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Innovations in Research and Scholarship Features

# The Relationship Between Engagement in Cocurricular Activities and Academic Performance: Exploring Gender Differences

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*The effects of time spent in cocurricular activities on academic performance was tested. A curvilinear relationship between hours per week spent involved in cocurricular activities and grade point average was discovered such that a low amount of cocurricular involvement was beneficial to grades, while a high amount can potentially hurt academic performance in college students. Important gender differences were present such that very high involvement was particularly detrimental to men's academic performance.*

Many college students spend much of their time in clubs and organizations (DesJardins, McCall, Ott, & Kim, 2010). While research has been devoted to the benefits of being engaged in the college experience and participating in opportunities for involvement, there is limited information regarding the potential negative effects of over-involvement (Pascarella & Terenzini, 2005). These negative effects of time away from the classroom can include lower GPAs (Pike, Kuh, & Mass-McKinley, 2008).

Experiences outside the classroom not only play a crucial role in the development of college students (Pascarella & Terenzini, 2005) but can also impact academic performance (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). Astin (1984) theorized that what students gain from participation in curricular and cocurricular activities is related to the effort they put into those activities. Many studies have shown that involvement in cocurricular activities is beneficial in multiple domains (Astin, 1993; Chickering & Reiser, 1993; Kuh, 2003; Pascarella & Terenzini, 2005).

A limited number of studies have shown that some cocurricular involvement may not be beneficial to college success, or could potentially be harmful (Miller & Kerr, 2002; Furr & Elling, 2000). Studies of students with athletic scholarships show that involvement in athletics correlates with a lower GPA (Miller & Kerr, 2002;). Still others have suggested that after a certain number of hours per week of participation in student activities, there is a decline in grade point average (GPA) (Kuh et al. 2008).

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We sought to examine how many hours per week students spent engaging in campus activities as it relates to GPA while exploring the effects of gender. Research has shown that some variables have curvilinear relationships, meaning that there could be essentially a bell-shaped curve of impact with low effects at the beginning and end of a continuum with stronger effects in the middle. Moderate levels of stress among college students tends to correlate with higher levels of task performance, while lower and higher levels tends to lead to performance decrements (Keeley, Zayac, & Correia, 2008). We sought to determine whether this curvilinear pattern was also evident with number of hours per week spent in student activities and GPA. Given our interest in determining whether there were gender differences in how different levels of involvement in student organizations affected student performance, we analyzed the relationship between several levels of students' weekly time spent in cocurricular activities.

## Review of Literature

### Student Engagement

In his student involvement theory, Astin (1984) attempted to bring together a vast number of other theories on student learning and propose that involvement in out-of-classroom experiences is beneficial to student development. Astin theorized that what students gained from their involvement was directly related to the amount they invested. Students who spent more time studying were more likely to do better academically. He theorized that different developmental outcomes could be reached through different forms of involvement.

In a longitudinal study, Astin (1993) examined how different forms of involvement impact student development in college. Astin found that students who participated in clubs and organizations showed an increase in both leadership and interpersonal skills. Astin's (2009) research on involvement was later extended by research on the concept of student engagement, led by Kuh and his colleagues. Kuh (2009) noted that when students engage in a variety of high-impact practices, college outcomes are enhanced and that student engagement can close some of the gap in college completion created by lower family income and educational background differences.

Research has shown that student engagement is linked to both GPA (Carini, Kuh, & Klein, 2006; Gordon, Ludlum, & Hoey, 2008; Kuh et al., 2008), and critical thinking skills (Pike, 2004). Student engagement is influenced by a number of environmental factors including students' involvement on campus (Astin, 1999; Kuh, Hu, & Vesper, 2000) and student/faculty interaction (Pascarella & Terenzini, 2005). When students engage in a wide variety of activities, valuable skill building occurs (Kuh, 1995; Kuh & Lund, 1994). Participation in student government has been shown to be beneficial to students in helping develop time management skills (Kuh & Lund, 1994). Studying led to a higher level of academic achievement (Kuh, 1995). Other studies have shown that interaction with other students is beneficial to adjustment to college. In one such study, having friends in college was positively correlated with adjustment to the college environment. Students who remain close to their high school friends show more academic and adjustment difficulties (Swenson, Nordstrom, & Hiester, 2008). Asian and African American students enrolled at predominantly White institutions report that participating in ethnic student organizations help greatly in their adjustment to campus culture (Museus, 2008). Black, Hispanic, and Asian students who are involved in clubs and organizations also have significantly higher grades in college (Fischer, 2007). For these populations, engagement helps students feel integrated into the campus culture and then leads to academic benefits. Academic deficits experienced with the many hours of team-related involvement by scholarship athletes leads to less developed social identities outside of their teams. Scholars theorize that athletes are missing a crucial part of their identity development as a result of their limited interaction with students outside of their sports (Miller & Kerr, 2002).



