information referenced, and not a norm referenced standard. The IEP further empowers the student athlete to being the process of addressing the needs of his/her own particular information base using the information referenced standards (not guessing) of being informed, partially informed, misinformed, or uninformed for evaluation.**

* Many researchers, feel that testing can in some be viewed as a legalized form of "child abuse" since it devastates the morale and self esteem of children without giving them the necessary feedback to improve their situation.

** An analogy of formative evaluation in the private sector might be an eye examination where the patient guesses or squints at one of four letters on an eye chart. Imagine that the patient bubbles in the letter and the doctor tries to determine a prescription for eye glasses from the responses on the answer sheet. Recognition and confidence in the recognition of the letter (not just recognition) is required for effective information based formative evaluation. IRT attempts to follow this type of "confidence" model by employing a sophisticated computer based scoring system. The procedure is also optically scannable and takes little additional time compared with present practices. See Bruno, 1988 for more details regarding the scoring system.

The ultimate professional objective of academic support personnel therefore should be not merely a diploma (reactive tutoring to get the student athlete through school) but an education (proactive tutoring to address basic information needs to derive benefit from the schooling experience).

From an organizational perspective three important forces or interest groups are involved with the academic support objectives of the athletic department. Each has its own concern, which if not professionally addressed, will impact on the athletic department's academic support program in a detrimental manner.

- A. The faculty member who has to deal with ill prepared student athletes in class. This legitimately leads to professors having a lowered satisfaction with teaching and makes the athletic department support services suspect. It damages the reputation of the university.
- B. The coach who has to win ball games with these academically ill prepared student athletes. Coaching satisfaction is lowered when games are lost because of the lack of availability of certain talents. It damages the athletic department sports program.
- C. The student athlete who must eventually deal with an "information rich" society or world. Lowered satisfaction of the student athlete with school because of social promotion and an unreliable information base (misinformation, lack of information, and partial information) to get something out of the courses being taken. It damages the student athlete's ability to compete outside of sports and to make a contribution to the community.

The academic advisor thus become the tri-part bridge to these three parties and the professional standard of care must include strategies which increase the satisfaction of each.

Consider for a moment the concept of educational bonding.

Bonding or Commitment
(in direct proportion)

Satisfaction (happiness, recognition, rewards, sense of purpose, etc.)

Bonding or Commitment
(in inverse proportion)

1

Time — Resource Effort (study skills, preparation, work habits, etc.)

$$\text{Bonding} = \frac{\text{or Satisfaction (S)}}{\text{Time — Resource Effort (T)}} = \frac{S}{T}$$

Using the above relationship we can define four important classes of student athletes. Each classification presents difference challenges for academic support personnel.

$\frac{S \uparrow}{T \uparrow}$ = Maximizes— They want to get something out of school, but are so "inefficient" that school consumes too much effort and they get discouraged eventually and "burn out" of the instruction program.

$\frac{S \downarrow}{T \downarrow}$ = Dissatisfier— This student athlete gets little satisfaction from school and is also technically inefficient (poor study habits, preparation, etc.). School is not worth the effort and he or she eventually fails or drops out of the instruction program.

$\frac{S \downarrow}{T \downarrow}$ = Satisfies— This student athlete is not getting much out of school, but is technically efficient in just getting by and gets a diploma but a poor quality education.

$\frac{S \uparrow}{T \downarrow}$ = Optimizer— This student athlete is not getting much satisfaction out of school but is also technically efficient with regards to the effort. This type of student athlete should be our goal.

A standard of care for academic support personnel would attempt to increase $S \uparrow$ while decreasing $T \downarrow$ or enhance the technical efficiency (Time-Response-Effort) in the student-athlete. An information base "audit" of the basic skills is one mechanism for making student-athletes more technically efficient. Using the results of the information audit for "proactive" interventions, the S/T Ratio can be increased dramatically for most student athletes. Since the currency, by which the student athlete purchases the information needed to pursue their own personal career objectives ($S \uparrow$) is the basic skill areas—mathematics, language, and reading the formative evaluation process is essential. To stimulate human capital formation in student athletes so that they can make an optimal investment in school thus becomes the general major behavioral objective of the academic support program.

E. INFORMATION REFERENCED TESTING AND ACADEMIC SUPPORT

As previously noted, the information referenced testing (IRT) is designed using the concept of a medical model of assessment. With IRT, not only is the recognition of the answer important, but confidence in that recognition is equally important. The questions asked on IRT assessment

are not "riddles," as with the SAT type exam, but basic fundamental information based questions needed for college level work. These questions tend to define the currency needed to "purchase" the information presented in various career path options (academic majors) available to the student athlete.

The IRT program focus is presently in the assessment areas of reading, language arts, and mathematics information. The IRT analysis attempts to determine, with a unique test scoring system called MCW-APM, where a student athlete is informed, misinformed, uninformed, and partially informed.*

The IRT assessment program produces a specific diagnostic prescription or an individual education plan (IEP) using an information referenced standard (informed, uninformed, misinformed) for each student athlete. The IEP contains detailed instructional cross references to assist athletic department tutors in their "proactive" work with the student athlete.

The IRT analysis also produces a specific information base profile for all the student athletes examined so that the athletic department can design its own "customized" special review classes and workshops before the beginning of fall classes. Both types of IRT analyses will be described, in more detail, later in the discussion.

F. IRT 88 RESULTS

The following institutions participated in the summer, 1988, information referenced testing experiment.

	# of Students	# of Exams	Total
UCLA	32	4	128
UCB	35	4	140
U of O	27	4	108
IU	35	4	140
LSU	28	4	112
CSU	18	6	108
MTSAC	18	4	72
PCC(F)	23	4	92
PCC(S)	30	4	120
SWCC	49	4	196
LHS	52	4	208

Total exams 1,404

* Modified Confidence Weighted-Admissible Probability Measurement or MCW-APM is a modification that is derived from the more generic APM (Admissible Probability Measurement) type testing. The Rand Corporation in the early 1970s, provided much of the theoretical research into this type of information based on APM testing (Brown, 1970; Brown & Shuford, 1973; Sibley, 1973; Shuford & Messingale, 1966; Bruno & Shuford, 1973). Recent research in MCW-APM test scoring includes applications to policy-legal issues (Bruno & Hogan, 1985), below grade level students (Bruno, 1986), special action admissions (Bruno, 1988) and test-retest reliability (Albedi, 1988).

