

An investigation on the problems of college student-athletes participating in Universiade 2005

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Abstract: This study investigates some of the problems that college student-athletes experience during their school life and considers the relationship between these problems and a number of other variables. The study involved 420 participants from 30 countries who were contacted during the 23rd Universiade Olympics held in Izmir (Turkey) in 2005. Murray's (1997) scale was used to determine the sources and levels of the problems experienced by the participants with regard to responsibility, emotional problems, personal fears, social fears, needs, and personal problems. The study yielded the following results: firstly, that student-athletes suffer from problems related to responsibility, personal problems and fears, and needs while they do not have any emotional or social problems. Secondly, gender was found to be a significant factor affecting the level of problems in terms of emotional and personal fears. Thirdly and finally, nationality was found to be another significant variable affecting the problem areas such as responsibility, emotional and personal problems, personal and social fears and needs. In the light of the study, it was recommended that a certain level of awareness should be raised among target groups about the problems they could possibly encounter, as well as gender and socioeconomic differences, and that sports counselling units should be founded so that such problems could be solved and student-athletes could be better prepared to face them as they arise in both their sporting and educational careers.

Keywords: college student-athletes' problems, responsibility, needs, Universiade 2005.

Introduction

Depending on their educational and communication problems, students' experiences indicate that university life is, at times, a period of excitement, sorrow and stress as they might encounter several problems due to their physiological, psychological, environmental, economic, emotional and social circumstances. According to Özgüven (1999), the problems experienced by university students are numerous; and they could be listed as follows: developmental problems (acquiring independence, sexual identity, and self-respect); problems concerning their future lives; problems concerning university life and programmes; problems concerning adaptation to a new environment, social relations and intellectual problems; economic problems; family relations; problems concerning leisure time, working life; problems concerning employment; psychological problems; housing problems; nutrition problems; health-related problems;

problems related to educational/academic failure; inadequate language and computer education at university; and particular problems of handicapped students.

Among the various problems that student-athletes face, one of the most significant is the conflict between their sports life and school life since they are loaded with formidable academic responsibilities such as attending classes and fulfilling their foremost duty, which is studying. Thus, their time is too limited for outside activities and it is almost impossible to enjoy “normal” social activities (Adler & Adler, 1991). In short, they face different challenges and transitions from their non-athlete peers (Engwall, Hunter & Steinberg, 2003; Weiss, 1999). In a narrower focus, when compared to other college students, the challenges which student-athletes are faced with might be listed as follows: (a) learning to balance athletic and academic pursuits; (b) adapting to a certain degree of isolation from social and more “mainstream” activities; (c) managing success or lack thereof; (d) attending to their physical health in a more deliberate way as to avoid injury and subsequent rehabilitation; (e) satisfying multiple relationships, including the ones concerning their coaches, parents, friends, and community; and, (f) terminating an athletic career and finding other activities in which participation will bring about a very similar, if not an even higher level of satisfaction (Parham, 1993).

Furthermore, the responsibilities student-athletes face seem atypical when compared to their traditional student peers. Many student-athletes have to struggle with their dual roles and the pressure exerted on them to achieve both academic and athletic success. Some of the specific challenges confronted by student-athletes are: (a) academic difficulties, (b) role conflict, (c) social and leisure challenges, (d) separation anxiety due to athletic career retirement, (e) substance abuse issues, and (f) weight management/eating disorders (Watson, 2003). The elite athletes are not immune to problems. They may be quite different from their non-athlete student counterparts, demonstrating higher levels of physical health, and reflecting the pressure of having to deal with more complex schedules and the integration of academic, social and athletic demands (Pinkerton, Hinz & Barrow, 1989; Brewer, Linder & Phelps, 1995).

On the other hand, collegiate student-athletes are just like their peers when considered within the context of the developmental life cycle (Parham, 1993). Both groups of students experience the same developmental challenges: a) developing and strengthening academic, social, and interpersonal competencies, which will help them develop a greater mastery and control over their environment, b) solidifying their identities as separate from their families, c) discovering and creating ways to nurture interpersonal and intimate relationships, d) establishing beliefs and behaviours which are consistent with their values, moral and ethical standards, and e) formulating career goals and deciding to pursue a vocational path which is both satisfying and personally rewarding (Parham, 1993). But, a review of related literature indicates that student-athletes learn to cope with greater difficulties and demands at earlier ages when compared to their non-athlete peers (Parham, 1993).