## GPA

There is a great deal of research on college GPA, both regarding its predictors and its use as an outcome variable. Some of the factors that predict GPA are relatively obvious, for example, class attendance (Conard, 2006). Other predictors of GPA include academic discipline, conscientiousness, and emotional control (Conard, 2006; Noftle & Robins, 2007; Robins, Allen, Casillas, Peterson, & Lee, 2006; Tross, Harper, Osher, & Kneidinger, 2000). Academic self-efficacy also predicts GPA but only after one semester of college (Gore, 2006). When students enter college, they have unrealistic expectations of their academic fitness; however, after one semester, they gain more realistic expectations.

Scholars have studied the impact of paid employment and engagement in cocurricular activities on college GPA. Regarding employment, research has shown that time spent at a job impacts cognitive development. One study (Furr & Elling, 2000) found that having an on-campus job has a positive impact on the cognitive development of students so long as they work 15 hours or less. Students who work on campus are also more likely to be involved on campus and to interact with faculty. After 15 hours, the level of cognitive development was negatively impacted by work (Furr & Elling, 2000). This finding begins to suggest that a curvilinear relationship in number of hours of involvement outside the classroom with an outcome variable, such as GPA, may exist.

Supporting this possibility is research showing that when the GPAs of students who work on or off campus for 20 hours or more versus those who do not work, the highest GPAs are reported by National Survey of Student Engagement (NSSE) respondents who work on campus for up to 20 hours, followed by those who do not have paid employment (Pike et al., 2008). This variability in GPA based on work hours could be because those who work on campus tend to be more involved on campus (Furr & Elling, 2000). Those students who worked more than 20 hours a week were also more likely to be at risk for poor academics than their peers, an additional factor that could be partly responsible for lower GPAs (Pike et al., 2008).

Analysis of NSSE data suggests that participation in cocurricular activities may lead to a decrease in academic performance. Analyzing data from the 18 institutions that participated in the NSSE research showed that for first-year students, participation in more than 5 hours in cocurricular activities was correlated with a decrease in GPA (Kuh et al., 2008). Yet, more was not known from this study regarding a possible curvilinear relationship.

Some research supports the contention that higher levels of student engagement are associated with higher GPAs. Leaders in student organizations have the highest GPAs, followed by members, followed lastly by those who are not members (Hawkins, 2010), paralleling research showing the psychosocial benefit of engagement in student organizations (Foubert & Grainger, 2006). Other research has found that the number of hours per week engaged in online social networking has a negative relationship with GPA, while studying and doing coursework was, not surprisingly, positively correlated (Hyatt, 2011).

The effects of being in a fraternity or sorority on GPA have been inconsistent for over 40 years (Feldman & Newcomb, 1969; Long, 2012). Some research has shown Greek involvement to lead to a decrement in GPA (Astin, 1993; Grubb, 2006). A recent study found that senior members experience a small but significant decrement in GPA relative to unaffiliated students, though no such difference existed for first-year students (Asel, Seifert, & Pascarella, 2009). Still other studies report no effect of fraternity and sorority involvement on GPA (Nelson, Halperin, Wasserman, Smith, & Graham, 2006; Pugh & Chamberlain, 1977). Two recent studies find higher GPAs among fraternity and sorority members (DeBard & Sacks, 2011; Long, 2012). Little is known consistently or conclusively about the effects of involvement in fraternities and sororities on GPA.

