

***Journal of the Indiana University
Student Personnel Association***
2002 Edition

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INDIANA UNIVERSITY STUDENT PERSONNEL ASSOCIATION

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2002 Awards and Honors

Congratulations to these members of the Indiana University family on the following recognitions:

Gregory Roberts	Elizabeth A. Greenleaf Distinguished Alumni
Victor Boschini	Robert H. Shaffer Distinguished Alumni Award
Denise Easley	Elizabeth A. Greenleaf Fellowship Award
Jennifer Komrosky	Elizabeth A. Greenleaf Fellowship Award
Kathleen Boyle	August and Ann Eberle Fellowship Award
Carla Morelon	Robert H. Wade II Fellowship
Steve Akers	Kate Hevner Mueller Award
Auden Thomas	Holmstedt Fellowship
JoAnne Bunnage	Holmstedt Fellowship

Call for Nominations

Nominations of individuals for the 2003 Elizabeth A. Greenleaf and Robert H. Shaffer Distinguished Alumni Awards are now being accepted. The Greenleaf Award is presented annually to the graduate of the master's degree program in Higher Education and Student Affairs who exemplifies "the sincere commitment, professional leadership and personal warmth" of Betty Greenleaf, for whom the award is named. Previous Greenleaf Award recipients include Louis Stamatakos, Phyllis Mable, James Lyons, Paula Rooney, Joanne Trow, Carol Cummins-Collier, Thomas Miller, Frank Ardaiolo, Deborah Hunter, Vernon Wall, William Bryan, Terry Williams, Marilyn McEwen, Gregory Blimling, Lawrence Miltenberger, and Jamie Washington.

The Robert H. Shaffer Award is presented to the graduate of the Indiana University Higher Education doctoral program who exemplifies outstanding service to the student affairs profession. Previous Shaffer Award recipients include L. "Sandy" McLean, Thomas Hennessy, Jimmy Lewis Ross, Robert Ackerman, Don G. Creamer, Nell Bailey, Alice Manicur, Rodger Summers, Caryl Smith, and Donald Mikesell.

Nominations for both awards close February 1, 2003. The awards will be presented at the 2003 NASPA and ACPA conferences. Please direct your nominations and supporting materials (e.g., vita) to Mary Howard-Hamilton, W.W. Wright Education Building, Room 4228, 201 N. Rose Avenue, Indiana University, Bloomington, IN 47405. Thank you.

Editors' Comments

Drew Griffin, Victoria Pasternak

Welcome to the 2002 edition of the Journal of the Indiana University Student Personnel Association. Continuing with the tradition of excellence and a strong commitment to student affairs, this year's edition reflects the quality of writing and the caliber of students that the HESA program produces.

The selections found in this year's journal cover a variety of issues within student affairs. "Academic Support Center Environment" addresses the stresses and rigors of undergraduate academics and provides insight into alleviating students' fears. "FIGS: A Comparative Study" studied different freshmen learning environments and the positive impact of such situations. "College Student Organizations and the Effects of Participation: A Review of Recent Literature" presents readers with recent data and information on the effects and benefits of student participation in student organizations. "Indiana University: A Model for Coeducation" provides a historical look at our campus and the standard it set for higher education institutions everywhere. "Predicting Faculty-Student Interaction: An Analysis of New Student Expectations" utilizes data from the College Student Expectations Questionnaire (CSXQ) as a way to help explain expected levels of participation between faculty and new undergraduate students.

It is important to recognize Jillian Kinzie for her support and guidance, not only with the Journal, but also with all Master's students with whom she has touched in one way or another. Jillian, we appreciate you more than you know, and wish you much happiness in your future endeavors. At the same time, we would also like to extend thanks to Monica Halcomb for her continued support and hard work within the HESA department, Chris Heasley for his artistic talents on the cover of this year's journal and Jennifer Komrosky for her help with fine tuning the final version of edits to the journal.

We also would like to take this opportunity to welcome Kate Boyle to the HESA family as the new Coordinator for the program. We appreciate your guidance and advice thus far, and look forward to working with you in the future. Additionally, we would like to recognize and thank the Higher Education and Student Affairs program alumni and friends for their generosity and support over the past years. With-

out their support, we would be unable to provide this type of service to our readers.

Finally, we would like to thank those Master's students who served on the Journal Review Board. Without their hard work and dedicated efforts, the success of this Journal would not have been possible. Again, we thank you and appreciate your professionalism and sincerity throughout the review process.

We hope that you enjoy this edition of the Journal, and that you continue to support and contribute to the Journal, the Indiana University Student Personnel Association, and to Indiana University.

Drew Griffin graduated from Indiana University Bloomington with a M.S. in Higher Education and Student Affairs. He received his B.S. in Mass Communication from Southeast Missouri State University in 2000. His assistantship was with the Division of Residential Programs and Services. While at IU, Drew also completed practicum opportunities within the Office of Enrollment Services and the Office of Admissions.

Vicky Pasternak will graduate with a M.S. in Higher Education and Student Affairs from Indiana University in 2003. While at IU, Vicky held an assistantship as a Graduate Supervisor in the Wright Quadrangle. Vicky also worked in the Office of Student Ethics as a judicial officer and taught an undergraduate course through the Student Academic Center. Vicky received her B.A. in Communication Studies in 1998 from Marquette University.

State of the Program

Jillian Kinzie

Master's Program Coordinator

Greetings from Bloomington! Spring has arrived, the Little 5 riders are gearing up for the big race, trees are in bloom, and our graduating students have been happily announcing their success in their job search processes!

The HESA program has enjoyed another year preparing talented young professionals in student affairs. It has also been a year of taking stock. The HESA faculty have undertaken a vision and planning process. Based on the assessment process, a vision statement and summary assessment have been developed to provide a basis for the planning phase. The faculty intend to implement some interesting new ideas to advance our goals of improving our preparation program and becoming a center for inquiry and reflective practice. At the same time, a sub-committee of master's students in IUSPA was equally engaged in a process of evaluating the master's curriculum. The students did an excellent job of identifying the strengths, weaknesses and areas for improvement in the program. We hope to see some of these ideas come to fruition in the near future.

Our faculty continue to be a strong asset for the program. Mary Howard Hamilton has eased into life in Bloomington and provided students with an exceptional course in student development theory. Mary and Kandace Hinton (who is teaching in the IUPUI program) collaborated on a grant through the office of the Vice President for Student Development and Diversity to enrich the multicultural education experiences and add visiting lecturers to the Diverse College Students course. Mary was also selected as the 2002 recipient of the Albert B. Hood Distinguished Graduate Award from the Student Development Program at the University of Iowa! The Council of Independent Colleges recognized George Kuh as one of its two annual award winners for distinction in academic leadership. George's Sonneborn Lecture from the fall on the theme of "College Students Today: Why We Can't Leave Serendipity to Chance" is available online at: www.broadcast.iu.edu/lectures/sonneborn2002/. George's work with the National Survey on Student Engagement continues to keep him engaged in helping institutions improve the quality of undergraduate education. Deborah Carter's book, *A Dream De-*

ferred? *Examining the Degree Aspirations of African American and White College Students* was published by Garland Press.

Deborah also has a chapter entitled: "College students' degree aspirations: a theoretical model and literature review with a focus on African American and Latino Students," published in the most recent *Higher Education: A Handbook of Theory and Research*.

Don Hossler continues in his role as Vice Chancellor for Enrollment Services. Don has had the opportunity to travel to distant lands, to the University of Alaska for a consulting project and recently to Moscow for an invited presentation as part of the IREX and Carnegie Foundation sponsored International Symposium on University Administration: Methods and Models. He also spent some time working with doctoral students on a project funded by the Lumina Foundation on Continuity and Change in College Choice. Bruce Jacobs and I co-taught C565 - College and University Administration again this year. Bruce's practical administrative experience helped enliven our discussions about higher education history and organizational theory. Bruce is doing some interesting work reorganizing Administrative Affairs (the areas that comprise Residential Programs and Services, the IMU, the Auditorium, Bookstore, Transportation Services-the Auxiliaries) at IUB, and will complete a strategic plan this spring. The key focus of this plan is the link between students and the learning process. Anyone interested in knowing more about the plan should contact Bruce Jacobs at jacobsb@indiana.edu. Our program chair, Ed St. John will take a sabbatical leave in 2002-03. His sabbatical proposal was on "Social Justice and Educational Opportunity: Rethinking Foundations for Policy and Practice." In addition to reading and thinking about this grand topic--his true intent during the leave--he will be also be conducting a study of financial access to higher education funded by the Lumina Foundation. Mary Howard-Hamilton will assume HESA program chair responsibilities this fall. More news of the program is available via our website at: <http://education.indiana.edu/~hesa/>.

Interest in the master's program in Student Affairs remains high as we continue to attract talented students from across the nation. The IUSPA Outreach team worked exceptionally hard again this year to introduce prospective students to the program via the two Outreach recruitment sessions in February. We expect a full class of talented students to join us in the fall. This year, we extended our outreach efforts by involving alumni as representatives at a couple of "grad prep

program fairs." If you are interested in volunteering to represent the program at a fair please let us know. As you well know, our alumni are really the most convincing recruiters for the program.

The production of the Journal is one of the hallmarks of our program. It makes a unique contribution to the professional development of our students as they take on roles as scholars and leaders in higher education. However, this opportunity is only made possible through the generous contributions of alumni and friends who designated that their donations to the annual fund drive go towards the IUSPA Journal. I encourage you to pledge your support to sustain this valuable professional development experience.

On behalf of the faculty, students and staff of the program, I thank you for your faithful contributions to the master's program through the financial gifts that make possible the publication of this Journal and through the referrals of talented prospective students that keep our program strong.

Faculty Advisors

Dr. Elizabeth Greenleaf	1960-1977
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Dr. George Kuh	1977-1982
Dr. John Schuh	1983-1987
Dr. Don Hossler	1987-1988
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Dr. George Kuh	1990-1996
Dr. Bruce Jacobs	1996-1997
Dr. Teresa Hall	1997-1998
Dr. Ada Simmons	1998-2000
Ms. Jillian Kinzie	2000-2002

FIGs: A Comparative Study of the Residential Component of Freshman Interest Groups

Helen Grace Correll, Allison K. Ragon, Sacha L. Thieme, and
Kathleen A. Wilburn

This study examines whether membership in a Freshman Interest Group (FIG) provides the same level of peer influence on academic and social integration when the residential component is absent, compared to FIGs that are residentially based. For the purposes of this study, academic integration is displayed through activities such as the formation of study groups, class attendance, and anticipated grade point average. Social integration is exhibited through such factors as friendships, emotional support from peers, college transition and campus involvement.

Introduction

College and university professionals aim to develop and engage students through the integration of curricular experiences with co-curricular activities (Carnegie Foundation for the Advancement of Teaching, 1990). Because students living on campus spend a majority of their time in a residential environment, residential programs and services are often viewed as a primary means to achieve this goal. One such program experiencing growing popularity and attention is the learning community. Traditionally, a residential learning community places students with similar interests or academic goals within the same residential unit. A recently popularized version of the learning community is the Freshman Interest Group (FIG).

Researchers in higher education have discussed the positive impact of FIGs on the academic and social integration of first-year college students (Tinto & Goodsell-Love, 1993; Pike, Berry, & Schroeder, 1997). A student's transition from high school to college in the first year can often serve as a predictor of whether or not they will persist through graduation (Hossler & Bean, 1990). Many postsecondary institutions, especially large, residential universities, have implemented a variety of programs whose sole purpose is promoting student retention and persistence beyond the first year. Because of their size, these institutions often struggle to help first-year students integrate academically and socially (Astin, 1993; Hossler & Bean, 1990).

Through his research on college impact, Astin (1993) developed a conceptual model for studying college student development. Astin's input-environment-output (I-E-O) model can be used to understand the effects of FIG membership on the development of first-year college students. Astin (1993) writes that inputs refer to the characteristics of the student at the time of initial entry to the institution. This suggests that all first-year students bring with them a variety of different backgrounds, which shape their approach to the college environment. In this study, the environment—the various programs, policies, faculty, peers, and educational experiences to which the student is exposed—was identified as the acts associated with FIG membership, such as attending class and living together. According to Astin (1993), outcome refers to the student's characteristics after exposure to the environment. For the purpose of this study the outcome measures were students' perceived levels of academic and social integration.

