Effects of Involvement in Clubs and Organizations on the Psychosocial Development of First-Year and Senior College Students

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Students at a midsized public university in the southeast completed the Student Development Task and Lifestyle Inventory at the beginning of their first year, beginning of their sophomore year, and end of their senior year. More involved students reported greater development in moving through autonomy toward interdependence and establishing and clarifying purpose. Uninvolved students had consistently lower developmental scores. Students who joined or led organizations reported more development than those who just attended a meeting.

Student involvement has long been studied as a statistically significant contributor to desirable outcomes of the college student experience (Astin, 1977, 1984, 1993, 1996; Moore, Lovell, McGann, & Wyrick, 1998; Terenzini, Pascarella, & Blimling, 1996). Astin defined student involvement as being characterized chiefly by two concepts: the

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amount of physical energy students exert and the amount of psychological energy they put into their college experience (Astin, 1984). The majority of available research has focused on how involvement contributes to students' cognitive development (Terenzini et al., 1996). Less is known about the contribution of involvement on psychosocial development, in particular the effects of increasingly more serious involvement, such as joining or leading an organization versus simply attending a meeting.

Some studies have explored how student involvement is defined; others explore different ways students become involved (Astin, 1984; Astin, 1993). Still others have examined specific contexts through which students become involved, such as residence life and on-campus employment (Gellen, 2003). Further research has explored the links between student involvement and different kinds of student development (Astin, 1996). Because various definitions of involvement and student development are used in the field, studies vary in their language and reach different, though not necessarily conflicting, conclusions (Hernandez, Hogan, Hathaway, & Lovell, 1999).

The present study examines the connections between students who have varying levels of involvement in student clubs and organizations and their psychosocial development along Chickering and Reisser's vectors (1993). We studied the role of involvement in clubs and organizations in students' psychosocial development after their first-year experience, by measuring their development just prior to the start of their sophomore year. We reassessed their development during the spring of their senior year, to gauge development over their entire college experience.

The most comprehensive and frequently cited theory of psychosocial development is the theory written by Chickering and Reisser (1993). Their theory described development as proceeding along seven vectors: developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, establishing and clarifying purpose, and developing integrity. Chickering and Reisser's theory is very highly regarded and has been praised for its practicality and ease of use (Evans, Forney, & Guido-Dibrito, 1999).

Longitudinal studies are particularly important in validating Chickering and Reisser's (1993) theory, given the assumption that the college experience brings about gradual development. A recent longitudinal study validated the assumption that developing purpose and competence are influenced by college experiences (Martin, 2000). Another longitudinal study has found evidence for continuous development along these vectors throughout students' college experience (Foubert, Nixon, Sisson, & Barnes, 2005).

Astin and the Roots of Student Involvement Theory

Astin's research and theory of involvement (1977, 1984) spurred many studies regarding student involvement in higher education. Not to be confused with the term "motivation," which refers primarily to a psychological state. Astin noted that involvement includes both physical and psychological energy. Although motivation is a necessary aspect of involvement. Astin asserted that the behavioral aspects of involvement, such as what an individual does and how she or he behaves, are also essential; this facet of involvement comprises the first point of Astin's involvement theory. The theory has four other basic ideas: (a) involvement occurs along a continuum; different students exhibit different levels of involvement in different activities at different times; (b) involvement has both quantitative aspects, how much time a student spends doing something, and qualitative aspects, how focused the student's time is; (c) the amount of personal development and learning that can occur is directly proportional to the quality and quantity of student involvement; and (d) the effectiveness of educational polices, practices, or programs is directly related to the policy, practice, or program's commitment to increasing student involvement (Astin, 1984, p. 298).