While it is difficult to determine the full, ultimate impact of IRT on the student athlete, the reactions were generally very positive. With regard to the MCW-APM type test scoring system, as compared to the traditional Right-Wrong (R-W) test scoring, the following results were obtained when student athletes were asked the following questions.

Which procedure provides the teacher (academic advisor) a more accurate picture of what you really know?

	Number	Percent
R-W	71	12
MCW-APM	385	68
Either	77	13
Neither	34	6

Which system would you prefer to use in the future?

	Number	Percent
R-W	78	13
MCW-APM	386	67
Either	81	14
Neither	27	5

Which system provides the best information for the academic support program to help you in school?

	Number	Percent
R-W	56	10
MCW-APM	438	77
Either	48	8
Neither	23	4

Is the MCW-APM scoring procedure as easy to use as R-W?

	Number	Percent
Yes	365	65
No	193	34

How many minutes did it take you to learn the MCW-APM procedure?

	Number	Percent
0-5	332	58
6-10	141	24
11-20	53	9.3

Examining specific large N4A institutions the following high acceptability of IRT among student athletes was obtained:

"Best Information For Teacher"

	RW (Right Wrong)	MCW-APM (Information Referenced Testing)
UCLA	5	22
UCB	4	28
U of O	4	19
IU	7	20
LSU	5	19
CSU - Fresno	2	14
MT SAC	2	15
SWCC	3	41
Total	32	178
Percent Acceptable =	84%	

In summary, student acceptability of MCW-APM was excellent. Both the IRT concept (using MCW-APM) and its use in formative evaluation and proactive tutoring by the athletic department was rated approximately 8:1 over present assessment methods.

Academic support program personnel acceptance was also high. IRT was viewed as a cost efficient and accurate procedure for the formative evaluation (see later discussion) of the student athlete and for generating information needed to design appropriate instruction interventions.

In the 1988 study, student athletes took the same examination with both the traditional R-W and the IRT test scoring MCW-APM formats. The study found that there were enormous amounts of important formative evaluation information that were filtered with presently used R-W assessment methods. This finding underscores the severe limitations of assessing (in terms of accuracy), the student athlete's knowledge or information base with forced choice traditional R-W test scoring methods.

Note the range of confidence in "correct" information for different ranges of R-W scores. At ranges of 70 to 80% correct using the R-W procedure, the actual confidence in correct information for these student athletes is in the unstable region (.33 = a random guess). Many of the student athletes had actual confidence in incorrect information (see Figure 1) yet scored between 70 and 80 on the R-W exam. Thus, the very group of students, most in need of an accurate assessment of their information base, has the largest "error" associated with its assessment. This confirms similar findings in the psychometric literature (Doscher & Bruno, 1987; Wick, 1983) as well as the perceptions of the student athletes used in this study (see above).

G. STUDENT ATHLETE INDIVIDUAL EDUCATION PLAN

The most important output in the IRT procedure is the student athlete individualized education plan (IEP). The IEP is used by both the student athlete and the assigned tutor for diagnostic and prescriptive intervention purposes. The specific student athlete areas of misinformation, lack of information, etc., with detailed instructional cross references are presented in the IEP. The IEP also provides an overall information referenced assessment and summative (for predictive purpose) evaluation. The specific intent of the IEP is for formative evaluation and is used to build reliable information in the information base of the student athlete. A typical IEP produced by the IRT procedure can be found in Figure 2.

The athletic department also receives an information referenced profile that clusters all IEP's across all student athletes examined. This IRT analysis depicts common areas of misinformation, lack of information and, partial information. This analysis is used by academic support personnel in designing specific instructional objectives for classes, special seminars, and review sessions. A typical information profile type of analysis for an athletic department is depicted in Figure 3.

Finally, a summative evaluation of the information state of the student athlete is prepared. The information is used for purposes of matriculation, counseling, and advisement into certain courses or sections. This IRT analysis clusters all IRT assessments across one student athlete, then lists the student athletes alphabetically. The analysis also ranks, each student athlete in terms of levels of reliable information across all areas assessed. A sample clustered summative evaluation is depicted in Figure 4. An information referenced standard of mastery (informed, misinformed, uninformed, partially informed) is used as the basis of the IRT summative evaluation.*

H. INSTITUTIONAL EVALUATION

Participants at the N4A session on IRT in San Francisco, (1989) who used IRT this past summer (1988), were in unanimous agreement regarding the value of the IRT program for Academic Support and wanted to see it continued. Many felt it addressed a genuine need in academic support, especially for the "at risk" blue chip inner city student athlete. These were the specific advantages cited by last years (1988) users of IRT.

* When asked if they would like to see the IRT program used in the future, over ninety percent of the student athletes surveyed favored the use and continuation of the IRT procedure by the academic support program of their Athletic Department.

- An excellent affirmative method for articulating to across campus departments, the sophisticated manner in which the athletic department is assisting its student athletes.
- IRT has all but replaced costly previous diagnostic academic support procedure used by the campus. It allowed us to focus and target our own resource to address specific student athlete information needs.
- The design IRT program and its scoring system seemed to generate less test anxiety on the part of the student athlete than our regular testing programs.
- The Individual Education Plans or the IEP's generated by the IRT procedure served as an excellent mechanism for articulating and coordinating our tutorial services. It made the academic tutorials extremely cost efficient by minimizing instructional "down time."
- The IRT concept not only provided predictive information about a student athlete but information needed for designing effective instructional interventions (formative evaluation).
- The IRT concept is affirmative, proactive for the student and cost efficient for the athletic department, especially with its use of detailed instructional cross references in the IEP.
- The use of IRT for academic support is being used as an effective tool for recruitment of student athletes since it underscores the seriousness of our commitment to academic support program. It also gives the student athletes confidence that their particular instructional needs will be met by our academic support program.
- The IRT exams will be useful for helping the student athlete prepare for later pre-professional exams in teaching, law, business.