This report begins with a literature review containing past research pertinent to understanding the influence of FIG membership on first-year students. A methodology section, outlining the research methods used in this study follows. Finally, results are provided, which compare and contrast experiences of students belonging to residential and non-residential FIGs.

Literature Review

Residential Component

An examination of peer influence and the impact of the residential component on students' social and academic integration would not be complete without a discussion of the concept that students who live in residence halls have a more fulfilling college experience than those students who live off campus (Tinto, 1993). Residence halls are often designed with the intention of aiding in the development of the whole student. Strange (1993), describes a residence hall as "a group of individuals who live together, share common goals, and pursue common activities in a campus setting" (p.134). Fredriksen (1993) suggests a residence hall promotes students' intellectual, social, moral, and physical development. Blimling (1993) reports that students living in residence halls have a better college experience, are more involved, and are more likely to attain higher educational goals than those who do not live in residence halls. Blimling (1993) also states "the most powerful

influence operating in residence halls is the peer environment" (p. 290).

As Douvan (1981) writes, proximity, as experienced by residents within a residence hall, emerges as a major force in determining friendships during the first year of college. For instance, relationships established earlier in college stem primarily from where a student lives, instead of personality similarities or extra-curricular commonalities (Douvan, 1981). This suggests that the proximity provided by the residential FIG structure would have greater influence on the establishment of relationships by its members than would the structure of the non-residential FIG. Strange and Banning (2001) discuss the development of a community and state that it "may depend on the attraction of a critical mass of involved participants whose common interests create a momentum that becomes self-sustaining" (p.165). FIG membership stems from the same type of situation, as students who participate in a FIG share a variety of common interests beginning with the theme and growing through class participation and a common living environment.

According to Tinto (1993), the activities and interactions that take place in the residence halls can be considered among the many influential informal interactions that occur during college. Because these interactions are most often informal, students are more inclined to become integrated into the environment through everyday activities, such as interactions in the dining hall, study lounges, common areas, and on their residence hall floors. Love (1995) refers to these informal interactions as the indirect influences on a student during his or her college experience. Newcomb (1962) suggests peer groups are more likely to be found wherever local arrangements, such as dining or studying, result in very frequent associations among a given group. The different experience of FIG members living among each other, compared to those living in various locations across campus, demonstrates the different levels of influence institutional program structures can have on student integration. FIG membership provides another component to the benefits of the residential structure through shared academic involvement.

Academic Component

Historically in the educational culture of America, students were taught to study alone and that collaboration was unimportant to the learning environment (Lazar, 1995). Through numerous studies, Lazar (1995) found students grow through active discussion and face-to-face

interactions. According to Lazar (1995), these interactions offer students the opportunity to engage in social language and academic discourse. By engaging in group discussion, students acquire a myriad of skills, as well as grow academically and intellectually (Horn, 1997).

Pascarella, Terenzini, and Blimling (1996) state frequent out of class encounters with other students exert a positive influence on those students, both academically and socially. FIG membership is designed to specifically enhance the out of class encounters students have by way of academic support outside the classroom. Students who take the same classes together, as in the FIG structure, are more likely to share class notes, provide homework assistance (Tinto & Goodsell-Love, 1993), and encourage class attendance (Wilcox & delMas, 1997). Horn (1997) states students may find their best support among their peers and suggests student camaraderie and academic support produce higher grades and higher retention rates as a possible externality of FIG participation.

Research has shown that a student who performs well in the first year of college is more likely to maintain a high level of academic performance in the second year (Terenzini & Wright, 1987). Guiding students toward a more positive academic experience during their first year, thus increasing retention and grade point averages was one of the primary goals in the development of the FIG program. Students who are members of FIGs have higher credits earned and also somewhat higher GPAs according to Wilcox and delMas (1997). However, some research has indicated that participation in a FIG does not directly or indirectly enhance a student's academic achievement (Pike et al., 1997). Another contributing factor to the positive experience of FIG membership is connected to the social component of peer influence.

Social Component

Peer group influence is almost certain to be affected, for better or worse, if there is an overlap between membership in formal college activities and in living units (Newcomb, 1962). Peer groups in college are highly influential and responsible for much of the socialization and learning that occurs in the university environment (Hurtado, Milern, Clayton-Pedersen, & Allen, 1999). As Newcomb (1962) points out, the more homogeneous the peer group, the more influence or power it has over its members. FIG groups composed of all first-year students with similar interests exemplify this homogeneous environment. Addition-

ally, the influence of peer groups is amplified as frequency and intensity of contacts increase (Chickering & Reisser, 1993). Therefore, students living with each other and attending class together, such as those in a residential FIG, would have much more influence on each other than would a peer group who solely attended classes together, as do non-residential FIG members.

Astin (1993) defines a peer group as a group of individuals in which members identify, affiliate, and seek acceptance and approval. The numerous social interactions provided by FIG membership, which include class attendance, living in the same residential environment, and sharing a common theme, allow it to serve as a true peer group. Love (1995) reports true peers-students who are going through the same experiences-are among the strongest socializing agents in a student's college experience. Love (1995) further suggests determinants of influence in the socializing process include intensity of feelings for and frequency of interaction with the socializing agents. The frequency of interaction associated with participation in a residential FIG would make it a stronger socializing agent.

Studies performed by Pike et al. (1997), on enhancing the impact of residential living, found that FIG membership produces significantly higher levels of social integration for its participants. In discussions on persistence, Nora (1987) and Attinasi (1989) both suggest that students must locate at least one community in which to find membership and the support that membership provides. FIG students participate in a wide variety of activities together, both social and academic, which would increase the likelihood that a student finds an area in which to participate and succeed. According to Schlossberg (1989), the creation of environments that clearly indicate to all students they matter, will urge them to greater social involvement. In regards to student development, Astin (1993) found that a student's peer group is the single most potent source of influence on growth and development during the undergraduate years. Because FIG members have both formal and informal academic and social interactions, the likelihood that students feel they matter and are involved in their community is increased.

Astin (1997) defines involvement as the amount of physical and psychological energy a student devotes to the academic experience. Astin (1997) also suggests this energy can be demonstrated through relations with faculty, peers, community development, and coursework, which are all characteristics of membership in a FIG community. In

relation to Astin's (1997) definition, FIG members exert a great deal of energy toward their academic experience, both academically and socially, and would thus prove to have greater involvement. The ideal FIG, which includes the residential component, lends itself to higher levels of social integration and therefore persistence.

Methodology

Sample

The purpose of this study was to measure the impact of the residential component on the academic and social integration of students in a FIG. The sample studied included 269 first-year students enrolled in FIGs at a large, public, residential, Research I university located in the Midwest during the fall semester of the 2001-2002 academic year. The sample used was a non-random convenience sample and represented a close approximation of most characteristics of the population. In total, 29 of the 52 FIG groups were surveyed. Students were chosen based on their placement in a FIG, either residential or non-residential. An attempt was made to survey each FIG participant regardless of the FIG type hoping to increase sample size and generalizability.

The sample was comprised of 34% male participants and 64% female participants. Eighty-four percent of the participants were Caucasian, 5% African American, 4% Latino/a, 3% of the participants were Asian, and 4% identified as Other. Ninety-six percent of the respondents lived on-campus, 3% lived in an off campus apartment, and 1% lived in the home of a parent or relative. Sixty-five percent of the participants were in state, 34% were out of state students, and 0.5% were international. Thirty-four percent identified as living in a residential FIG, and 66% indicated they lived in a non-residential FIG.

Procedure

A FIG is defined as a small group of first-year students (usually 10 to 20) who participate in common coursework during the first year of college. Students in a residential FIG live in the same residential unit, while students in a non-residential FIG live in a variety of locations, both on and off campus. All FIG participants must enroll in a one semester, one-credit seminar course facilitated by a Peer Instructor (PI). A PI is an upper class student who may or may not live in the residence

hall with the FIG members. The seminar meets once a week and serves as a way to introduce students to the institution and the campus culture. The researchers decided to use a portion of this seminar time to distribute the survey instrument. The same survey was administered to students participating in residential FIGs and non-residential FIGs during the seminar unless the student indicated that he/she did not want to participate.

The survey consisted of 37 Likert scale questions, which elicited information regarding students' perceptions of their FIG experience in terms of academic and social integration. Within the Likert scale, responses ranged from strongly disagree to strong agree on a scale of one to five, respectively. Three short answer questions were also included in the instrument asking respondents if they enjoyed their FIG experience, if they would recommend it to other first-year students, and if they believed living in the same residential unit as their FIG members would be/was beneficial. Finally, questions pertaining to demographic information were posed to better understand the sample, although students were not asked to provide any personal identification information on the survey. All questions aimed to determine the level of academic and social peer influence the residential component of a FIG had on students.

Academic peer influence was measured by analyzing students' study habits, including with whom they study and where they study, with the goal of identifying their study peers and group study patterns (Horn, 1997; Lazar, 1995). The pattern of a student's class attendance and the anticipated GPAs of students were also examined. Social peer influence was measured by looking at with whom students spent their free time with, who they sought for emotional support, how often students went home, and students' social eating patterns in order to identify how socially integrated they were within their FIG program and within the greater context of the college environment (Astin, 1997).

Results

The findings in this study were based on data self reported by FIG members. However, a mislabeling of residential and nonresidential FIGs occurred in the student assignment process and held true for the publications, which were used as resources for this project, and by potential FIG members enrolling in the program. Thus, respondents may have indicated living in a residential FIG inaccurately, simply because

they were misinformed. The researchers discovered this discrepancy and made adjustments in how the survey was introduced to the FIG members. In addition, the data compiled for this study were self-reported by the FIG members.

Academic Integration

This study was designed to measure the academic and social integration of participants and to analyze whether results varied according to student participation in either a residential or non-residential FIG. A t-test comparing residential and non-residential FIGs showed that eight variables were statistically significant. The statistically significant results of the study are included in Table 1.

In reference to study patterns, the participants in this study preferred to study alone. When FIG members were asked if they studied with fellow FIG members, the majority of all participants disagreed ($M=2.33$), indicating they preferred to study alone. However, at the $p<.05$ level, a significant difference was found between residential students who preferred to study alone ($M=2.58$) and non-residential FIG members who preferred to study alone ($M=2.20$). Although neither group preferred to study with their fellow FIG members as often as they preferred to study alone, non-residential FIG members were even less likely to study in groups than residential FIG members.

Although many students study alone, both residential and non-residential FIG members indicated that they preferred to study in their residence hall, where other students may have been present to help them ($M=4.15$). Students in residential FIGs ($M=4.21$) and non-residential FIGs ($M=4.13$) specifically stated that they preferred to study in a residence hall, as opposed to the library or an off campus location.

The survey also asked respondents to report their patterns of class attendance and anticipated GPA. Participants were asked if they attended their FIG classes more often than non-FIG classes. Responses on this question were fairly neutral ($M=2.82$), but overall respondents stated they did not attend their FIG classes more often than their other classes. At the $p<.05$ level no significant difference was found between residential ($M=2.79$) and non-residential ($M=2.84$) FIG participants. There were also no statistically significant differences found between residential and non-residential FIG participants in regard to anticipated GPA.

Table 1. Significant Differences Between FIG Types

Area	FIG Type	N	Mean	SD	SEM	T
Study with FIG Members	Residential	89	2.58	1.10	0.12	2.77*
	Non-Residential	177	2.20	1.06	0.08	
Spends Spare Time Usually Hanging Out with FIG Members	Residential	90	2.91	1.24	0.13	2.34*
	Non-Residential	177	2.55	1.15	0.09	
Spends More Time Hanging Out with FIG vs. Non-FIG Individuals	Residential	90	2.46	1.18	0.12	2.19*
	Non-Residential	176	2.13	1.16	0.09	
Usually Eats Meals with FIG Members	Residential	90	2.54	1.27	0.13	2.87*
	Non-Residential	177	2.09	1.11	0.08	
Go Home Most Weekends	Residential	90	1.84	1.13	0.12	-2.36
	Non-Residential	176	2.22	1.36	0.10	
Socialize Daily with FIG Members	Residential	90	3.78	1.12	0.12	2.16*
	Non-Residential	176	3.43	1.29	0.10	
Socialize Daily with FIG Members Outside of Class	Residential	90	3.72	1.24	0.13	3.70*
	Non-Residential	176	3.10	1.34	0.10	
Usually Receive Emotional Support from FIG Members	Residential	90	3.32	1.22	0.13	2.50*
	Non-Residential	174	2.90	1.36	0.10	

* Indicates a significance at the $p < .05$ level.

