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JOB RESPONSIBILITIES AND BACKGROUNDS OF NCAA DIVISION I ATHLETIC ADVISERS AND COUNSELORS: A REPLICATION

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ABSTRACT

A replication of a 1985 national survey of the educational backgrounds and job responsibilities of athletic advisers and counselors from National Collegiate Athletic Association (NCAA) Division I institutions was conducted. Two hundred and ninety-six advisers and counselors were sent surveys: 193 (65%) returned completed questionnaires. Data revealed that the majority of respondents continue to be former athletes from revenue-producing sports who hold masters degrees in education, with counseling or psychology representing their next most frequent background. Although more women are involved in advising and counseling than in 1985, the majority remain men in the mid-1990's. Respondents are primarily employed by athletic departments. The majority work under the titles of either adviser/administrator or counselor/adviser. Counseling services for college athletes continue to focus on academic matters, with considerably less attention devoted to personal/social or vocational counseling. Advisers and counselors still devote nearly two-thirds of their time to male student-athletes.

INTRODUCTION

Considerable concern has been raised about the nature of intercollegiate athletics and the welfare of student-athletes (SAs) (Brooks & Althouse, 1993; Knight Commission Report, 1990; Sperber, 1990). Likewise,

evidence of interest in and awareness of the distinctive lifestyles and needs of SAs has appeared in the literature (American Institutes for Research, 1988; Etzel, Ferrante, & Pinkney, 1991; Kirk & Kirk, 1993; Parham, 1993; Pinkerton, Hinz, & Barrow, 1987). Various authors have discussed SA needs and described service models and programming to provide formal assistance to these young people (Chartrand & Lent, 1987; Ferrante, Etzel, & Pinkney, 1991; Gabbard & Halischak, 1993; Jordan & Denson, 1990; Petitpas & Champagne, 1988). Along with increasing participation and interest in intercollegiate athletics over the past decade, there seems to have been an expanding range of support services (e.g., academic advising, tutoring, career, personal/social, and sport performance-enhancement counseling) being made available to SAs (Etzel, Ferrante, & Pinkney, 1991; Gurney, Robinson, & Fygetakis, 1983).

Almost a decade has passed since Brooks, Etzel, and Ostrow (1987) surveyed National Collegiate Athletic Association (NCAA) Division I athletic advisers and counselors about their training and professional activities. Recently, the authors became curious again about who was doing what and what their qualifications were nearly ten years later. What differences, if any, might exist between the general "profiles" of SA service providers of the mid-1990s and their predecessors? What services are advisers and counselors providing to SAs today? Are they being provided by people from similar or different backgrounds and training? What implications does this have for the future?

METHOD

A copy of a questionnaire developed by Brooks et al. (1987) was mailed to 296 athletic advisers and counselors employed by institutions that sponsored NCAA Division I men's basketball, the sport with the highest number of sponsors. Of those 296 professionals listed in The 1993-94 National Directory of College Athletics (1993), 193 returned a usable survey — a 65% rate of return. The questionnaire inquired about a variety of demographic variables (e.g., age, gender, athletic and educational backgrounds) as well as information concerning current occupational activities (e.g., employers, services provided, populations served). (See Table 1.) The only item added to the questionnaire that did not appear on the first version of the survey asked respondents to indicate the percent of time they devote to assisting SAs from different racial backgrounds (i.e., African-American, Caucasian, Asian-American).

RESULTS

Demographic Characteristics

Table 1 presents descriptive data regarding the personal attributes of those athletic advisers and counselors ($n=193$) surveyed and provides comparative demographic data collected from the 1985 survey (Brooks et al., 1987) of athletic advisers ($n=134$). The table also contains the results of the

Table 1

Comparison of Demographic Characteristics of NCAA Division I Athletic Advisers Surveyed in 1985 ($N=134$) and in 1994 ($N=193$)

Characteristic	1985 Sample		1994 Sample		Chi-square
	n	%	n	%	
Gender					
Male	93	69.40	104	53.89	7.95*
Female	41	30.60	89	46.11	
Former Athlete					
Yes	83	61.90	119	61.66	0.00
No	51	38.10	73	37.82	
Sport Background ^a					137.15**
Football	32	23.90	60	31.11	
Basketball	19	14.20	77	39.90	
Baseball	10	7.50	45	23.32	
Soccer	3	2.20	9	4.67	
Track	3	2.20	39	20.21	
Wrestling	3	2.20	5	2.59	
Other	13	9.20	51	26.42	
Highest Academic Degree					3.64
Baccalaureate	16	12.10	23	11.92	
Masters	73	55.30	125	64.77	
Doctoral	43	32.60	45	23.31	
Area of Academic Preparation ^a					84.11**
Business	4	3.00	20	10.36	
Counseling/ Psychology	33	24.60	59	30.57	
Education	39	29.10	82	42.49	
Physical Education	33	24.60	45	23.32	
Other	25	18.70	57	29.53	

* $p < .01$

** $p < .001$

^aThe summation of percentage scores exceeds 100% because subjects chose to respond to more than one subcategory.

chi-square analyses conducted to compare the demographic data originally collected in 1985 with that of 1994.

As can be seen in Table 1, significantly more females are currently employed as athletic advisers or counselors relative to 1985 ($\bar{x} = 7.95$, $p < .01$). Also, the majority of advisers continue to be former athletes, with basketball (39.90%) and football (31.11%) still the most frequently mentioned sports in which these individuals had previously participated.

The distribution of data by highest academic degree attained was similar to that reported for the 1985 survey ($\bar{x} = 3.64$ NS). The majority of advisers/counselors (64.77%) continue to indicate that their highest degree is a master's degree. On the average, it has been 10.44 years ($SD = 8.67$) since these individuals completed their highest degrees.

These advisers and counselors were also asked to specify the area(s) of their academic training, based on five categories designated in the survey: (1) business, (2) physical education, (3) counseling/psychology, (4) education, or (5) other. The data indicate that (relative to 1985) the academic training of academic advisers and counselors continues to be principally in the field of education. However, the data also suggest that there has been an increase since 1985 ($\bar{x} = 84.11$, $p < .001$) in the number of academic advisers/counselors trained in either counseling/psychology (30.57%) or business (10.36%).

In the current survey, athletic advisers and counselors were asked to indicate whether they were licensed professionals. Among those responding, only 13 (6.74%) indicated that they were licensed. Of these, the majority indicated that they were licensed in the area of counseling (i.e., seven of 13, or 53%).

Employment Responsibilities

Table 2 presents descriptive data outlining the employment responsibilities of academic advisers/counselors ($n = 134$) employed in 1994 in a capacity similar to those who were surveyed in 1985. As evident from Table 2, athletic advisers/counselors continue to be principally employed by athletic departments (71.50%), with no discernible change since 1985 ($\bar{x} = 0.43$ NS) in the type of department within colleges and universities in which they are employed.

Those surveyed were also asked to indicate how their specific job titles could be categorized from among the following: (a) counselor-adviser, (b) adviser-coach, or (c) adviser-administrator. The majority (69.91%) of respondents said that their specific job title could best be labeled as adviser-administrator, with significantly more ($\bar{x} = 17.94$, $p < .001$) choosing this category than in the 1985 survey.

As was true in the 1985 survey, Table 2 indicates that these people devote more of their time to providing support services to male SAs (62.16%) in revenue sports (56.59%); the percentage of time they devoted to African-American (42.69%) versus Caucasian SAs (43.40%) was almost equal. Of

Table 2

Comparison of Demographic Characteristics of NCAA Division I Athletic Advisers Surveyed in 1985 (N=134) and in 1994 (N=193)

Characteristic	1985 Sample		1994 Sample		Chi-square
	n	%	n	%	
Department Employed By					
Athletics	115	85.82	138	71.50	0.43
Physical Education	3	2.24	3	1.55	
Student Services	14	10.45	21	10.88	
Other	—	—	44	22.80	
Specific Job Title					
Adviser/Coach	12	8.96	7	3.63	17.94**
Adviser/Administrator	32	23.88	133	68.91	
Counselor/Adviser	—	—	59	30.57	
Percent of Time Devoted To:					
Academic Advising	134	45.69	187	42.74	
Personal/Social					
Counseling	134	13.93	186	13.46	
Vocational					
Counseling	134	8.15	186	4.71	
Consultation	—	—	186	9.13	
Sport Performance					
Enhancement	—	—	186	1.92	
Other	134	22.72	187	22.74	
Percent of Time Devoted To:					
Revenue Athletes	134	63.79	175	56.59	
Non-revenue					
Athletes	134	30.47	175	42.34	
Percent of Time Devoted To:					
Male Athletes	134	72.54	160	62.16	
Female Athletes	134	25.07	160	35.17	
Percent of Time Devoted To:					
African-American					
Athletes	—	—	153	42.69	
Caucasian Athletes	—	—	153	43.40	
Asian-American					
Athletes	—	—	153	4.58	

** $p < .01$

The summation of percentage scores exceeds 100% because subjects chose to respond to more than one subcategory.