Some of the specific concerns raised by the IRT procedure (based on discussions in San Francisco) included:

- Availability of time to assess and design an comprehensive intervention program. The schools using the quarter system were at an enormous advantage in this regard. Schools on the semester system will have to fit "proactive" academic support into a small time frame. It was suggested that the testing be completed before school begins and the proactive tutoring process begin in the fall.
- It would be nice to fit PLATO instructional cross references into the IEP's for those schools which have this capability.
- Debate pro and con over the value of language arts IRT assessment for written expression. Most agreed that it is more a question

of the personnel the athletic department has to address language problems. The information is valuable but not as valuable as the math information. Some schools, however, did find the language IRT valuable.

I. SUMMARY

In summary, stimulating and building human capital formation of student-athletes through the formative and summative evaluation process is a major mission of academic support programs. For low achieving students athletes, the academic support program will be nearly the only source for developing the skills needed to derive benefits from their human capital investment in school. Formative evaluation is the centerpiece for enhancing human capital formation and the later human capital potential of the student athlete. Formative Evaluation skills should therefore reflect themselves as a centerpiece for a professional standard of care for academic support personnel. The purging of misinformation and the filling in of an incomplete information base of the student-athlete should be considered as fundamental to the mission of academic support. Information based formative evaluation thus has the dual objective of both assisting and partly defining a professional standard of care for academic support personnel.

Some of the notions of information referenced standards of mastery as presented in this study serve to underscore an interesting alternative to current testing practices. The IRT assessment procedures seem to be consistent with the notion of promoting "equal educational opportunity" through information equality.

In conclusion, any measure the NCAA proposes in the area of determining athletic eligibility will encounter some controversy.* The issue then becomes which measure or combination of measures (which can include the SAT) is fair, consistent and logical for increasing the likelihood of a successful academic and college experience for the student athlete. Ideally these measures should be affirmative, diagnostic, and proactive in the sense of empowering the student athlete (and the athletic department) with specific recommendations and prescriptive information.

The goal of an education, not a diploma, for the student athlete requires a reexamination of academic support procedures which involve not

* For example, the self interest of the community colleges, traditionally an institution where most proposition 48 type students would participate in sports, would tend to favor retention of NCAA propositions such as 48 and 42.

They have excellent instructional programs and feel they can better help the student athlete. From the student athlete perspective, however, they would want to participate in highly visible sports programs and from an "economic" perspective (at least in sports) they would probably be better off at the four year institution.

only the interest of the student athlete but the academic faculty and the general community (or society) after graduation. The separate practical and philosophical goals of the college faculty, the athletic department and the student athlete, though difficult to obtain, are not mutually exclusive to each other.

Finally, a professional standard of care for academic support personnel can be considered as part of the bridge needed to achieve educational, societal as well as athletic objectives. More importantly perhaps, continued research efforts in this area will tend to underscore the commitment of the NCAA and N4A to promoting "equal educational opportunity" along with quality athletic programs while not compromising on academic quality. The seemingly impossible task of simultaneously achieving all three objectives (academic quality, athletic quality, and equal opportunity), will require the utmost of our research and professional efforts. Information Referenced Testing for academic support of the student athletes is hopefully one important step in this direction.

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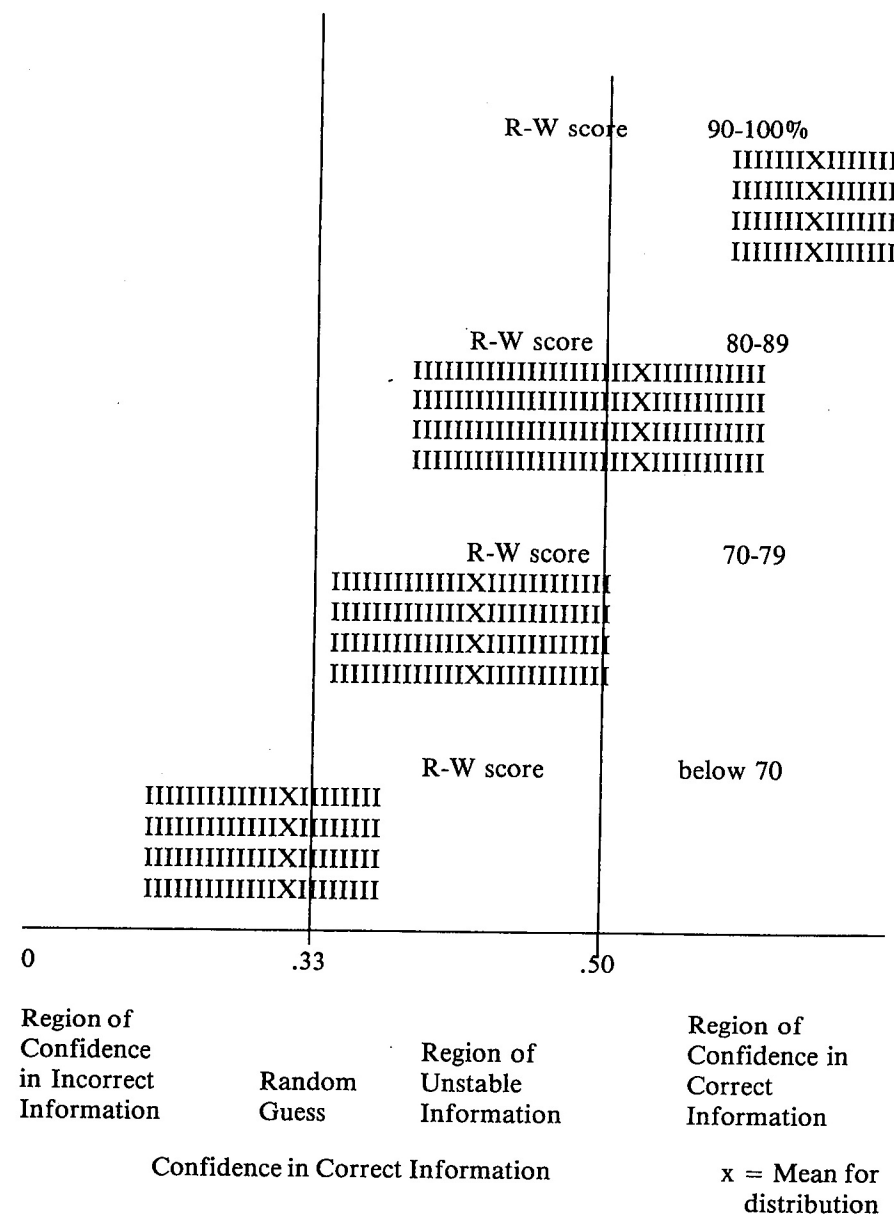


