Does Social Support Diminish Depression in Students? Evidence from Athletes and Greek Life

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Abstract

Depression and stress are extremely prevalent in college students. The goal of the current study was to examine if social support from athletic teams and fraternities or sororities are related to lower levels of depression and stress compared to students not involved in such groups. Participants (N=134) were asked to fill out a questionnaire with scales of depression, stress and social support. It was hypothesized that members of Greek life and student-athletes will show higher levels of social support and lower levels of depression compared to a control group of students. The results supported these hypotheses and suggest that joining social groups might be a resource for battling mental health issues in college.

Differences in Distress and Support in College Populations

Stress and depression are two highly correlated states that are prevalent in college students (Mahmoud et al., 2012). As of 2013, the National College Health Assessment reported that 1/3 of all college students report depression some point in their past year, and identified stress as the primary cause for impaired academic performance (Novotney, 2014). It is vital that researchers examine all possible ways to decrease stress and depression in college students. The current study looks at the influence of social support on psychological distress and well-being among three student groups on a college campus: athletes, members of Greek organizations, and the general student population.

College students have an extraordinary amount of stress to deal with on a daily basis. Students reported that major academic stressors were tests, grade competition, time demands, professors' expectations, class environment, and future success, and the most intense personal stressors were intimate relationships, parental conflicts, finances, and interpersonal conflicts with friends (Archer & Lamnin, 1985). College students who have been treated for depression also report experiencing stress from a variety of sources, including roommate issues, academic problems, financial and career concerns, and family pressure (Aselton, 2012).

Depression plays a big role in the overall health of college students. Depression was predicted by both general life stress and college-related stress (Lester, 2014). Because college-related stress was a greater predictor of prior suicide attempts than general life stress, itis possible that the college experience may be more psychologically disturbing and stressful than life outside of college. In a study of interrelationships of stress, depression, anxiety, and physical illness in college students, correlations were found in the stress-illness and depression-illness relationships (Rawson, Bloomer, & Kendall, 1994). Physical illness was defined from a Health

Questionnaire, which lists the most common campus-illnesses. It demonstrated that depression and stress can weaken the immune system and cause health problems. In a 30-day diary study, students with a history of depression showed greater stress-reactivity even when in remission (O'Hara, Armeli, Boynton, & Tennen, 2014). On days characterized by higher than usual stress, these participants were at a higher risk for a depressive episode.

College students are clearly at greater risk for stress and depression because of their intense schedules, developing personalities, and many other academic issues. Looking at different groups of the college population, it is likely that being a member of a team sport, a fraternity, or sorority may either increase or decrease stress and depression levels depending on the individual students' experience. College student-athletes face a variety of stressors ranging from physical training to academics. Eight factors appeared most likely to contribute to the stress of student-athletes: sports injury, performance demand, coach relationships, training adaptation, interpersonal relationships, romantic relationships, family relationships, and academic requirements (Lu, Hsu, Chan, Cheen, & Kao, 2012). All of these factors are likely to enhance stress from the college experience.

Organized sports may provide help against stress and depression. Not only are the physical aspects of a sport a way to relieve stress, but team sports provide a built-in social support network that can also help decrease levels of anxiety, depression, and stress (Tamminen, & Gaudreau, 2014). Students participating in an individual sport or students who do not belong to such groups will not reap the benefits of this peer social support system (Morgan & Pollack, 1997; Raglin, 2001; Storch, Killiany, Roberti, 2005). Athletes in intercollegiate team sports have been found to have different levels of depression compared to nonathletes (Proctor & Bon-Lenzo, 2010; Storch et al., 2005). Gender was also found to influence depression in these studies.

Female athletes reported the highest levels of depressive symptoms, social anxiety, and lack of support. Male athletes, male nonathletes, and female nonathletes reported the lowest levels. It appears that levels of depression can possibly vary from school to school depending on how vigorous the respective sport is on the athletes (Storch et al., 2005). A final variable found to interact with athletic status and depression in college is sports injury (Roiger, Weidauer, & Kern, 2015).

In addition to the literature about student-athletes, research also shows that fraternities and sororities provide social support for students, and this may help students avoid stress and depression. Just like being part of an athletic team, joining a fraternity or sorority can help students build new friendships, connections, and facilitate feelings of acceptance by the members. Also, the social support in these groups can help reduce depression and stress in individual members (Taylor, 2010). In a study of the overall mental health aspects of college students, fraternity and sorority members had a significantly lower level of depression than non-members (Mahmoud et al., 2012).

