

## Stress Sources and Responses of Student-athlete Counseling Service Clients, Non-student-Athlete Clients and Non-athlete Non-clients

Edward F. Etzel, West Virginia University

Christopher D. Lantz, Truman State University

*It is widely believed that because of the unique demands of their lifestyles, college student-athletes often experience greater levels of life-stress than do non-athlete students. Limited research on this topic has provided inconsistent support for this notion. Quick Stress Questionnaire (QSQ) responses of student-athlete counseling service clients, non-athlete student counseling service clients, and a non-client sample were compared to examine differences in the frequency and severity of life-stress and life-stress responses. All groups reported moderate to moderately high stress levels, but student-athletes reported fewer sources of distress and fewer stress-related symptoms than non-athlete clients or non-clients. Findings are discussed in the context of the student-athlete lifestyle and recommendations for further study are provided.*

A growing amount of information has emerged about the lifestyles and psychosocial development of college athletes and the provision of counseling services to this population (Blann, 1985; Chartrand & Lent, 1987; Etzel, Ferrante, & Pinkney, 1996; Greenspan & Anderson, 1995; Jordan & Denson, 1990; Kirk & Kirk, 1993; Parham, 1993). Student-athletes' life experiences are often thought to be quite different from those of other students, which may complicate their working through the development tasks of college students (Sowa & Gressard, 1983). Of particular concern is the role that life stress appears to play in athletes' personal development. For the purpose of this study, stress was considered a complex process characterized by the presence of various stress sources, perceptions of threat or danger to self, and cognitive, affective and/or behavioral, and physical reactions to these phenomena (Spielberger, 1989). Accordingly, stress response may be manifested cognitively (e.g., worry), behaviorally (e.g., avoidance behaviors), emotionally (e.g., depression), or somatically (e.g., muscle aches).

Based on their clinical work with this population, Pinkerton, Hinz, and Barrow (1987) suggested that student-athletes represent a group "at risk" for experiencing several life stress sources, stress responses, and developmental crises. In particular, those authors pointed to potential difficulties with individuation and separation, identity and role conflicts, relationships, and educational-vocational concerns. Conflicts with coaches and teammates, depression, eating disorders, substance abuse, and coping with injury are also common issues for these young people (Etzel, et al., 1996; Hinkle, 1996; Parham, 1993). It has been suggested that student-athletes as a group often lead unusually stressful lives (Bergandi Wittig, 1984). This stress appears to be associated with the extra demands and pressures of sport training and competition (Lanning, 1982) which may make working through normal developmental tasks and succeeding as student more difficult than for students who do not

participate in athletics ( Selby, Weinstein, & Bird, 1990). Beyond meeting the challenges of college life, these young people may be more negatively influenced by life stress and have special personal needs.

Although the above views are often assumed to be true, the sources and levels of stress student-athletes encounter has not been well researched. Perhaps the most extensive investigation was undertaken by the National Collegiate Athletic Association (NCAA) President's Commission, which studied the effects of athletics participation on Division I athletes (American Institutes for Research, 1988). Conducted by the American Institutes on Research (AIR), the study was a survey of 4,083 male and female athletes from 42 member institutions. Many respondents said that they experienced academic difficulties, psychological distress, multiple personal problems, mental and physical abuse, and feelings of isolation. These difficulties were more commonly reported by participants in highly competitive, so-called "big-time" sports like football and basketball.

Etzel (1989) investigated life stress sources, stress reactions, and locus of control perceptions of 263 male and female athletes across sports at a medium-size land-grant institution that competed at the NCAA Division I level. Participants said that they experienced high levels of overall life stress and cognitive stress symptoms (e.g., anxiety, worry). They also reported owning a chance-oriented, external locus of control.

Further evidence of student-athletes' life-stress has been provided by Selby, Weinstein, and Bird (1990) who examined sources of stress. A total of 267 varsity athletes at Stanford University completed a 52-item survey that addressed, among many other things, stress factors, alcohol and drug use, and issues related to diet and body image. The perceived threats of physical injury and academic concerns were the greatest sources of distress for both males and females. Other stress sources included sports' time demands, perceived coach expectations, sport competition demands, general health concerns, social life, athletic scholarships, weight and eating behaviors.

More recently, Smallman, Sowa, and Young (1991) asked 53 male and female, African American and Caucasian student-athletes about the sources of stress in lives and their and their perceptions of those stressors. More than 25% of the respondents indicated experiencing high levels of stress. No gender or race differences were observed in reported levels of stress. Further, African American and male student-athletes perceived stressful life events as more aversive than non-African Americans and females.