Figure 1

Range of Confidence in Correct Information Given
Ranges in Percent Correct Score for Student Athletes Taking
the Exam using Both R-W and MCW-APM Test Scoring Formats

Test item	Infor. state	Description Instructional Cross Referenced
5	M	Mixed number multiplication B. M. Schaums, Ch. 3, p. 29-49
11	M	Units of measurement-kilograms B. M. Schaums, Ch. 6, p. 9, 20, also 125-128
.	.	.
.	.	.
31	M	Linear equations (slope) B. M. Schaums, Ch. 7, p. 93-110

Examinee uninformed (lacks information) responses—concepts that you didn't know. Have your instructor explain these concepts to you.

Test item	Infor. state	Description Instructional Cross Referenced
23	U	Exponential equations B. M. Schaums, Ch. 8, p. 110-145
24	U	Log equations B. M. Schaums, Ch. 9, p. 146-176
.	.	.
35	U	Word prob.—ratio and proportion B. M. Schaums, Ch. 6, p. 82-92

Examinee partially informed items on examination—concepts where you weren't sure of the answer. Have your instructor review these concepts with you.

Test item	Infor. state	Description Instructional Cross Referenced
18	P	Word prob.—multiplication B. M. Schaums, Ch. 1, p. 1-9
.	.	.
.	.	.
.	.	.
30	P	Linear equations (slope) B. M. Schaums, Ch. 7, p. 93-110

Figure 2

Typical Student Athlete Individual Education Plan (IEP)
(M = Misinformed U = Uninformed P = Part Informed I = Informed)

Misinformed examination items for your examinees. Your examinees have wrong information in these concept areas—misinformation.

Have workshop coordinator develop instructional materials and demonstrate misconceptions. Follow this with accurate information.

Item	Number	Percent	Concept Description/ Cross Reference
27	15.00	0.45	Calculations with scientific notation B. M. Schaums, Ch. 2, p. 9-29
20	12.00	0.36	Word problem—rate-time-distance B. M. Schaums, Ch. 4, p. 43-51
31	11.00	0.33	Linear equations (slope) B. M. Schaums, Ch. 7, p. 93-110
.	.	.	.
.	.	.	.

Uninformed test items on the examination—examinees generally lack information in these concept areas. Basic instruction is needed. Have workshop coordinator prepare instructional materials to teach these basic concepts.

Item	Number	Percent	Concept Description/ Cross Reference
25	15.00	.045	Plane geometry B. M. Schaums, Ch. 11, p. 198-228
23	14.00	.042	Exponential equations B. M. Schaums, Ch. 8, p. 110-145
35	7.00	0.21	Word prob.—ratio and proportion B. M. Schaums, Ch. 6, p. 82-92
.	.	.	.
.	.	.	.

Partially informed concept areas—your examinees have incomplete or unstable information in these concept areas. Thorough review is needed in these areas.

etc.

Figure 3

Athletic Department Information Profile:
Clustered IEP's of Student Athletes

(Alpha- betical listing)	%MCW	%Info. Use	%Uninf.	%Confid.	Class Assessment	Exam
Student A	0.97	0.97	0.0	0.91	Fully Inf., Adv. to next L,	1
	0.98	1.00	0.0	0.96	Fully Inf., Adv. to next L,	2
	0.96	0.97	0.02	0.88	Fully Inf., Adv. to next L,	3
	0.86	0.86	0.0	0.54	Part. Inf., Review & instr.,	4
Student B	0.80	0.81	0.16	0.39	Part. Inf., Review & instr.,	1
	0.75	0.60	0.60	0.29	Uninf., Instruction needed,	2
	0.97	0.97	0.0	0.91	Fully Inf., Adv. to next K,	3
	0.80	0.80	0.0	0.37	Part. Inf., Review & instr.,	4
Student C	0.80	0.79	0.22	0.39	Part. Inf., Review & instr.,	1
	0.65	0.25	0.33	0.24	Part. Mis., Some reeducation,	2
	0.86	0.86	0.02	0.54	Part. Inf., Review & instr.,	3
	0.81	0.76	0.13	0.39	Part. Inf., Review & instr.,	4
Student D	0.75	0.75	0.11	0.29	Uninf., Instruction needed,	1
	0.74	0.57	0.51	0.28	Uninf., Instruction needed,	2
	0.79	0.79	0.02	0.37	Part. Inf., Review & instr.,	3
	0.80	0.80	0.0	0.38	Part. Inf., Review & instr.,	4
.	.	.	.	.	.	.

Figure 4

Academic Advisor Analysis Clustered Summative Evaluation
for Use in Matriculation, Counseling and Advisement

%MCW = Information Referenced Score (0 to 1.00) where 1.00 = 100% correct and 100% confidence in the correct information

%Info = Percent time a student athlete is correct when 100% sure of an answer

%Uninf = Percent "I don't know" responses

%Confi = Average confidence in "correct information" on the exam

Class Assessment = Information Referenced Standard of Mastery

Exam Number = 1 = Math 2 = 2 3 = Language 1 4 = Language 2

ASSISTING STUDENT ATHLETES IN UNDERSTANDING AND IDENTIFYING TRANSFERABLE SKILLS

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Abstract

The concept of transferable skills is defined and an instrument to help student athletes understand and identify their transferable skills is presented. Suggestions for utilization of the instrument for individuals or groups are outlined.

As the field of athletic counseling has evolved, the role of the athletic counselor has expanded. Once primarily involved with only academic-related issues, athletic counselors may now be providing a variety of services including personal counseling, social skills training, values exploration, and self-awareness training (Remer, Tongate, & Watson, 1978). Another area where athletic counselors are assuming greater responsibility is career development (Mand & Fletcher, 1986).