Social Integration

Most of the statistically significant results from this study came from questions that inquired about student's patterns of social integration. These results included significant answers about a number of variables, including with whom students spent their spare time, with whom they ate, the emotional support that stemmed from FIG membership, and the ease of transition from high school to college.

The students enrolled in a FIG were asked if they spent their spare time with members of their FIG, the majority of both residential and non-residential FIG members disagreed ($M=2.68$) with this statement. At the $p < .05$ level a significant difference was found between residential FIG members who stated they spent their spare time with members of their FIG ($M=2.91$), compared to non-residential FIG members ($M=2.55$). This indicated students enrolled in residential FIGs were more likely to spend their spare time with fellow FIG members than those enrolled in non-residential FIGs.

There was also a statistically significant difference ($p < .05$) between the two types of FIGs when participants were asked to record whether or not they spent more time with people from their FIG or people from their residence hall. Respondents in residential FIGs spent more time with their own FIG members ($M=2.46$), as they lived in the

same residence hall. Non-residential members indicated they were less inclined to spend more time with members of their FIG than people in their residential unit ($M=2.13$). These results are not surprising, as proximity made it easier for residential FIG members to socialize with other FIG members who also lived in their residence hall than non-residential members who may have had to travel across campus to find their fellow FIG members. Proximity also played a role in student response in regard to eating patterns. While residential and non-residential FIG members indicated that they did not eat most of their meals with members of their FIG, participants in residential FIGs ($M=2.54$) were more likely to eat with members of their FIG than were non-residential FIG members ($M=2.09$).

Participants were also asked to rate how often they go home on weekends. Overall, participants disagreed that they went home on most weekends ($M=2.09$). There was, however, a significant difference ($p < .05$) between the residential and non-residential groups. Residential members stated that they strongly disagreed that they went home most weekends ($M=1.84$), while non-residential members disagreed ($M=2.22$). This significant difference indicates that students enrolled in a residential FIG may have had a better affiliation with students and programs on campus, which promoted their staying on campus instead of going home most weekends. Furthermore, students who had a stronger affiliation with fellow FIG members may have gained emotional support from these individuals. A statistically significant difference at the $p < .05$ level between the residential and non-residential FIGs showed that residential FIG members gained more emotional support ($M=3.32$) from other members of their FIG than did non-residential FIG members ($M=2.90$).

A major goal of the FIG program is to help students make the transition from high school to college. Overall participants stated ($M=3.30$) that they were undecided whether their enrollment in a FIG helped their transition, although the responses erred on the positive. Those students enrolled in a residential FIG appeared to have gained slightly more transition assistance ($M=3.51$), as compared to non-residential members ($M=3.19$). When asked if their enrollment in a FIG helped them make friends in college, FIG participants responded positively in both categories. Residential ($M=3.44$) and non-residential ($M=3.34$) FIG members generally agreed that friendships were made through FIG membership.

Short Answer Responses

In calculating the responses to the three short answer questions student responses were divided by their participation in a residential or non-residential FIG. Results from the short answer items can be found in Table 2.

When asked if they enjoyed the FIG experience; 67% of all participants indicated that they had enjoyed their experience while 17% indicated they had not. Seventy-two percent of students participating in a residential FIG responded they enjoyed their FIG experience compared to 64% of the students in a non-residential. Reasons stated by FIG members for enjoying the program were varied. Most commonly recorded was that students were able to make friends for social and academic support. Seventy-three percent of residential FIG members stated they enjoyed the FIG program because it helped them make friends and gave them someone to sit with during classes, while only 58% of non-residential FIG members enjoyed the program because it helped them make friends.

One student responded the reason why he or she enjoyed the FIG experience was, "It is helpful to know a group of people in almost all of my classes. Then we can discuss other teachers, tests, and we can help each other study if needed." Another student added, "Yes, it helps for study groups/projects or if you miss a class and need notes. It is a good way to meet people that you can sit next to in your class, not as lonely."

Seventy-four percent of the participants said they would recom-

mend freshmen participate in the FIG program, 16% said they would not, and 10% of the sample claimed neutrality on the issue. Residential and non-residential FIG members shared similar responses in recommending the FIG program to freshmen (75% and 74% respectively). In terms of academic support, 44% of non-residential FIG members stated they would recommend the program because of the academic support it offered. Sixteen percent of participants from a residential FIG also listed academic support by way of studying together, working on homework together, and attending class together. A non-residential FIG member stated, when asked if he or she would recommend the FIG program to freshmen, "Yes because if you [are] here not knowing anyone or you live off campus, it's a good way to make friends and form study groups."

Sixty percent of the participants indicated they thought it would be/is beneficial for students to live among their FIG members. Seventy-six percent of residential and 51% of non-residential FIG members stated they find it beneficial to live among their fellow FIG members. Students listed a variety of benefits from living among fellow FIG members such as safety when walking to the FIG seminar, making friends, and study support. In response to the question of how beneficial living in the same residential unit as other FIG members would be, one residential FIG member stated, "Very. I didn't have to call someone or meet someone for homework help, I can just walk down the hall." Another student responded, "Yes, I wish that we all did live together that way it would be easier for us to spend time together, study, etc. instead of having to travel across campus." A non-residential FIG member stated, "Yes, because I don't live among them. I am in another residence hall, but if I did live with them I could see us [being] better friends."

Table 2

Short Answer Results

	<u>Residential</u>		<u>Non-residential</u>	
	N	Percentage	N	Percentage
Enjoyed Participation in FIG	66	72	111	64
Made friends from participation	67	73	99	58
Academic benefits from participation	31	34	76	44
Would recommend to freshmen	74	75	123	74
Recommend because of friends	37	37	67	40
Recommend because of academic support	27	16	73	44
Living together beneficial	70	76	85	51
Beneficial because of friends	36	39	51	31
Beneficial because of academic support	35	21	49	29

Discussion

The purpose of conducting this study was to determine if the residential component of a FIG provided more social and academic integration to first-year students than to those who resided in a non-residential FIG. Eight different elements of the program were found to be statistically significant, when comparing residential and non-residential FIGs. The short answer responses provided more in-depth understanding of students' experiences.

Academic Integration

The academic component of the instrument examined students' patterns of study group formation, class attendance and anticipated GPA. Overall, participants indicated no preference when asked if they preferred to study alone or study in groups. When dividing the responses into the residential and non-residential living components, residential students were slightly more likely to study in groups than non-residential students. This pattern of group study is academically beneficial, promoting intellectual growth (Fredriksen, 1993) and helping students acquire intellectual skills (Horn, 1997). While the study group component exhibited statistical significance, the implications are few for students. The mean responses elicited from students in a residential FIG was slightly higher than non-residential students, however both were generally in disagreement that participation in the FIG program prompted the students to study with members of their FIG. While there may be academic benefits to students living in close proximity, the survey results do not prove this increased academic success.

Class attendance did not prove to be a significant variable as most participants indicated they were no more likely to attend class due to their participation in the FIG. There was also no statistically significant difference between residential and non-residential FIG members on this question. This lack of difference was also evident in an examination of students' anticipated GPAs in regard to the residential and non-residential components. Previous research by Wilcox and delMas (1997) stated students who participate in learning communities have increased class attendance. This study on FIGs illustrated students' academic achievements were not necessarily increased by participating in a learning community, which supports the research of Pike et al. (1997). Over a longer period of time, the results may provide conclusive evidence, but in one semester no significant difference was noted.

Social Integration

The social variables examined during this study consisted of the following: with whom students spent their spare time, student friendships, level of emotional support students received from their FIG members, and assistance in the transition from high school to college. The majority of the statistically significant variables were found in the social portion of the survey results.

Overall, residential FIG membership had little influence on with whom students preferred to spend their spare time or eat their meals. Residential students were consistently more positive in their responses in these areas, but were not in complete agreement with the statements. Proximity to each other seemed to have the most influence. Since residential FIG members lived with one another the opportunity for interaction was more likely than for non-residential FIG members. According to Newcomb (1962), this frequent interaction is a benefit of a residential learning community. Newcomb (1962) also suggests the more interactions there are between group members, the greater the likelihood strong friendships will develop. As Douvan (1981) stated, proximity is a major force in determining friendships during the freshman year.

In the short answer responses the majority of both groups stated membership in their FIG helped them make friends, however the number of residential students who agreed with this statement was much higher than those students in a non-residential FIG. A similar result was derived when reviewing the level of emotional support students gained from the FIG program, members of a residential FIG felt they had gained more emotional support than the non-residential students. As Tinto (1993) stated, students' informal interactions are among the strongest socializing agents, thus these informal interactions among the residential FIG members helped them integrate more than non-residential students.

Another factor determined to impact social integration was students' transition to college. Residential FIG members once again responded more positively than non-residential students that the program aided in their transition to college. In the short answer response students stated that the program helped make the large university feel small. By the results of these areas it is reasonable to determine that proximity and increased interactions from living among one another again proved beneficial for these students.

Overall, students stated they enjoyed their FIG experience, and when residential and non-residential members were asked if they would recommend the program to other freshmen, both groups responded positively. The high level of enthusiasm for the program illustrates the impact it had on students. The short answer responses provided more insight into whether or not students thought living with their FIG members would be/is beneficial. Overall, the majority of the sample

stated living with their FIG members would be/ is beneficial. Once again the majority of residential students stated they thought it was beneficial whereas only half of the non-residential students said it would be beneficial. The fact that the residential students stated they would recommend FIG participants live together provides another example of the impact the residential component has on perceived integration. This recommendation is demonstrated by a comment made by a non-residential student who stated, "I wish we did all live together that way it would be easier for us to spend time together, study, etc. instead of having to travel across campus." This quote illustrates the desire some students had to be with their FIG members more often.

Non-residential FIG members provided unique explanations as to why they did not want to live with their fellow FIG members. For instance, students stated they did not want to have only one set of friends and if they lived together they thought they would have difficulty meeting other students. Some students stated they were tired of seeing their FIG members all the time and enjoyed having other friends in their respective residential unit.

The Likert scale questions used in this study resulted in eight statistically significant findings, one academic, the remaining seven social. It is important to point out that comparatively, in terms of both social and academic integration, residential FIG members tended to answer the scaled questions in a more positive manner than did non-residential FIG. As aforementioned, the short answer questions elicited much more useful and reflective answers. From this set of questions, the majority of both residential and non-residential FIG members indicated they enjoyed the FIG experience, would encourage other first-year students to participate, and felt living together would prove beneficial in terms of academic and social integration.

This study allows for several implications to be drawn from its findings. Primarily, universities, especially larger institutions like the one used in this study, may want to look at implementing first-year programs similar to FIGs within their institutions. If such programs already exist, the effects of including a residential component should be examined, as residential living within first-year programs is not commonplace. Finally, the length of first-year programs resembling a FIG-type structure should be studied, as most are only semester long programs instead of year-long. Many students indicated a preference for more time with FIG members, thus it would be interesting to examine the effects of semes-

ter versus yearlong programs. Because students involved in this study felt they benefited from the four months of FIG participation, the effects of a yearlong program warrant additional research.

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The Impact of E-mail Use on Student-Faculty Interaction

Sara E. Hinkle

While research demonstrates that contact between students and teachers can positively affect students, new forms of technology are transforming the way that students and faculty interact. This paper will examine some of the positive and negative effects that the increased use of e-mail communication has on the interactions between students and faculty. Implications and recommendations for policy and practice are presented.

Close and frequent interaction between students and teachers has long been a central value of education (Wilson, Gaff, Dienst, Wood, & Bavry, 1975). Contact with faculty both in and out of the classroom has many positive impacts on students, and there is a wealth of research spanning several decades that supports this assertion. Studies have demonstrated that student-faculty interactions may enhance student development (Alberti, 1972), foster social and academic integration (Pascarella & Terenzini, 1978), and positively affect students' academically related self-concepts (Woodside, Wone, & Wiest, 1999), educational aspirations, attitudes toward college, academic achievement, intellectual and personal development, and institutional persistence (Pascarella, 1980).