Missing data denote that these subcategory items were not included in the 1985 survey.

course, these data must be interpreted cautiously, given that the survey did not assess the number of male versus female, African-American versus Caucasian SAs, and so forth, with whom athletic advisers are in contact at the institutions surveyed.

Pearson product moment correlation coefficients were computed between the percent of time that academic advisers/counselors devote to revenue athletes and the percent of time they allocate to various support services (e.g., academic advising, personal/social counseling). The results indicated low, but statistically significant, correlation coefficients for academic advising ($r = .15, p < .05$) and for consultation ($r = .18, p < .05$), i.e., much of the respondent's time is involved with these activities. However, for the most part, the athletic advisers' gender evidenced no relationship to the percent of time they devoted to providing support services to either male or female SAs or to the type of support services provided (i.e., academic advising, personal/social counseling, etc.). Further, whether academic advisers/counselors were former athletes had no bearing on the percent of time they devoted to providing support services for SAs in revenue-producing sports.

The extent to which the terminal degree (i.e., masters versus doctoral degree) and/or the area of academic preparation (i.e., counseling/psychology, education, or physical education) of the academic adviser/counselors affected the percentage of time they allocated to five types of support services (academic advising, consultation, and so forth) was examined through 2 X 3 multivariate analysis of variance (MANOVA). The obtained F-ratio was not statistically significant at the .05 level.

In addition, a 2 X 3 (Median Split on Years Since Completing Last Degree X Job Title) MANOVA was computed to determine if these factors influenced the percentage of time these advisers devoted to the five types of support services identified in the survey. The resultant F-ratio of 4.26 was statistically significant ($p < .001$). Follow-up univariate 2 X 3 ANOVA revealed that recency of completing the last degree affected academic advising ($F = 5.84, p < .05$), and the job titles of the advisers affected the percentage of time they devoted to both academic advising ($F = 4.18, p < .05$) and sport performance enhancement ($F = 11.97, p < .001$). Further, the percentage of time these academic advisers/counselors devoted to sport performance enhancement was influenced by the interaction of how recently they completed their last degree and their job title ($F = 18.93, p < .001$). Post hoc analyses were conducted using Duncan's Multiple Range Test. The results indicated that those advisers/counselors who received their degrees more recently spent less of their time (37.93%) in the area of academic advising than did those advisers who indicated that they had received their last degree years earlier (46.52% of time devoted to academic advising). Those individuals ($n = 7$) who indicated that their principal job title was adviser/coach devoted more time (15.71%) to sport performance enhancement than did adviser/administrators ($n = 118$; 1.47%) or counselor/advisers ($n = 47$). However, these results are questionable given the small number who identified their job titles as adviser/coach.

Finally, 2 (Gender) X 2 (Former Athlete or Not) MANOVA was computed to determine if these factors affected the percentage of time devoted to the five types of support services listed in the survey. The resultant F-ratio of 1.01 was not statistically significant at the .05 level.

Discussion

Have the "profiles" of those who provide advising and counseling assistance to SAs at the NCAA Division I level changed over the past decade? Yes and no. In general, the data indicate that, like those surveyed in the mid-1980s, athletic advisers and counselors in the mid-1990s are still predominantly male former athletes who have obtained master's degrees. Similarly, these people continue to provide academic advising to male SAs who participate in so-called "revenue-producing" sports. However, noteworthy differences exist between our sample profiles.

First, the findings indicate that considerably more women (i.e., roughly 46%) are now working in these capacities than they did ten years ago. This trend appears to parallel employment trends in other helping professions (e.g., psychology) where more entering professionals are women than men. This finding is encouraging because the number of women who participate in collegiate athletics has grown rapidly since Title IX legislation was passed in the 1970s and because they may now more readily receive assistance from professionals of the same gender.

Another noteworthy finding was that respondents said they devoted nearly the same amount of time providing assistance to African-American SAs as Caucasian SAs. Although no comparisons could be made with the 1985 sample in this area, it is encouraging to see that advisers/counselors are attempting to meet the needs of a diverse group of athletics participants—a group that will continue to be more diverse as the years go by. However, as mentioned above, these observations should be interpreted with care, given the noted limitations of the survey.

Another remarkable finding was that many advisers and counselors continue to report having participated in sport. The distribution of participation in the current set of respondents reflected involvement in more than one sport as well as a wider range of sports, to include not only football and basketball but also the so-called "Olympic" or "minor" sports as well. Adviser/counselor involvement in sport is seen as a useful experience for advisers and counselors. Indeed, it may contribute to better understanding of SA needs and lifestyles, which may lead to greater acceptance and trust of helpers by SAs who often struggle with the developmental issue of identifying someone on whom they can rely.

As mentioned earlier, from an educational perspective, little change was noted in a decade. Most respondents still own a terminal master's degree; nearly ten percent more than in the previous survey said they had earned a degree at that level. Other research (Burton, 1992) has produced similar educational background profiles of SA support program personnel at National

Association of Intercollegiate Athletics (NAIA) schools (i.e., nearly two-thirds of personnel held master's degrees and one-third doctoral degrees). This is also seen as an advancement, in that advisers/counselors as a group are probably better trained to work with college-aged people than their predecessors. Graduate education and training in these fields clearly is essential to providing high quality direct and indirect services to SAs in the mid-1990s and beyond.

Shifts also were observed in some of the fields of academic preparation of respondents. Indeed, more people said that they came from counseling/psychology, education, and business backgrounds than ten years ago. Just how or why people from business backgrounds have entered the field and how useful education and training in business is to working as athletic advisers and counselors is unclear. However, the finding that gradually increasing numbers of professionals have preparation in counseling, psychology, or education is encouraging since the roles of athletic advisers/counselors appear to more closely match many of the roles and responsibilities of professionals from these fields today. Other research that has examined the demographics of academic advisers at NCAA Division I-A and I-AA institutions (Rader, 1991) revealed education and training background similarities: the majority of respondents indicated they have graduate degrees in higher education, counseling and guidance, and student personnel.

It should be noted that only a small percentage of our survey respondents said they are involved in the provision of personal/social or vocational counseling services. The percentages of respondents who said they do so (approximately 14% and 8% respectively) remained rather low and virtually unchanged (in the personal/social area) over ten years. This was unfortunately the case despite growing awareness of the unique psychosocial needs of SAs and an increase in the provision of holistic support services to SAs (Parham, 1993).

Few respondents reported that they were licensed professionals. Given the increasing complexity of SA concerns and the growing number of states that have passed legislation specifying and restricting professional activities (e.g., the practice of counseling and the use of the title "counselor"), it would seem useful and wise from competency as well as from ethical and legal standpoints for more license-eligible SA support service providers to seek licensure in the states where they work.

Little change was observed in the employment affiliations of advisers and counselors since 1985. Not surprisingly, the majority still work for athletic departments. Although this makes sense from historical and various practical standpoints (e.g., SA service accessibility), some argue that support services should be housed outside of athletics to minimize SA isolation, to encourage SAs to seek assistance from the full range of resources in the university community, to avoid potential conflicts of interest, and often to save departments money (Denson, in press).

SUMMARY

If colleges and universities are to continue to attend to the needs of SAs into the next century, they must focus much of their efforts on understanding and meeting the holistic needs of this often misunderstood, increasingly diverse group of people. Athletic advisers and counselors will have critical roles to play in these future efforts. Considerable and consistent attention will have to be paid to the education and training experiences of these professionals which will affect the quality of the services they will provide.

REFERENCES

- American Institutes for Research (1988). Summary results from the 1987-88 national study of intercollegiate athletics. (Report No. 1). Palo Alto, CA: Center for the Study of Athletics.
- Brooks, D., & Althouse, R.(Eds.). (1993). Racism in college athletics. Morgantown, WV: Fitness Information Technology, Inc.
- Brooks, D., Etzel, E., & Ostrow, A. (1987). Job responsibilities and backgrounds of NCAA Division I athletic advisors and counselors. The Sport Psychologist, 1, 200-207.
- Burton, J. (1992). Support services for student-athletes attending southeast institutions of higher education that are members of the National Association of Intercollegiate Athletics (NAIA). Dissertation Abstracts International, 53, 1068-A.
- Chartrand, J., & Lent, R. (1987). Sports counseling: Enhancing the development of the student-athlete. Journal of Counseling and Development, 66, 164-167.
- Denson, E. (in press). An integrative model of academic and personal support services for student-athletes. In E. Etzel, A. Ferrante, & J. Pinkney (Eds.), Counseling college student-athletes: Issues and interventions (2nd ed.). Morgantown, WV: Fitness Information Technology.
- Etzel, E., Ferrante, A., & Pinkney, J. (Eds.). (1991). Counseling college student-athletes: Issues and interventions. Morgantown, WV: Fitness Information Technology.
- Ferrante, A., Etzel, E., & Pinkney, J. (1991). A model for accessing student-athletes with student-affairs resources. In E. Etzel, A. Ferrante, & J. Pinkney (Eds.), Counseling college student-athletes: Issues and interventions (pp. 19-30). Morgantown, WV: Fitness Information Technology.
- Gabbard, C., & Halischak, K. (1993). Consulting opportunities: Working with student-athletes at a university. The Counseling Psychologist, 21, 386-398.
- Gurney, G., Robinson, D., & Fygetakis, L. (1983). Athletic counseling within NCAA Division I institutions: A national profile of staffing, training and services. Paper presented at the annual meeting of the National Athletic Academic Advising Association, San Diego, CA.