Research has shown that student athletes, most specifically football and male basketball players, have lower career maturity than the general student population (Kennedy & Dimick, 1987). Sowa and Gressard (1983) suggest that student athletes have difficulty formulating clear educational goals and therefore may not derive much personal satisfaction from classroom experiences. Others have suggested that student athletes may not engage in the exploratory behavior necessary for career and personal development because their sport provides them with an identity (Petitpas & Champagne, 1988). If these observations are accurate, it would appear that athletes might accrue considerable academic and personal benefits from a career counseling experience. Nelson (1982) and McFarland (1976) found this to be the case with their student athletes, who showed significant academic improvement after a career counseling program.

This article describes how the concept of transferable skills can be utilized to help student athletes gain confidence in their abilities to engage in educational and career planning. More specifically, the concept of transferable skills is examined. A workshop instrument to help athletes identify transferable skills is presented, and suggestions for utilizing the instrument in group settings are provided.

Transferable Skills

Those people who promote athletics as positive and beneficial often claim that sport experiences help athletes develop intangibles that not only contribute to athletic achievement, but are also important for success outside of athletics. Characteristics discussed in this manner include desire, determination and perseverance. Some have labeled these characteristics as transferable skills. Transferable skills have been defined as skills that "are transferable to any field/career that you choose, regardless of where you first picked them up" (Bolles, 1988, p. 52).

Although the concept of transferable skills has been suggested for career development programs for student athletes, a description of how to utilize the concept has not appeared in the literature. Based on the evaluations of the Career Assessment Program for Athletes (United States Olympic Committee), the Planning Career Goals Program (Ladies Professional Golf Association), and the Advisory Resource Center for Athletics (intercollegiate athletes), identifying and understanding transferable skills is critical in developing the belief and confidence that one can successfully perform a given task, namely career development. This notion has been labeled "self efficacy" and has been shown to be an important link to academic achievement, persistence and career development (Lent, Brown, & Larkin, 1984, 1987).

Athlete's Guide to Understanding and Identifying Transferable Skills

Athletes who have devoted so much of their lives to their sports may feel that they have few skills or attributes that relate to the world of work. The Athlete's Guide to Understanding and Identifying Transferable Skills (Schwartz, 1988) was developed to assist athletes in discovering more about the skills and attributes that they possess and how those skills and attributes may generally apply in other settings.

Figure 1.

Athlete's Guide to Understanding and Identifying Transferable Skills

Part 1

1. What personal qualities and characteristics do you think coaches and teammates look for in athletes?

2. What other personal qualities and characteristics do you think are important for athletic achievement?
3. What personal qualities and strengths have helped you succeed in sports?
4. What have you learned from sports successes?
5. What have you learned from sports disappointments?
6. What have you learned from your extensive pre-competition practice experience?
7. What have you learned from competitive situations?

Part 2.

- 1B. Review your responses for questions one and two. Now describe how this may be similar to and different from what employers look for in prospective employees.
- 2B. Again review your responses to questions one and two. How will these qualities and characteristics be important for career development and/or life decisions?
- 3B. Review your response to question three. How will these qualities and strengths be important for your career development and/or life decisions?
- 4B. Review your responses to questions four, five, six and seven. How can you apply what you have discovered to areas of your life outside of sports?
- 5B. How do you think teamwork applies to a work setting?

Strategies for Group Facilitators

Although the Guide was originally developed for use with individual athletes, it has proven to be an effective tool for group work. After the athletes have completed the Guide, they are divided into groups of six to eight. In a few cases, a group of athletes may include a few individuals who are verbal and have work experiences to share with the group. In these infrequent cases the group leader assumes more of a participant/observer role. When athletes are hesitant to self-disclose or feel uncertain as to how their skills might transfer to a work setting, a more active and direct leader role is required. In the latter situation it has proven helpful to direct the discussion around three questions which are discussed below:

1. What kinds of personal characteristics and skills have you developed through sports that might be equally valuable in a work setting?

In groups where the student athletes lack confidence in participating in this kind of discussion or lack knowledge of the work environment, the leader may need to provide more structure to encourage involvement. This can be accomplished by: 1) validating the feelings of doubt or confusion that people often experience when exploring new career issues; 2) modeling self-disclosure by sharing personal experiences; 3) providing further clarification of the question; 4) utilizing the experiences of athlete role models such as alumni athletes who might volunteer to participate in the workshops; and 5) reviewing participants' responses to the stimulus questions in Part 1 of the instrument and "translating" these traits into job-related skills (e.g. perseverance can be reframed as learning from mistakes, or desire can be translated as seeks feedback to improve). As the student athletes become more comfortable with self-disclosure and discussion, the facilitator may serve as "gate keeper", insuring that each person in the group has an opportunity to contribute if he/she chooses to, while at the same time preventing the more verbal participants from dominating the group discussion.

2. What skills have you developed through sports participation that will help you succeed in your job search and career?

Typically, group members are more likely to identify personal characteristics and traits than skills. In an attempt to help them feel more confident about their abilities to engage in career development, it may be helpful to first acknowledge that by participating in the transferable skills workshop, they have already taken the first step in career exploration. Next it is important to help them identify specific skills they may have developed. For example, many athletes will identify hard work and dedication as transferable skills. It should be explained that these are characteristic traits that they possess. The transferable skills are their abilities to seek information, set goals and self-evaluate. Athletes typically know how to get the information and training necessary to develop or strengthen their skills because they have used these strategies often to improve their athletic skills. These are clearly important life skills that are crucial to academic and career development.

The facilitator might also relate these skills to their current career development processes. These student athletes have identified as skill deficit, namely their lack of knowledge about career development. They sought "coaching" by attending the workshop and utilizing the expertise of the presentors and other participants. They know how to acquire new skills through goal setting and practice, and they know that feedback is necessary to polish these skills, to build on strengths, and to improve weaknesses. Thus, they know how to learn and how to identify and utilize resources. The hard work and dedication are the traits that allow them to accomplish these tasks.

3. What are the costs and benefits of your personal style and how do they relate to various work environments?

It is often helpful to consider how personal traits may fit with other workers' personalities in various employment settings. For example, individual sport athletes who are accustomed to independent, self-pacing and autonomy may feel frustrated in a work environment that requires interdependence of job functions and people. Other athletes who are accustomed to a highly structured environment may have difficulty in a setting where there is little supervision or clear direction.