Results from one study suggest that the advantages of belonging to a fraternity or sorority may be balanced by some drawbacks (Ridgeway, Tang, & Lester, 2014). For example, Greek life can be associated with risky behaviors and health problems, potentially leading to increased stress. Greek members engage in more alcohol use, cigarette smoking, sexual partners, and sex under the influence of drugs or alcohol than the average college student (Scott-Sheldon & Carey, 2008).

Prior to membership in Greek Life, pledges may experience high levels of stress and depression (Kase, Rivera & Hunt, 2016). Those who are pledging a fraternity could be under a significant amount of stress in anticipation that their personal characteristics are under review by

active fraternity members. Students who were rushing a fraternity or sorority showed increases in depressed mood immediately following a negative outcome (Abela & Seligman, 2000). Many studies have shown that these groups are involved in more risky behaviors than non-members, but few studies have attempted to look at the benefits of joining these organizations. Most of the relevant literature supports the idea that belonging to an athletic team and being a member of Greek Life can create a positive atmosphere because of social support and friendships. However, no studies have compared these two groups in the same study to see if one group creates better mental health than the other.

The current study will address these issues by obtaining a sample of Greek members, student-athletes, and students involved in neither of these groups, and compare their levels of stress, depression, and social support. If the study can show that one group might provide better mental health benefits than the others, real world application could involve advertising potential benefits of joining a fraternity or sorority, or to becoming involved in a team sport. Also, results will indicate whether any of the groups is at a greater risk for stress or depression.

It is predicted all three groups of students will have similar levels of stress. It is also predicted that students not involved in team sports or Greek life will have higher levels of depression because of the comparative lack of social support. Consequently, it is predicted that student-athletes and members of Greek life will perceive more social support than the average college student.

Method

Participants

Three different groups (N = 134) consisting of students from Eastern Kentucky University participated in the study: student-athletes (n = 32; Female=16, Male=16), members of

a fraternity or sorority (n = 56; Female=28, Male=28), and a control group of college students (n = 46; Female=23, Male=23) who do not belong to these other two groups. Each group consisted of equal number of males and females, between the ages of 18 and 23. The Greek life group was recruited by going to their weekly meetings and offering them 30 minutes of service for completing the survey. For the students-athlete group, players were contacted on different athletic teams to help obtain a larger sample of participants from their specific team. Each player on the baseball team received 30 minutes of study hall hours, while each player on the softball team received 30 minutes of service hours. For the control group, students taking psychology courses were recruited through the SONA system, which is the electronic system this university uses to recruit students for psychology research, and received 0.5 credits for completing the survey.

Materials

This study consisted of three different surveys for stress, depression, and social support (Appendix A). High scores on each of these scales result in high levels of each specific construct.

Stress. For the measure of stress, this study used The Perceived Stress Scale. This is a validated scale which asks questions about recent stress in the participant's life on a five-point scale (1 = *not at all*, 5 =*almost all the time*) (Cohen, Karmarck & Mermelstein, 1983). The only modification made was changing the scale from 0-4 to 1-5 to match the other scales used in the study.

Social Support. For the measure of social support, this study used the Quality of Relationship Inventory (QRI). This is a validated scale which asks questions based on how much participants report they feel that they can "count" on others based on a five point scale (1 = *not at all*, 5 = *almost all the time*) (Pierce & Sarason, 1991). Some modifications were made to this

specific survey. Seven items were taken from the full inventory. These items comprised the QRI social support subscale. Also, "this person" was changed to "other students" because group social support was taken into consideration. Finally, a fifth score of "almost all the time" was added in order to match the scoring on the other two scales.

Depression. For the measure of depression, this study used the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977). The CES-D is a commonly used scale in research to study depression. The inventory displays depressive statements and has the participants record their answers based on a five-point Likert scale (1 = *never*, 5 = *very often*). No modifications were made to the statements or the scale.

Procedure and Script

Male student-athletes and male and female Greek life students were tested at their specific meeting places for practices or chapter meeting; the softball team was tested in a library room. Each in-person participant completed the survey in a group setting comprised of their specific team or chapter. The control group completed the survey online through the SONA system. Before the in-person groups took the questionnaire, they received a standard script regarding the study (Appendix B)

It did not take long for the participants to complete all of the materials (Appendix B). However, they were not timed and were allowed to work at their own pace. After they had completed the full questionnaire, they received another standard script (Appendix C). My contact is benjamin_chartoff@mymail.eku.edu if you have any further questions about the study."

For the SONA participants who completed the survey online, they read the same consent form before taking the survey and read the same debriefing form after the survey was completed.

Scoring and Analysis

Each participant received three different total scores, one for each survey. For The Perceived Stress Scale, items 4-7, 9, 10, 12, and 13 were reverse coded. For the CES-D, items 4, 8, 12, and 16 were reverse coded. For each measure, scores were added to get composite scores. There were a total of three separate mean scores for each participant. A MANOVA was used to examine all three hypotheses.