College GPA has been used as a college outcome measure of academic achievement in a wide variety of studies (Kuh et al., 2008; Gordon, Ludlum, & Hoey, 2008; Carini, Kuh, & Klein 2006). GPA is also attractive given that a certain level of GPA is required at virtually every institution for graduation (Cabrera, Burkum, & LaNasa, 2005). GPA is a critical component of the application process for graduate school and is often used in the employment process (Allen, Robbins, Casillas, & Oh, 2008; Carini, Kuh, & Klein, 2006; Pascarella & Terenzini, 2005). Finally, GPA has been found to be one of the best predictors of college persistence and degree completion (Cabrera, Burkum, & LaNasa; 2005; Pascarella & Terenzini, 2005). We chose GPA as an outcome variable for several reasons. First, GPA is an objective measure that is much less susceptible to an individual's self-perception. Perceptions are subject to being inaccurate, because how one perceives oneself may differ from reality (Wagerman & Funder, 2007). The selection of GPA as an outcome variable greatly reduces self-perception as a factor influencing the validity of student's reported achievement. The only validity problem with reporting GPA would be if a student inaccurately remembers or records their GPA. Second, a meta-analysis of studies of student engagement and academic success found that most used GPA as an outcome measure of academic success (Robbins, Lauver, Le, David, Langley, & Carlstom, 2004). Academic engagement has been found to be a powerful predictor of degree attainment, GPA, and time to degree (Svanum & Bigatti, 2009).

### **Gender Differences**

Extensive research has shown many gender differences between college students in a variety of areas (Baxter-Magolda, 2001; Chickering & Reisser, 1993; Mayhew, Siefert, & Pascarella, 2012). When examining gender differences, noting that there are areas in which men and women do not differ is important. Aspirations for careers in law and medicine are now equal, where they had formerly been male dominated (Sax & Arms, 2006). Though some may think that men are more mathematically inclined, a meta-analysis of over 200 studies comparing men and women in math from 1990–2007 found that they perform equally (Lindberg, Hyde, Petersen, & Linn, 2010). Equal performance by men and women in math is the case in both high school and college (Cheryan, 2012). There are some areas where women are outperforming men. Men have lower GPAs, credits earned, and are less likely to graduate than women (Conger & Long, 2010).

College men and women also have different styles of learning and knowing (Baxter-Magolda, 2001). The gender difference in ways of knowing coincides with different overall GPAs by men and women (Conger & Long, 2010). In a major study of gender differences involving thousands of students on over 200 campuses, women had higher GPAs and were also higher on feeling overwhelmed with their responsibilities (Sax & Harper, 2007).

### **Research Questions**

Several studies have shown some relationship between involvement outside the classroom and GPA. Consistency in results remains somewhat elusive. Research in other domains, for example cognitive development, has shown that curvilinear relationships between variables can be a source of their complex relationship. When studying students who hold jobs, research has shown that working while in school has a curvilinear relationship with cognitive development (Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1998). Given the similarity between cognition and GPA (Pascarella & Terenzini, 2005), we hypothesized that a curvilinear relationship might also exist between involvement and GPA. In the present study we sought to explore whether there were gender differences in the effects of several different levels of involvement in clubs and organizations on GPAs. We paid particular attention to the direction and potential curvilinear nature of such relationships.

We sought to answer the following research questions.

**Research Question 1:** Do successively higher numbers of hours per week involved in cocurricular activities have a significant relationship with undergraduate GPA?

**Research Question 2:** Will men and women differ in the pattern of their relationship between involvement and GPA?

## Method

### Participants

Participants in this study consisted of a 20% random sample of the respondents from the 2006 NSSE. The 51,874 students sampled for this study were from institutions throughout the United States. The 2006 NSSE data set consisted of 50% first-year students and 50% seniors. The sample of the data set utilized in the present study was 50.5% freshman and 49.5% senior. Additionally, respondents for the whole 2006 NSSE data set were 36% male and 64% female. The respondents in this study were 35.9% male and 64.1% female. Our sample included 43% were 19 or younger, 39% were 20–23 years old, 9% were 24–29 and 10% of students were 30 and over. Additionally, 75% of this sample were Caucasian, 7% were African American, 4% Asian/Pacific Islander, 5% Hispanic and the remaining 8% were other and from unknown backgrounds.