In addition, some athletes may have developed a self-image that necessitates a work environment that has "status". In other situations, athletes might be surrounded by some co-workers who look up to them because of their athletic status. In these cases, co-workers may be hesitant to offer constructive feedback because they might over estimate the athletes' job knowledge. At the same time, other co-workers might resent them because they feel that they were only given the job because they were athletes. These discussions often lead to more immediate concerns of how student athletes are perceived and treated on campus by various groups of students, staff and faculty.

Conclusion

The concept of transferable skills has the potential to offer numerous opportunities to assist student athletes in gaining confidence about their abilities to engage in personal, academic, and career development. It has been suggested that career development should be introduced as early as possible in the educational process of the intercollegiate athlete (Kennedy & Dimick, 1987). Helping student athletes understand and identify transferable skills can be an effective first step in introducing them to career development and establishing the interrelationship between athletic and academic endeavors and their future life/work plans. Gains in self-efficacy often translate into higher academic and athletic performance.

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FEMALE ATHLETES AND THE ATHLETIC SYSTEM

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Abstract

This article discusses the difficulty that many female athletes have in making the athletic transition from high school to college athletics. Specific factors that affect the degree of difficulty that female athletes experience as they make the athletic transition, along with information about the rules and expectations of the athletic system and common mistakes that female athletes make, are presented to provide readers with information that may facilitate their ability to identify and understand female athletes who are particularly ineffective in negotiating the athletic transition.

Female Athletes and The Athletic System

Much has been written about the femininity/masculinity of female athletes (Harris, 1987; Hoferek & Hanick, 1985), the sex role identity of the female athlete (Colker & Widom, 1980; DelRey & Sheppard, 1981; Duguin, 1978; Edwards, Gordin & Henschen, 1984; Helmreich & Spence, 1977; Henschen, Edwards & Mathinos, 1982), how female athletes compare to male athletes and nonathletes (Bredemeier, 1985; Hyde, 1984; Jackson & Marsch, 1986; Murray, 1983; Williams, 1978), and the role-conflict of female athletes (Anthrop & Allison, 1983; DelRey, 1978; Felshin, 1974; Gilbert & Williamson, 1973; Loggia, 1973). Others (Hoch, 1972; Kane, 1982; Lever, 1976, 1978) have suggested that sport is perhaps the critical means by which adolescents learn and maintain the roles and values of our society and point to the restricted involvement in complex sports and games as, in part, responsible for women's limited effectiveness in organizational problem solving as adults. However, little attention has been directed towards providing female athletes with the information and/or direction that will assist them to function effectively in the masculine domain of athletics. Consequently, many female athletes pay an emotional price for their athletic involvement (Cratty, 1983), and they do not understand that by competing in athletics they have an opportunity to learn skills that they can later apply in organizational settings. Instead they are often referred to as "head cases". They are described as having more emotional problems than male athletes, as not taking their sport seriously, as not being able to play with pain, as not being good team players, and in general, as being less coachable.

Many female athletes enter college unprepared for the athletic experience. Like male athletes they often erroneously assume that college will be a continuation of their athletic experience in high school (Roberts-Wilbur, Wilbur, & Morris, 1987). While some female athletes have difficulty making the academic transition, they appear to have more difficulty making the athletic transition than they do the academic one. This may change as women's sports programs begin to gain more recognition, and probably varies between sports and between institutions but in general more male athletes seem to be in trouble academically than female athletes. Therefore, the focus of this article will be on the athletic transition of female athletes and not the academic one. The purpose of this article is to discuss the athletic transition from the female athlete's perspective and to provide information that can be utilized to assist female athletes in making the athletic transition.

Many women (because they compete in a context of cultural mores, prejudices, expectations, and social sanctions) feel compelled to choose between being feminine and being athletic, and fear that they will become masculinized as a result of their athletic participation (Hill-Donitsch, 1986;

Harris, 1987). Also, a majority of female athletes today are first-generation college athletes and thus have no maternal role models. Consequently, they enter the predominately masculine athletic system unaware of the larger system with its rules and expectations. Because sport is a masculine domain and a socializer for men, female athletes need to learn how to function effectively in the predominately masculine athletic system, in addition to improving their athletic skills. In other words, the athletic transition is more difficult for women because they must learn how to function in the athletic system and at the same time compete in it whereas male athletes have been socialized to function in the athletic system and therefore need only to compete. Thus, female athletes need to be given information about the differences between professional systems and personal systems (relationships), about the rules they will be expected to follow, and about some of the common mistakes that female athletes make.

Most female athletes will experience some difficulty in making the athletic transition. The type of sport has been found to be an important factor in determining the social acceptability of female athletes (Cratty, 1983). Those sports that emphasize strength, bodily contact, and endurance have traditionally been thought to detract from femininity while sports emphasizing skill, grace, and beauty have been thought to enhance femininity (Malumphy, 1968; Snyder, Kivlin, & Spreitzer, 1975). Thus, one would expect female athletes who compete in the less acceptable sports such as basketball, track, and softball to have a more difficult time making the athletic transition. Besides the type of sport the degree of difficulty that female athletes experience can depend on such things as: 1) their attitudes, values and beliefs about women; 2) their high school athletic experience; 3) the amount of over-protection and/or pampering at home; 4) their orientation toward play; and 5) their expectations of being treated differently because they happen to be female.

The Athletic Transition

Successful women athletes are described as being assertive, dominant, self-sufficient, independent, intelligent, aggressive, reserved, and high achievers (Harris, 1987; Williams, 1980). While female athletes are not necessarily strong advocates of women's rights, by virtue of their athletic participation they will be expected to behave in nontraditional "unfeminine" ways. Because the athletic demands, in terms of time, are so much greater in college than they are in high school, female athletes find themselves spending more and more of their time engaging in nontraditional (unfeminine) behaviors. Harris (1975) reported that female athletes experience dissonance between their social selves and their competitive selves—that women often perceive their athletic role to be separate from, and to some degree inconsistent with, their social selves. This coupled with

the double standard of behavior that requires female athletes to act like ladies but perform like men, often results in female athletes experiencing more dissonance between their social selves and their competitive selves in college than they did in high school. Consequently, female athletes who hold traditional attitudes towards women (and therefore themselves) can be expected to have a more difficult time making the athletic transition, because the traditional social expectations of women in our society differ from what will be required of them in their sport.