Results

Consistent with my predictions, there were significant main effects for group in relation to depression (F (2, 128) = 3.79, $p < .025$, partial eta squared = .056) (Figure 1) and social support (F (2, 128) = 17.53, $p < .001$, partial eta squared = .215 (Figure 2). Women (M = 49.22, SD = 14.50) were more depressed than men (M = 41.70, SD = 12.49; F (1, 128) = 10.75, $p < .01$, partial eta squared = .08). Pairwise comparisons indicated that control participants (M = 49.72, SD = 14.97) were more depressed than student athletes (M = 41.81, SD = 10.78; p = .009). The difference between control participants and Greek students approached but did not reach significance (M = 44.84, SD = 14.75; p = .06). Pairwise comparisons also indicated that control students (M = 19.88, SD = 6.91) experienced less social support than student athletes (M = 23.51, SD = 6.64; p = .016) and Greek students (M = 27.46, SD = 6.05; p = .001), and students athletes experienced less support than Greek students (p = .006). There was no effect of group on stress (F (2, 128) = .95, $p > .389$, partial eta squared = .015) (Figure 3).

There were interactions between sex and group in relation to stress (F (2, 128) = 2.98, p = .054, partial eta squared = .045) and depression (F (2, 128) = 4.54, p = .012, partial eta squared = .066). Simple effects indicated that there was an effect of sex for Greek students in relation to