- Jordan, J., & Denson, E. (1990). Student services for athletes: A model for enhancing the student-athlete experience. Journal of Counseling & Development, 69, 95-97.
- Kirk, W., & Kirk, S. (Eds.). (1993). Student athletes: Shattering the myths & sharing the realities. Alexandria, VA: American Counseling Association.
- Knight Commission report. (1990, March 7). Chronicle of Higher Education, p. A38.
- Parham, W. (1993). The intercollegiate athlete: A 1990s profile. The Counseling Psychologist, 21, 411-429.
- Petitpas, A., & Champagne, D.E. (1988). Developmental programming for intercollegiate athletes. Journal of College Student Development, 29, 454-460.
- Pinkerton, R., Hinz, L., & Barrow, J. (1987). The college student-athlete: Psychological considerations and interventions. Journal of American College Health, 37, 218-226.
- Rader, S. (1991). The characteristics, job responsibilities, and academic advising practices of athletic advisers at NCAA Division I institutions. Dissertation Abstracts International, 52, 2030-A.
- Sperber, M. (1990). College sports inc.: The athletic department versus the university. New York: Henry Holt.
- The 1993-94 national directory of college athletics. (1993). Cleveland, OH: Collegiate Directories.

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A COMPARISON BETWEEN INJURED AND UNINJURED FOOTBALL PLAYERS ON SELECTED PSYCHOSOCIAL VARIABLES

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Conclusions drawn from or recommendations based on the data provided by the National Collegiate Athletic Association are those of the authors based on analyses/evaluations of the authors and do not represent the views of the officers, staff or membership of the NCAA.

ABSTRACT

The psychological impact of athletic injury on 916 NCAA Division I football players was examined. Injured student-athletes reported significantly higher levels of depression and life stress than uninjured student-athletes. The findings, which are consistent with previous research, suggest that injury can be a significant stressor for student-athletes.

INTRODUCTION

Participation in intercollegiate athletics involves extensive commitments of time and energy. It has been argued that the demands placed on college student-athletes exceed those placed on their nonathletic peers (Pinkerton, Hinz, & Barrow, 1989). In addition to the typical academic and social challenges faced by college students in general, student-athletes encounter a unique set of concerns as a result of their participation in intercollegiate athletics, such as discrimination, social isolation, and extensive

travel to competitions (Engstrom & Sedlacek, 1991; Pinkerton, Hinz, & Barrow, 1989; Petitpas & Champagne, 1988).

One of the major transitions experienced by many student-athletes is dealing with physical injury (Pearson & Petitpas, 1990). Despite the high prevalence of injury in sport activities (Kraus & Conroy, 1984; Lanese, Strauss, Leizman, & Rotondi, 1990; Meeuwisse & Fowler, 1988; Zemper, 1989), there has been little research on the psychological impact of athletic injury. Several studies have found that injured athletes experience greater mood disturbance than their uninjured counterparts (Chan & Grossman, 1988; Pearson & Jones, 1992; Smith, Stuart, Wiese-Bjornstal, Milliner, O'Fallon, & Crowson, 1993) and that this postinjury mood disturbance tends to diminish as rehabilitation progresses (McDonald & Hardy, 1990; Smith, Scott, O'Fallon, & Young, 1990). Kleiber, Greendorfer, Blinde, and Samdahl (1987) found that college student-athletes who sustained a career-ending athletic injury experienced lower postcollegiate life satisfaction than those who did not. A subsequent reanalysis of these data (Kleiber & Brock, 1992) revealed that low levels of postcollegiate life satisfaction were evident only for those student-athletes who were committed to playing professional sport and who sustained a career-ending athletic injury.

Investigations on the psychological effects of athletic injury, however, have been limited in several important ways. First, sample sizes have typically been small. None of the studies has had samples in excess of 100 injured participants. Second, college student-athletes have been the primary participants in only two studies (Kleiber, Greendorfer, Blinde, & Samdahl, 1987; McDonald & Hardy, 1990). And third, perhaps as a consequence of the first two limitations, relatively few psychological variables have been included in typical investigations of psychological responses to athletic injury. Thus, the purpose of this study was to examine differences between injured and uninjured college football players on selected psychological variables employing a large, diverse sample that was randomly selected during the National Collegiate Athletic Association's 1987-1988 national study.

METHOD

Participants

Participants were 916 NCAA Division I football players who participated in the 1987-88 National Study of NCAA Student-Athletes (Center for the Study of Athletics, 1988). The football players were drawn randomly from 42 universities that had been selected to represent the variation in size, location, and public/private status of all 291 Division I universities. The mean age of the participants was 19.78 ($SD = 1.40$) years; 553 (60%) identified themselves as white and 344 (38%) as black. In terms of class standing, 296 (32%), 257 (28%), 220 (24%), and 138 (15%) reported being freshmen, sophomores, juniors, and seniors, respectively.

Measures

Several well-validated and psychometrically sound measures were administered as part of the National Study. The Center for Epidemiological Studies Depression Scale (CES-D) (Radloff, 1977), the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and the Spielberger Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) were used to assess depression, self-esteem, and trait anxiety, respectively. The Levenson (1974) Locus of Control Scales were used to measure perceptions of three dimensions of control (internal control, powerful others, and chance). Acceptably reliable indices of life stress ($\alpha = .88$) and social support ($KR-20 = .58$) were developed from survey items.

Two items pertaining to recent injury history were used to determine membership in the injured and uninjured groups. Participants who reported having sustained an injury in intercollegiate practice or competition during the preceding academic year comprised the injured group ($n = 488$). The remaining participants comprised the uninjured group ($n = 428$). Unfortunately, none of the items on the National Study questionnaires addressed injury severity.

RESULTS

Table 1 presents means and standard deviations for the psychosocial variables assessed in this investigation. To examine differences between the injured and the uninjured group, a one-way MANOVA was performed on participants' scores on the depression, self-esteem, trait anxiety, locus of control, life stress, and social support inventories. A significant multivariate effect for group membership (Wilks' $\lambda = .97$, $F[8,907] = 3.34$, $p < .005$) was obtained.

Follow-up univariate ANOVAs revealed that the injured group had significantly higher depression scores ($F[1,914] = 7.50$, $p < .01$) and life stress scores ($F[1,914] = 16.96$, $p < .0001$) than the uninjured group. No other significant effects were obtained, although the difference between the injured group ($M = 4.46$, $SD = 2.14$) and the uninjured group ($M = 4.71$, $SD = 2.19$) on social support approached significance ($p < .08$).

Although the CES-D generally is not used to make clinical diagnoses of depression, researchers (Husaini, Neff, Harrington, Hughes, & Stone, 1980; Radloff, 1977) have identified cut-off scores that may be employed to classify individuals and determine prevalence rates. Using the original cut-off of 16, 115 (27%) and 161 (33%) of the uninjured and injured football players, respectively, could be classified as depressed. When the more conservative cut-off of 23 is applied, however, prevalence rates drop to 9% ($n = 35$) and 13% ($n = 61$) for the two groups.

DISCUSSION

The results of this study indicate that injured college student-athletes reported significantly higher levels of depression and life stress than their

Table 1

Means and Standard Deviations of Psychosocial Variables for Injured and Uninjured Participants

Variable	Group	
	Injured (n=488)	Uninjured (n=428)
Depression		
M	14.15	12.66*
(SD)	(8.80)	(7.56)
Self-esteem		
M	25.21	25.27
(SD)	(4.86)	(4.33)
Trait anxiety		
M	38.38	37.55
(SD)	(9.43)	(8.26)
Locus of control		
Internal control		
M	38.18	38.24
(SD)	(5.89)	(5.80)
Powerful others		
M	21.55	21.92
(SD)	(11.18)	(10.41)
Chance		
M	18.47	19.09
(SD)	(8.81)	(8.93)
Social support		
M	4.46	4.71
(SD)	(2.14)	(2.19)
Life stress		
M	118.28	114.08*
(SD)	(14.28)	(15.99)

*Significantly different from injured group at $p < .01$.

uninjured counterparts. These findings are consistent with previous research documenting greater mood disturbance for injured versus uninjured athletes (Chan & Grossman, 1988; Pearson & Jones, 1992; Smith et al., 1993) and with the theoretical position that injury is a stressor (Weiss & Troxel, 1986; Wiese & Weiss, 1987). The nonsignificant differences between the injured and uninjured groups on the remaining psychological scales make sense when it is considered that, with the exception of the social support scale, the measures are designed to

assess dispositional characteristics that are unlikely to change as a result of athletic injury.