Many researchers have investigated the demands and stressors faced by college students. This population regularly reports experiencing numerous stressful academic,

health-related, and personal-social challenges such as the pressures to perform well in the classroom, excessive time demands, relationship issues, family pressures, and financial concerns (Archer & Lamnin, 1985; Roberts & White, 1989). However, it should be noted that previous studies commonly deal with the identification of the problems experienced by students. In other words, studies evaluating the relationship between certain problems and the factors which affect them are very limited. Thus, this study aims to investigate the levels of some problems experienced by college student-athletes and the relationship between these problems and certain variables. On the other hand, this study differs from the previous research in that its sample group consists of college student-athletes, who are generally known to be under greater pressure than other college students (Bergandi & Wittig, 1984).

Among some significant variables that affect the levels of problems according to the related literature, gender is one of the reported factors. For instance, Heilburn and Chefitz (1984) reported that general irritability, unstable emotions, easy fatigability, emotional tenseness, and loss of appetite are the stress symptoms most commonly observed among college students. Female students are more susceptible to psychosomatic symptoms, physical illnesses, psychological disorders, and anxiety and report greater depressive mood symptoms than male students (Gerdes, 1995; Heilburn & Chefitz, 1984; Brack, La Clave & Wyatt, 1992). A National Collegiate Athletic Association report on intercollegiate athletes noted that female athletes spent more time preparing for classes than male athletes and less time in social activities and relaxing alone (Smallman, Sowa & Young, 1991). Humphrey et al. (2000) reported that for more than 40% of the male athletes and for well over half of the female athletes included in their study, factors related to "time" were among the most serious causes of stress (Humphrey et al., 2000). In fact, 95% of male athletes and 86% of female athletes were stressed by factors such as tests and exams, preparing papers for classes, missing classes due to frequent travelling, and making up for missed assignments (Humphrey et al., 2000). In Murray's (1997) study, the main problems which student-athletes were faced with were listed as difficulties with studying, social conflicts, sexual preoccupations, and career worries. Furthermore, female student-athletes reported more concerns related to fear of failure, anxiety, poor athletic performance, depression, self-confidence, and emotional problems than male student-athletes did. Consequently, one of the issues examined in this paper is the effect of gender on the problems in question.

On the other hand, there are several studies which report other variables such as lack of information, family problems, physical complaints, administrative programmes, and discipline measures. The mentioned studies show that 25% of the participant student-athletes complain about anxiety and depression. Social and personal problems, including anxiety, stress, time management, identity conflicts, social isolation, termination of sports career as a result of injury, inadequate athletic performance, and career problems are other problems presented to university counseling centers by the student-athletes (Figler & Figler, 1991; Pinkerton, Hinz & Barrow, 1989; Wittmer, Bostic, Phillips & Water, 1981). In addition, some athletes

have so much of their personal identity tied up in sport that they have little motivation to explore non-sports roles. They view themselves as successful athletes, not successful people. This mind-set can rob them of their confidence and prevent them from exploring non-sporting roles. If they do not think they can be successful in other settings, they may prefer not to explore other options. What is more, many athletes have internalized the belief that they must give 100% of their time and effort to their sport if they are to succeed. This view can block athletes from investing time and energy in any non-sporting pursuit. It can also promote a narrowness of self-esteem and a lack of confidence in their ability to function effectively in other domains (Danish, Petitpas & Hale, 1993). When compared to team sports athletes, collegiate athletes taking part in individual sports have been observed to report more frequent problems related to anxiety, confidence, and concentration as well as different patterns of experience concerning mental practice (Mahoney et al., 1987). The demands that student-athletes experience make them particularly vulnerable to mental and physical distress (Etzel, Ferrante & Pinkney, 1991). Distress refers to reactions to stimuli perceived as harmful, or to performance demands that an athlete believes she/he is unprepared to satisfy (Martens, Vealy & Burton, 1990). Student-athletes have to cope with difficulties associated with multiple role conflict, i.e. meeting the demands of the academic and the sporting environment at the same time. In addition to performing at a high skill level, they must also act with the understanding that physical injury is a likely consequence of their efforts. Thus the athletes' self-perceptions are readily susceptible to fluctuations (Danish, Petitpas & Hale, 1993; Etzel, Ferrante & Pinkney, 1991; Parham, 1993). The ways in which student-athletes respond to such demands largely depend on their own individual behavioural style and personality (Felsten & Wilcox, 1993).