However, with the exception of one study, all of the research referenced was conducted before the advent of many of the technological advances that are now taken for granted, such as e-mail, satellite videoconferencing, Internet-based teleconferencing, and interactive multimedia classrooms. This new technology is transforming "the very nature of how higher education institutions are communicating with and educating students" (Roach, 1999, p. 92). The impact that these new forms of technology will have on student-faculty contact requires further exploration (National Survey of Student Engagement, 2000). As such, this paper will examine some of the positive and negative effects that the increased use of e-mail has on the interactions between students and faculty, and their implication for policy and practice.

Positive Aspects of E-mail Use

E-mail is increasingly becoming the preferred means of communication between students and faculty. In 1994 about 8% of

postsecondary classes were using e-mail; by 1998 this number jumped to 44% (Institute for Higher Education Policy, 1999). According to one professor, "These days, students are more likely to send e-mail messages than to make telephone calls or visit a professor in person" (Wilson, 2001, pp. A11-A12). The ability to communicate electronically has numerous benefits. For one, e-mail removes time and distance barriers that may impede contact, thus allowing students greater access to faculty around the clock (D'Souza, 1992a). Both faculty and students are reporting better and increased communication with one another through the use of e-mail (D'Souza, 1992b; Gilbert, 1995).

D'Souza (1992b) surveyed a class of college students in order to assess the role of e-mail in the learning process and found that their reactions toward the electronic communication were primarily positive. In response to statements about e-mail use in the classroom, the students provided the following mean ratings (1= strongly disagree and 5= strongly agree): e-mail provides better access to the instructor (4.5); the use of e-mail creates more interaction between students and the instructor (4.0); and the use of e-mail helps provide a better learning experience (4.5). The majority agreed that e-mail enhanced communication with their instructor and had a positive effect on the learning process.

Many faculty would concur with these students' positive assessment of the effect of e-mail on learning, and a growing body of literature supports the effectiveness of e-mail as a pedagogical tool (Haworth, 1999). More faculty are using e-mail to complement and enhance the traditional learning environment and reinforce class discussions by extending conversations beyond the classroom (D'Souza, 1992b; Roach, 1999). This can be especially important in large lecture classes where students may feel alienated from the professor, as well as their fellow classmates (Meacham, 1994). For example, using a class Listserv can make these types of classes feel smaller, promote greater communication among class members (D'Souza, 1992a), and foster collaborative learning tasks and activities that enhance course material (Hardwick, 2000).

Proponents of the use of e-mail in the learning environment also emphasize that it allows for a moderately-paced academic conversation (Ehrman, 1999). As opposed to fast-paced in-class conversation, or the slower process of receiving feedback on homework, e-mail is "fast enough to foster real conversation, but slow enough to give students

time to think about what they have read and heard and compose a reply" (Ehrman, 1999, p. 44). In addition, e-mail use enables instructors to provide immediate feedback to students who may have questions or concerns regarding course material. As an added benefit, these instructors can offer more personalized attention to students and attend to their individual needs and concerns without taking up valuable class time (D'Souza, 1992b).

Others assert that e-mail can especially enhance communication for those groups of students who may participate less actively in class, such as women, minorities, and those for whom English is not their primary language (Gilbert, 1995). Furthermore, e-mail can be an excellent tool for fostering interaction among students who are affected by shyness, fear, or low self-esteem (Jensen, 1993). Some students may feel more comfortable interacting in this format as it provides a sense of anonymity (Ehrman, 1999; Haworth, 1999) and a "non-threatening, two-way communication link" (D'Souza, 1992b, p. 263). Indeed, "race, gender, sexual orientation, physical deformity, education, social class, and age are not part of the Internet experience" (Blimling, 2000, p. 7), a condition which can bolster email as "safe" means of communication.

Negative Effects of E-mail Use

While more and more educators seem to agree about the benefits of this new technology paradigm, there are others who fear that this increased reliance on electronic communication may become a substitute for one-on-one human contact (Blimling, 2000; Haworth, 1999). According to Malveaux (2000), "To the extent that the Internet increases access and information, it's a good thing. To the extent that it is seen as a substitute for hands-on learning, it is both a mistake and yet another way to widen, not close, the gap between those who have access and those who do not" (p. 38).

Dierks (1990) stresses the importance of promoting e-mail-use with students in the classroom because it prepares them for the new high-tech working environment where e-mail use is typically encouraged and expected amongst employees. On the other hand, professional leaders also place a high value on verbal communication and interpersonal skills, which are critical for effective teamwork and communicating with various stakeholders in a given field (Education Commission of the States, 1995). Certainly, it is a rare job that is completely devoid of

human contact and allows employees to communicate strictly via e-mail. Blimling (2000) asserts that by fostering virtual relationships via e-mail, "students may be sheltered from the full complexity of human relationships" (p. 7) that is essential for their development. Less frequent contact with faculty, as well as peers, could mute the development of interpersonal communication skills and limit the experiences which socialize students into post-college environments, such as workplaces, families, and communities (Ehrman, 1999; Kuh & Hu, 2001).

Haworth (1999) conducted an analysis of college student e-mail use and concluded that e-mail does not significantly increase the interaction between students and faculty, but rather, just redistributes it to an alternate form. While this new electronic form may be more expedient, there is something unique that occurs during one-on-one interaction that cannot be obtained in an e-mail transaction. Jensen (1993) summarizes the importance of personal contact as follows:

Warm and fuzzy professors patiently "hold hands" to soothe frustrated students who have learning or personal problems. No hypermedia author can anticipate all possible questions that learners might raise, nor set up interactive navigation buttons for millions of conceivably possible questions. Professors can beat the machines in capacity to react to unforeseen questions raised and make adjustments to unforeseen paths of discourse. Some cues in complex combination (for example, the perspiration on a student's brow, atypia stammering, moistened eyes, phone messages from a parent, and the like) are best dealt with when there is physical proximity between a student and a human listener and teacher. (p. 13)

Furthermore, as Coyle (1971) posited, students expect more from faculty than just teaching, such as advising, mentoring, and helping with problems, and will turn to instructors as a logical source of help with problems related to their academic progress. This type of assistance might be provided more effectively via personal contact.

Another issue that advocates of e-mail use may overlook is the fact that not all students have equal access to the technology. While campuses are becoming more and more "wired" by offering Internet access in the residence halls and at public computer stations around campus, not all institutions are acquiring this technology at the same rate (Bernstein, Caplan, & Glover, 2000). Kuh and Hu (2001) found that students at research universities and private colleges and universities tend to use computer and information technology more frequently than

their counterparts at other types of institutions. This may be a reflection of institutional affluence, in that these institutions have more money to invest in technology, thus making it more available and accessible to students. The researchers also discovered that students from higher socio-economic backgrounds appear to use computer and information technology more frequently, which might be another case of affluence increasing access. Malveaux (2000) asserts that African Americans and Whites have different access to computers and the Internet and raises the question, "Will a people already at the periphery of the technological revolution gain or lose by its acceleration and proliferation into higher education?" (p. 1).

Research has demonstrated that students at more wired campuses report more contact with their teachers and more substantive interaction with their peers (Hu & Kuh, 2001). In addition, Kuh and Hu (2001) found that, given equal access to the technology, students of different racial and ethnic backgrounds did not differ significantly in their use of technology. The key here is that students must have access to the technology in order to receive the benefits that it can offer. If, indeed, some groups of students, such as minorities and those of lower socio-economic status, have less access to the technology, this may have a negative effect on the amount of interaction between professors and these underrepresented groups. With all the literature that supports the positive effects of student interaction with faculty, these students may be at a major disadvantage.

Implications and Recommendations

Research suggests that e-mail use can have a positive impact on the interaction between students and faculty. However, it is given that all students have equal access to the technology, and that e-mail is used to complement, and not replace, face-to-face interaction. With these thoughts in mind, the following recommendations are offered to educational practitioners, policy makers, and researchers.

First, it is critical that public and institutional policies ensure that all students at all colleges and universities have equal access to the technology. Since information technology appears to level the playing field for learning for students from diverse racial and ethnic backgrounds (Kuh & Hu, 2001), it is important that no student is disadvantaged because of inaccessibility.

Second, institutions need to weigh the costs and benefits of

providing these services in relation to other institutional priorities, since allocating funds to technology means there will be less money for other needs (Kuh & Hu, 2001). For example, perhaps student-faculty interaction could be promoted more effectively by allocating resources to hire more faculty, thus lowering the student to faculty ratio and increasing student access to their professors. This is an issue that all institutions will need to examine through periodic evaluations of the impact of technology on student learning.

Third, more research is needed to promote effective use of e-mail in classroom settings. E-mail can be successfully integrated into the curriculum in a number of ways (D'Souza, 1992a, 1992b; Meacham, 1994), and faculty are in the best position to encourage the use of e-mail as a learning tool. However, many faculty have not been trained on the best ways to make use of the technology and may not be comfortable in using it themselves. In addition, course-related uses of e-mail can significantly increase faculty workload as they spend more time outside of class attending to e-mail correspondence (Gilbert, 1995). Research that demonstrates ways to use e-mail to promote learning and increase interaction, without overloading the professors, would be beneficial for both students and faculty.

Conclusion

Faculty are one of the most important agents of socialization for students in college (Pascarella & Terenzini, 1991; Weidman, 1989), and contact between students and faculty is hailed as a critical element for promoting student motivation and involvement (Chickering & Gamson, 1987). As the literature reviewed in this paper suggests, e-mail use can have a positive effect on increasing interaction between students and faculty, and ultimately, student learning. The asynchronous nature of e-mail offers students greater convenience of access, and students may feel freer to express themselves via this medium because of the sense of anonymity and moderate pace that it offers. Faculty can then respond to the concerns and questions of students in a more expedient manner, and offer personal attention that may not be possible during class. Furthermore, e-mail can also be used to extend discussions beyond the classroom and connect students with their peers, both tenets of good practice that promote student learning.

On the other side of the coin, there is evidence that e-mail use does not actually increase the amount of contact between students and

faculty. Instead, it simply changes the mode of interaction. Critics argue that e-mail strips the personal approach offered by in-person meetings, and deprives students of opportunities to develop critical verbal and interpersonal skills. Others assert that unequal access to technology, particularly among minorities and students from a lower socio-economic status, may place some students at a disadvantage.

Given that this technology is relatively new, educators need to be sensitive to these issues and invest time and money in evaluation and research that will further explore the impact of e-mail use on student-faculty interaction. Clearly, e-mail can be used in many ways to complement and enhance the relationship between students and faculty. Ultimately, educators should strive to find a balance between personal and electronic means of communication.

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The Academic Support Center Environment: An Assessment of Student Use at the Student Academic Assistance Center

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This study assessed the services provided at a Student Academic Assistance Center (SAAC) at a large, public, Research I university in the Midwest. Students who used the SAAC responded to a survey that measured motivation for using the SAAC, the academic support services offered, preferred educational environments and satisfaction with the SAAC. Results showed that students used the SAAC approximately once a week, preferred one-on-one tutoring, sought academic support when needed, and were satisfied with their use of the SAAC. An implication of the study is support for SAACs as valuable resources for college students.

Introduction

Undergraduate students sometimes find themselves in learning distress; often due to: poor previous academic preparation, lack of effective study skills, topic apprehension, lack of focus during classroom learning and/or study time, or low motivation. With specific assistance, many such students can be helped to succeed. Some students are consciously aware that they have problems and some of these even understand why problems occur; others remain unable or unwilling to admit that they need help. In recent years, several institutions have recognized this problem and have made available professionally and peer staffed tutoring centers. (Petress, 1999, p. 247)

A public, Research I institution in the Midwest is one such university that has implemented academic support services through a Student Academic Assistance Center (SAAC). The SAAC was developed to address the needs of many new students for accessible assistance in the math, writing, and study skills crucial to academic success at a large university; to provide opportunities for these students to interact in a non-threatening environment; and to improve students' overall college experience (Morgan, 1996).

According to the university's Office of Institutional Research (2001), in its first year of operation (1996-1997), the SAAC had a positive effect on persistence for both resident and non-resident freshmen of all ability levels. In the 1999-2000 academic year, research also

showed that students who used the SAAC in the fall had statistically significant higher fall and spring semester GPAs than non-users. Although these results are encouraging, there is a lack of research that identifies why students use the Center. This study seeks to more thoroughly understand and assess motivations for use, services provided and overall satisfaction with the SAAC.