The current findings provide impetus for the provision of counseling and support services to injured student-athletes (e.g., Chartrand & Lent, 1987; Denson, 1992; Jordan & Denson, 1990). The elevations in depression and life stress experienced by injured student-athletes should be of particular concern for counselors and other student service professionals for several reasons. First, although injured athletes typically receive care from sports medicine personnel (e.g., athletic trainers, team physicians), these professionals generally have no formal training in helping student-athletes cope with concomitant psychological disturbances like depression (Etzel & Ferrante, 1993). Injured student-athletes who experience high levels of depressive symptoms then must seek assistance from other professionals within the university community who possess the necessary knowledge and skills (e.g., counselors). In fact, the involvement of counselors in the treatment of injured student-athletes can be critical because psychological distress can interfere with adherence to injury rehabilitation regimens (Daly, Brewer, Van Raalte, Petitpas, & Sklar, in press) and physical recovery (Wise, Jackson, & Rocchio, 1979). Thus, counselors serve injured student-athletes by helping them cope with injury, reduce levels of depression (an aversive state in and of itself), and adhere to injury rehabilitation programs that are critical for reattaining the role and identity of athlete, a source of self-worth to many student-athletes (Petitpas & Champagne, 1988).

Second, life stress can have adverse effects in the academic arena. For example, Petrie (1993a) found an inverse relationship between student-athletes' life stress and grade point average. White college football players who reported higher stress levels at the beginning of the academic term earned lower grades during that term. Thus, in addition to experiencing athletic difficulties, injured student-athletes' academic performance may suffer as well. If identified early, however, the specific needs of these "high stress" student-athletes could be assessed and interventions targeted to help. For example, some high-stress, injured student-athletes may feel overwhelmed and unable to cope with the demands of school. Such student-athletes might benefit from individual/group therapy, where they could discuss their feelings and receive support, or from life skills workshops (e.g., on time and/or stress management), where they could learn essential skills for negotiating their current environment. Whatever the student-athletes' specific needs, counselors and other student service professionals again appear to be in the best positions to offer assistance.

It is important to acknowledge that, because of the retrospective and cross-sectional methods employed in this study, causal inferences cannot be made regarding the impact of athletic injury on the psychological state of college student-athletes. A possible alternative explanation for the findings of this study is that elevated levels of depression and life stress precipitated injury in the football players (e.g., Andersen & Williams, 1988; Petrie, 1992, 1993b, 1993c). Nevertheless, this investigation represents an improvement over previous studies with respect to the number of variables incorporated in the analyses and the size, diversity, and representativeness of the sample. In future

research, attempts should be made to rule out alternative explanations and to improve upon the current study by employing prospective and longitudinal designs (e.g., Smith et al., 1993) while retaining the positive elements of this investigation.

Physical injury is a risk inherent in competitive sport participation. As an enhanced understanding of the impact of athletic injury on student-athletes is developed through research, athletic counselors and student services professionals will be better prepared to attend to the needs of injured student-athletes and assist them in their transitions through college.

REFERENCES

- Andersen, M. B., & Williams, J. M. (1988). A model of stress and athletic injury: Prediction and prevention. Journal of Sport & Exercise Psychology, 10, 294-306.
- Center for the Study of Athletics (1988). Report No. 2: Methodology of the 1987-1988 National Study of Intercollegiate Athletes. Palo Alto, CA: American Institutes for Research.
- Chan, C. S., & Grossman, H. Y. (1988). Psychological effects of running loss on consistent runners. Perceptual and Motor Skills, 66, 875-883.
- Chartrand, J. M., & Lent, R. W. (1987). Sports counseling: Enhancing the development of the student-athlete. Journal of Counseling and Development, 66, 164-167.
- Daly, J. M., Brewer, B. W., Van Raalte, J. L., Petitpas, A. J., & Sklar, J. H. (in press). Cognitive appraisal, emotional adjustment, and adherence to rehabilitation following knee surgery. Journal of Sport Rehabilitation.
- Denson, E. L. (1992). Integrating support services for student athletes: Possible pathways. Academic Athletic Journal, Fall, 16-23.
- Engstrom, C. M., & Sedlacek, W. E. (1991). A study of prejudice toward university student-athletes. Journal of Counseling and Development, 70, 189-193.
- Etzel, E. F., & Ferrante, A. P. (1993). Providing psychological assistance to injured and disabled college student-athletes. In D. Pargman (Ed.), Psychological bases of sports injuries (pp. 265-283). Morgantown, WV: Fitness Information Technology.
- Husaini, B. A., Neff, J. A., Harrington, J. B., Hughes, M. D., & Stone, R. H. (1980). Depression in rural communities: Validating the CES-D scale. Journal of Community Psychology, 8, 20-27.
- Jordan, J. M., & Denson, E. L. (1990). Student services for athletes: A model for enhancing the student-athlete experience. Journal of Counseling and Development, 69, 95-97.
- Lanese, R., Strauss, R., Leizman, D., & Rotondi, A. (1990). Injury and disability in matched men's and women's intercollegiate sports. American Journal of Public Health, 80, 1459-1462.
- Kleiber, D. A., & Brock, S. C. (1992). The effect of career-ending injuries on the subsequent well-being of elite college athletes. Sociology of Sport Journal, 2, 70-75.
- Kleiber, D., Greendorfer, S., Blinde, E., & Samdahl, D. (1987). Quality of exit from university sports and life satisfaction in early adulthood. Sociology of Sport Journal, 4, 28-36.
- Kraus, J. F., & Conroy, C. (1984). Mortality and morbidity from injuries in sports and recreation. Annual Review of Public Health, 5, 163-192.
- Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. Journal of Personality Assessment, 38, 377-383.
- McDonald, S. A., & Hardy, C. J. (1990). Affective response patterns of the injured athlete: An exploratory analysis. The Sport Psychologist, 4, 261-274.
- Meeuwisse, W. H., & Fowler, P. J. (1988). Frequency and predictability of sports injuries in intercollegiate athletes. Canadian Journal of Sport Sciences, 13, 35-42.
- Pearson, L., & Jones, G. (1992). Emotional effects of sports injuries: Implications for physiotherapists. Physiotherapy, 78, 762-770.
- Pearson, R. E., & Petitpas, A. J. (1990). Transitions of athletes: Developmental and preventive perspectives. Journal of Counseling and Development, 69, 7-10.
- Petitpas, A. J., & Champagne, D. E. (1988). Developmental programming for intercollegiate athletes. Journal of College Student Development, 29, 454-460.
- Petrie, T. A. (1992). Psychosocial antecedents of athletic injury: The effects of life stress and social support on women collegiate gymnasts. Behavioral Medicine, 18, 127-138.
- Petrie, T. A. (1993a). Racial differences in the prediction of college football players' academic performances. Journal of College Student Development, 34, 418-421.
- Petrie, T. A. (1993b). The moderating effects of social support and playing status on the life stress-injury relationship. Journal of Applied Sport Psychology, 5, 1-16.
- Petrie, T. A. (1993c). Coping skills, competitive trait anxiety, and playing status: Moderating effects on the life stress-injury relationship. Journal of Sport & Exercise Psychology, 15, 261-274.

- Pinkerton, R. S., Hinz, L. D., & Barrow, J. C. (1989). The college student athlete: Psychological considerations and interventions. Journal of American College Health, 37, 218-226.
- Radloff, L. (1977). The CES-D scale: A self-report depression scale for research in the general population. Applied Psychosocial Measurement, 1, 385-401.
- Rosenberg, M. (1965). Conceiving the self. Princeton, NJ: Princeton University Press.
- Smith, A. M., Scott, S. G., O'Fallon, W. M., & Young, M. L. (1990). Emotional responses of athletes to injury. Mayo Clinic Proceedings, 65, 38-50.
- Smith, A. M., Stuart, M. J., Wiese-Bjornstal, D. M., Milliner, E. K., O'Fallon, W. M., & Crowson, C. S. (1993). Competitive athletes: Preinjury and postinjury mood state and self-esteem. Mayo Clinic Proceedings, 68, 939-947.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). Manual for the State-Trait Anxiety Inventory. Palo Alto, CA: Consulting Psychologists Press.
- Weiss, M. R., & Troxel, R. K. (1986). Psychology of the injured athlete. Athletic Training, 21, 104-109, 154.
- Wiese, D. M., & Weiss, M. R. (1987). Psychological rehabilitation and physical injury: Implications for the sportsmedicine team. The Sport Psychologist, 1, 318-330.
- Wise, A., Jackson, D. W., & Rocchio, P. (1979). Preoperative psychological testing as a predictor of success in knee surgery: A preliminary report. The American Journal of Sports Medicine, 7, 287-292.
- Zemper, E. (1989). Injury rates in a national sample of college football teams: A 2-year prospective study. The Physician and Sportsmedicine, 17, 100-102, 105-108, 113.

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THE STUDENT-ATHLETE LIFE/CAREER PORTFOLIO: A MULTIFACETED APPROACH TO LIFE AND CAREER DEVELOPMENT

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ABSTRACT

The student-athlete life/career portfolio is a process that develops reflective practice and allows for an in-depth portrayal of the experiences of each person as an individual and an athlete. The contents of the life/career portfolio provide a unique document that is far more illustrative of an individual's abilities and achievements than the traditional resume.