Another significant variable is the role conflict in which they are engaged. In a study conducted by Adler and Adler (1987), it was observed that student-athletes have several role expectations that resulted in conflicts. Initially, 47% of the surveyed athletes revealed high academic aspirations by requesting to be placed in the colleges of business or engineering. However, these expectations soon dissipated, as the various kinds of pressure became evident to the athletes (i.e. classes were dropped and majors were changed). Accordingly, the athletes' poor academic achievements resulted in feelings of inadequacy and uncertainty (Thornburn, 2003). Moreover, in addition to the common issues associated with college adjustment (e.g. living away from home for the first time, developing new social groups, and assuming responsibilities of self-discipline), one of the two biggest hurdles that student-athletes face is learning to balance athletic and academic roles. However, it becomes extremely difficult for this population of students to establish such balance, since mostly they cannot benefit from the services that are more readily accessible to other students in the university community. Student-athletes operate on schedules with limited flexibility – typically attending classes in the mornings and early evenings and devoting evenings to study or other necessary daily activities (Jordan & Denson, 1990). In addition, many athletes find that they are unprepared for academic life in college or falsely believe that they

will be treated differently in the classroom because they are athletes (Papanikolaou et al., 2003).

The study owes its significance to the following reasons. Firstly, though several studies have been conducted to focus on the levels of problems experienced by student-athletes, research activities on the factors affecting these levels have remained too limited. Thus, this study aims to contribute to the related literature by providing research findings on the relationship between certain variables and problems. Secondly, the problems experienced by student-athletes have been examined in an intercultural context. In other words, the aim of this proposed study is to collect data and describe student-athlete perceptions regarding the effectiveness of the services provided to them. In the light of the above-mentioned reasons, the study puts forward two research questions:

1. What are the levels of problems experienced by student-athletes?
2. What is the relationship between these problems and some subject variables?

Method

Participants

The sample group of the study consisted of 420 student-athletes from all over the world who participated in the 23rd Universiade 2005 Olympic Games. The demographics are given in terms of their gender, age, nationality, grade, field of sport, and place of accommodation when the study was conducted. As the tables reveal, the sample group consists of 224 male and 196 female students. The majority of the group (45.7%) consists of students in the 21-23 age group. Included in the sample are participants from Turkey with a percentage of 28.1%, from other European countries with 33.8%, from Africa with 6.9%, from USA-Canada with 13.8%, from South America with 10.5%, and from Asia with 6.9%. The majority of the students are senior students (37.4%). Almost half of the sample group participated in football and basketball. They come from five different continents. However, the subjects from Turkey have been assigned as a separate group since another purpose of the study is to make a comparison between the results obtained from Turkish student-athletes and those from other nationalities. All the participants gave their informed consent to participate in the study.

Table 1. Demographics of the participants

Demographic Variables	Categories	N	%
Gender	Male	224	53.3
	Female	196	46.7
Age	18-20	136	32.4
	21-23	192	45.7
	24-26	92	21.9
Nationalities	Turkish	118	28.1
	European	142	33.8
	African	29	6.9
	North American	58	13.8
	South American	44	10.5
Grade	Asian	29	6.9
	Freshmen	72	17.1
	Sophomores	112	26.7
	Juniors	79	18.8
Field of sport	Seniors	157	37.4
	Football	86	20.5
	Basketball	121	28.8
	Volleyball	67	16.0
	Athletics	38	9.0
	Wrestling	33	7.9
	Taekwondo	14	3.3
	Fencing	18	4.3
	Gymnastics	14	3.3
	Swimming	13	3.1
Place of accommodation during education period	Archery	10	2.4
	Water polo	6	1.4
	With family	221	52.6
	Dormitory	103	24.5
	Alone at home	59	14.0
	With friends at home	37	8.8

Instruments

The instruments of the study consist of a background questionnaire and a scale to identify the levels and sources of the problems. The background questionnaire (see Appendix 1) interrogated the participants about their genders, ages, countries, grades, fields of sport, and their place of accommodation during their education period. The scale used was Murray's instrument (1997), which was, for the purposes of the current study, adapted to a Likert-type scale and included 36 items. The items aimed to examine the problems under the sub-titles of responsibility, emotional problems, personal and social fears, needs and personal problems. The items in the scale could be answered in a scale ranging from one to four (very much=4, somewhat=3, a little=2, not at all=1).