### Measures

The National Survey on Student Engagement is a measure including 42 items related to five scales and 15 demographic items. The five scales measure level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experiences, and supportive campus environment (Center for Postsecondary Research, 2006). Concurrent validity of the NSSE was shown by correlations with scales of the Wabash National Study of Liberal Arts Education. The Enriching Educational Experiences scale of the NSSE data correlated significantly with Effective Reasoning and Problem Solving ( $r = .44$ ), Moral Character ( $r = .44$ ) and the Intercultural Effectiveness scale ( $r = .57$ ) correlated with the Openness to Diversity/Challenge scale ( $r = .41$ ) scales of the Wabash study (Pascarella, Seifert & Blaich, 2010). Reliability for the sample used for the NSSE data provided for the present study as determined by Cronbach's alpha was .91. Some questions about the validity of the NSSE have been raised by recent studies, as discussed in our limitations section (Campbell & Cabrera, 2011; Porter, 2011).

**Involvement in cocurricular activities.** Involvement in Cocurricular Activities was derived from a question "About how many hours do you spend in a typical 7-day week doing each of the following: Participating in cocurricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)?" Respondents were given 8 choices on an ordinal scale representing different ranges of hours spent in cocurricular activities: 0, 1–5, 6–10, 11–15, 16–20, 21–25, 26–30, more than 30 (Center for Postsecondary Research, 2005).

**Academic performance.** Academic performance was measured through the question "What have most of your grades been up to now at this institution?" Respondents were given the choices of *A*, *A-*, *B+*, *B*, *B-*, *C+*, *C*, and *C-* or lower. For the purpose of this study, these responses were converted into a GPA on a 4.0 scale. *A* became 4.0, *A-* became 3.67, *B+* became 3.33, *B* became 3.0, *B-* became 2.67, *C+* became 2.33, *C* became 2.0, and *C-* or lower, became 1.67 (Breland, 1975; Center for Postsecondary Research, 2005).

## Design

Given our interest in measuring the differences between the various levels of involvement and GPA and to determine whether this interacted with gender, we used a factorial analysis of variance. Next, we followed up with one-way analyses of variance (ANOVA) procedures for men and for women to determine the linearity of this relationship. We graphed academic performance against hours spent in cocurricular activities to further explore this relationship. Linearity of the relationships between the variables was determined by examining the shape of the graphs. Because of the large sample size, we set our alpha level at .01.

## Limitations

One of the major limitations of this study is that participants' type of involvement is not clear. This study only looks at overall involvement, not how different types of involvement impact students differently. From the literature, it is clear that involvement in intercollegiate sports has a different impact on students than involvement in fraternities and sororities (Asel et al. 2009; Pike, 2004; Richards & Aries, 1999). Given the fixed format of the NSSE, we were not able to control for hours worked in employment, which could have interacted with the number of hours involved in other activities outside the classroom. Another limitation of our study is the measurement of academic performance. The question on the NSSE, "What have most of your grades been at this institution up till now?," that relates to academic performance only allows for an estimation of academic performance, as it does not ask directly for GPA.

A senior might report most of their grades as being *B+s*, but they received a number of *F*s as first-year students. In this study, they would be treated as a 3.33, even though their actual GPA might be lower than this. The academic performance variable may be inaccurate. This raises further questions about the problem of self-reported data more generally, which can plague all survey research (Gall, Gall, & Borg, 2006). Previous studies have utilized the GPA variable as collected in the present study successfully as a determination for academic performance (Pike, Kuh, & Massa-McKinley, 2008).

Another limitation of this study is the use of the NSSE itself. Critics and supporters of the NSSE agree that it is both widely used and implemented by well-respected scholars (Olivas, 2011). Despite substantial data on the reliability and validity of the NSSE offered by authors of the NSSE (Kuh, 2003), there is a great deal of evidence for the lack of validity of the NSSE (Gordon, Ludlum, & Hoey, 2008; LaNasa, Cabrera, & Tangsrud, 2009; Porter, 2011). Other concerns include the vague wording of questions and lack of replication of the reported dimensional structure of the instrument (Porter, 2011). Campbell and Cabrera (2011) found through a confirmatory factor analyses that the five-benchmark model proposed by NSSE researchers does not hold up. They also found poor alpha reliabilities, low factor loadings, and a particularly troublesome amount of error (Campbell & Cabrera, 2011). We maintain that despite these limitations, the NSSE is the most valid and reliable option available to measure student engagement currently, and that results from studies using the NSSE, including our own, are worth a serious look. These limitations should be kept in mind when considering the results of our study.