In his landmark book, What Matters in College? Four Critical Years Revisited, Astin (1993) addressed the impact that involvement in clubs and organizations has on students. He reported that elected student offices, public speaking ability, leadership abilities, and interpersonal skills have statistically significant correlations with hours per week spent participating in student clubs and organizations. Later, Astin (1996) found that the three most powerful forms of involvement are academic involvement, involvement with faculty, and involvement

with student peer groups. Astin stated that the strongest single source of influence on cognitive and affective development is a student's peer group; the greater the interaction with peers, the more favorable the outcome (p. 126). He proposed that the power of the peer group can be found in the capacity of peers to involve each other more intensely in experiences (p. 126). Interaction with peers has also been shown to contribute to seniors' growth in interpersonal competence, cognitive complexity, and humanitarianism (Kuh, 1995; Terenzini et al., 1996).

Some researchers have used the Student Development Task and Lifestyle Inventory (SDTLI) to study student development and involvement. The SDTLI instrument was developed to collect students' self-reported behaviors, attitudes, and opinions on psychosocial topics that specifically relate to Chickering and Reisser's theory, particularly establishing and clarifying purpose, developing mature interpersonal relationships, and academic autonomy (Martin, 2000). Studies that have used the SDTLI (Cooper, Healy, & Simpson, 1994; Martin, 2000; Stanford, 1992; Williams & Winston, 1985) are particularly relevant to the present study because they too explore student development in relation to involvement in student organizations and leadership positions during college.

Involvement in clubs and organizations has been shown to correlate positively with several areas of psychosocial development. Specifically, college juniors who are members of student organizations score higher than nonmembers on such factors as educational involvement, career planning, lifestyle planning, cultural participation, and academic autonomy (Cooper et al., 1994).

Research has also shown that first-year students who join student organizations have higher scores on developing purpose than those who do not join (Cooper et al., 1994). In fact, the strongest association found thus far between involvement and psychosocial development is the positive connection between student involvement and establishing and clarifying purpose (Martin, 2000; Stanford, 1992).

Studies have also explored the effect of participation in clubs and organizations on students' development of mature interpersonal relationships. Researchers have hypothesized that participation in extracurric-

ular activities would be positively related to the development of competence and mature interpersonal relationships (Hood, 1984; Martin, 2000). Tests of this hypothesis, however, have yielded conflicting results. Some studies have concluded that students' participation extends their capacity for mature interpersonal relationships by increasing their tolerance of and acceptance for other people and by raising their self confidence (Abrahamowicz, 1988; Hood, 1984). Conversely, a more recent study found no statistically significant relationship between involvement in extracurricular activities and the development of mature interpersonal relationships (Martin, 2000). The difference in these results may be attributable to the sample population and study design in each case. Whereas the studies by Abrahamowicz (1988) and Hood (1984) involved relatively large sample sizes at large institutions, Martin (2000) studied 89 students, 90 percent of whom were Caucasian, attending a small, religiously affiliated private liberal arts college. The findings of Martin's study are therefore limited in their generalizability. Martin further suggested in her discussion that perhaps students filling out a questionnaire in a group meeting in the first week of their freshmen year were more likely to give both superficial and socially acceptable responses than seniors, who responded by mail (p. 302).

Being a leader in a student organization has been shown to be associated with higher levels of developing purpose, educational involvement, life management, and cultural participation (Cooper et al. 1994; Hernandez et al., 1999; Kuh, 1995). In addition, specific leadership responsibilities in an organization have been found to correlate positively with developmental gains in interpersonal competence, practical competence, cognitive complexity, and humanitarianism (Hernandez, 1999; Kuh, 1995, p. 129). Participants credited the tasks of leadership—planning, organizing, managing, and decision-making—with promoting growth among student leaders (Kuh, 1995).

Existing studies on involvement in higher education suggest that further research is needed on student participation in clubs and organizations, not because of what has already been discovered through research, but rather because of what has *not* been explored (Cooper et al., 1994). Many involvement studies have looked broadly at student participation in a variety of areas including residence life, employ-

ment, athletics, and extracurricular activities (Martin, 2000). Such overviews not only provide valuable information about higher education but also bring to light the need for additional research within these categories. Rather than focusing on "extracurricular activities," a term that encompasses many areas of campus life, researchers need to direct their investigations to identify the impact of specific types and levels of involvement (Gellin, 2003). Most current research addressing the connection between student involvement and student development does not specify how the level of students' involvement (being a member, a leader, founding an organization) affects developmental gains (Hernandez et al., 1999; Kuh, 1995; Terenizini et al., 1996). What are the developmental differences between a student who only attends a club's monthly meeting and a student who holds a leadership position in that organization?