Procedure

The procedure applied to the research involved three steps. First, the items in the original scale were translated into Spanish, Portuguese, German, French, and Turkish. Next, a team of ten surveyors administered the background questionnaire and the scale

to the 420 student-athletes selected from among a total of 5300 students who participated in the games. During the data collection process, some difficulties were faced such as language barriers, unwillingness to participate in the study by some coaches and students and time constraints. Thirdly, the collected data were used to provide a descriptive and correlational analysis in terms of the research questions.

In the statistical analysis procedure, three steps were followed. Firstly, factor analysis was performed and the alpha (Cronbach) model was used to compute the reliability coefficients. Furthermore, in order to reveal the levels of the problems and the homogeneity of the sample group, the mean scores and standard deviations were calculated. Thirdly, Tukey's post-hoc analysis, T-test, and ANOVA were used to analyse the collected data and the results of these analyses provided the correlational data with regard to the relationship between the levels of problems and certain subject variables.

Results

The findings of the study could be categorized under three subsections. Firstly, factor and the reliability analyses of the scale are presented in tables. Next, the descriptive statistics on the levels and sources are presented. Finally, the correlational statistics on the relationship between the problems and subject variables are given.

Reliability coefficients and descriptive findings

Table 2 presents the item loadings of each factor along with their respective eigenvalues, explanations of variance in percent, reliability scores, means and standard deviations. 24 of the 36 problem items load above .48 on a single factor. The *responsibility* factor combining five items explained 29.77% of the variability in the data. *Emotional problems* including six items explained 8.21% of the variability. *Personal fears* and *social fears* factors, each of which include four items, explained 5.79% and 5.16% of the variability, respectively. The *needs* factor combining three items explained 4.79%. The *personal problems* factor comprising two items explained 4.18% of the variability. Murray (1997) found a three-factor structure in a study conducted in the US using the same instrument and named them as: 'problems', 'needs', and 'responsibilities'. However, the main difference between them is that the sample group consisting of only NCAA students in the US for Murray's study, and the sample group of this study has a different social, cultural, and infrastructural environment when compared to their counterparts in the US.

Table 2. Factor Analysis

Factors	Item loadings	Eigenvalue	Explained Variance	Cronbach Alpha	Mean	Std. D.
Factor 1. Responsibility		7.44	29.77	.80	2.08	.79
Career choice	.71					
Anger	.69					
Life management	.66					
Decision-making	.63					
Being responsible	.63					
Factor 2. Emotional problems		2.05	8.20	.78	1.83	.67
Depression	.70					
Feeling isolated	.69					
Sexuality problems	.65					
Fear of success	.61					
Dating	.51					
Emotional problems	.48					
Factor 3. Personal fears		1.45	5.78	.76	2.06	.75
Fear of failure	.77					
Poor athletic performance	.70					
Anxiety	.67					
Choice of major/minor	.59					
Factor 4. Social fears		1.29	5.16	.68	1.89	.69
Connecting with others outside of sports	.72					
Grade point average/failing classes	.58					
Boy/Girlfriend problems	.55					
Termination of athletic career	.52					
Factor 5. Needs		1.19	4.79	.65	2.33	.77
Burnout	.75					
Eating disorders	.61					
Time constraints	.51					
Factor 6. Personal problems		1.04	4.18	.63	2.43	.98
Business demands	.75					
Personal demands	.67					
Explained total variance			57.89			

Notes:

Principal Component Analysis Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .884.

Varimax with Kaiser Normalization. Bartlett's Test of Sphericity: $p=.000$ (Chi-Square 3639,36 $df=300$, $p<.000$).