Are the life experiences of the student-athletes truly different from those of non-athlete-students? To address this question, the two purposes of this investigation were: (a) to identify the sources of life stress for help-seeking athletes (i.e., those who sought assistance from a university counseling service) as compared with non-athletes who sought counseling assistance, and a non help seeking non-athlete control group, and (b) to investigate the severity of responses to those stressors for these comparison groups. Based upon the literature and clinical lore, it was hypothesized that student-athletes would report experiencing a wider range of life stress sources, and frequent sever stress responses compared with non-athlete students.

## METHODS

### Participants and Procedures

Quick Stress Questionnaire (QSQ) (Otani, 1985) of student clients were obtained from the counseling service closed files at a, medium sized, land grant institution. The QSQ is a problem checklist completed by clients, as a routine part of all intake assessments and becomes a part of each student's permanent, confidential file. Clients did not provide consent to access their QSQs. The QSQs of 91 athlete clients (i.e., those student-athletes who had sought counseling) were examined, although a random sample of 207 QSQs was obtained from the non-athlete client population over a three-year period. These two sets of QSQ data were compared with non-athlete, non-client QSQ student norms (N=218) developed from the general student population over the same period of time.

### Instrument

The QSQ is a 25 item, self-report inventory designed to measure sources of stress and stress related symptoms along a nine-point Likert scale, from 1 (little) to 9 (extreme) (Otani, 1985). Clients are asked to rate the impact of nine sources of stress (e.g., academic, personal/social, financial) on their lives. The QSQ also measures three categories of stress symptoms (i.e., cognitive, somatic, behavioral). The checklist can be completed in approximately five minutes.

Support for the QSQ's construct validity has been established through Maximum Likelihood Factor Analysis (MLFA) (Otani, 1985). MLFA revealed that the nine stress source items loaded on a single stress source factor and identified three symptom factors labeled cognitive, somatic, and behavioral. The cognitive factor was comprised of items 10 (depression), 11 (anger), and 12 (fear). The somatic factor was comprised of items 13 (muscle tension), 14 (indigestion), 15 (tics), 16 (sleep), and 17 (eating). Items 18 (drinking), 19 (forgetfulness), and 22 (avoidance) loaded on the behavioral factor. Items 9 (other), 20 (hypertension), 21 (acne), 24 (overall stressors this year), and 25 (stress level at first appointment) are not used in determining factor scores (Comer, 1994). Omega coefficient estimates of internal reliability for the cognitive, somatic, and behavioral factors were observed to be .89, .83, and .79, respectively.

## RESULTS

QSQ item means and standard deviations for the student-athlete clients, non-athletes clients, and non-clients are presented in Table 1.

TABLE 1

QSQ Item and Factor Means, Standard Deviations for Athlete Clients, Nonathlete Clients and Nonclients and One-way ANOVAs for QSQ Items

	Athletes		Nonathletes		Nonclients		p
	M	SD	M	SD	M	SD	
1. Academic/work concerns	6.20	1.83	6.78	1.55	6.25	1.96	.037*
2. Social/personal relationships	5.63	2.54	5.09	2.16	5.82	2.38	.013*
3. Family concerns	5.16	2.52	4.72	2.28	5.14	2.33	.031*
4. Financial concerns	4.87	2.55	5.84	2.12	5.14	2.48	.003*
5. Self-image	5.02	2.45	4.90	2.21	5.19	2.46	.586
6. Health concerns	4.22	2.54	3.87	2.08	3.91	2.36	.336
7. Sexual concerns	3.58	2.41	3.79	2.26	3.80	2.41	.732
8. Day-to-day Hassles	4.76	2.01	5.01	1.98	4.45	2.29	.186
9. Other	—	—	—	—	—	—	—
10. Feelings of depression	4.99	2.66	4.66	2.17	5.80	2.47	.001*
11. Anger and hostility	4.96	2.40	5.08	2.04	5.23	2.36	.542
12. Apprehension/worrying	5.79	2.17	5.84	2.02	6.23	2.29	.531
13. Muscle tension ... headaches	4.06	2.42	4.34	2.31	4.23	2.44	.905
14. Indigestion Stomachaches	2.79	2.52	3.31	2.36	3.70	2.58	.047*
15. Tic/Tremors	2.20	2.02	2.05	1.64	2.19	1.99	.617
16. Sleep disturbances	4.58	2.62	4.56	2.40	5.20	2.55	.016*
17. Eating disorders	3.37	2.52	3.59	2.53	4.04	2.59	.330
18. Drinking/drugs	2.50	2.14	3.65	2.59	3.15	2.40	.001*
19. Forgetfulness	4.41	2.65	4.82	2.45	5.40	2.54	.001*
20. Hypertension	1.67	1.44	2.05	1.62	1.91	1.73	.055
21. Acne/Eczema	2.66	2.12	2.91	2.09	2.58	2.20	.169
22. Avoidance behavior	4.12	2.74	4.75	2.38	4.85	2.75	.158
23. Current overall level of stress	5.44	2.35	5.38	2.16	6.19	2.13	.001*
24. Overall stress level, past year	5.81	2.16	5.89	1.98	6.19	2.21	.773
Cognitive Factor	5.27	2.00	5.24	1.60	5.82	1.79	.002*
Behavioral Factor	3.39	1.64	3.57	1.52	3.87	1.68	.089
Somatic Factor	3.69	2.02	4.40	1.94	4.44	2.01	.014*