The present study used a random sample of college students who completed the SDTLI at the beginning of their first-year, the beginning of their sophomore year, and at the end of their senior year in college. This method allowed for an assessment of the relationship between student involvement and development resulting from students' first-year experience and development resulting from the sum total of their college experience.

This study focused on a complex research question. Specifically, to what extent do varying levels of involvement in student clubs and organizations coincide with the development of students at the beginning of their sophomore year and the end of their senior year along three of Chickering and Reisser's vectors: moving through autonomy toward interdependence, developing mature interpersonal relationships, and establishing and clarifying purpose?

It was hypothesized that students who reported higher levels of involvement with student organizations would report greater levels of development for each testing occasion. In particular, it was hypothesized that students who occupied leadership roles would show greater development than students who were not members of organizations, who had only attended a meeting, or who were members of an organization but did not lead it.

Method

As part of a large-scale assessment project at a highly selective midsized public university in the southeast, a 4-year longitudinal study was conducted analyzing students' development along Chickering and Reisser's vectors (1993) over the course of their college careers. Students completed the SDTLI (Winston, Miller, & Prince, 1987) at the beginning of their first year, the beginning of their sophomore year, and at the end of their senior year. Given the focus of the present study, only data collected from the latter two administrations were used.

Participants

All participants were traditionally-aged college students (18–22), 40% of whom were men and 60% of whom were women. The racial background of participants was 79% Caucasian; 11% Asian American/Pacific Islander; 7% African American/Black; and 3% identified as "other," which includes Hispanic/Latino students. All participants lived in residence halls during their first year. Approximately half lived in residence halls their sophomore year and one-third during their senior year. Compared with the population from which the sample was drawn, women and Caucasian students were slightly overrepresented and African American students were slightly underrepresented in the final sample. All participants attended the same institution. Most students at this institution ranked in the top 10% of their high school class, had SAT scores at least one standard deviation above the mean, and are from middle to upper socioeconomic status homes.

Instrument

The SDTLI (Winston, Miller, & Prince, 1987) is a survey instrument based on Chickering's theory. It was developed using a factor analysis of items with an initial sample of 500 students from six colleges and universities; a confirmatory factor analysis with 1,100 students at 12 colleges and universities; and an additional confirmatory factor analysis, reliability analysis, and norm collection from 1,200 students across the United States and Canada.

The SDTLI measures development on three of Chickering and Reisser's vectors (1993). Several scales measure establishing and clarifying purpose, developing mature interpersonal relationships, and moving through autonomy toward interdependence. Each scale is composed of several subtasks. Establishing and clarifying purpose (alpha = .90) includes educational involvement (16 items, alpha = .75), career planning (19 items, alpha = .80), lifestyle planning (11 items, alpha = .62), life management (16 items, alpha = .69), and cultural participation (6 items, alpha = .45). Developing mature interpersonal relationships (alpha = .76) includes the subtasks of peer relationships (13 items, alpha = .75), tolerance (9 items, alpha = .55), and emotional autonomy (8 items, alpha = .55). Subscales of the moving through autonomy toward interdependence vector are academic autonomy (alpha = .70) and intimacy (alpha = .70) with 10 and 19 items, respectively. Test-retest reliability coefficients were .85 for establishing and clarifying purpose, .78 for mature interpersonal relationships, .79 for academic autonomy, and .84 for intimacy. Winston (1990) also reported evidence for validity in that subtasks correlate more highly with their assigned tasks than with other tasks. Winston found the purpose and mature interpersonal relationships scales to be independent of one another. Factor analysis confirmed the independence of the concepts measured. In addition, Winston (1990) reported statistically significant correlations with other instruments that measure similar concepts, such as the study skills and family independence scales from the College Student Questionnaire (Peterson, 1968 as cited in Winston, 1990), the Career Planning and Career Exploration Scales from the Career Development Inventory (Super, Thompson, Lindeman, Jordaan, & Myers, 1981 as cited in Winston, 1990), and the Values Scale (Super & Neville, 1985 as cited in Winston, 1990).