4-point scales (1=not at all, 2=a little, 3=somewhat, 4=very much).

Internal consistency reliabilities (Cronbach's alpha) for factor dimensions were calculated between .6338 and .8089, which indicates that respondents picked these items consistently. Alphas were also calculated for each deleted individual item in the scale. Elimination of the items did not increase the scale reliability of the factors; thus all items were left in the scale to form a summated (composite) scale. A composite

scale represents the multiple aspects of a concept in a single measure and decreases measurement error probability inherent in all measured variables (Hair et al., 1998, 116-117). An overview of the means of the student-athlete problem factors generally indicates that student-athletes faced the problems between the levels.

Correlational statistics

One of the subject variables related to the problems was gender. T-tests were conducted to determine whether gender caused variations in the means of the student-athlete problem factors. It was found that two of the six means of student-athlete problem factors varied according to gender. As seen in table 3, females face higher levels of emotional problems ($x=1.94$) than males do ($x=1.75$) ($t=-2.91$, $p=.004$). Again, females ($x=2.22$) experience higher personal fears than males ($x=1.92$) do ($t=-4.07$, $p=.000$).

Table 3. Relationship between gender and problems

Student-Athlete problem factors	Gender	N	Mean \bar{X}	Standard Deviation	t-value	p-value
Responsibility	Male	224	2.06	.80	-.64	.523
	Female	196	2.11	.77		
Emotional Problems	Male	224	1.74	.68	-2.91	.004
	Female	196	1.94	.66		
Personal fears	Male	224	1.92	.75	-4.06	.000
	Female	196	2.21	.71		
Social fears	Male	224	1.92	.70	.95	.342
	Female	196	1.85	.67		
Needs	Male	224	2.28	.71	-1.62	.105
	Female	196	2.40	.82		
Personal problems	Male	224	2.37	.97	-1.34	.179
	Female	196	2.50	.99		

4-point scales (1=not at all, 2=a little, 3=somewhat, 4=very much).

The findings above are congruent with the findings of the previous studies in the literature (Gerdes, 1995; Heilburn & Chefitz, 1984; Brack, La Clave & Wyatt, 1992). Females are more prone to emotional and personal problems than males are. Collegiate administrators and mentors should eliminate these concerns and help female athletes overcome them. The differences on responsibility, social fears, needs, and personal problems according to gender were not found to be statistically significant ($p>.05$).

Another variable examined in the research was the nationalities of the participants. As mentioned above, the sample group of the study was contacted during the 23rd Universiade Olympics, held in Izmir (Turkey) in the year 2005. 130 countries were represented by over 5300 athletes in the Games. However, 420 applicable surveys belonging to participants from 31 countries were used in the data analysis. Excluding Turkey, 30 countries were classified into five groups in accordance with the continents they belonged to. Since approximately 120 of the respondents/participants were Turks and Turkey can be categorized as a Mediterranean, a European, a Middle Eastern or an

Asian country, it deserves to be investigated separately. Following the classification, an analysis of variance was performed to examine whether student-athlete problem factors varied according to the respondents' countries/continents. As seen in the F-tests and in the related significance levels for all problem factors, significant differences were observed between the means of the respondents' countries/continents and the means of all student-athlete problem factors.

Table 4. The relationship between nationalities and problems

Student-Athlete Problem Factors	F	Sig.
Responsibility	11.19	.000
Emotional Problems	9.08	.000
Personal fears	5.07	.000
Social fears	2.94	.013
Needs	12.24	.000
Personal problems	19.49	.000

The third variable investigated to ascertain its relation to the level of the problems were the continents the participants came from. Tukey HSD post-hoc test was used to determine which student-problem levels differed according to the country/continent they belonged to. In terms of responsibility, it was observed that Turkish ($p < .001$) and African ($p < .05$) students experience higher levels of problems than their counterparts in other parts of the world. The difference and p-value columns indicate further differences among countries/continents.

