The Effects of Extracurricular Activities on Self-Esteem, Academic Achievement, and Aggression in College Students

The present study focuses on the relationship between undergraduate student involvement in extracurricular activities and levels of self-esteem, academic performance, and aggression. Previous studies involving high school and college students (Hamachek, 1995; Monashkin, 1953) reported a positive correlation between participation in social activities and increased self-esteem and school performance. Membership in clubs and athletic groups increases feelings of inclusion, thus diminishing aggressive behavior (Leary, Schreindorfer, & Haupt, 1995). In the present study, 113 undergraduate students at a medium-sized midwestern university were given the Texas Social Behavioral Inventory (Helmreich & Stapp, 1974) and the Buss-Perry Aggression Questionnaire (Buss & Perry, 1992). The scores on these inventories were related to the students' extracurricular involvement and their cumulative grade point averages (GPAs). Women involved in social clubs had significantly higher self-esteem scores than women involved in athletics and women not involved in activities. Men participating in social clubs had significantly higher hostile aggression scores than did women involved in social clubs. Thus, for women, self-esteem is positively related to extracurricular activities, whereas for men, the relationship is less clear.

During televised sporting events, stations often broadcast Nike commercials which claim that extracurricular activities, namely athletics, increase children's levels of self-esteem and achievement at school. After seeing frequent airings of these commercials, we decided to see if Nike was correct. Past research using high school students (Jenkins, 1996; McNeal, 1995) has indicated that social involvement is directly related to levels of self-esteem, academic performance, and aggressive behavior. One study (Leary, Schreindorfer, & Haupt, 1995) found that perceived levels of inclusion and exclusion appear to influence the development of self-esteem and aggressive behaviors. Individuals who felt socially accepted had higher self-esteem and rarely committed aggressive acts. McNeal (1995) also reported that individuals with high levels of self-esteem had higher levels of academic performance and were less likely to commit deviant behavior. The present study focused on the relationship between social involvement in college and levels of self-esteem, academic performance, and aggression.

Most researchers agree that a person's self-esteem grows and develops throughout life, while going through many interactive cycles. Indeed, Kaplan (1995) argues that self-esteem is not something that is given to a person; it develops over time, as the individual decides whether he or she is a valuable, successful, and competent human being. Self-esteem is sometimes considered to be a psychological gauge, capable of monitoring a person's social environment (Leary et al., 1995). From this perspective, self-esteem helps detect instances of social rejection and exclusion or social acceptance and inclusion.

Studies (Hamachek, 1995; Holland & Andre, 1987; Jenkins, 1996; Monashkin, 1953) have shown that participation in extracurricular activities correlates positively with high levels of self-esteem. R. E. Phillips (1969) found a significant positive relationship between self-esteem and participation in extracurricular activities in high school students. Belonging to a supportive extracurricular group led to feelings of includability, positive school attitudes, and healthy peer relationships. McNeal (1995) found that...
participation in extracurricular activities helped students identify with their peers in positive ways, while increasing feelings of self-esteem.

Involvement in extracurricular activities also is related to academic achievement. J. C. Phillips and Schafer (1971) showed that male high school athletes had higher overall grade point averages (GPAs) than male nonathletes. McNeal (1995) linked extracurricular involvement with low drop-out rates among high school students. Although this study found a significant negative relationship between involvement and drop-out rates, some activities seemed to have stronger effects than others. McNeal points out that because students are labeled by the groups they belong to, and because each of these groups is classified according to prestige, some students are higher on the status ladder than others. These high-status students, many of them athletes, are the ones most likely to stay in school. The degree of prestige, then, may be what actually determines the likelihood of staying in school and getting good grades.

In addition, students participate in activities at different levels (Finn, 1989). For example, a starter on a school basketball team is probably much more involved as a team member than a substitute player is. As students become increasingly involved, they are able to identify with their schools, which helps them to stay in school. For example, Feltz and Weiss (1984) found ACT scores were highest in girls who participated in five or more high school activities. Thus, the degree of participation may mediate academic performance and attainment.

Research (Emshoff, Davis, & Davidson, 1981; Leary et al., 1995) also reveals a relationship between social involvement and aggressive behaviors. Goldstein and Rosenbaum (1985) found that individuals are more likely to become aggressive when they feel rejected or excluded. Interventions which increase feelings of inclusion expand levels of self-esteem and decrease episodes of aggressive behavior. Emshoff et al. (1981) believe that social support helps satisfy the needs of the individual through affection and inclusion. Through socialization, individuals are able to develop their attitudes and values. However, aggression often occurs when there is a lack of needed social support, because individuals are unable to develop the social skills necessary for positive social interaction (Emshoff et al., 1981).