A brief analysis of the academic environments on college and university campuses indicates the importance of establishing the role academic support services will play on a campus. It is essential to examine a student's fit into the campus' academic environment. Holland, as cited in Strange and Banning (2001), refers to this fit as the person-environment congruence, which explains the congruency between an environment and the student's personality type. "A person is said to be congruent with an environment if his or her type is the same as the dominant type within that environment" (p. 52). A student's learning style is an aspect of a personality type, and its congruence with the learning environment is essential for maximum learning. Learning is a process that creates knowledge through the transformation of experience, and the concept of a "learning style" refers to how people prefer to learn (Cano-Garcia & Hewitt Hughes, 2000). A learning style, according to Dunn and Dunn (1993, as cited in Dunn & Stevenson, 1997) is "the way each individual begins to concentrate on, process, internalize, and remember new and difficult academic information or skills" (p. 334). Environmental, emotional, sociological, and physiological elements should be considered when analyzing learning styles. Each of these elements can individually or collectively influence the interaction between a student's learning style and the learning environment that determines the person-environment congruence.

Terenzini (1999) examined learning environments and found that "the extent to which learning occurs is related in important ways to the extent to which the learner is directly involved in the learning process" (p. 35). Student involvement in the learning process is negatively affected by what Barr and Tagg (1995) refer to as the Instruction Paradigm. This paradigm places the emphasis on the delivery of the instruction, instead of the quality of the learning. An instructor who espouses the Instruction Paradigm would assume the following: 1) students are equally prepared; 2) students learn at the same rate; 3) students learn in the same way and through the same set of activities; 4)

differences in performance are more likely due to differences in student ability than to the faultiness of any of the foregoing assumptions (Terenzini, 1999). These assumptions ignore different learning styles and might not provide an opportunity for all students to become directly involved in the learning process.

Any instructional process that tries to influence how students learn either encourages and reinforces one's preferred styles, or creates pressures for a student to modify them (Grasha & Yangarber-Hicks, 2000). When the instructional process encourages and reinforces preferred learning styles, achievement scores are higher (Dunn & Stevenson, 1997). Unfortunately, in most cases, instructional methods and learning styles are not complimentary. According to Schroeder (1993), over half of today's students prefer concrete concepts and active methods of instruction. In contrast, three-quarters of faculty teach with an emphasis on abstract concepts and passive instruction. A study conducted by Terenzini (1999) at a Research I institution reveals that 80 percent of a typical college class is spent lecturing, and the students are only attentive for 50 percent of that time. Therefore, one might conclude that lectures, as a part of abstract and passive instruction, do not tend to involve students in their learning.

"Post-secondary learning is qualitatively different from learning at earlier levels of education. Therefore, students need, first, to be open to new ways of learning in order to develop intellectually, and second, to be willing to invest personally in the learning process" (Donald, 1997, p. 79). Research has shown that students are now coming to college under-prepared for the rigor of post-secondary learning (Donald, 1997). It is thus becoming the responsibility of the college or university to help these students learn how to succeed. Hirsh (2001) explains that students should, "focus on what they have control over, use small study goals and tangible rewards for goal attainment" (p. 76).

Colleges and universities can help students reach their goals by creating a sense that the campus is a learning community (Donald, 1997). This can be established by implementing academic support programs on campus that are available for all students. Donald (1997) has also shown that when students invest in their learning, these students tend to seek assistance and desire to learn strategies for learning that will enable them to reach their learning goals. In addition, Eppler and Harju (1997) suggest that as students become more actively involved in their learning process and less concerned with their final

outcomes (their grades), students will become more academically successful. Therefore, it seems appropriate for campuses to strive to exist as learning communities that encourage and enable students to take an active role in their learning and to succeed academically.

The importance of student involvement in the learning process should encourage colleges and universities to find alternatives for students who do not benefit from the current learning environment. As a result, several college and universities have begun to evaluate out-of-class activities. Approximately 80 percent of a student's time is spent outside of the classroom setting (Kuh, Schuh, Whitt & Associates, 1991, as cited in Terenzini 1999). These out-of-class experiences influence students' academic and cognitive development (Terenzini, Pascarella, & Blimling, 1999). When in-class learning is supplemented by positive out-of-class experiences, student learning is more likely to be successful (Terenzini, 1993). The emphasis on both in-class and out-of-class experiences acknowledges that students are not simply vessels to be filled; most students need to participate actively with their learning (Terenzini, 1999). Out-of-class environments, such as academic support services, provide students with the opportunity to learn in a more active learning environment than the traditional college classroom.

Services that are typically provided by learning assistance centers include tutoring, academic counseling, and study skill programs (Maxwell, 1997). Maxwell explains that larger institutions may have the resources to support various types of academic support services. Burns (as cited in Maxwell, 1997) proposes a model that identifies the following characteristics as being essential for any learning assistance center's success: providing individualized and self-paced learning, being visible to the campus community and being open to all students. According to White, Jr., Kyzar, and Lane (1990), a learning assistance center's physical location on campus can influence student use; "more students, especially, drop-ins, use the center when its name is 'inclusive' and when they know where it is" (p. 64). Current research is devoted to academic support programs that target specific student populations including minority students or first-generation college students (Petress, 1999; Hodges, 2001), but Maxwell explains that if inclusive academic support services are offered, "many students reflecting all levels of preparation will come" (1997, p. 5).

Since tutoring is a major component of academic support services, it is crucial to focus on literature examining the effects of tutoring

on students. According to Maxwell (1990), "a well-trained tutor can serve a vital role in helping fellow students attain their academic goals" (p. 110). It has been challenging, however, to prove that tutoring has a positive impact on students' grades. "Because tutoring is only one part of the services for under-prepared students, and because it can take many forms (individual, group, drop-in, as an adjunct to programmed material, etc.), it is often impossible to show that one-to-one tutoring, by itself, leads to higher grades for developmental students" (Maxwell, 1990, p. 111). However, research suggests that students who are tutored persist further through college than those who are not tutored (Vincent, 1983, as cited in Maxwell, 1990). Some literature recently cited by Rheinheimer (2000) indicates that tutoring can have a positive impact on final grades in tutored courses and course completion. While much of the literature pertaining to tutoring focuses on under-prepared students, the positive effects associated with tutoring can be applied to students of all levels of academic preparedness (Petress, 1999; Hodges, 2001).

In reviewing other aspects of typical learning assistance centers, limited literature exists explaining the specific benefits of academic advisors and study skill workshops. The literature that does exist, however, indicates that academic advisors and study skill workshops are effective means of academic support. Polson and Jurich (1979) indicated that "advising students has the potential to enhance their learning process and to provide a crucial link between the student and the university that can reduce the student's feelings of alienation" (p. 249). It has also been found that academic advisors provide academic information as well as information about other campus services. As advisors promote these services, students become more aware of their existence, and, in turn, use them more frequently (Middleton, 1989). Some campuses have implemented academic support services that include study skills workshops. Levin et al. (1997) explains that comprehensive academic support programs should strive to offer proactive academic assistance. Levin also notes that academic assistance should be provided in a small group instruction format and it should teach learning and test-taking strategies in the context of college or university courses. Study skills classes or workshops espouse these characteristics of academic assistance.

Method

Sample

The participants of the study consisted of a convenience sample of 124 students, over the age of eighteen, who utilized the services at the Student Academic Assistance Center (SAAC) at a large, public, residential Research I institution in the Midwest. The SAAC is located in a residence hall, one of eleven residence centers at the university, which houses approximately 900 students. Developed by a committee convened by the Dean of Faculties and comprised of staff members from a variety of student support services, the SAAC was established to improve the quality of intellectual life in the residence halls. These improvements were designed to encourage persistence at the university. The SAAC consists of four main units: an academic problem-solving unit (offering weekly academic support workshops), a writing tutorial unit, a mathematics help unit, and an academic advising office. The SAAC is open four hours a night, five days a week, and the services offered are easily accessible and available to any student on the university campus.

During a one-week period, students leaving the SAAC were approached to complete a survey. One hundred and twenty four students completed the questionnaire, and approximately 20 declined participation. Out of the 124 students who participated, 41 were male, and 83 were female. Eighty two percent of the participants were first-year students, with ages of all participants ranging from 18 to 22 years. Of the 124 participants, 94 students optionally reported their race: 82 percent were White, 7 percent were Black, and 4 percent were Asian. A variety of academic majors were represented and were categorized into five major groups: 35% were classified as Business, 16% were classified as Math and Science, 16% were classified as Humanities and the Arts, 16% were classified as Social Science, and 17% were classified as Undecided. Fifteen participants lived off campus. Of the 109 participants who lived on campus and reported their housing unit, 56 resided in the residence hall containing the SAAC. Only 10 of the respondents resided in a hall that was not in close proximity to the residence hall that housed the SAAC.

Instrumentation and Procedure

The researchers met with the Director of the SAAC to gain permission to survey students about their use of the SAAC. The director provided the researchers with access to statistical research

from previous years. A 91-item questionnaire, specifically designed to assess student use of the SAAC, was subsequently developed. The questionnaire consisted primarily of questions in five point Likert scale format, with two open-ended questions. Based on literature reviewed, the questionnaire was constructed to measure characteristics of participants, frequency of use, motivation to use the SAAC, academic services used, actual versus preferred educational environments, and satisfaction with the SAAC.

Data were subsequently coded and entered into SPSS where correlations and t-tests were run to test for statistical significance. Correlations between each item on the survey were examined to determine the strength of relationships between items. Paired t-test analyses for the strongest correlations were conducted. Independent correlations were also run to determine significant relationships between select items and gender, as well as select items and participants' class standing. Data for participants' class standing was coded such that first-year students comprised one group and all upperclass students constituted the other group. Independent t-test analyses for all items were conducted to determine possible differences between respondents in different groups.

Results

Use/Motivation

When asked how often the SAAC was used, participants reported that, on a scale of one to five, one representing "infrequently" or "once a month," and five representing "frequently" or "once a day," 2.94 (approximately once a week), was the mean response. Subsequent results are reported from participant responses to the questions asked, in Likert scale format, on the survey instrument. The scale ranged from one to five, one representing "not at all" or "never" and five representing "very much" or "very often." Participants indicated that their instructor ($M = 3.20$) and friends ($M = 3.04$) had the greatest influence on their decision to visit the SAAC. Participants also indicated that difficulty with homework ($M = 4.30$) and an upcoming exam or assignment ($M = 4.16$) motivated them to use the SAAC.

Correlation analyses revealed that participants who were motivated to use the SAAC by an upcoming exam or assignment indicated that their preferred study environment was the SAAC ($r = 0.313$, $p <$

0.05). With regard to specific characteristics of the SAAC, participants expressed that the free, drop-in tutoring ($M = 4.75$) and the SAAC's hours of operation (Sunday-Thursday 7-11 p.m.) ($M = 4.65$) most influenced use. When asked about the degree to which the participants sought academic support when needed, respondents reported they almost always did so ($M = 4.02$). A correlation analysis indicated that these participants who use academic support when needed also use the SAAC frequently ($r = 0.299$, $p < .05$).

Academic Support Services

Participants were asked about their use of tutoring during high school; participants were then asked about their use of tutoring in college. While participants indicated they used tutoring more in college ($M = 2.67$), there was a significant correlation between those participants exposed to tutoring in high school ($M = 2.01$), and their use of college tutoring ($r = 0.271$, $p < .05$). Of the services provided at the SAAC, math tutoring was the most used service ($M = 3.89$) followed by writing tutoring ($M = 2.21$). A negative relationship supported by correlation results ($r = -0.204$, $p < .05$) indicated that participants use either math tutoring or writing tutoring, but surprisingly not both. Math tutoring at the SAAC is provided in a group format, while writing tutoring is provided on a one-on-one basis. When asked about the extent to which they prefer specific types of tutoring, participants responded that they prefer one-on-one tutoring ($M = 4.55$) as opposed to group tutoring ($M = 3.24$). Additional analysis revealed a significant correlation between participants preferring one-on-one tutoring and participants who prefer to study alone ($r = 0.199$, $p < 0.05$). Further analyses indicated a significant correlation between participants who preferred group tutoring and those who preferred to study with friends or at the SAAC ($r = 0.277$, $p < 0.05$).