*Note: Item 25 is an optional item examining the level of stress prior to the first counseling session. This item is often omitted by clients and was omitted for the purposes of these analyses due to missing data. \*Denotes statistical significance ( $p < .05$ ).*

Items concerning stress symptoms were averaged to provide a composite index for each symptom factor (i.e., cognitive, somatic, behavioral). This provided an estimate as to the modalities in which individuals experienced their stress. Means of each composite factor are presented in Table 1.

Three one-way analyses of variance (ANOVA) are computed to determine if any differences existed among the groups on their cognitive, behavioral, and somatic symptom factor scores. Significant differences among the groups on the cognitive and somatic factors were observed, but not for the behavioral symptom factor (see Table 1).

To determine which differences between group means were statistically significant, Tukey's Honesty Significant Difference (HSD) multiple comparison tests were conducted on the cognitive and somatic factor scores. This post hoc comparison was employed because of its rather conservative approach to determining statistically significant differences between group means. These comparisons indicated that student-athlete clients reported significant lower levels of somatic symptoms than either the non-athlete clients or the non clients (see Table 1). Student athlete clients' QSQ responses did not significantly differ from non athlete clients or the non client sample on the reported levels of cognitive stress symptoms. The conservative nature of the HSD procedure may have contributed to the lack of significant differences between these groups.

Independent one-way ANOVAs were calculated on the eight QSQ stress source items. An ANOVA was not calculated for item 9 due to the nature of the item, which asks each participant to identify and rate any other personally unique sources of stress that they may be experiencing. The resulting  $F$  values are presented in Table 1.

Tukey's HSD multiple comparison tests revealed that athlete clients reported significant lower academic or work related stress (item 1) than did non athlete clients, but not the non client sample (see Table 1). Student-athlete clients and non clients reported significantly higher levels of social and personal relationship stress (item 2) and family stress (item 3) than the non athlete client sample. Non athlete clients reported significantly greater financial stress (item 4) than either student-athlete clients or the non client sample. There were no significant between group differences observed on the self-image, health concerns, sex concerns, or day-to-day hassles items.

## DISCUSSION

The results of this investigation suggest that athletes who sought assistance at a counseling center experienced fewer disturbing sources of stress and less severe stress-related symptoms than non athlete clients or student non clients. Specifically, athlete clients in this study indicated that the only sources of stress that were more upsetting than for other help seeking students were social/personal concern and family concerns, versus other that have been reported (e.g., anxiety, worry,

depression). Interestingly, student athlete clients reported lower financial related distress than non athlete clients and non clients. This finding deviates from the popular view that athletes experience greater financial stress as a result of long-standing NCAA limitations regarding the employment of student athletes, which very recently have changed and that many come from lower socioeconomic backgrounds.

It should be noted that all three groups in this study reported experiencing moderate to moderately high stress in several stress source and symptom areas (see Table 1). This supports the observation that life is stressful for college students in general (O'Malley, Wheeler, & Murphy, in press). From this perspective, athletes may be seen as more like other students than not, in particular those who seek help at counseling services. Theoretically, all college struggle to work through aged developmental tasks and events (Chickering, 1969; Farnsworth, 1966). They often experience distress associated with these struggles, and encounter other psychosocial problems (Pinkerton et al., 1987; Parham, 1993). With the exception of the observation that our student-athlete sample reported more social/personal and family distress, our findings did not lend support to our hypotheses. Further, our data were they generally inconsistent with the views of other researchers and clinicians who have suggested that athletes are more vulnerable to excessive stress than their peers because of the unique and complex personal challenges they often face (Ferrante & Etzel, 1996). How can these findings be understood?