Although several studies have been conducted on the effects of extracurricular activities, there are still gaps in the knowledge base. First, even though research (Hamachek, 1995) shows that involvement in high school activities increases self-esteem and school achievement, this research does not ensure that the same effects exist for undergraduate students in college activities. Second, although research (Feltz & Weiss, 1984; Finn, 1989) has examined the relation between athletic involvement and students' self-esteem and academic achievement, there is scant information on the relationship of other types of extracurricular activities to these variables. Research (Emshoff et al., 1981; Goldstein & Rosenbaum, 1985) on aggression and its relation with social involvement is available; however, these studies are quite general in nature and have not evaluated extracurricular involvement. Although previous studies have evaluated the relation between certain combinations of self-esteem, academic achievement, aggression, and involvement in extracurricular activities, no study has evaluated all four variables simultaneously. The present study attempted to ascertain what relations exist between undergraduate college students' involvement in extracurricular activities and levels of self-esteem, academic achievement, and aggression.

**Method**

**Participants**

The participants were 113 undergraduate students (38 men and 75 women) enrolled in introductory psychology courses at a medium-sized midwestern university. The majority of the students were freshman and sophomores. All participants, ranging in age from 17 to 51 years ($M = 21.67$), volunteered to complete the surveys and received credit in their introductory psychology courses for participation. Although 113 students completed the surveys, data were analyzed for only 109 participants, due to the specific comparisons that were studied.

**Materials**

**Demographic form.** A sheet requesting information about the participant's sex, age, cumulative GPA, and athletic and social club involvement was completed by each student. Participants provided information regarding the activities they were involved in including the specific type of sport (intercollegiate or intramural), name of club, any positions or offices held, and the number of hours spent in weekly participation.

**The Texas Social Behavior Inventory (TSBI).** Form A of the TSBI (Helmreich & Stapp, 1974) was employed to evaluate levels of self-esteem. The TSBI is a 16-item self-report inventory. Each question is evaluated using a 5-point Likert-type scale. The TSBI was developed "to be an objective measure of self-esteem or social competence" (Helmreich & Stapp, 1974, p. 473).
**Buss-Perry Aggression Questionnaire.** The Buss-Perry Aggression Scale (Buss & Perry, 1992) consists of 29 questions, each using a 5-point Likert scale. In addition to a total aggression score, the Buss-Perry also yields scores on four subscales to provide a more detailed analysis of the aggressive response. Nine questions assess physical aggression, eight evaluate hostile aggression, five probe verbal aggression, and the remaining seven questions examine anger aggression. To avoid a response bias, the questions are presented in a random order.

**Procedure**

Students reported to a designated classroom to complete the surveys. Upon their arrival, the participants received and completed an informed consent document. After this form was collected, each student completed the questionnaire booklet. The demographic sheet appeared first, the TSBI appeared second, and the Buss-Perry Aggression Scale appeared last in all packets. Although no time limit was imposed, all participants completed the questionnaire booklet within 20 min.

**Results**

In order to allow direct between-groups comparisons, the analysis of variance (ANOVA) procedure was employed. Separate 2 × 3 ANOVAs incorporating sex (male vs. female) and group participation (member of social club[s], involved in athletics, or not involved in any activities) as factors, analyzed the self-esteem scores, aggression scores, and GPAs. In all instances α = .05 was used to determine significance. Four participants who were involved in both social clubs and athletics were not included in statistical analyses. The analyses for self-esteem, aggression, and GPAs are described separately.

**Self-Esteem**

The main effects of sex, \( F(1, 103) = 1.26, p > .05 \), and group participation, \( F(2, 103) = 2.23, p > .05 \), were not significant. However the interaction of sex and group participation yielded significance, \( F(2, 103) = 5.07, p = .008 \); see Figure 1.

The significant interaction was probed through the use of the Newman-Keuls test. The results of this analysis indicated that women involved in social clubs scored significantly higher than both women involved in athletics and women involved in no activities (\( p < .05 \)). Men involved in no activities had significantly higher self-esteem scores than women involved in athletics (\( p < .05 \)). The remaining comparisons were not significant.

**Aggression**

The total aggression score and the four separate aggression subcategories (i.e., physical, hostile, verbal, and anger) were analyzed separately.