INTRODUCTION

Issues and concerns plaguing the student-athlete have been well documented (Chartrand & Lent, 1987; Danish, Petitpas, & Hale, 1993; Lanning, 1982; Petitpas & Champagne, 1988;). These problems involve a cadre of developmental issues (identity, personal competence, career planning) that cover the life span of the student-athlete (Jordan & Denson, 1990; Pearson & Petitpas, 1990; Wooten, 1994).

Coleman (1961) first identified potential developmental difficulties when he reported on the centrality of athletics in developing adolescent peer groups. Since that time, researchers (Goldberg, 1991; Pearson & Petitpas, 1990) have described the transitional, academic, and developmental difficulties that result from over-identification with sports. As a result, athletes are often plagued with issues concerning reconstructing an identity outside athletics,

developing personal competencies, and developing career/life plans for when the "game is over."

Many career and transitional programs have been designed which address the aforementioned problems of student-athletes (Chartrand & Lent, 1987; Danish, D'Augelli, & Ginsburg, 1984; Wooten & Hinkle, 1991). However, the typical approach is a "one shot" career planning program. These programs cover a plethora of topics that include self and world of work knowledge as well as decision-making skills. While occupationally-focused crash courses are a good introduction, they fall short when student-athletes' problems are more developmental in scope.

One method to expand the focus and duration of the career/life exploration process is the student-athlete life/career portfolio. This article is designed to provide an introduction to the development and application of that portfolio.

WHAT IS A STUDENT-ATHLETE LIFE/CAREER PORTFOLIO?

Portfolios have been used historically in the fields of music, art, and drama, and more recently in the fields of teacher education, graduate education, and business. The portfolio concept is one that allows an individual, through a selection of representative work, to demonstrate competencies and accomplishments as well as reflections of these experiences. Portfolio development emerges over time, capturing the complexities of the students during their collegiate experience. Thus, the portfolio is analogous to a picture album with "snapshots" depicting the growth and development of the student-athletes.

The portfolio as a process develops reflective practice and allows for an in-depth portrayal of each person's experiences. The content of the portfolio provides evidence that is far more illustrative of the individual's abilities and achievements than the traditional resume.

The focus of a life/career portfolio for student-athletes can be facilitated to engage the process of self-definition both inside and outside the athletic milieu. Researchers (Goldberg, 1991; Pearson & Petitpas, 1990; Petitpas, 1978) have outlined the deficits of individuals who over-identify with sports and as a result have foreclosed on age-appropriate exploratory activities. The portfolio concept can set into motion developmental changes in identity, competence, relationships, and different conceptions of self. The process facilitates self-reflection and critical analysis by way of sequenced assignments, journal writing, group work, and reflection. By constructing a running commentary of work done over each semester and by meeting periodically with an academic athletic adviser, student-athletes can study the parts of the portfolio (e.g., self-assessment and analysis, field of study, decision-making) to understand what meaning these components have, how they work in everyday life and in the future, and why they might be important.

WHY CONSTRUCT THE PORTFOLIO?

Reasons for constructing the student-athlete life/career portfolio vary according to the wants and needs of the student-athletes, programming coordinator, academic and sports counselors, and athletic department. In the case of student-athletes, a life/career development portfolio could provide a comprehensive and integrated view of human growth and development over their life span. This approach addresses the developmental issues such as identity, competencies, and career planning that are often deemed deficient in student-athletes. The life/career development perspective provides a framework to develop life and career consciousness. This awareness allows student-athletes to explore the possibilities of new identities, develop new competencies, plan short- and long-range goals, and make decisions based on new data. The portfolio process of life/career development is a holistic approach to development that recognizes the interactive nature of all aspects of a person's life.

Furthermore, with a general life/career focus, pertinent mental health issues can arise from this process. Corbishley and Yost (1989) suggested that during the career development process certain issues and concerns (e.g., low self-esteem, cognitive dysfunctions, ineffective coping styles, unsatisfactory relationships) cannot be ignored because they may interfere with the life/career goals and process. These issues and concerns, in turn, can be simultaneously integrated into the life/career development portfolio process. Through reflection, self-awareness, understanding, and enhanced personal competence, student-athletes can learn new ways of thinking, behaving, and feeling. They can come to understand that changes due to the life/career portfolio process will result in changes in other parts of their lives.

A life/career portfolio, developed over time, integrates an individual's life roles and explores various aspects of life to discover sources of satisfaction that heretofore may have been neglected. A multifaceted approach expands the possibility of personal choice to include occupational, social, personal, educational, and leisure interests.

INFORMATION NEEDED FOR THE PORTFOLIO

The student-athlete life/career portfolio should be designed initially to collect the information needed to address fairly broad areas, including educational and academic experiences, athletic experiences, career development, and self-improvement. After sufficient time is spent on collection and reflection, student-athletes may develop more specific areas of concentration within the broader areas of development. For example, a student-athlete might have aspirations of becoming a sports journalist. With guidance from the academic athletic adviser, the student-athlete can be directed to investigate personal strengths and weaknesses in this field. If the area of writing continues to be of interest, the student-athlete might focus on the structure and strategies of writing as well as the process of discovery and the

development of ideas. This concentration on good writing, regardless of the class in which it is assigned, demonstrates to potential employers the student-athlete's strengths and commitment.

The basic task is to gather the documentation needed and begin to collate the material that best represents each person. While many sources for potential documentation and reflection can be utilized, the most common are autobiography or lifeline, career and personal inventories, perceived abilities and skills, and personal achievements. The documentation can be kept in a three-ring binder, expandable file, or any other organizational system. Written documents can be stored on computer disk for continuous updating and reflection.

The goals in the collection of documentation and reflection are as follows: (a) to integrate these sources of information in order to help gain insight into the past, present, and future; (b) to help identify strengths and abilities, as well as difficulties or deficits that may impede current or future functioning in the athletic, academic, or occupational world; (c) to develop short- and long-range goals; and (d) to make decisions based on these goals for the next semester, the next year, and the more distant future.

The use of several sources of information can help develop a more accurate picture of each student-athlete. The portfolio provides a rich description of the separate aspects which make up the individual's work and progress. A good portfolio will have not only balance but cohesion. The triangulation of the data from different sources and different methods helps to minimize distortions and leads to a more credible portrayal of the student-athlete.

A typical student-athlete life/career portfolio might include the following elements:

I. INTRODUCTION

- * Title page
- * Table of contents
- * Introductory comments

II. SELF

- * Autobiography
- * Genogram
- * Cultural and personal values
- * Life roles
- * Goals, motives, wants, values
- * Personality inventories (e.g., MBTI)

- * Abilities
- * Aptitude
- * Achievements

III. EDUCATION

- * Schools attended
- * Favorite courses and teachers
- * Special abilities
(e.g., writing, research, speaking, organizing)
- * Skills
(e.g., computer skills)
- * Achievements
(e.g., high grades, significant reports, outstanding projects)

IV. ATHLETICS

- * Past athletic achievements as individual and team
- * Individual goals for future athletic accomplishments
- * Goals for fitness training

V. CAREER

- * Ideal job description
- * Volunteer/work achievements
- * Interests inventory
- * Work values clarification
- * Investigation and reflection on occupational information
(e.g., publications, audio-visual aids, programmed instructional materials)
- * Direct observation, internship, externship, co-op, information interviews

VI. SUMMARY

- * Setting goals for next term
(e.g., academic, personal, athletic)

- * Evaluation and reflection on content and process of past term
(e.g., academic, personal, athletic)

Student-athletes meet with academic athletic advisers, sports counselors, career counselors, or faculty advisers on a periodic basis to discuss and reflect on pertinent issues and concerns. These meetings can include discussion concerning self-appraisal, role-clarification, performance expectations in classroom and sport, and parameters for evaluation. Evaluation of the portfolio can include a self-evaluation by the student-athlete at the end of each semester as to how the expectations of the semester were met. The self-evaluation is a learning process for the student-athlete and also gives the academic athletic adviser feedback on the individual's progress. Student-athletes are accustomed to developing goals and strategies for effective performance in sports and can likely transfer that attitude towards the development of self.

SUMMARY

Life/career portfolios are good vehicles for discussion in meetings with student-athletes. The portfolios are diagnostic in that they do not develop by chance, but are put together by design. The portfolio process can lend insight into the individual's philosophy, sense of self, motivation and resistance, expectations, and priorities. Feedback can be given to help facilitate readiness, provide motivation, elicit thoughts and feelings, and offer support.

Results of the life/career portfolio process will be unique documents that illustrate the complexities of each student-athlete. As the student-athletes construct their portfolios, their reflections and evidence will mutually illuminate experience, development, and a multifaceted portrayal of their present and future selves. The "one shot" crash course on career planning, the traditional resume, or transcript cannot compare to the construction of the life/career portfolio.