Educational Environments

Participants were asked about the style in which their classes were taught (large lecture, medium lecture, and small lecture). Responses were evenly distributed among the options. However, when asked about their preference for learning in the same environments, participants expressed an overwhelming preference for learning in a small lecture environment ($M = 4.27$), and least preferred learning in a large lecture environment ($M = 2.20$). Participants were asked to indicate

the extent to which they preferred to study in eleven possible environments. "Alone in a quiet place" was the most preferred study environment ($M = 4.23$). Participants also expressed a preference for studying in the SAAC ($M = 3.34$). The preference to study in the SAAC was the only of the eleven study environments that significantly correlated with the participants' tendency to seek academic support when needed ($r = 0.319$, $p < 0.05$). Interestingly, correlation analysis revealed that participants who preferred to study in their residence hall lounge also reported that the location of the SAAC in a residence hall influenced their decision to use it ($r = 0.244$, $p < 0.05$). Additional analyses revealed a negative correlation between participants who indicated a preference for studying in their own room and indicated that the location of the SAAC in a residence hall had an influence on their use ($r = -0.194$, $p < 0.05$). Finally, when asked at which time of the day participants preferred to learn/study, the 6:00 p.m. to midnight option yielded the greatest response ($M = 4.22$). Coincidentally, the hours of operation of the SAAC fall within that block of time.

Satisfaction

Overall, participants were satisfied with their use of the SAAC ($M = 4.42$). For all closed-ended questions, there were no statistically significant differences between the responses from male and female participants, nor were there statistically significant differences between first-year respondents and upperclass student respondents.

In addition, two open-ended questions inquired about the positive and negative aspects of the participants' experience at the SAAC. Forty-two percent of the responses included positive remarks with regard to the friendly, helpful, and knowledgeable personnel. One participant commented that positive aspects included "[a] friendly environment and helpful people who listen to my needs." Twenty-nine percent of the responses included comments related to when and how services were available. A participant commented, "It's free! And there are math and writing tutors available every day." When asked about the negative aspects of the SAAC, 70% of the responses included remarks related to the crowdedness and busyness of the SAAC, in addition to a request for more tutors. One participant commented that the SAAC "need[s] more tutors because it is crowded and it is hard to help everyone."

Discussion

In discussing the results of the study, implications can be drawn from the areas outlined in the Results section, namely motivation to use the SAAC, academic support services, educational environments, and satisfaction with the SAAC. Since instructors had the greatest influence on students' decision to visit the SAAC, instructors should continue to be educated and informed about the SAAC. These instructors might recommend it highly because they have had success with students who have used the services. Furthermore, students were most likely to use the SAAC for academic purposes that they identified on their own (difficulty with homework, upcoming exam and/or assignment). Instructors and advisors could take a more active role in helping students identify their need for academic support.

Likewise, students using the SAAC are taking a more active role in their learning. These students can participate more actively at the SAAC, as compared to passive classroom instruction. When looking at preferred methods of instruction, research shows that students prefer concrete and active methods (Schroeder, 1993). Results of the study indicate that participants find active instructional methods at the SAAC. Participants greatly preferred one-on-one tutoring, arguably a more active method of instruction than the traditional lecture-style format. Further, some open ended responses revealed that positive aspects of the SAAC were "it helps you learn and understand what you are learning as you go through class day by day," "there are plenty of tutors and I never felt stupid for asking 'why?' ten times," and "[positive aspects include] one on one attention, [a] comfortable environment, [and a] non-judgmental environment." All of these responses describe positive outcomes associated with active methods of instruction.

Results of the study support that the SAAC exhibits the general characteristics of an academic assistance center similar to those proposed by Burns (as cited in Maxwell, 1997). Specifically, participants mentioned that "you can go [to the SAAC] with a question on the homework and just drop by" and that "if you bring specific things to work on, the tutors will help." These responses attest to the "individual and self-paced learning" (Maxwell, 1997, p. 64) characteristic of the SAAC. Additionally, the variety of influences on participants' decision to use the SAAC, such as a friend or instructor, point to the Center's visibility on campus. Finally, the diversity in demographics of participants in the sample illustrates Burns' assertion that student academic assistance centers are "open to all students" (Maxwell, 1997, p. 64).

In terms of the specific academic support services offered at the SAAC, results indicated that students who used tutoring in high school also used tutoring in college. Some implications for this might include the idea that students who have been previously exposed to tutoring will seek out academic support services in college and have high expectations for these services. Thus, the SAAC might want to target those students who have not been exposed to tutoring in high school, since they would be less likely to be aware of the services offered by the SAAC. Additionally, the SAAC should continue to offer high quality services for those students who expect them.

A closer look at participants' use of tutoring services reveals that all types of tutoring are used more often in college than in high school. This trend could be explained because the degree of difficulty in college might be greater than that in high school (Donald, 1997). Furthermore, students might be more aware of the academic support services offered in college than those available in high school. Additionally, participants most often used the services at the SAAC (namely tutoring) when they had difficulty with homework or had an upcoming exam/assignment. These students might have sought academic support to ensure that they would do better on their homework or perform better on an exam.

Participants used math tutoring more frequently than writing tutoring and they preferred one-on-one tutoring significantly more than group tutoring. An explanation for this might be that the format of group tutoring can serve a greater number of students and is less structured. While math tutoring is currently offered in a group format and writing tutoring is offered as one-on-one, different formats might reduce the discrepancy between what is preferred and what is offered. Therefore, one option might be to offer one-on-one math tutoring. Another option would be to look at the group interactions taking place during math tutoring and possibly extend these interactions to a writing or other discipline tutorial.

The notion that students who prefer to study alone also prefer one-on-one tutoring and that students who prefer to study with their friends prefer the group tutoring format might have some implications for the physical layout of the SAAC. It might be appropriate to consider providing small, individual study spaces for those students who prefer to study alone or with a one-on-one tutor. Additionally, designated group study rooms could be provided to accommodate those

students who prefer to study and be tutored in a social environment.

Environmental preferences for learning and studying may also lead to some implications. The participants who are influenced by the SAAC's location in a residence hall do not prefer to study in their room, but do prefer to study in their residence hall lounge. Therefore, residence hall administration might want to consider making lounges and other spaces such as classrooms or conference rooms more study-friendly, especially in residence centers that do not house an SAAC. Based on the idea that those students who are motivated to seek academic support are those students who use the SAAC, it might behoove the Center to reach out to those students who might not be inclined to seek academic support when they need it.

The results of the study in regard to person-environment congruence are encouraging. Participants demonstrated a strong preference for learning in a small lecture environment. Consistent with these preferences, it was indicated by the participants that slightly more of their classes were taught in a small lecture environment as compared to larger lecture sizes. Hence, these results show that it is possible to provide classes congruent with participants' preferred learning environments. These results might also imply that participants could choose to use the SAAC because the environment is similar to that of a small lecture.

Further investigation of preferred learning environments results in the examination of other academic support services available on campus. Participants tend to seek help when they need it, yet they do not utilize the other services on campus, such as mentoring programs or the Career Development Center. Conversely, by looking at participants' infrequent use of other academic support services, one might predict that participants would not use the SAAC frequently. However, results show that participants did use the SAAC approximately once a week. Participants' frequent use of the SAAC and not other academic support services could be a result of some aspects of the SAAC's environment. Environmental features could include convenience factors such as drop-in advising, late hours, and the location in the residence hall. Students felt that the late hours of operation at the SAAC influenced their use; this was consistent with their preferred study time being 6 PM - midnight. Since participants use the SAAC more than other academic support services, SAAC staff might want to inform students who use the Center about other services available to them on campus.

In evaluating the open-ended responses intended to measure satisfaction, some interesting conclusions could be drawn. Because participants conveyed favorable opinions regarding the SAAC staff, SAAC administration should make a point to recognize and support the efforts of the tutors, academic advisors and administrative assistants. Comments about the negative aspects of the SAAC also warrant further examination. Since 70% of the responses expressed concern with crowdedness and busyness of the SAAC, Center administration should consider hiring more tutors to meet the high demand for math and writing tutoring services.

Further research in this area would be useful, particularly in some specific areas. First, it would be beneficial to consider the perspective of Center staff, such as tutors, academic advisors, workshop facilitators, and front desk staff in order to gain a broader assessment of student use. Additionally, since the study was only conducted over a specific one-week period, more accurate results of overall use of the Center might be obtained by conducting the study for an extended period of time, such as a semester or academic year. A future study might also examine whether use of the Center is influenced by students' level of academic achievement (as determined by GPA). Finally, because the participants in the sample resided predominately in the residence hall housing the SAAC or a surrounding residence hall, further research might focus on whether those students who live outside the vicinity of the SAAC utilize the services to the same extent or for the same reasons as the participants in the sample.

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Student Participation in College Student Organizations: A Review of Literature

Ricardo Montelongo

This article reviews several studies on extracurricular participation in college student organizations. College student organizations appear to provide students a variety of opportunities to become acquainted with the campus life within an institution. College student organization participation cultivates satisfaction with the college experience, increases campus and community involvement, and enhances intellectual development.

Sometimes labeled as "the other education," participation in extracurricular activities provides opportunities for students to apply classroom knowledge to real world settings and develops skills that will assist in the practical realities of living after graduation (Astin, 1993; Kuh, 1995). The added supplement of extracurricular activity involvement such as that found in college student organization participation can be a significant factor in a student's college experience. On most campuses, college student organizations tend to fall into the following categories: governing bodies, greek letter social organizations, student government groups, academic clubs and professional societies, honor societies, publication and media groups, service groups, intramural sports clubs, religious organizations, and special interest/cultural groups (Astin, 1993; Craig & Warner, 1991).

Research in extracurricular involvement has emphasized the importance of supplementing academic learning with learning that occurs outside the formal classroom environment. The enhancement of student learning with activities outside the classroom is consistent with the initial goals of student affairs work; to develop the whole student (American Council on Education, 1949). A variety of student development changes in regards to cognitive and affective growth are associated with participation in college extracurricular activities. Extracurricular activity involvement cultivates noticeable changes in a student's behavioral traits and personality characteristics (Astin, 1993; Pascarella & Terenzini, 1991).

The following article reviews several studies on extracurricular involvement in college student organizations among college and university students. While the literature investigating the influence of extracurricular activities is extensive in the student affairs field, the

following is not an exhaustive review of the literature on college student organizations. Its purpose is to provide a general understanding of the influence college student organization participation has on several aspects of the college experience. Studies investigating factors associated with participation and non-participation in college student organizations are summarized to provide an idea of the extent membership influences the overall college experience. Three educational outcomes (college satisfaction, campus involvement, and student development) will be addressed in order to assess the effect college student organization participation has on each outcome. A brief summary on the limitations of the reviewed studies, especially with regard to their generalization of findings to diverse student populations, will be provided.

Factors Related to Participation and Nonparticipation

College-sponsored activities do not receive the full participation of all students despite the opportunities associated with extracurricular involvement. Burton (1981) conducted one of the few studies focused on determining if demographic and personality characteristics could be used to differentiate and describe participants and non-participants of social, recreational, athletic, and cultural college extracurricular activities at a large state university. Burton hypothesized that there would be differences in levels of participants and non-participants using the aforementioned variables.

Students were surveyed on dimensions of interpersonal behavior (e.g., wanting or expressing inclusion, control, and affection). By forming nine homogeneous groups of students formed with respect to level of activity participation, multivariate analysis of variance statistical procedures were used to examine if these characteristics influenced extracurricular participation. Burton found that extracurricular participation was not significantly influenced by personality characteristics such as "good personalities, good intelligence, and adequate funds" (p. 252). Selected demographic data such as age, sex, GPA, high school and/or college leadership participation were also found not to be significant indicators of extracurricular participation in college.

No distinct personality characteristics were found that significantly influenced extracurricular participation among participants in Burton's study. These findings questioned the ability to transfer leadership roles and extracurricular activities from high school to college.

Burton recommended that in order for student affairs professionals to identify potential participants and non-participants of extracurricular activities in college, less traditional ways of identification should be considered. Burton neither describes nor suggests what constitutes these new methods. Despite this lack of knowledge, information can still be gained on certain characteristics that led to student extracurricular participation.

Extracurricular activity participation was determined, not necessarily from personality or environmental characteristics of students, but rather from factors that were not fully assessed by previous studies looking at the predisposition to participate in college extracurricular activities. Berk and Goebel (1987) found that it was individual characteristics, not previous high school environments (such as high school size), which exerted stronger influence on extracurricular participation in college. For example, students from large high schools were just as likely to become active college extracurricular participants as students from smaller high schools, especially in large university settings (Berk & Goebel, 1987). Regardless of their high school size, students who maintained high levels of participation in extracurricular activities during high school were significantly more likely to be participators in college extracurricular activities (Berk & Goebel, 1987). Although research tended to focus on the background characteristics of students, little emphasis has been placed to use these characteristics as descriptive identifiers of participants and non-participants of extracurricular college activities.