Sample

In August 1994, prior to their arrival on campus, a randomly selected sample of 600 incoming first-year students received a letter from the dean of students asking them to participate in a special study of the undergraduate experience. Students were asked to attend a voluntary meeting during a required week of orientation to complete the SDTLI and to continue with the study over the next 4 years. Of those students receiving letters, 407 (68%) agreed to participate and complet-

ed surveys with usable responses in the week before their first classes began. These students were invited to attend a testing session at the beginning of the sophomore year and at the end of their senior year. To standardize data collection, students had to attend these sessions for their surveys to be counted in the present study. Of those 407 students, 307 (75%) completed both the beginning of sophomore year and end of senior year data collection points, constituting the sample used for this study. Following the recommendations of Tabachnick and Fidell (1989), cases with missing data were not included in this final sample. Their recommendations were also followed by using a Multivariate Analysis of Variance (MANOVA) in a study where the statistical significance of group differences on multiple dependent variables was studied.

Results

The first MANOVA used sophomores' early fall semester level of involvement as a five-level independent variable (not a member of a club, attended a club meeting, joined a club, led a club, founded a club) and their psychosocial development as measured by the SDTLI scales as dependent variables. Multivariate statistical significance emerged with a Wilks Lambda of F(40, 1,112) = 1.71, p < .01, allowing exploration of univariate differences. No differences emerged for subscales of developing mature interpersonal relationships. Statistically significant univariate effects emerged for other all dependent variables measured (see Table 1). These included educational involvement F(4, 307) = 3.73, p < .01; career planning F(4, 307) =4.08, p < .01; lifestyle planning F(4, 307) = 3.01, p < .05; lifestyle management F(4, 307) = 4.39, p < .01, cultural participation F(4, 307)= 4.96, p =.001; academic autonomy F(4, 307) = 2.93, p <.05, and establishing and clarifying purpose F(4, 307) = 7.25, p < .001. In all of the aforementioned areas, students who were involved in student organizations by attending a meeting, joining, or leading an organization were more highly developed than those who were not involved at all in student organizations. In most areas, joining or leading an organization was associated with higher levels of development than just attending a meeting. There were no developmental differences, however, between joining and leading a student organization. In each case,

effect sizes were in the low range, indicating that despite better than chance differences, the effects of involvement were relatively small.

For the second analysis, a MANOVA using senior students' spring semester level of involvement as the five-level independent variable and their development on the SDTLI scales as dependent variables, multivariate statistical significance emerged with a Wilks Lambda of F(40, 1253) = 2.53, p < .001. Like the results for students after their freshman year, this finding allowed exploration of univariate differences (see Table 2). Statistically significant univariate effects emerged for five dependent variables. These included educational involvement F(4, 344) = 11.15, p < .001; career planning F(4, 344) = 6.67,p < 001; lifestyle management F(4, 344) = 11.18, p < .001; cultural participation F(4, 344) = 9.49, p < .001; and establishing and clarifying purpose F(4, 344) = 13.46, p < .001. By their senior year, students involved in clubs and organizations had statistically significant higher levels of development in establishing and clarifying purpose, educational involvement, career planning, lifestyle management, and cultural participation than they did at the beginning of their first-year and at the beginning of their sophomore year. In all of the aforementioned areas, students who were involved in student organizations by attending a meeting, joining, or leading an organization were more highly developed than those who were not involved at all in student organizations. In addition, joining or leading an organization was usually associated with higher levels of development than just attending a meeting. Like the earlier findings, for most areas there were no developmental differences between joining and leading a student organization. Again, effect sizes tended to be in the low range.