In terms of emotional problems, African students were found to experience higher levels of problems than their counterparts in other parts of the world ($p < .01$). The difference and p-value columns detail further differences among other countries/continents. Interestingly enough, South American and Asian students were observed to experience lower levels of personal fears than the students in other parts of the world ($p < .05$). Some reasons that might possibly explain this finding may include different social, cultural and economical conditions prevailing in these areas. Turkish students were found to feel the highest level of personal fears. With respect to social fears, only one significant difference was determined between countries/continents. Turkish students were observed to experience higher levels of social fears than their counterparts in Asian countries ($p < .01$). No major differences were found between other groups of students. With respect to the needs factor, Turkish students were observed to experience higher levels of needs problems than the students in other parts of the world, except for the African students ($p < .01$). Similar to the results obtained with the needs factor, Turkish students were also found to experience higher levels of

personal problems than their counterparts in other parts of the world, again except for the African students ($p < .01$). African students were observed to experience higher levels of personal problems than the students living in Europe, North America, South America, and Asia.

Table 5. Tukey post-hoc analysis

Problems faced/factors	Country/Continent	N	Mean	Standard Dev.	Difference	p-value
Responsibility	1. Turkey	118	2.46	.791	1-2	.000
	2. Europe	142	1.95	.72	1-4	.000
	3. Africa	29	2.35	.61	1-5	.000
	4. North America	58	1.86	.69	1-6	.000
	5. South America	44	1.84	.89	3-4	.041
	6. Asia	29	1.70	.63	3-5 3-6	.048 .011
Emotional problems	1. Turkey	118	1.89	.58	1-3	.001
	2. Europe	142	1.87	.71	1-5	.011
	3. Africa	29	2.44	.70	2-3	.000
	4. North America	58	1.73	.63	2-5	.015
	5. South America	44	1.51	.68	3-4	.000
	6. Asia	29	1.53	.47	3-5 3-6	.000 .000
Personal fears	1. Turkey	118	2.05	.66	1-3	.021
	2. Europe	142	2.08	.80	2-3	.034
	3. Africa	29	2.53	.88	2-5	.030
	4. North America	58	2.13	.67	3-5	.000
	5. South America	44	1.70	.72	3-6	.007
	6. Asia	29	1.86	.63	4-5	.037
Social fears	1. Turkey	118	2.01	.64		
	2. Europe	142	1.89	.69		
	3. Africa	29	1.94	.55	1-6	.003
	4. North America	58	1.80	.78		
	5. South America	44	1.89	.76		
	6. Asia	29	1.50	.48		
Needs	1. Turkey	118	2.74	.75	1-2	.000
	2. Europe	142	2.22	.66	1-4	.000
	3. Africa	29	2.44	.70	1-5	.000
	4. North America	58	2.03	.66	1-6	.001
	5. South America	44	2.21	.96		.000
	6. Asia	29	1.94	.53		
Personal problems	1. Turkey	118	3.04	.85	1-2	.000
	2. Europe	142	2.12	.79	1-4	.000
	3. Africa	29	2.89	1.11	1-5	.000
	4. North America	58	2.22	.94	1-6	.000
	5. South America	44	2.05	.92	2-3	.000
	6. Asia	29	2.00	1.11	3-4 3-5 3-6	.012 .001 .002

Conclusions and discussion

Since research on the problems experienced by student-athletes has remained limited until now, and the intercultural aspect of the issue has not yet been investigated, this study aimed to determine the levels and sources of problems and the relationship between such problems and certain subject variables. The sample group of the study consisted of 420 student-athletes and the subject variables investigated included gender, age, nationality, school grades, fields of sports, and places of accommodation during education life. Two instruments – a background questionnaire and a scale to identify the levels and sources of the problems – were administered to collect data and then, the collected data were used to provide a descriptive and correlational analysis with respect to the aims of the research questions.

The study yielded some significant results. Firstly, student-athletes were found to suffer from problems related to responsibility, personal problems and fears, and needs, while they had no emotional or social problems. Secondly, gender was identified as a significant factor affecting the level of problems experienced in terms of emotional and personal fears. To put it another way, females suffer more from emotional and personal fears than males do. Thirdly, nationality was detected to be another significant variable that has an impact on the problem areas, such as responsibility, emotional and personal problems, personal and social fears, and needs. In other words, students from Turkey and Africa had higher levels of problems with regard to responsibility while only Africans suffered from emotional problems. However, the findings indicate that students from Turkey, Europe, Africa and North America had a higher level of personal problems, whilst only the Turkish students had social fears. Furthermore, except for the Asian students, all the participants had problems related to needs. Finally, it was determined that all subjects suffered from personal problems.