## Results

An ANOVA with hours in cocurricular activities as an independent variable and academic performance as a dependent variable revealed a statistically significant relationship,  $F(7, 46,274) = 31.286, p < .001$ . The relationship between the mean values of academic performance to each level of hours spent involved in cocurricular activities of the entire sample revealed a nonlinear relation-

ship (see Figure 1). Upon examination, the trends in this relationship can be seen to be curvilinear with a single peak. There was an initial increase from the 0 hour point to the 1–5 hour point. After this point, the trend is negative. By adjusting the scale, the means plot resembles more closely a curvilinear relationship with a single peak (see Figure 2). The scales were adjusted into five levels: 0 hours, or none; 1–10 hours, or light; 11–20 hours, or moderate; 21–30 hours, or heavy; 30 or more hours, or excessive. With this adjustment, we can see a clear single curve in the relationship. Looking at Figures 1 and 2 together, it appears that the optimal amount of involvement appears to be between 1 and 5 hours of activities with the next best level of involvement being between 6 and 10 hours of activities.

### Differences Between Men and Women

We used a factorial ANOVA to test the effects of gender (male, female) and cocurricular involvement (7 categories of hours per week) on academic performance. Results were statistically significant, showing differences between men and women,  $F(7, 46,266) = 4.758, p < .001$ . These differences can be seen graphically in Figure 3. For males, when comparing the mean values of academic performance to hours involved in cocurricular activities, a nonlinear relationship emerges. For females, the comparison of mean values of academic performance to time spent involved in cocurricular activities also produced a nonlinear relationship with a different pattern on over 30 hours per week of involvement.

According to the analysis, how cocurricular involvement impacts academic performance is significantly different for men and women. When the scale for hours involved is adjusted as in the previous section, the relationship for men is curvilinear in nature, with a single peak (Figure 4). Like the overall sample, this peak occurs at the 1–5 hour point on the unadjusted scale, and the 1–10 hour point on the adjusted scale. The major difference between men and the overall sample can be seen in the degree of fluctuations at different points. For men, the increase that occurs on the adjusted scale for men is smaller than the increase that occurs in the overall sample. The decrease for men is also larger than it is for the overall sample. Unlike the overall sample, men continue to decrease at each point after the 1–10 hour point, where the overall sample is relatively static from the 11–20 hour point and 21–30 hour point.

### Discussion

We sought to determine the effects of time spent in cocurricular activities on men's and women's grades. We found that time spent in cocurricular activities has essentially a curvilinear relationship with grades, particularly for men. Some participation in cocurricular activities is beneficial to academic performance for both men and women. As the number of hours students spent participating in activities moves past 10, their academic performance returns to nonparticipatory levels. Students whose level of involvement exceeds 30 hours per week experience a detrimental effect with their grades. It should be noted that these differences are relatively small in magnitude. While the change in grades may seem small, the difference between a 3.2 and a 3.3 can mean the difference between being on the Dean's List or graduating with honors at some institutions.

Analyzing the adjusted scale revealed no level of academic performance comes close to the initial increase that occurs from participating in 1 to 10 hours of cocurricular activities. In fact, participating in no activities is nearly the same as participating in 11 to 30 hours of cocurricular activities. Participating in more than 30 hours of cocurricular activities is detrimental to student academic performance. This relationship has similarities with the results found by Pike, Kuh, and Massa-McKinley (2008) in their study on how working on and off campus impacts academic per-

Figure 1. The relationship between number of hours per week spent in student organizations and GPA for entire sample.

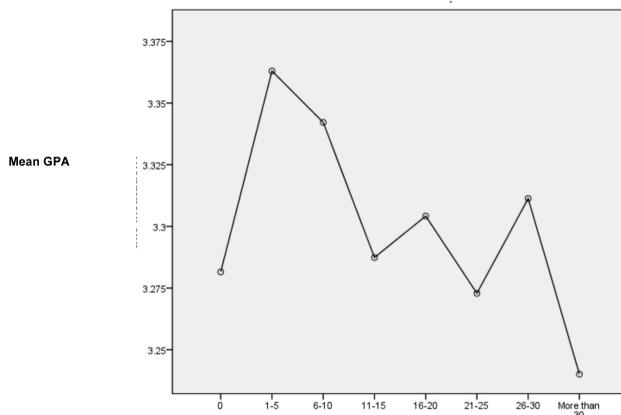


Figure 2. The relationship between number of hours per week spent in student organizations and GPA for entire sample (adjusted).