Several explanations are plausible. First, lumping all athletes together may mask individual differences and special subgroup (e.g., people of color and women) differences in QSQ data (Lent, 1993; Smallman et al., 1991). Just as all college students are not alike, surely all college student-athletes are not alike. Another factor that may have attenuated both student-athlete and nonathlete client QSQ scores was the fact that these young people came to the counseling center to address a variety of presenting concerns, which ranged from the serious (e.g., depression, career-ending injuries, eating disorders) to the relatively less serious (e.g. major selection, time management, and sport performance enhancement). The diversity of presenting concerns and their varied severity may have had a leveling effect on their responses to these difficulties.

Perhaps differences in responding to QSQ items were in part a function of the dissimilar situations in which people completed the instrument. The student-athlete client and nonathlete client responses, which tended to be consistently lower than those of the control group, were not produced under conditions of complete anonymity. Although it would seem in the respondent's best interest to be open and honest, it is possible that members of the nonclient control group felt more free to answer honestly and so reported greater distress, that social desirability influenced the responses of both client groups.

It is also conceivable that some of those who sought help may have denied having difficulties or downplayed them. Indeed, there is some support for athletes doing so as a group (Ferrante & Etzel, 1996) and under-utilizing helping services for a variety of reasons (Carmen, Zerman, & Blaine, 1968; Pierce, 1969; Rheinhold, 1973; Segal, Weiss, & Sokol, 1965). Athletes may have an unrealistic sense of self-reliance or a "macho" attitude that can make them reluctant to admit to distress and to seek

help for fear of being seen by themselves or others as weak people (Ferrante & Etzel, 1996).

Another explanation for the athlete client scores is the possibility that both client groups experienced some relief after they had decided to seek assistance at the counseling center. In fact, there is evidence that the expectation of relief can facilitate change or "spontaneous improvement" and so reduce perceived and felt stress (Hoyt, Rosenbaum, & Talmon, 1992). It is also possible that the student-athlete who completed the QSQ were somehow better adjusted than the other participants.

Although our student-athlete sample did not differ much from samples of their peers, there was some support for the notion that student-athletes experience more stress in the areas of personal/social and family concerns. This finding points to the importance of helping student-athletes cope with various life stresses by fostering connections with sources of social support (Albrecht & Adelman, 1984). Student-athlete support networks often include family members, coaches, advisors, athletic trainers, physicians, teammates, and various helping professionals. Indeed, a growing number of institutions have begun to provide support services to meet their needs (Denson, 1996; Jordan & Denson, 1990). Perhaps the formal and informal sources of support available to student-athlete clients on the campus which data was collected (e.g., advising, counseling, sports medicine) diminished the amount of reported stress assessed by the QSQ.

In retrospect, the findings of this investigation point to the need to conduct more systematic research on stress and its influences on college athletes. Although it appears to many that concerns athletes experience comparatively high life stress, this notion has not been consistently supported empirically. Although our findings provide some needed empirical insight into the nature of stress experienced by some college student-athletes, given the limitations of our methodology, readers should use care in generalizing our findings to other student-athlete populations on other campuses.

Future research needs to be conducted to paint a more reliable picture of what stressors and stress-related symptoms athletes experience. Furthermore, investigating other salient variables would seem useful such as stress responses of athletes with different types of presenting concerns, differences in individual and group perceptions of stress, the influences of various sources of social support, and the stress experienced by athletes based on gender, racial backgrounds, the competitiveness of the institution, and by whether or not they received an athletic scholarship. It would also appear worthwhile to investigate the stress experienced by student-athletes who are not counseling service clients.

Tens of thousands of college students participate in the usually rewarding, yet taxing activities associated with intercollegiate athletics. In the late 1990s, especially at schools involved in so-called big-time athletics, student-athletes will continue to toil for their institutions and themselves, working hard to entertain and support fans and programs (Sperber, 1990). Along with this "job", they struggle to obtain meaningful education and to grow as people. There obviously is much more to learn about the life experiences of this diverse group. Researchers and helping professionals have a responsibility to understand their unique challenges better so as to help them develop into well-adjusted young people.



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**Author Notes.** Edward Etzel is a psychologist with the Department of Intercollegiate Athletics at West Virginia University in Morgantown, WV. He is also an associate professor with the School of Physical Education in the sport and exercise psychology program.

Christopher Lantz is an assistant professor in the Division of Human Potential and Performance Science at Truman State University in Kirksville, MO.

Correspondence regarding this article should be sent to Edward F. Etzel, P.O. Box 877, West Virginia University, Morgantown, WV, 26507; telephone: (304) 293-7062; electronic mail: [Etzel@wva.edu](mailto:Etzel@wva.edu).