Discussion

Several things of note were discovered in the present study. First, there appears to be a strong connection between involvement in student organizations and higher levels of development on several indicators of psychosocial development. Enhanced development is apparent after students complete their first year of college and at the end of their college experience. Specifically, students with higher levels of involvement in student organizations reported greater levels of psychosocial development in the areas of establishing and clarifying purpose, edu-

Table 1
Mean Development Score by Level of Involvement at the Beginning of Students' Sophomore Year

Dependent Measure	0 No Club	1 Attend Meeting	2 Join Club/Org.	3 Lead Club/Org.	4 Founded Club/Org.
Academic Autonomy (a) M SD	5.1 2.8	5.0 2.8	5.8 2.6	6.2 2.6	7.1 2.3
Establishing and Clarifying Purpose (b) M SD	32.0 10.0	36.4 10.8	38.6 10.3	41.2 9.9	43.1 6.1
Educational Involvement (c) M SD	7.3 3.1	8.3 3.8	8.7 3.1	9.5 3.5	10.1 3.4
Career Planning (d) <i>M</i> <i>SD</i>	7.2 3.7	8.5 4.3	9.3 4.3	10.0 4.2	9.9 1.6
Lifestyle Planning (e) <i>M</i> <i>SD</i>	5.4 2.4	6.2 2.3	6.6 2.4	6.4 2.5	7.1 2.0
Lifestyle Management (f) <i>M</i> <i>SD</i>	9.1 3.3	10.0 2.9	10.4 2.9	11.1 2.6	12.1 1.4
Cultural Participation (g) <i>M</i> <i>SD</i>	2.9 1.6	3.4 1.4	3.6 1.4	4.1 1.1	3.9 1.5

Table 2
Mean Development Score by Level of Involvement at the End of Students' Senior Year

Dependent Measure	0 No Club	1 Attend Meeting	2 Join Club/Org.	3 Lead Club/Org.	4 Founded Club/Org.
Establishing and Clarifying Purpose (a) M SD	41.9 9.6	46.0 9.2	50.7 9.5	49.7 8.5	49.9 9.5
Educational Involvement (b) <i>M</i> <i>SD</i>	10.0 3.0	10.9 2.9	12.3 2.7	12.2 2.5	12.5 1.8
Career Planning (c) M SD	12.5 3.8	14.2 3.4	14.9 3.4	14.5 3.5	14.1 4.6
Life Management (d) M SD	9.8 2.7	10.6 3.2	12.1 2.6	11.7 2.6	12.5 2.7
Cultural Participation (e) M SD	3.2 1.3	3.7 1.4	4.2 1.2	4.2 1.3	3.9 1.3

⁽a) Significant Difference between 0–1, 0–2, 0–3, 0–4, 1–2 at p < .01; Significant Difference between 1–3 at p < .05. Effect size = .14

⁽b) Significant Difference between 0–2, 0–3, 0–4, 1–2, 1–3 at p < .01; Significant Difference between 0–1 at p < .05. Effect size = .12

⁽c) Significant Difference between 0–1, 0–2, 0–3 at p < .001. Effect size = .07

⁽d) Significant Difference between 0–2, 0–3 at p < .01. Significant Difference between 0–4 at p < .05. Effect size = .12

⁽e) Significant difference between 0–2, 0–3 at p < .001. Significant difference between 1–2 at p < .01. Significant difference between 0–1, 1–3 at p < .05. Effect size = .10.

cational involvement, career planning, life management, and cultural participation. This relationship between involvement and development was statistically significant both after students' first year in college and at the end of their senior year.

Unlike seniors, more involved students tested at the beginning of their sophomore year also reported statistically significant greater development in their academic autonomy and their lifestyle planning than less involved students. This finding suggests that greater levels of student involvement may have particularly powerful effects on development early in the college experience. However, one must carefully weigh the low effect sizes when interpreting the present findings. Although several areas of difference emerged beyond chance levels, all differences were in the low range, suggesting minimal to moderate effects of involvement at best.