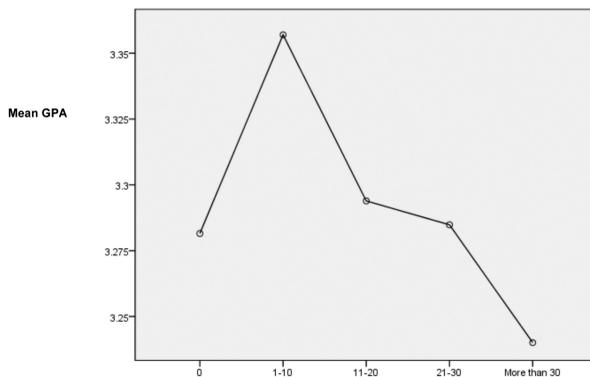




Figure 3. The relationship between number of hours per week spent in student organizations and GPA by sex.

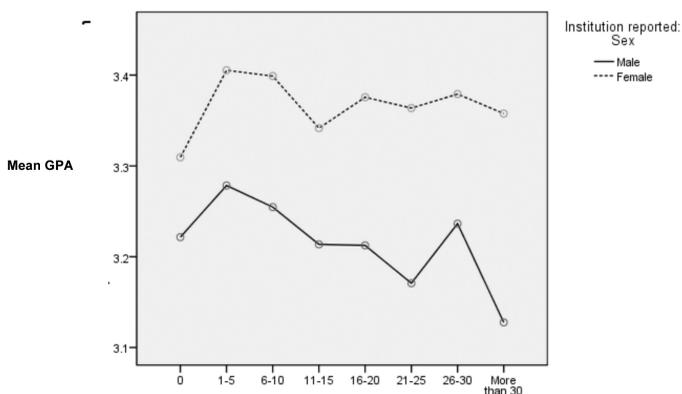
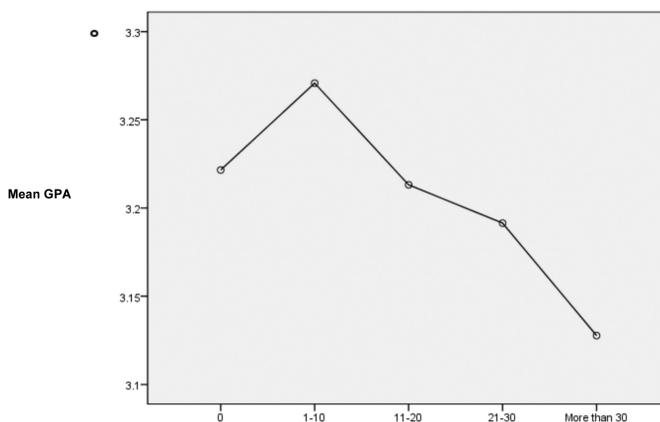


Figure 4. The relationship between number of hours men spend per week in student organizations and GPA (adjusted).



formance. Pike et al. (2008) also found a curvilinear relationship with academic performance depending upon time spent working a job. Students who worked between 1 and 20 hours performed better academically than students who worked 0 hours or more than 20 hours. Future research should examine the combined effect of work hours and hours spent in cocurricular activities on GPA, given that both have now been found to relate to GPA.

### **Differences Between Men and Women**

We found that men's academic performance improves with up to 10 hours per week of involvement in cocurricular activities. The decrease in men's GPA with higher levels of involvement, is what student affairs practitioners must be aware of in their work with students. From this study, it seems that men are more susceptible than women to become overwhelmed by their cocurricular involvement. Women, on the other hand, have their lowest level of academic performance at 0 hours of involvement. Women perform better academically at every other point, though their highest degree of academic performance occurs at the *1–5 hours* point on the unadjusted scale and *1–10 hours* point on the adjusted scale.