Craig and Warner (1991) found that non-greek, non-governing organizations (e.g., academic clubs, service groups, sports clubs, religious groups, special interest groups, etc.) were crucial components in the campus life of large institutions. They were crucial because these organizations far outnumbered fraternities/sororities, student government, and program boards on college campuses-organizations that were frequently described as "traditional organizations". Non-greek/non-governing organizations appeared to service those students who needed to establish connections to the college environment: "Knowing who the members [of these organizations] are make servicing these groups even more critical because [through these organizations] we are servicing those students who are the least 'connected' to our campus" (Craig & Warner, 1991, p. 42).

Craig and Warner listed two general groups of students that joined

non-greek/non-governing student organizations. The two types of groups that participated in these organizations were described as "the serious, academically oriented" student and the "at-risk" student (Craig & Warner, 1991, p. 42). Additionally, members of academic, cultural/special interest, religious, sports club, and service groups tended to be "multicultural" first-generation college students (Craig & Warner, 1991). This study, however, did not provide a discussion on how measures were developed to create these classifications. The authors did not provide a detailed description outlining what characterized these two groups of students. Still, useful information on the distinct characteristics of student participants could still be gathered.

Understanding why college students participated in extracurricular activities such as college student organizations can be associated with several factors. Individual student characteristics, along with the present college environment (e.g., the kind of institution, the curriculum, the faculty, and peers), influenced levels of activity participation (Astin, 1993). Astin described what entailed the "student life" of a college campus. The student life of an institution included "social life, opportunities to attend cultural events, opportunities to participate in extracurricular activities, and regulations governing campus life" (Astin, 1993, p. 284). A student who attended a large institution would probably have a greater number of extracurricular activity opportunities as well as have more diverse social opportunities, for example, like those found through participation in college student organizations. Students with more opportunities to participate in the overall student life of the institution could have more student-to-student interactions. Consequently, student interactions were found to cultivate a more active social life in college (Astin, 1993). Having an active college social life by participating in college student organizations could influence how one perceives his or her own college experience.

Abrahamowicz's (1988) study on the effects of college student organization membership on student perceptions, satisfaction, and college involvement provided an analysis on the effects of a campus' student life, especially the effects participation in student organizations had on various measures of the college experience. Abrahamowicz's single-institution study compared quantitative measures of college perception, satisfaction, and involvement from a sample of student members involved with recognized university-funded organizations and fraternities/sororities with those from students who were not members

of these groups. By using the College Student Experiences Questionnaire (CSEQ) to assess these variables, the study found that significant differences existed between the college experiences of undergraduate students who were members of organizations compared to students who were not (Abrahamowicz, 1988).

Participants of college student organizations were more likely to perceive their educational experiences as having high quality compared to those of non-participants (i.e., participants were more involved in their overall college experience) (Abrahamowicz, 1988). Feelings of satisfaction and positive perceptions of relationships with faculty, administration, and students were also concluded to be significantly associated with student organization participation (Abrahamowicz, 1988). Thus, non-participants did not have the same level of connection to their campus compared to students who were members of college student organizations.

Educational Outcomes Related to Student Organization Participation

College Satisfaction

Participation and membership in university-sponsored organizations provided college students ample opportunities to have a greater magnitude of student-to-student interactions. Frequency of interactions was supported by the amount of time a student spends in college student organizations which in turn was said to be associated with overall satisfaction with college (Astin, 1993). Participation in college student organizations can create positive feelings about the overall college experience. According to Astin, the variables used in his longitudinal study that were shown to have positive effects with satisfaction in campus life "leaned heavily toward student interaction and social life" which included "hours per week spent in student clubs and organizations" (p. 285).

Student-to-student interaction and collegiate social life through student organization involvement has positive relationships with a favorable college experience (Astin, 1993; Pascarella & Terenzini, 1991). These favorable experiences reinforce high aspirations and goals for college. To achieve these aspirations and goals, these students tended to become more involved with their college experience. By increasing their involvement levels in their college experience,

these students consequently increased their participation in campus life.

Abrahamowicz (1988) found that when measures of attitude toward college are considered, individuals involved in college student organizations had significant differences in their responses measuring feelings of satisfaction toward their institution when compared to students who were not involved in these organizations. College student organization members appeared to have more positive feelings about their current environment and felt satisfied with their educational experience (i.e., gave positive ratings on how well they like college and the institution they were attending). When asked to respond to how well they liked college, a majority of college student organization members (65%) said they were "enthusiastic" about college compared to 17% of non-members of student organizations (Abrahamowicz, 1988). Abrahamowicz also found significantly more positive perceptions of relationships with faculty, administrators, and students among college student organization members. These significant variances apparent in responses between college student organization members and non-members underscored the noticeable differences in attitudes toward the overall college experience.

Emphasizing the idea that college student organization membership influenced campus life perceptions, Williams and Winston, Jr. (1985) investigated participation in campus-recognized organizations among undergraduates at a large public university. Their study found that membership in a college student organization was positively related to perceived satisfaction of the student's current college experience. Using the Student Development Task and Lifestyle Inventory (SDTLI), it was found that students who were members of college organizations believed that they held a greater meaning of their present college experience (i.e. were more aware of their educational environment) compared to non-members and thus were able to explore more thoroughly their interests, goals, and values (Williams & Winston, Jr., 1985).

Increasing students' level of connection to their campus by providing numerous opportunities for peer interactions and endorsing a wide-ranging social life by way of student organizations were positively associated with students' feelings of satisfaction with the student life of their campus (Astin, 1993). Extracurricular participation in college student organizations benefited those who were least connected to their college campuses: "There is considerable evidence...that

active participation in the extracurricular life of a campus can enhance..." positive attitudes about student life within individuals to make them feel more connected to campus (Noel, 1987, as cited in Craig & Warner, 1991, p. 42). The significant levels of campus satisfaction expressed by members of college student organizations tended to enhance their overall college experience.

Campus Involvement

Increased satisfaction with the college experience as a result of organization participation motivates college students to become active participants in the student life of their institution. The extracurricular activities that comprise an institution's student life produce opportunities for students to interact with one another and facilitate involvement with the social aspects of the college as well as with the more formal academic environment.

For each of the fourteen categories of a "quality of effort" scale measuring the amount of extracurricular activities students became involved in at their campus on the CSEQ, members of college student organizations had significantly higher mean scores than nonmembers (Abrahamowicz, 1988). Activities that were cited ranged from the number of library visits by students to membership and participation in clubs and organizations (Abrahamowicz, 1988). One possible explanation for this result could be that college student organization members naturally were more involved in student life in comparison to nonmembers.

Extracurricular participation, however, appeared to nurture activity beyond the scope of the member's student organization. Members of college student organizations extended their involvement into other campus areas. Increased participation in faculty relations, library visitation, interest in theater and the arts, and technology were a few of the areas cited for increase student involvement (Abrahamowicz, 1988).

Williams and Winston, Jr. (1985) found that when compared to non-members of student organizations, members understood their abilities and limitations more clearly and began to explore their interests and values. As shown in the significantly higher levels of task achievement in education and career plans on the SDTLI, student organization members became more aware of resources and learning opportunities available to reach these goals. Pascarella and Terenzini

(1991) found that when thinking in retrospect, college graduates perceived their extracurricular involvement as "having a substantial impact on the development of interpersonal and leadership skills important to general occupational success" (p. 478). College student organization participation enhanced interpersonal and leadership skills, allowing students to explore their goals and to identify steps to achieve these goals.

Schuh and Laverty (1983) studied the long-term effects of involvement obtained from organization participation on a sample of student leaders from three institutions. Leadership positions in extracurricular activities such as student government, fraternities, sororities, and campus newspapers were found to have a positive effect on increased participation in community and civic organizations. In general, students continue to stay aware and become involved in community and political activities even after their terms as college student organization leaders end (Schuh & Laverty, 1983). The study emphasized that college student organization membership can be associated with continued organizational involvement and continued interactions with a variety of peers long after graduation from college.

Continued extracurricular involvement in student organizations produced informed citizens who actively participated in addressing those issues that are of most interest to them. Students viewed community involvement in a positive light and saw their involvement as directly affecting their leadership skills (Schuh & Laverty, 1983). The perceived influence on leadership and other skills emphasize the potential impact organizational participation could have on the development of college students.

Student Learning and Development

In regards to college student organization membership and its effect on critical thinking and intellectual development, Pascarella and Terenzini (1991) supported Astin's (1993) notion that the degree of involvement in activities (i.e., intellectual, vocational, social, athletic, etc.) was significantly associated with cognitive and affective growth. Pascarella and Terenzini, in their thorough review on how college affects student development, found that frequency and quality of students' interactions with other students and their involvement with extracurricular activities (e.g., college student organization participation) were positively associated with high educational aspirations,

enhanced self-confidence, and increased interpersonal and leadership skills: "The greater the students' involvement in college, the greater will be the amount of student learning and personal development" (Pascarella & Terenzini, 1991, p. 36). As stated by the researchers, "perceived [cognitive] growth tended to be commensurate with involvement in activities that were consistent with it and supported it" (Pascarella & Terenzini, 1991, p. 147).

Using GRE scores as measures of learning, Anaya (1996) explored the influence of student experiences and college environments on cognitive development. For the variable of college student organization involvement, the study used student scores on a scale of levels of involvement in a number of activities (e.g., participation in Greek organizations, elected student office, performing volunteer work). The study found that college student organization involvement has a negative effect on verbal learning (Anaya, 1996). The study suggests that an increase in the number of hours spent on college student organization involvement reduced the amount of time and energy necessary to devote to activities directly related to verbal and quantitative learning (Anaya, 1996). Despite these findings, it should be considered that in college settings a variety of extracurricular activities are available for student participation.

In a qualitative study by Baxter Magolda (1992), the impact of the undergraduate co-curricular experience (e.g., college student organization involvement, peer relationships, living arrangements, employment, etc.) on intellectual development was investigated over a four-year period. By interviewing students from their freshmen to senior year, Baxter Magolda found that college organization participation and affiliation cultivated students' intellectual development by initially teaching them responsibility and independence in regard to meeting new people and becoming knowledgeable to the campus environment. Intellectual development further progressed to higher levels of independent functioning reinforced by being able to communicate well with others and holding leadership positions in organizations. Baxter Magolda's qualitative approach allowed students to provide descriptions of their college experience and college organization involvement that captured "the multiple realities of students' experience and interpretations of [cocurricular experiences] impact" in order to "understand how cocurricular experiences contributed to development" of students who participate in campus student organizations (p. 205).

Astin (1993) postulated that a student's learning and development were directly proportional to the quality and quantity of a student's involvement in the academic experience. Astin noted that hours spent in college student organizations per week were positively associated with higher intellectual skills requiring independence and responsibility such as improvement in public speaking skills and holding an elected office. It appeared that participation in a college student organization impacted intellectual development by promoting awareness of both the educational environment and the resources and learning opportunities available for students to meet academic standards.

The influence campus organization participation had on student learning was emphasized by Smith and Griffin's study (1993) on the relationship between extracurricular involvement and psychosocial development. Smith and Griffin found that participation in extracurricular activities promoted academic autonomy for college students. Gaining academic autonomy was described as "enhancing the students' development of the ability to attain their educational goals with minimal help from others" (Smith & Griffin, 1993, p. 81). As levels of extracurricular involvement increased, academic autonomy increased. Especially for seniors, extracurricular involvement improved their ability to initiate career and lifestyle plans (Smith & Griffin, 1993).

In a three-year study by Cooper, Healy, and Simpson (1994), results showed becoming a member of a college student organization had positive effects on student development. As entering freshmen, students who said that they would participate in college student organizations differed significantly on the Life Management index (i.e. items measuring perceptions of personal health, handling finances, and independence) of the SDTLI compared to students who said they intended not to participate (Cooper, Healy, & Simpson, 1993). Freshmen who considered becoming members of college student organizations planned to pursue opportunities that enhanced their academic experience to achieve goals and objectives (Cooper, Healy, & Simpson, 1993).