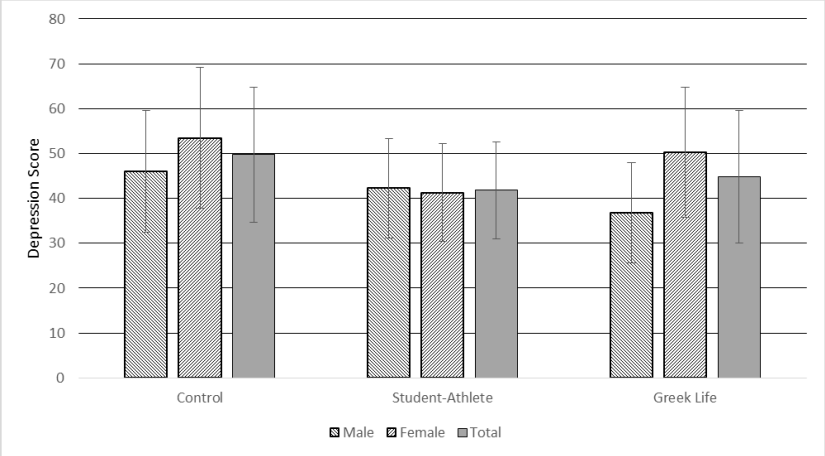

Figure 1. Levels of Depression in the Three Groups of Students

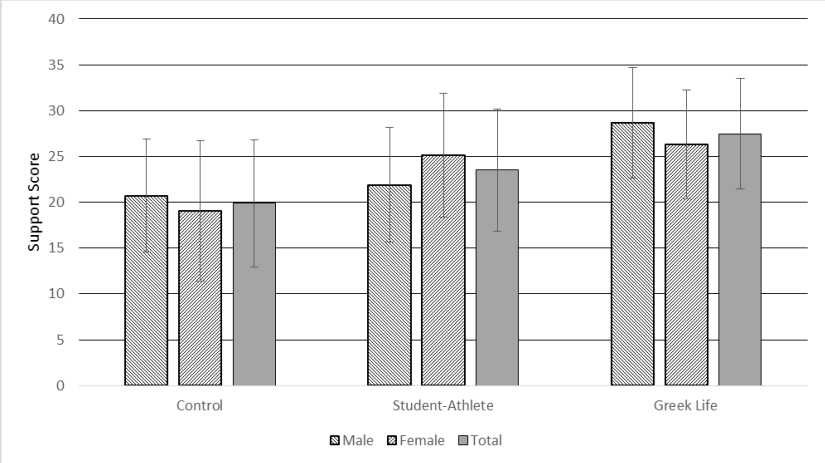

Figure 2. Levels of Social Support in the Three Groups

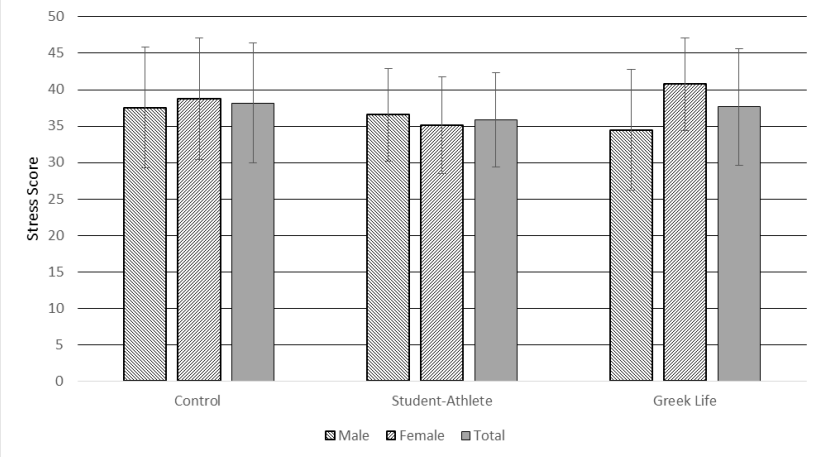

Figure 3. Levels of Stress in the Three Groups of Students

stress (F (1, 54) = 10.30, p = .003, partial eta squared = .157) and depression (F (1, 54) = 23.26, p < .001, partial eta squared = .30). Female Greek students (M = 52.86, SD = 13.65) were more depressed than male Greek students (M = 36.82, SD = 11.10). Female Greek students (M = 40.75, SD = 6.39) also exhibited higher levels of stress than male Greek students (M = 34.50, SD = 8.26). There were no similar sex differences for control students or student athletes.

Discussion

This study supports the hypothesis that students involved in either Greek life or team sports may experience a greater amount of social support than the average college student. This can be explained through the closeness of each of these groups, and how they interact like a "family". When a student goes to college, he or she may experience changes in the everyday support of immediate family members or other close individuals. These college groups may function in many of the same ways as those important support members, thus resulting in higher levels of perceived social support.

The study also supports the hypothesis that the average student experience higher levels of depression than students involved in Greek Life or Division I sports. It can also be inferred that students with more perceived social support will have decreased depression levels, as seen in the Greek Life and student-athlete groups. The bonds created by these members can help during rough periods of school or other life problems. They know other teammates or "brothers/sisters" will be there for guidance and support when depressive symptoms arise.

The hypothesis that all groups will perceive similar amounts of stress was also supported by the study. This fits with previous research showing that 30% of college students reported negative effects of stress and 85% reported feeling overwhelmed within their past year (American College Health Association, 2015). Although not formally hypothesized, it was

originally considered that student-athletes could have higher levels of stress because of the demands of their activities, but now it seems clear why they may not report intense stress. Stress could be mediated by the resources that athletes have in terms of academic performance. They have tutors, coaches, and teachers who are willing to help them out while traveling on the road or during times of increased academic workload. Also, stress may be experienced from losing games, but they have each other to rely on in coping with these instances. There is rich and complex literature on the experiences of college athletes in relationship to both stress and social support (e.g., Dubuc-Charbonneau & Durand-Bush, 2015; Lu et al., 2012; Selby, Weinstein, & Bird, 1990). Little research, however, has investigated the potential mediating impact of other resources on college athlete stress. Future research may wish to explore this further.

Other interesting results to be pointed out were that members of sororities reported higher levels of depression and stress than members of fraternities. One possible explanation is the idea that sorority members are intended to hold themselves to a high standard compared to fraternities. Pushing for these high academic performance and personal goals could be hard to handle, resulting in the higher levels of depression and stress seen in this study. Further, some previous research suggests that there may be subtle differences in the way that sorority members vs. fraternity members provide each other with social support (Woodward, Rosenfield, & May, 1996) and that fraternity members may receive more personal/interpersonal benefit than sorority members from belonging to a Greek organization (Martin, Hevel, Asel, & Pascarella, 2011). There is also some suggestion that men in Greek organization may be more at risk for alcohol abuse than women in Greek organization (Capone, Wood, Borsari, & Laird, 2007).

Differences were found between fraternity and sororities members within this study, and it was difficult to find research that compared male to female Greek organizations. Future

research should investigate whether standards for behavior are significantly different in these groups and whether such standards are the potential cause for differences in mental health.

Limitations

There are limitations to be aware of in this study. First, all of the Greek life members were taken from one sorority and one fraternity. Also, all of the student-athletes were taken from the baseball and softball teams. Second, these are all survey responses, meaning that some of the data may not have been answered honestly and to the best of their ability. Third, these were all students from one University, so it can be hard to generalize the results to all of the college populations across the U.S.

Conclusions

Being a member of Greek Life or sports teams can create a sense of community, resulting in higher levels of social support, and lower levels of depression. College students are at a very high risk for depression and other mental stressors, and it is important to eliminate or control these threats. This research suggests that joining these close-nit groups might be an answer in creating a healthier lifestyle in college.

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