One of the significant findings of the study is that student-athletes suffer from problems concerning responsibility, personal problems and fears, and needs, while they appear to have no emotional and social problems, which contradicts the findings of Archer and Lamnin (1985) and Roberts and White (1989), who noted that student-athletes have numerous stressful academic, health-related, and personal-social challenges, such as the pressures to perform well in the classroom, excessive time demands, relationship issues, family pressures, and financial concerns. Conclusively, the results of the current study were similar to those of previous research. However, one of the findings of the study indicates that gender only affects the levels of emotional and personal fears while it was found that it also has effects on general irritability, unstable emotions, easy fatigability, emotional tenseness, and appetite (Gerdes, 1995; Heilburn & Chefitz, 1984; Brack, La Clave & Wyatt, 1992). Finally, this study differs from previous research in that it examines the relationship between nationalities and the levels of problems. In other words, as the sample group consists of worldwide participants, there exists no data in the previous research to compare the results in terms of the relationship between nationalities and problem levels.

In the light of the results of the study, some practical recommendations could be noted. Firstly, as student-athletes suffer from problems related to responsibility and personality, the awareness of target groups such as students, teachers, and trainers about the problems should be raised. For this purpose, in student, teacher and trainer training programs, the significance of such problems should be emphasized. Specifically, training programs and school curricula should be revised so that the issues on the problems can attract the attention they deserve in programs and curricula. An alternative recommendation is that sports counselling units should be founded so that such problems could be solved and student-athletes could be better prepared to face them as they arise in both their sporting and educational careers. Furthermore, these units may be of benefit for student-athletes both prior to and during competitions. Secondly, since the findings of the study indicate that females suffer more from emotional and personal fears than males do, it is recommended that the awareness of target groups about gender difference be raised. It is also important that counselling units be more sensitive to the problems they encounter. Thirdly, the socioeconomic situations of student-athletes should be improved as the study indicates that the participants from less developed countries have more problems. However, the solution to this problem directly concerns economic, social and cultural improvement of the countries.

The study was confined with the sources and levels of student-athlete problems and the relationship between such problems and certain subject variables. In addition, the sample group was limited to 420 students from various countries, and the methodological approach limited to a background questionnaire and a scale aiming to find the levels of the problems. It is recommended that further studies should focus on gender and socioeconomic differences of student-athletes.

Appendix 1. Problems that Face College Student-Athletes

		Very Much	Some-what	A Little	Not at all
1	Stress	()	()	()	()
2	Burnout	()	()	()	()
3	Eating disorders specify	()	()	()	()
4	Alcohol abuse	()	()	()	()
5	Being responsible	()	()	()	()
6	Family difficulty	()	()	()	()
7	Taking care of my business	()	()	()	()
8	Fear of failure	()	()	()	()
9	Poor athletic performance	()	()	()	()
10	Depression	()	()	()	()
11	Anxiety	()	()	()	()
12	Unreasonable expectations of coaches	()	()	()	()
13	Grade point average	()	()	()	()
14	Connecting with others outside of sport	()	()	()	()
15	Eligibility problems	()	()	()	()
16	Boyfriend problems	()	()	()	()
17	Feeling left-out	()	()	()	()
18	Time constraints	()	()	()	()
19	Self-confidence/worth	()	()	()	()
20	Choice of major/minor	()	()	()	()
21	Fear of success	()	()	()	()
22	Sexuality/sexual identity	()	()	()	()
23	Homesickness	()	()	()	()
24	Leisure needs	()	()	()	()
25	Termination of athletic career	()	()	()	()
26	Girlfriend problems	()	()	()	()
27	Personel demands	()	()	()	()
28	Emotional problems	()	()	()	()
29	Decision-making	()	()	()	()
30	Physical injury	()	()	()	()
31	Career choice	()	()	()	()
32	Anger	()	()	()	()
33	Managing my life	()	()	()	()
34	Financial problems	()	()	()	()
35	Transition to college	()	()	()	()
36	Dating	()	()	()	()

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