REFERENCES

- Chartrand, J., & Lent, R. (1987). Sport counseling: Enhancing the development of the student-athlete. *Journal of Counseling and Development*, 66, 164-167.
- Coleman, J. S. (1961). *The adolescent society: The social life of the teenager and its impact on education*. New York: Free Press.
- Corbishley, M. A., & Yost, E. B. (1989). Psychological aspects of career counseling. *Journal of Career Development*, 16, 43-51.
- Danish, S. J., D'Augelli, A. R., & Ginsburg, M. R. (1984). Life development intervention: Promotion of mental health through the development of competence. In S. D. Brown & R. W. Lent (Eds.), *Handbook of Counseling Psychology* (pp. 520-544). New York: Wiley.

- Danish, S., Petitpas, A., & Hale, B. (1993). Life development intervention for athletes. *The Counseling Psychologist*, 21, 352-358.
- Goldberg, A. D. (1991). Counseling the high school student-athlete. *The School Counselor*, 38, 332-340.
- Jordan, J., & Denson, E. (1990). Student services for athletes: A model for enhancing the student-athlete experience. *Journal of Counseling and Development*, 69, 95-97.
- Lanning, W. (1982). The privileged few: Special counseling needs of athletes. *Journal of Sport Psychology*, 4, 19-23.
- Pearson, R., & Petitpas, A. (1990). Transitions of athletes: Pitfalls and prevention. *Journal of Counseling and Development*, 69, 7-10.
- Petitpas, A. (1978). Identity foreclosure. A unique challenge. *Personnel and Guidance Journal*, 29, 558-561.
- Petitpas, A., & Champagne, D. (1988). Developmental programming for intercollegiate athletics. *Journal of Student Development*, 29, 454-460.
- Wooten, H. R. (1994). Cutting losses for student-athletes in transition: An integrative transition model. *Journal of Employment Counseling*, 31, 2-10.
- Wooten, H. R., & Hinkle, J. S. (1992). Career-life planning with college student-athletes. *TCA Journal*, 20, 41-46.

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A COMPARISON OF TWO INITIAL ELIGIBILITY RULES: PROPOSITIONS 48 AND 16

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ABSTRACT

Two NCAA initial eligibility rules were compared to determine which was more restrictive in terms of the overall number of student-athletes declared ineligible to compete and which was more accurate in identifying future graduates. The sample consisted of 164 freshman student-athletes enrolled at Clarion University of PA in 1989. A standard decision table was employed to classify the subjects. Results found Proposition 16, which will be implemented in 1996, to be significantly more restrictive than Proposition 48, the current rule. The new rule also rejected significantly more future graduates than the current rule, but no other statistically significant results were obtained.

REVIEW OF THE LITERATURE

Loss of Integrity

Since the turn of the century, conflict has persisted over the co-existence of academics and athletics at collegiate institutions. Cramer (1986) testifies to this fact, citing a football game between Princeton and Rutgers in 1896 which was canceled because the faculties of those two institutions feared overemphasis. That fear has grown to new levels in the modern era, spurred greatly by, among other things, multi-million dollar contracts between television networks and universities. Macintosh (1990) notes that in 1989 a trip to the Final Four of the NCAA championship men's basketball tournament was worth \$41.3 million in television revenues. Brownlee and Linnon (1990) found that for the same year college football bowl participants shared more than \$55

million. Schools that shared in bowl revenues generally finished in the Top 20 rankings.

Many intercollegiate athletic departments need the income that the big money sports can provide to support the expenses of other sports programs. Some argue that this financial pressure to win entices athletic directors and coaches to engage in activities, with respect to recruiting and maintaining student-athletes, that compromise the integrity of their institutions. Brownlee and Linnon (1990) reported the findings of a 1989 survey which showed that over 85 percent of college presidents felt that the pressure to win interfered with the primary mission of American schools. Even the coaches themselves were skeptical of abuses committed by colleagues. Cullen, Latessa, and Byrne (1990) surveyed close to 200 Division I coaches. According to the survey results, the coaches estimated that nearly one third of Division I programs cheated regularly and that while coaches knew cheating was occurring, they overlooked it. Further, most of the respondents felt that the primary cause of rules infractions was the pressure to win, which is inherent in the position of head coach.

Over the past two decades, the exploitation of student-athletes who lacked the credentials for academic success upon entrance into college has been well documented. Brownlee and Linnon (1990) note that between 1973 and 1983 the Memphis State men's basketball program graduated only 10 percent of its players. Cramer (1986) found similar results at North Carolina State University, where only 2 of 80 football players who entered school between 1976 and 1978 were able to graduate. In 1984 this same university signed a blue chip men's basketball prospect who revealed later, while on trial for various criminal charges, that his combined score on the SAT was 470. In another celebrated case, Billy Don Jackson, a 1980 football signee at UCLA, revealed while on trial for murder that he was functionally illiterate. Jackson maintained eligibility for competition until his junior year.

In addition to these examples of the enrollment of unqualified student-athletes, stories of recruiting violations, under-the-table payments, and point shaving bombarded newspapers across the country, painting a picture of American collegiate sports as being out of control. Over the past decade, the National Collegiate Athletic Association (NCAA) has responded to the widespread criticism with a series of legislative reforms. The new regulations cover a variety of areas including limitations on practice hours, reductions in coaching staffs, restrictions on recruiting, and public accountability. The legislation reviewed here will focus only on the development of rules affecting initial and continuing eligibility standards.

Recent History of Initial Eligibility Legislation

At the 1983 NCAA convention, a highly controversial initial eligibility regulation (Proposition 48) was adopted. It required student-athletes who entered college in Fall 1986 or after to achieve at least a 2.00 grade point

average (GPA) in a core curriculum of at least 11 academic courses, as well as a combined score of at least 700 on the SAT or a composite score of at least 15 on the ACT. Before this time, a 2.00 overall GPA was required. The regulation was later amended to require an ACT composite score of at least 17, effective as of October 28, 1989. Proposition 48, now Bylaw 14.3, was viewed by many as racially discriminatory. Clark, Horton, and Alford (1986) surveyed presidents and chancellors of historically black colleges and found that 80 percent of the respondents were not in favor of the legislation. Clark, Horton, and Alford noted that a biased racial impact was anticipated by many because 51 percent of black males and 60 percent of black females at that time were scoring lower than 700 on the SAT. Another common complaint was that the selection of the cut-off points for the standardized tests was made arbitrarily for the NCAA regulation. The methods employed by various committees in 1983 to arrive at the cut-off points were not documented by NCAA Research Report 91-04 (Benson, 1991d).

Others who opposed the rule argued that newly implemented continuing eligibility legislation would make the restrictive initial eligibility criteria unnecessary. The 1983 convention amended the satisfactory progress rule (adopted in 1981) to require that hours earned by student-athletes must be credit hours toward their specific degree programs. No longer would student-athletes be able to accumulate meaningless credits in slack courses in order to remain eligible. Student-athletes were further required to designate a specific baccalaureate degree prior to their third year and meet the progress requirements stated by that degree program.

Proponents of Proposition 48 spouted rhetoric like, "Put the emphasis back on 'student' in the term student-athlete." Bryant (1992) typified this sentiment by stating in an NCAA newsletter, "College is for the academically elite. If you don't fall in that category, you don't deserve to be there" (p. 4). Many backers of the increased standards, like Bryant, thought that the rule would be successful on the simple premise that higher academic expectations would motivate student-athletes to greater achievement. This conviction has been maintained over time. According to R. Gerald Turner, former chair of the NCAA Presidents Commission, "...if a 1.50 is what's required that's what some of them will make. If a 2.00 is required, that's what some will make. And they'll make the 2.50 and be better prepared for having done it" (Tucker, p. 4, 1992). In *The NCAA News*, Scanlan (1991) added this commentary: "...the most obvious beneficiaries of rules such as Proposition 42 are the hundreds or thousands of college student-athletes for whom such rules provide the incentive to prepare academically in order to meet the required standards" (p. 4).

NCAA Research Findings

In 1983 the NCAA formed the Special Committee on Academic Research. This committee employed the services of Advanced Technology of Reston, Virginia, to study the impact of Proposition 48 standards on student-athletes who entered Division I institutions between 1977 and 1982. The results

of that study suggested that the legislation would have a greater adverse effect on black student-athletes (Summers, 1991). This spurred the NCAA's Special Committee to take a closer look at the academic performance of student-athletes beginning in 1985. This research yielded the Academic Performance Study (APS), a series of ongoing reports. The APS research has provided longitudinal data on a large sample of Division I student-athletes nationwide, initially in an attempt to settle the controversy over Proposition 48. Subsequent findings provided support for those on both sides of the issue.

NCAA Research Report 93-01 (Benson, 1994a) revealed that the percentage of black student-athletes initially experienced a noticeable drop following implementation of Proposition 48. The 1984 level (25.6 percent) was reduced to 17.9 percent by 1986. The percentages rebounded in 1987 (20.6 percent) and again in 1988 (21.8 percent) but failed to reach the initial level of 1984. On the other hand, overall graduation rates improved significantly, as did standardized test scores and core grade point averages (Benson, 1993).

In April 1994 the NCAA published APS Report 91-07 (Benson, 1994b), which extracted twenty findings from APS Reports 91-01 through 91-06. Eight of these findings were supportive of either the current rule or its successor. The following is a brief description of the APS findings, plus three additional findings which do not support either of the two rules:

Finding 1. Core grade point averages (CGPA) and national test scores were found to be significant predictors of college graduation. This result supports both rules, since each utilizes CGPA and standardized test scores (Benson, 1991a; 1991b).