It is worth noting that the areas of development experienced by those tested at the beginning of their sophomore year were in two of Chickering and Reisser's vectors—moving through autonomy toward interdependence and establishing and clarifying purpose. The development experienced by seniors was all in the establishing and clarifying purpose area. On the one hand, the present study's findings are consistent with Chickering and Reisser's theory that developmental growth for involved seniors would be in a later vector, establishing and clarifying purpose. Present findings are also consistent with the theory in that students who had been involved during their first year would experience growth in an earlier vector, moving through autonomy toward interdependence. What is inconsistent with the theory is the finding that there was growth in establishing and clarifying purpose reported by students at the beginning of their sophomore year relative to the beginning of their first-year. This finding suggests the need for further research on when development on the different vectors tends to occur among students and what it is that affects that development most.

Another finding of particular interest was that in each area where developmental differences emerged, there were statistically significant differences between students who reported no involvement in student organizations and those who either attended a meeting, joined an organization, or led one. Not surprisingly students who either joined

or led an organization tended to have higher levels of development than those who just attended a meeting. The presumed developmental benefit of taking on a leadership role, however, was seen only in sophomores in the area of cultural participation. In all other cases, leading versus joining an organization did not have a statistically significant developmental benefit.

This lack of a statistically significant difference between leadership and membership may have something to do with the developmental variables measured, or more importantly, those not measured. Earlier research has reported that students who hold leadership positions show developmental benefits in the areas of humanitarian values and civic involvement—areas of development not measured in the present study (Hernandez et al., 1999). Like the present study, earlier research found a higher level of cultural participation among student leaders than nonleaders (Cooper et al., 1994). Unlike the present study, however, earlier research found that students in leadership positions in student organizations had statistically significant higher scores than nonleaders on developing purpose, educational involvement, and life management (Cooper et al., 1994). One difference in these studies was the point at which measurements were taken. The present study focused on measures at the end of the first year and the end of the college experience, whereas Cooper et al. (1994) assessed juniors. It could be that the benefits of leadership experiences are most influential during students' junior year, and that by the time students are in their senior year, these differences are no longer evident. It could also be that findings were affected by institutional differences between the sample studied by Cooper and the sample tested in the present study. Future research with students from multiple campuses assessed during each year of the college experience would clarify these discrepancies.

It is unclear from the present study whether involvement in student organizations causes development, or whether they merely coincide. Is it the highly developed student who is also more likely to seek out involvement, or does involvement provide the experience necessary for development to occur? Future research should explore this topic to clarify this perplexing matter. Although it would be difficult to manipulate involvement experimentally, qualitative research could begin to explore the meaning behind connections in this area.

Limitations

The findings of the present study should be considered in light of its limitations. The fact that all participants attended the same institution limits the generalizability of the present findings. It could be that the environmental factors at the institution where data were collected coincided with growth on the developing purpose vector in ways that would not occur at other institutions. For this reason it is particularly important for the findings to be replicated in a different setting before applying them too broadly. In addition, subject attrition was an issue of concern. Although over half of the initial random sample completed the measures on each occasion analyzed in the present study, these students may have differed in substantive ways from those who chose not to participate.

The persistence of the participants who completed all measures in this study suggests that they were both involved and motivated students. Their persistence may explain some portion of the findings. Therefore, self-selection bias should be considered a limitation of this study. Furthermore, although a random sample was used, the present study was not experimental in nature in that it did not randomly assign students to leadership, membership, or noninvolvement categories. Such is the nature with the kind of research where student choices cannot be randomly assigned. To improve on the present study, a quasi-experimental study could add further validity to research findings.

Conclusion

Ultimately, it seems that involvement in student organizations has a strong association with psychosocial development, particularly on students' establishing and clarifying purpose, educational involvement, career planning, life management, and cultural participation. Although this relationship may be either unidirectional or mutually reinforcing, it is evident that students who are involved in clubs and organizations during their college experience are also those who demonstrate higher levels of development in many areas. This finding reinforces the necessity of making such opportunities widely available on the college campus. Thus, a clear implication of this study is that student affairs professionals should work to create meaningful involvement opportunities for students, and should encourage them

to join student organizations as a way to promote modest gains in development.

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