Their high school athletic experience also will affect their ability to negotiate the athletic transition. It is therefore important to determine how their high school experience is similar to and/or different from their experience in college. Such factors as "start status", relationships with the coach, fan support, and competitiveness of the program are all important variables to investigate.

Women who have been over-protected and/or pampered at home can also be expected to have a more difficult time making the athletic transition. Female athletes accustomed to being "daddies' little girls" often find the physical and time demands of their sport as unrealistic.

Female athletes are often criticized for not being serious enough about their sport. Kane (1982) describes women as having a play orientation toward games (more concerned with fairness than victory), whereas men have a more professionalized attitude toward play (stressing skill and victory over fairness). Females are encouraged to be less competitive and less motivated to win in sports and to be more concerned with the personal, self-expressive rewards of performance (Kidd & Woodman, 1975; Loy, 1975). Initially many female athletes do seem to be more concerned with fairness than they are with victory, and it is not uncommon for them to describe their athletic participation as something that they have done and/or do for fun. Female athletes who have a play orientation toward their athletic participation will find the college emphasis on skill development and winning alien, and they will be frustrated when others (i.e. coaches) expect their sport to be the most important thing in their lives.

Finally, many female athletes enter college having been treated differently (special) because they happen to be female. Female athletes are often treated like "girls" rather than athletes. If this has been the case (either at home or in their high school programs), when these women are finally treated as athletes, they will tend to feel as if they are being treated unfairly.

The Athletic System

The athletic domain is an example of a professional system similar to other corporate systems in our society. Women are taught how to behave in personal systems (relationships), but they are not taught how to function and behave in professional systems. This causes a problem for many female athletes because they approach their sport, and the larger athletic system, in the same way that they approach personal relationships. Thus it is not uncommon for female athletes to personalize criticism, to focus more on fairness than winning, and to attempt to have their emotional needs met through their sport. Therefore, it is important to provide female athletes with specific information about professional systems (the athletic domain) so that they will better understand what is expected of them and will behave in ways that will not reduce their credibility as serious athletes.

Female athletes need to understand that professional systems are basically task-oriented, and that the task of the athletic system is to win. The focus in the athletic domain is extrapersonal. That is, the task of winning provides a common purpose for the team, team effort is paramount, group and individual needs are expected to be subjugated to the task (winning), the end (winning) justifies the means, self and sport are the center of focus, and criticism is utilized to improve performance. More specifically, female athletes need to know that in the athletic domain feelings are irrelevant, individual group member relationships are not important, individualism is perceived negatively, personal problems are not disclosed, players are expected to be able to handle criticism without getting upset by it, and affectional, closeness and/or intimacy needs are not addressed.

It is often assumed that female athletes, like male athletes, understand the rules (what is expected of them and what behavior is appropriate) of the athletic system by virtue of their athletic participation. This is not the case for many female athletes. Many female athletes do not realize that the athletic domain is a professional system, independent, if you will, of their athletic participation and, consequently, they do not understand what is expected of them and/or what behaviors are considered appropriate. Female athletes need to know that they have **not** been socialized to know and/to follow the rules of the athletic domain. They also need to know the rules of the athletic system and to follow these rules, if they are to be successful college athletes. The following information related to rules is not intended to be inclusive but rather, it represents our most typical and frequent observations and experiences with female athletes.

Winning is the Name of the Game

Many female athletes simply do not understand this basic rule. They may think that it is desirable to win, but many female athletes do not

understand that this rule underlines the existence and therefore the purpose of everything that goes on in the athletic system. This is due to the fact that: 1) females are encouraged to be less competitive and less motivated to win in sports and to be more concerned with the personal, self-expressive rewards of performance (Loy, 1975); 2) female participation in the world of sport is relatively new; 3) level of sport involvement has been found to be directly related to professionalization of attitude toward play (Kane, 1982); 4) women have less positive feelings about successful women and their own success (Horner, 1970; Weinberg, Gould, & Jackson, 1979; Wittig, 1975; Silva, 1981); and 5) women anxious, or at least uncomfortable, in male-oriented achievement situations.

The results is that female athletes simply are not as concerned about winning as male athletes. Female athletes need to recognize the importance that winning plays in the athletic system, regardless of their own personal beliefs about the importance of winning. They also need to realize that unless they behave as if winning is the most important thing to them, others (coaches, trainers, teammates, etc.) will not see them as being competitive, motivated or serious athletes. Female athletes who do not understand that **winning is the name of the game** will behave inappropriately, i.e., they will be more concerned about whether or not they played or started, than they are about winning, they will not understand why they are being pushed so hard in practice, and they will see the athletic system as cold and ruthless and their coaches as indifferent.

The Focus in the Athletic System is Extrapersonal

The focus is not centered on team members but instead is on the task of winning. It is this focus on the task of winning that provides a common purpose for the team. Individual member needs of an interpersonal or intrapersonal nature are subjugated as the team's objective to move towards the goal of winning. Thus, the athletic system is not concerned with individual group-member relationships, attitudes, or feelings, but it is focused on winning. Female s are socialized to focus more on relationships than they are on winning and in fact have been found to quit a game when a dispute threatens a friendship rather than to risk losing the relationship (Lever, 1975, 1976). Female athletes who do not understand that the focus of the athletic system is extrapersonal make the mistake of focusing more on relationships with teammates and coaches and on their own personal concerns than they do on the task of winning. In particular, they do not understand that feelings are irrelevant. They do not understand that coaches are not interested in how they feel or what they think about what is expected—coaches expect them to do what they are told to do regardless of how they feel and/or what they think.