Finding 2. Test score was the strongest predictor of college graduation, but CGPA and test scores combined were better than either variable alone. Both Proposition 48 and Proposition 16 combine the CGPA and test score variables. However, this finding favors Proposition 48 because it places an increased emphasis on the test score variable. With Proposition 48 standards, the test score cut-off point (700) falls one standard deviation below the national mean score, while the CGPA minimum (2.00) falls two standard deviation units below the national mean (Benson, 1991b).

Finding 3. An equally weighted combination of the CGPA and test score variables was the single best predictor of college graduation. This finding favors Proposition 16 because it employs an index with equal emphasis on the two variables (Benson, 1991b).

Finding 4. Average rules, which place equal emphasis on the CGPA and test score variables and do not employ cut-off points, lead to fewer false negative errors and less negative impact on minority student-athletes than both the current and new rules (Benson, 1991c).

In APS Research Report 91-03 (Benson, 1991c), the current and new initial eligibility rules were applied to a sample of more than 3000 student-athletes to compare four outcomes: (1) overall percent ineligible; (2) percent

declared ineligible who graduated (false negatives); (3) percent declared eligible who graduated (true positives); and (4) percent declared ineligible who failed to graduate (true negatives). The outcomes for these two rules are presented below.

Finding 5. The current rule was less restrictive in terms of overall percent ineligible (27.0) than Proposition 16 (31.7 percent) (Benson, 1991c).

Finding 6. The current rule made fewer errors in terms of false negatives (5.3 percent) than Proposition 16 (6.3 percent) (Benson, 1991c).

Finding 7. The current rule was more accurate in terms of true positives (88.4 percent) than Proposition 16 (86.2 percent) (Benson, 1991c).

Finding 8. Proposition 16 was more accurate in terms of true negatives (46.8 percent) than the current rule (39.9 percent) (Benson, 1991c).

Finding 9. Rules which place the most emphasis on graduation led to an increasingly stringent cut-off point. Maximum value for rules which emphasize graduation were found closest to the Proposition 16 rule (Benson, 1992).

Finding 10. Rules which place the most emphasis on minority graduation suggest the elimination of cut-off points (Benson, 1992).

Finding 11. Rules which place equal emphasis on increased graduation and minority impacts suggest cut-off points lower than either the current rule or the new rule (Benson, 1992).

The NCAA Academic Requirements Committee, in response to a 1991 directive, developed legislation to strengthen requirements for initial and continuing eligibility. The committee recommended that incoming student-athletes be required to achieve a score of at least 700 on the SAT (17 on the ACT) and a 2.50 grade point average in 13 core courses. Additionally, a sliding scale could be applied to allow compensation of lower test scores with higher GPAs, or vice versa. Subsequently, the Presidents Commission sponsored legislation modifying that proposal to include minimum grade point limits (2.00) and minimum test score limits (700 or 17) on the index. That legislation (Proposition 16) will be implemented at the Division I level in 1996.

Summary

In reaction to widespread media reports of paltry graduation rates among student-athletes at some major collegiate institutions, the NCAA adopted legislation which significantly raised initial eligibility standards. In 1986 the NCAA implemented Proposition 48, which came under fire as being racially discriminatory. Subsequent research found that the rule did have a biased racial impact with respect to the opportunity for freshman minority student-athletes to compete and earn athletic grants-in-aid. In addition, no empirical evidence was available to support the selected cut-off points of the

rule, which placed a heavier emphasis on standardized test scores than on core grade point averages. The NCAA Academic Requirements Committee responded in 1991 with a sliding scale index that placed equal emphasis on the test and CGPA variables. The NCAA Presidents Commission added minimum cut-off points to the scale. The commission's legislation (Proposition 16) was adopted at the 1992 convention and will be implemented in 1996.

Since that time, NCAA research has found that average rules which place equal weight on test and grade point variables without employing cut-off scores have less negative impact on minority students and lead to fewer false negative errors than the current and new rules. In addition, studies by the NCAA showed unfavorable results for Proposition 16 in comparison with the current rule and the average rules on three of four variables, including percent ineligible, false negatives, and true positives. Proposition 16 was more accurate with respect to true negatives.

According to the research examined here, Proposition 16 is clearly less accurate than the other proposals examined, including the current rule. Despite the reality that more minority freshman student-athletes will be ineligible to compete and earn athletic grants-in-aid, and further that more student-athletes with the ability to graduate will be declared ineligible, the NCAA electorate voted to implement this rule. Before the vote, NCAA President Joseph Crowley stated that the goal of the association was to strike a balance between academic standards and educational opportunity (Initial Eligibility Question, 1994). Research suggests, however, that this goal was not achieved for two reasons. First, rules with equal emphasis on graduation and minority impacts suggest lowering of standards beyond current levels. Second, rules primarily concerned with graduation find maximum value with cut-off points almost identical to the standards of Proposition 16.

This study traces the recent historical development of NCAA initial eligibility legislation. In addition, the current rule (Proposition 48) and its successor (Proposition 16) are compared with respect to graduation and eligibility outcomes. The sample was not broken down by race, but the findings do hold implications for the interests of minority student-athletes.

PURPOSE

Five hypotheses were developed for examination in this study:

(H1) There is no significant statistical difference between Propositions 48 and 16 with respect to the overall percentage of student-athletes declared ineligible. Alpha level is set at .05.

(H2) There is no significant statistical difference in the error rate of Propositions 48 and 16 with respect to declaring student-athletes ineligible who later went on to graduate. Alpha level is set at .05.

(H3) There is no significant statistical difference in the error rate of Propositions 48 and 16 with respect to declaring student-athletes eligible who later failed to graduate. Alpha level is set at .05.

(H4) There is no significant statistical difference in the accuracy rate of Propositions 48 and 17 with respect to declaring student-athletes ineligible who later failed to graduate. Alpha level is set at .05.

(H5) There is no significant statistical difference in the accuracy rate of Propositions 48 and 17 with respect to declaring student-athletes eligible who later went on to graduate. Alpha level is set at .05.

METHODS

Subjects

This study examined the high school academic records and graduation outcomes of 164 freshman student-athletes who enrolled at Clarion University of PA (CUP) in Fall 1989. The sample includes all freshman student-athletes who enrolled during that semester, with the exception of 14 who did not submit SAT scores to the university. The sample includes both academic qualifiers and non-qualifiers, as well as scholarship athletes, non-scholarship athletes, and walk-ons. Clarion University is a state-funded institution that participates at the Division II level in all sports except wrestling, in which it competes at the Division I level.

Procedures

A representative from the university's Office of Admissions retrieved data for the sample with respect to high school CGPA and SAT scores. Graduation outcomes were provided by the institution's Computer Services Center in conjunction with the Office of Admissions. The Office of Admissions also coded the names of all student-athletes to ensure confidentiality.

Variables

The four variables examined in this study are the following:

(V1) **High School Core GPA (CGPA).** This grade point average was based on the 11 high school core courses required by the NCAA under Proposition 48. Scores were obtained for 100 percent of the student-athletes in the study.

(V2) **Precollege Test Scores (TEST).** This variable reflects only SAT scores. None of the student-athletes in this study took the ACT.

(V3) **Equally Weighted Average.** The NCAA used the numerical average of the CGPA Z-score and the TEST Z-score to establish an index (i.e., sliding scale).

(V4) **College Graduation.** The student-athletes were counted as graduates only if they obtained their degrees from CUP within a five-year period. This study does not determine the reasons for non-graduation. Student-athletes who transferred, continued beyond the five-year period, or left in good academic standing were all considered dropouts.

Eligibility Rules

The two eligibility rules in this study (i.e., Propositions 48 and 16) are composed of one or more of the first three variables mentioned above, plus cut-off scores (see Table 1).

(R1) **Proposition 48.** This rule sets minimum scores for CGPA and TEST scores. Student-athletes who surpass the TEST score must also be above the CGPA minimum in 13 core courses to be considered eligible. This rule is in effect until August 1996.

(R2) **Proposition 16.** This rule applies TEST and CGPA results to an index, which is based upon equally weighted averages for these two criteria. The index allows the TEST score to compensate for a low CGPA, and vice versa. Cut-off points are established for both CGPA (2.00) and TEST variables (700 SAT or 17 ACT).

Table 1

Comparison of Initial Eligibility Standards in Propositions 48 and 16

Proposition 48 (R1)		Proposition 16 (R2)	
SAT	GPA	SAT	GPA
700+	2.00+	900	2.00
		860	2.10
		820	2.20
		780	2.30
		740	2.40
		700	2.50

Data Analysis

Student-athletes were classified as graduates or non-graduates (within a five-year period) in comparison with their status as eligible or not eligible as defined by one of two specific eligibility rules. Four classifications were developed as follows:

(TN) True Negatives are those who would have been declared not eligible by the specific rule and later did not graduate.

(FN) False Negatives are those who would have been declared not eligible by the specific rule but later did graduate.