Women seem to perform better academically when they are involved in cocurricular activities. The GPA enhancing effect of involvement with women is different than any other demographic or the overall sample, in which after the initial increase, academic performance continues to decrease to a level below what it was at the 0 hours point. Women's GPAs do decrease after their initial increase, just not to the same degree as men. While both exhibit a curvilinear relationship, there are two important differences between men and women. The first is the overall level of academic performance. Women perform better than men academically. The second difference is the degree of decrease of academic performance. While men continue to decrease after the *1–5 hour* point, the academic performance of women levels out and doesn't decrease past what it was at *0 hours*. This disparity shows that student affairs practitioners must be cognizant of how hours spent in student organizations impacts the development of men and women differently.

### **Implications for Practice**

From the data it is clear that the time spent involved in cocurricular activities has an impact on how students perform academically. Participating in a light amount of activities (1–10 hours) produces a small increase in academic performance. Participating in a moderate to heavy amount (11–30 hours) might not be detrimental to academic performance but is also not as beneficial. Participating in an excessive amount of activities (more than 30 hours) shows that grades decline.

This research provides support for the importance of student clubs and organizations on college campuses. Student organization advisors should be aware of the time their students spend involved in cocurricular activities. Too much time in cocurricular activities may adversely affect the grades of those students, so student affairs practitioners should help students navigate their choices and the various levels of involvement.

We encourage student affairs practitioners to use the results of this study in their day-to-day conversations with students, especially those who are over-involved. Those who have sought a theoretical or research-based approach to such conversations in the past have been able to rely on the strong foundation Gilligan (1982) has set, noting the importance of making choices that serve self and others. Our study provides specific data that more than 30 hours per week of time in student activities leads to a decline in GPA. Such information can be shared with students so that they can make informed decisions about how to adjust their involvement to meet important life goals.

Administrators who speak to parents during orientation might also wish to cite our study as both a reason to get involved and a reason to limit involvement to a certain level. A conversation with a dean of students or director of orientation noting the association between 1–10 hours a week of involvement and increased GPA could allay parents' fears that their son or daughter might suffer a decrement in GPA with outside involvement. Parents can also learn that they should caution their children against higher forms of involvement, particularly above 30 hours per week.

One additional service student affairs divisions might seek to provide based on these findings is an involvement alert system, similar to an academic alert system used on some campuses that monitor early poor performance by students. As technological advances allow for more information to be known about student involvement levels, our databases can be used to estimate the number of hours per week that students are or are not involved. If programmed with estimates for hours per week it might take to accomplish officer positions in organizations, an automatic email might be sent to a responsible individual in the student affairs division with a list of all students whose involvement levels are over 30 hours per week. Conversations with these students could be had regarding their academic progress and the possibility that over-involvement may impede academic progress. For students with no involvement, letters might be sent to every student to encourage involvement for personal growth and academic success.

Different approaches can be taken with male and female students. With women, involvement of 1–10 hours can be especially encouraged. Talking with women about being cautious about higher levels of involvement is warranted given our results. Student affairs professionals can feel less urgency in their conversations with the average woman, given that the decline in GPA women experience with high involvement tends to be slight. Of course, cutting back on high involvement may also have other beneficial effects besides protecting a GPA, such as living a more balanced life. With male students, student affairs professionals should exercise particular caution. Our findings indicated a particularly sharp decline in GPA after 30 hours of men's involvement. Student affairs professionals and other educators should send strong messages to college men that over 30 hours of cocurricular activities are, generally speaking, detrimental to their education. This research shows that cocurricular activities have a valuable place in academia. At a time when student affairs divisions are being asked to cut back, noting that students involved in a light amount of activities perform better than students involved in no activities at all is important. In addition to the role our findings play in providing important information to students and parents, our findings help justify the importance of funding these activities in colleges and universities across the nation.

### Implications for Research

We were unable to examine the type of involvement (fraternity, athletics, service organizations) on GPA. Future research should examine the effects of involvement in different types and combinations of organizations to gauge whether the curvilinear pattern we found holds for different types of involvement. We also were limited in that the NSSE surveys first year and senior students. We encourage research on sophomore and junior students, particularly given that those are years in which much involvement tends to occur.

### Conclusion

This study demonstrates the curvilinear nature in the relationship between involvement and GPA, taking our understanding of the phenomena to a more complex level than previous studies have sought to explain. Student affairs practitioners should, therefore, be aware that the time

students spend participating in clubs and organizations may have a positive or negative impact on their grades, and be both willing and informed to help them make good choices.

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