Team Effort is Paramount

Females have not had as much experience playing on teams as males. Consequently, female athletes seem to have a more difficult time subjugating their personal needs to those of the team and instead attempt to function at either the interpersonal and/or intrapersonal level. Examples include manipulation for one's own personal gain, personalization of feedback, indirect expression of anger, talking about players and coaches behind their backs, starting rumors about teammates, not putting-out in practice, and holding petty grievances against teammates and coaches. In other words, many female athletes are more concerned about themselves than they are the team. Female athletes also seem to be less knowledgeable about some of the team concepts than male athletes. Many do not understand such things as—you need the team to be a star, how the team performs is more important than the performance of individuals, you are part of the team regardless of whether or not you participate in a competition, and etc. This inability of some female athletes to function as effective team members seems to be related to their focus on fairness as opposed to winning. They are so concerned about who gets what, who the coaches like best, who gets criticized the most, and who said what to whom that they lose sight of how their behavior negatively affects the overall team performance. We have worked with some teams whose members spend more energy and time in petty disagreements and disputes with one another than they do preparing to meet their competition. It is as if they forget that they are on the same team and instead behave as if they are on opposing teams.

Criticism is Utilized to Improve Performance

Female athletes seem to have a particularly difficult time dealing with criticism. They tend to personalize feedback and respond to criticism by acting hurt. This, more than any of the other things we have discussed, seems to be particularly aggravating to coaches. Women are brought up to please others and therefore they do not perform so much for themselves as they do for others, e.g., coaches. Therefore many female athletes appear to be hurt when their coaches are critical of them, and react to the criticism by crying, getting angry, and sometimes quitting the team altogether. One of the reasons that female athletes respond to criticism the way that they do to criticism is that they do not understand that they need to separate the professional parts of their lives from the personal parts of their lives. They need to understand that what a coach says to them during practice does not have anything to do with how the coach sees them as a person and, likewise, how a coach treats them out of practice does not have anything to do with their position on the team. In other words, many female athletes think that if a coach likes them that they will get to start, play, and travel, and that if a coach is critical of them, the coach does not like them. Female athletes need

to understand that they are involved in a performance competition, not a popularity contest.

It also is important to emphasize that females are socialized to believe that the direct expression of anger and/or aggressiveness is not feminine, i.e., "be nice to everyone" or "good girls don't get angry". Therefore, many female athletes, even though they are aggressive when they compete, feel uncomfortable directly expressing anger to another person. Women seem to feel more comfortable expressing hurt than they do anger and therefore often cover their anger with hurt or **act hurt** when they are angry (Goleman, 1988). They also have been socialized to express their anger indirectly and this explains much of the **talking about others behind their backs** syndrome that is commonplace on women's teams. It is extremely important that female athletes learn to accept criticism without letting it upset them, if they are able to do this, they will experience an unnecessary amount of emotional pain and will not receive the feedback that they need in order to improve their athletic skills. Women who play for coaches that expect them to **act like ladies but perform like men**, or threat them differently because they are females, will have a particularly difficult time coming to terms with this aspect of the athletic system.

Self and Sport is the Center of Focus

The relationship that athletes have with their sports is supposed to be the center of focus or their lives. Males athletes who cannot define themselves independent of their sport are examples of this rule. Female athletes tend to see their sport as **part** of what they do and who they are, but not their lives. They also tend to value their relationships with others as much as, if not more, than they do the relationship that they have with their sport. Because all of their lives are not tied up with their sport, they are unwilling to do some of the self-destructive things that male athletes are willing to do to their bodies, and they are more likely to quit their sport altogether if they decide that their situation is not making them happy, or if their sport is interfering too much with other parts of their lives. Female athletes, unlike male athletes, are in the position of needing to define themselves independent of their sport in order to feel feminine. Men can use their athletic participation to reinforce their masculinity, whereas women, by virtue of their athletic participation are thought to be unfeminine or even gay. Thus, female athletes resist narrowing their focus to their sport because to do so would threaten their identify as women.

Conclusions

While female athletes may not understand the rules and expectations of the athletic system as well as male athletes, it is remarkable in some respects

that so many female athletes have functioned and continue to function as well as they do. Female athletes are required to spend as much time as male athletes in their sports for much less reinforcement, to undergo surgery just like male athletes, to participate without the illusion of a lucrative professional athletic career, and to deal with their sexuality being a public issue. We would argue that female athletes are closer to being real student-athletes because they do not have more emotion problems than male athletes, they do not create as many embarrassing situations for athletic departments and programs as male athletes, and they have healthier self-concepts than many male athletes who identify completely with their sport.

Based on the socialization of women, it is understandable that female athletes would have and will continue to have a difficult time negotiating the athletic transition, just as many male athletes continue to have a difficult time negotiating the academic transition. It is important to realize that many female athletes do not know what is expected of them in the athletic realm anymore than many male athletes understand what they need to do in order to be successful academically (Roberts-Wilbur, & Wilbur, 1986). Therefore, it is a mistake to make the assumption that female athletes know what is expected of them and/or to label them **head cases** when they behave inappropriately in the athletic system. To do so results in criticizing female athletes for something that they have not been socialized to know or, in effect, criticizing them for behaving the way that others have socialized them to behave.

We are not suggesting that all female athletes are unprepared to play the **athletic game** but to the degree that they are unprepared for their athletic experience, they will frustrate coaches and other athletic personnel, behave in ways that will reduce their athletic credibility, and pay an unnecessary emotional price for their athletic involvement.

It is not enough simply to provide women with the opportunity to compete. The opportunity, if it is to be a real one, must go beyond recruitment and take into consideration that fact that, with information and direction, many female athletes (regardless of their athletic ability and/or potential) will not be prepared to take advantage of the opportunity. Perhaps even more importantly, female athletes will not understand that by virtue of their athletic participation they have a real opportunity to learn about professional systems and develop skills that they can apply later in organizational settings. This opportunity needs to be emphasized and highlighted rather than glossed over and ignored because what female athletes learn by virtue of their athletic participation has the potential to go beyond what happens to them on the sportfield.

Finally, it is important to reframe the perceptions that others may have about the inappropriate behaviors manifested by many female athletes. If

we, and others, understand that the inappropriate behaviors of female athletes may be related to their ignorance of the rules and expectations of the athletic system, perhaps we also will be in a position to develop the support programs and systems to facilitate their ability to understand and function appropriately in the athletic system. Such as understanding is the first step in enhancing female athletes' athletic performance.

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