(TP) True Positives are those who would have been declared eligible by the specific rule and later graduated.

(FP) False Positives are those who would have been declared eligible by the specific rule but later did not graduate.

Table 2 displays the graduation and eligibility outcomes from the 1989 student-athlete date under Proposition 48 (R1) as well as the graduation and eligibility outcomes from the same data as if Proposition 16 (R2) were in effect. The numbers have been converted into percentages to allow for a comparison of accuracy between the rules. Accurate decisions are considered to be both true negatives and true positives, while errors are considered to be false negatives and false positives.

Table 2

Projected Outcomes of Initial Eligibility Rules

Rule	% Ineligible	%FN	%FP	%TN	%TP
Prop 48 (R1)	10.4	17.6	53.0	82.3	46.9
Prop 16 (R2)	30.5	31.1	51.2	68.8	48.7

Chi-square analysis was applied to the following sets of data to determine statistical significance: overall percentage ineligible for R1 vs. R2; false negatives; false positives; true negatives; and true positives (see Table 3). Expected frequencies were determined as the average of the percentage sums of the two rules. Since percentages were used, chi-square results were increased by multiplying these figures by 1.64, or the sample size ($n = 164$) divided by 100.

RESULTS

Percentage Ineligible

The eligibility standards of the current and new rules were applied to the sample to determine the overall percentage of student-athletes who would have been declared ineligible if each of these rules were in effect. Proposition 48 (R1) was found to be less restrictive (10.4%) than Proposition 16 (R2 = 30.5%). Chi-square analysis was applied to determine statistical significance.

Table 3

Chi Square Analyses of Proposition 48 versus Proposition 16

Variable	Number of Observations	Chi-Square	Degrees of Freedom	Significance Level
Overall Percentage Ineligible	41	9.8(1.64)=16	1	.05
False Negatives	49	3.7(1.64)=6.0	1	.05
False Positives	104	.03(1.64)=.049	1	.05
True Negatives	151	1.20(1.64)=1.96	1	.05
True Positives	96	.03(1.64)=.049	1	.05

The two rules were found to be statistically different with respect to overall percentage ineligible, with chi-square equal to 16.0 ($\alpha = .05$, 1df). Thus, H1 was rejected.

Error Rate Comparisons

Error Rate percentages included both false negatives and false positives. Proposition 48 (R1) was found to make fewer errors with respect to false negatives than Proposition 16 (R2 = 31.1%). A significant statistical difference was found for the two rules, with chi-square equal to 6.0 ($\alpha = .05$, 1df). Thus, H2 was rejected.

With respect to false positives, Proposition 16 (R2) was found to make fewer errors (51.2%) than Proposition 48 (R1 = 53.0%). No significant statistical difference was found for the two rules, with chi-square equal to .049 ($\alpha = .05$, 1df). Thus, H3 was not rejected.

Accuracy Rate Comparisons

Accuracy Rate comparisons included both true negatives and true positives. Proposition 48 (R1) was found to be more accurate (82.3%) with respect to true negatives than Proposition 16 (R2 = 68.8%). No significant statistical difference was found for the two rules, with chi-square equal to 1.96 ($\alpha = .05$, 1df). Thus, H4 was not rejected.

With respect to true positives, Proposition 16 (R2) was found to be more accurate (48.7%) than Proposition 48 (R1 = 46.9%). No significant

statistical difference was found for the two rules, with chi-square equal to .049 ($\alpha = .05$, 1df). Thus, H_5 was not rejected.

DISCUSSION

The purpose of this study was to determine differences in accuracy and restrictiveness between Propositions 48 and 16. The results obtained with respect to the overall percentage of student-athletes who would be declared ineligible under each rule were consistent with previous research conducted by the NCAA. Proposition 16 was found to be significantly more restrictive than the current rule. Slightly more than 20 percent of the sample declared ineligible under Proposition 48 would also have been denied eligibility if the new rule had been in place when the student-athletes entered college. Error rate comparisons showed results similar to those found by previous NCAA research. With respect to false negatives (students declared ineligible who graduated), Proposition 16 was significantly less accurate than the current rule. The percentage of false negatives allowed by the current rule has been the focal point of major criticism. NCAA research determined that average rules, which employ a sliding scale index but do not employ cut-off points, reduce the number of false negatives produced by the current rule. Proposition 16 uses a sliding scale, but the addition of cut-off points makes this rule more prone to errors than Proposition 48.

The two rules were separated by less than two percent with respect to false positives (student-athletes declared eligible who failed to graduate). Because of its increased standards, Proposition 16 was the more accurate rule in its identification of future graduates. However, many will argue that the small gap between Propositions 16 and 48 with respect to true positives and false positives does not compensate for the rules' negative impact on overall eligibility and the number of false negative errors. Further, Proposition 16 was less accurate with respect to true negatives (student-athletes declared ineligible who did not graduate). A difference of more than 13 percent was found between the two rules. These results were not statistically significant and were not supported by the NCAA's research, which found Proposition 16 to be slightly more accurate than the current rule.

LIMITATIONS

The design employed by this study has several limitations. First, five-year graduation was the only academic outcome considered, and precollege test scores and core grade point averages were the only indices of academic input. One outcome to be considered for possible future study is persistence rates. Second, precollege data were used for student-athletes who were in compliance with the standards of Proposition 48. It is unknown what effect the new rule would have had on their academic performance in high school or college. Third, the sample represents only one institution. Results may be generalized to similar state-run universities but not on the national scale for which NCAA initial

eligibility rules are mandated. Conversely, this study avoided validity issues familiar to previous research which sampled colleges across the country.

CONCLUSION

The results of this study found Proposition 16 to be more restrictive and less accurate than Proposition 48. While only two of the outcomes measured were statistically significant, it must be remembered that the other percentages represent thousands of student-athletes whose lives will be negatively affected by the new rule. Further, these findings were consistent with previous research at the national level.

While Proposition 16 effectively raises eligibility standards over the current rule, its impact on the academic performance of high school student-athletes cannot be measured at this time. The positive response to the last raising of initial eligibility standards suggests that student-athletes will adapt, and college graduation rates will continue to climb.

REFERENCES

- Benson, M.T. (1991a). NCAA academic performance study: A description of college graduation rates for the 1984 and 1985 freshman student-athletes (Report 91-01). Overland Park, KS: The National Collegiate Athletic Association.
- Benson, M.T. (1991b). NCAA academic performance study: A statistical analysis of the predictions of graduation rates for college student-athletes (Report 91-02). Overland Park, KS: The National Collegiate Athletic Association.
- Benson, M.T. (1991c). NCAA research report: A statistical analysis of proposed initial eligibility legislation (Report 91-03). Overland Park, KS: The National Collegiate Athletic Association.
- Benson, M.T. (1991d). NCAA research report: A graphic display of initial eligibility rules applied to 1984 and 1985 freshman student-athletes (Report 91-04). Overland Park, KS: The National Collegiate Athletic Association.
- Benson, M.T. (1992). NCAA research report: A decision theory analysis of initial eligibility rules applied to 1984 and 1985 freshman student-athletes (Report 91-05). Overland Park, KS: The National Collegiate Athletic Association.
- Benson, M.T. (1993). A statistical comparison of college graduation of freshman student-athletes before and after Proposition 48 (Report 92-02). Overland Park, KS: The National Collegiate Athletic Association.

- Benson, M.T. (1994a). Cohort trends in college academic performance of 1984-88 freshman student-athletes (Report 93-01). Overland Park, KS: The National Collegiate Athletic Association.
- Benson, M.T. (1994b). Executive summary reports 91-01 to 91-06 (Report 91-07). Overland Park, KS: The National Collegiate Athletic Association.
- Brownlee, S., & Linnon, N.S. (1990). Sports and academic studies are incompatible. In Sports in America: Opposing viewpoints (pp. 53-59). San Diego, CA: Greenhaven Press.
- Bryant, C. (1992, January 1). Athletes will meet the challenge of stricter academic requirements. The NCAA News, p. 4.
- Clark, V. L., Horton, F., & Alford, R. L. (1986). NCAA Rule 48: Racism or reform? Journal of Negro Education, 55(2), 162-168.
- Cramer, J. (1986). Winning or learning? Athletics and academics in America. Phi Delta Kappan, 67, K1-K9.
- Cullen, F. T., Latessa, E. J., & Byrne, J. P. (1990). Scandal and reform in collegiate athletics. Journal of Higher Education, 61(1), 50-63.
- Initial eligibility question now a matter of choice. (1994, August 17). The NCAA News, pp. 1,7.
- Macintosh, D. (1990). Interschool sport programs in Canada. Journal of Physical Education, Recreation, and Dance, 61, 58-63.
- Scanlan, J.P. (1991, December 18). Low entrance standards hardest on minorities. The NCAA News, pp. 4,14.
- Summers, J. G. (1991). NCAA academic performance study (Report 90-01). Overland Park, KS: The National Collegiate Athletic Association.
- Tucker, D. (1992, January 15). Presidents force the issue on academics. The NCAA News, pp. 3-4.

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