**Total aggression.** The comparison between men (\( M = 74.10 \)) and women (\( M = 64.44 \)) was significant, \( F(1, 103) = 9.78, p = .002 \). However, the main effect for group participation, \( F(2, 103) = 1.01, p > .05 \), as well as the interaction effect, \( F(2, 103) = 1.05, p > .05 \), were nonsignificant.

**Physical aggression.** Once again, the comparison of men (\( M = 22.88 \)) and women (\( M = 17.11 \)) was significant, \( F(1, 103) = 18.86, p < .001 \), but the main effect of group participation, \( F(2, 103) = 1.18, p > .05 \), as well as the interaction effect, \( F(2, 103) = .88, p > .05 \), were not significant.

**Hostile aggression.** In this case, the main effect of sex, \( F(1, 103) = 1.63, p > .05 \), and the main effect
of group participation, \( F(2, 103) = .35, p > .05 \), were not significant. However, the interaction effect yielded significance, \( F(2, 103) = 3.98, p = .021 \); see Figure 2. The significant interaction effect was probed through the use of the Newman-Keuls test. The results of this analysis indicated that men involved in social clubs had significantly higher hostile aggression scores than did women involved in social clubs \( (p < .05) \). No other differences were significant.

**Verbal aggression.** The ANOVA for verbal aggression failed to yield significant results.

**Anger aggression.** The ANOVA for anger aggression failed to yield significant results.

**GPA**

The ANOVA for GPA failed to yield significant results.

**Discussion**

The results of the present study provide partial support for the initial hypothesis, which anticipated relations among social involvement, levels of self-esteem, academic performance, and aggression. As predicted, there is a significant relation between social involvement and self-esteem. However, this effect is based on sex. Women involved in social clubs have higher self-esteem than women involved in athletics, followed by those with no involvement in activities.

Surprisingly, men involved in athletics and social groups have lower self-esteem than men with no extracurricular involvement. This result shows that self-esteem scores vary according to both extracurricular activity involvement and sex.

These data stand in sharp contrast to the results of past research. Previous studies (Hamachek, 1995; Holland & Andre, 1987; R. E. Phillips, 1969) have made little or no mention of differences between the sexes in relation to extracurricular activity involvement. Perhaps further studies could investigate the differences between which activities women and men choose to participate in, as well as the effects the activities seem to have on the participants' levels of self-esteem.

Contrary to our initial hypothesis, we found no significant relation between academic performance (GPA) and involvement in extracurricular activities. We also found no relation between sex and GPA. Perhaps a student's overall GPA is not the best indicator of academic success in college. In fact, previous studies (Anderhalter, 1962; Stricker, Rock, Burton, Muraki, & Jirele, 1994) reported problems with the reliability and validity of GPA as a criterion of academic success. Juola (1968) found that GPA is not comparable for students who take classes with high grading standards and those who take classes with very lenient standards. Other potentially more sensitive barometers of academic performance might include class attendance or the number of hours spent studying each week. Also, most previous research (Jenkins, 1996; McNeal, 1995) has focused on high school students and their involvement in extracurricular activities. Possibly, at the collegiate level, activities are not such an integral component of an individual's self-esteem and work ethic. Level of self-esteem and level of academic aspiration may be established in high school and therefore may not be effected by activity level in college.

Because the results of our study showed no relation based exclusively on participation in activities and levels of aggression, the element of our hypothesis which dealt with aggression was not supported. Only
total aggression and physical aggression scores varied according to sex; they had no relationship to extracurricular activity involvement. However, the analysis of hostile aggression scores indicated an interaction between sex and activity. Women involved in social groups reported the lowest hostile aggression. In contrast, men in social clubs possessed the highest hostile aggression levels. Scores for anger and verbal aggression were not related to sex, participation in activities, or their interaction.

In summary, the present research considers the basic components of the relations between extracurricular activities, self-esteem, academic achievement, and aggression. The results of this study indicate that women's self-esteem levels and men's hostile aggression levels are both significantly increased when involved in social clubs. However, academic achievement is not significantly effected by involvement in athletics or social clubs.

The opportunities for further research in this area are numerous. For instance, variables such as class attendance, student classification, and number of hours devoted to activities per week (as a measure of level of involvement) could be gathered, analyzed, and compared to levels of self-esteem, aggression, and overall GPA. Participants in future studies could also be asked for information regarding their duties in different social clubs and positions on various athletic teams. Perhaps having a leadership role in a club or sports team may have a significant effect on a student's level of self-esteem, aggression, or overall GPA. Further investigations of variables such as these may yield a more complete picture of the possible effects extracurricular activities have on college students.

References