Students who were members of college organizations between their freshmen and junior year of college showed more significant changes than non-members on indices estimating educational involvement. Being a member of a college organization and being involved in campus life tended to have "direct positive effects on student learning both in and out of the classroom" (Cooper, Healy, & Simpson, 1993, p.

101). College student organization members appeared to show more growth than non-members in tasks that lead to overall student success (e.g., Developing Purpose, Educational Involvement, Lifestyle Planning, and other indices on the SDTLI) (Cooper, Healy, & Simpson, 1993).

Students involved in organizations gave more meaning to their college experience and thus have significantly greater levels of interdependence, education plans, career plans, and lifestyle plans (Williams & Winston, Jr., 1985). Measures of collegiate social participation had statistically significant positive effects on educational attainment for both men and women (Pascarella & Terenzini, 1991). When students were exposed to other achievement-oriented students through college student organizations and other social networks, students were able to acquire personal resources such as interpersonal skills, self-confidence, and specialized knowledge that encourage the realization of goals and aspirations (Pascarella & Terenzini, 1991). Involvement in college student organizations could increase students' understanding of their abilities and limitations in their education environment. Thus, extracurricular activity participation could be an important facet in a student's college experience in that "such participation seems to be an effective means of stimulating personal development" (Williams & Winston, Jr., 1985, p. 58).

Limitations of Reviewed Studies

Research on involvement in student organizations suggested a positive influence on cognitive gains, affective development, academic success and college persistence. From these investigations on student involvement in student organizations, most of the reported findings relied on mainstream predominantly White groups. Research samples comprised mostly of middle class Whites provided the "norms" for college organization experiences where "diverse persons and diverse experiences often appeared other than 'normal'" (Stage & Anaya, 1996, p. 49). Generalizations from the reviewed studies were "particularly problematic when [researchers used] predominantly and traditionally White student organizations such as fraternities, sororities, student government, religious groups, choir groups, and intramural groups" as the focus for their studies (Trevino, 1992, p. 24). Minimal amounts of research have explored minority student involvement in college student organizations (Rooney, 1985). Much of the research has failed to

consider the contributions of minority student involvement in college student organizations, especially in minority college student organizations (Rooney, 1985; Trevino, 1992).

Although participation in extracurricular activities was seen as a positive component of the college experience of students, most studies failed to provide racial and gender breakdowns of their samples and most expressed caution regarding generalizations to other groups since mostly White student leaders and traditional college student organizations that were predominantly White were profiled (e.g., Cooper & Simpson, 1994; Schuh & Laverty, 1983). For the most part, focus was placed on identifying statistically significant findings for Whites, despite researchers' acknowledgment of racial differences in their discussions (e.g., Smith & Griffin, 1993).

The research literature on college student organization participation reflects a problem that has been prevalent in the higher education-student affairs field. It was not until very recently that college student research broke away from research practices where observations of human behavior and development were generalized to all populations, despite the fact that most studies used a limited sample consisting of only White middle or upper class males at elite institutions (Stage & Anaya, 1996).

Discussion

Participation in college student organizations promotes affective and cognitive changes within college students. Involvement in extracurricular activities, especially in college student organizations, has benefits extending beyond classroom learning. Participation in extracurricular activities contributes to the intellectual, social, and emotional changes in a person over time. Outcomes associated with participation in college student organizations includes cognitive development or higher intellectual processes such as critical thinking, knowledge acquisition, synthesis, and decision-making, as well as personal or affective development of attitudes, values, aspirations, and personality disposition. However, some college student organizations affect student learning negatively while others assist in the promotion of cognitive development.

Participation in college student organizations has been shown to have an influence on affective outcomes of the college experience, such as cultivating a student's sense of satisfaction with the college experi-

ence and in increasing participation and involvement within campus and community. College student organization participation also was an influential component in a student's total co-curricular experience as shown by enhancing intellectual development and by allowing students to become aware of and involved with the educational environment. Students were able to assess campus resources to achieve their educational goals.

On the whole, participation in college student organizations appeared to provide students with a variety of opportunities to become better acquainted with the campus life within an institution. While students' personality characteristics and previous levels of participation in extracurricular and leadership activities in high school were not significant predictors of college extracurricular involvement, these factors could be used to identify those who would accept the opportunity to become involved in extracurricular activities, such as participation in college student organizations. College campus environments with multiple student life components provide ample opportunities for organization participation that could influence subsequent participation in such activities.

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Indiana University: The Transition to Coeducation

Christine E. Jones

In 1867, Indiana University became one of the first state institutions of higher education to admit women to a public university on the same terms as its male students. This paper will provide a brief history of women in higher education followed by a closer look into the process by which Indiana University became coeducational.

Many institutions of higher education are currently experiencing a shift in their student populations. At Indiana University female students outnumber their male counterparts by a margin of nearly six percent (Indiana University, 2001). While this may seem normal by today's standards, in the mid-1800's gender demographics were quite different. Post-secondary education for women has changed dramatically since its inception. "The years between 1790 and 1859 witnessed a remarkable growth in female schooling, and as a result the notion of collegiate study moved from the realm of fantasy to that of real experimentation" (Solomon, 1985, p.14). In 1867, Indiana University became one of the first state institutions of higher education to realize the dream of admitting women to a public university on the same terms as its male students. This paper will provide a brief history of women in higher education followed by a closer look into the process by which Indiana University became coeducational.

In 1787, Benjamin Rush opened The Young Ladies Academy in Philadelphia. "Rush maintained that the education of women was critical to the well-being of the new nation, with emphasis on mothers' responsibilities for the early instruction of women" (Solomon, 1985, p. 12). While there was much opposition to this concept of education for women, including the argument that females were incapable of great thoughts and thus not worth training, Benjamin Rush did help to establish a precedent and opened doors for college women in the future (Rudolph, 1962). Female seminaries and academies were founded, largely in the New England area, throughout the early 1800's. Mary Lyon and Zilpah Grant, both having been instructed at the Byfield Female Academy, sought equality for women's education and dreamed of an institution as important as those for the education of men (Solomon, 1985). Mount Holyoke Seminary, the result of those dreams, was chartered in 1836 (Solomon, 1985). Mount Holyoke

became a model for many female institutions throughout the country, yet a new concept with regard to women's education remained unexplored. Coeducation eluded the collegiate academic environment until women at Oberlin College made history in 1837.

In 1837 Oberlin College, originally called the Oberlin Collegiate Institute, became the first institution of higher education to admit women to its all-male roster of college students (Rudolph, 1990). The College's founding father, Father John Shipard, published the first campus circular in 1834, writing, "The elevation of female character by bringing within the reach of the misjudged and neglected sex all the instructive privileges which hitherto have unreasonable distinguished the leading sex from theirs" (Hosford, 1937, p. 5). The institution was chartered in 1834 and from the very beginning sought equality for women. In 1834, both boys and girls were admitted to its preparatory department and were offered the same courses. Students who had completed the appropriate course work at the preparatory school were then eligible for admission to the college (Hosford, 1937). In 1837 four women enrolled in the Oberlin Collegiate Institute's freshman class, inaugurating the coeducational academic experience (Hosford, 1937; Rudolph, 1990). Because Oberlin College was committed to coeducation since its inception, all-male institutions that eventually converted to coeducational institutions could not use Oberlin as a model for their transition; Indiana University came to set a standard by which many institutions operate today.

In 1867, Indiana University admitted women on the same terms as men, a novel idea at that time regarding the education of college women. In 1866 the Board of Trustees in Bloomington, Indiana had considered the admission of women to the institution. (Clark, 1970). The board suggested that, "the quickest way to meet the feminine drive to achieve equality was to admit girls to university classes" (Clark, 1970). The following year, the Board officially voted to allow women to apply to Indiana University (Clark, 1970). While the first woman applied and matriculated in 1867, the University's coeducation experience was not advertised until 1868. An 1868 issue of the campus newspaper states that, "Ladies are admitted to the College Classes on the same terms as males" (The Indiana Student, 1868, p. 7). A later copy of The Indiana Student (May 1, 1871, p. 91) describes a time when students questioned the University's efforts toward women.

The trustees, in the fall of 1867, resolved to admit ladies into the College Classes on the same conditions that young men were admitted; thus giving your ladies of our State an opportunity to receive the same mental discipline, to acquire the same collegiate education as their brothers...Most of the old students did not quietly look upon this innovation. It was decried with the most bitter words and assailed with biting sarcasm. On all sides was heard: 'Mixed Colleges will not live.'

There were others, however, who fully supported the move towards coeducation. An editorial from *The Indiana Student* dated March 12, 1868, poses the question, "Shall Indiana wait until the universities of all the other States admit the ladies and then follow their example?" The piece reads on to reply, "Why not let our State lead the van in this noble cause, and beckon her sister States to follow her example?" (p. 1). As one of the first state institutions to admit women, and the only to admit women on the same terms as men, Indiana University developed its model for coeducation on the basis of gender equity. The institution planned to provide no special support services to welcome their female students. Each student, regardless of gender, was to receive the same treatment and services.

Sarah Parke Morrison was the first female student to matriculate at Indiana University. In 1867 she accepted a five dollar bribe from her father, John Morrison, of the Board of Trustees, to apply to the institution. Having already completed ten years of formal post-secondary education (at all-female colleges), Morrison would be well prepared for her academic experience at Indiana University. Ms. Morrison was rather tired of going to school and hoped that another woman would rise to the honor of becoming the first female at Indiana University (Morrison, 1911). Ms. Morrison sent notices to women throughout the state indicating that Indiana University was to begin admitting women during the next fall term of classes. After no response, she decided that she could not chance the idea that the University might reverse its decision (Morrison, 1911). Sarah Parke Morrison matriculated into the College Classes in 1867, completed the course work in only two years and graduated in 1869. Ms. Morrison later returned to become the first female faculty member at Indiana University. Eight women followed Ms. Morrison and matriculated in the Fall of 1868, seven of whom went on to graduate with Bachelors of Science degrees in 1871 (Woodburn, 1940). The number of female students continued to rise

and by 1882 nearly one quarter of the total student body was comprised of women (Woodburn, 1940). Despite the initial opposition to women at Indiana University, it became clear that women intended to stay. It was noted in *The Indiana Student* on May 1, 1871, that,

It is evident our University is destined to become a great and powerful 'mixed College.' No more do we hear the words of opposition, or the taunts of derision to the ladies becoming students of the University, and journeying, with the young men, long the highway of learning found in our curriculum, but all exclaim, 'ever be remembered the day, when the daughters of our noble State, and neighboring States, received the same advantages as their brothers, for developing and training their mental faculties; and let the day soon come when the ratio of ladies to gentlemen shall soon be nearer.' (p. 91)

Indiana University was establishing itself as a prosperous institution for both men and women while reinforcing its commitment to gender equity. This commitment was regularly reinforced through University publications.

During these early years, Indiana University produced only a few regular publications. The University's Annual Report and the student newspaper, *The Indiana Student*, were responsible for relaying most news about the institution to the public. It is clear from the Annual Reports however, (released during the first five years following the admission of Ms. Morrison) that some Indiana University news was withheld from the reports. Even though Ms. Morrison matriculated at Indiana University in 1867, no mention was made of the admission of women in the 1867 Annual Report. In 1868 the report confirmed that "Ladies are admitted to the collegiate courses, classical and scientific, on the same terms as young men and are entitled to the same rights and privileges; but no ladies will be admitted to the Preparatory Department" (Indiana University, 1868, p. 24). The Preparatory Department was designed to prepare younger male students for the rigor of the collegiate experience at Indiana University. During 1868 girls had to find alternate methods for college preparation. The following year, 1869, ladies were admitted to the Preparatory Department and the statement excluding them from the school was removed from the Annual Report. This information was the only mention of women at Indiana University in the Annual Reports until 1870 (Indiana University, 1868, 1869 & 1870). In 1870 a new section was added to the

university register called, "The Conditions and Wants of the University." The section mainly described the need for more money, more resources and a new gymnasium, but it also included a passage that expressed some self-pride with regard to the quality of education at Indiana University.

Then no young men and women need leave their own state in order to secure the best liberal and professional education in any vocation they may select. Indiana owes this to herself and her sons and daughters. Her children should not be dependent upon other commonwealths for what she, herself, is abundantly able to provide. (Indiana University, 1870, p. 36)

The Annual Report also contained a section entitled "Literary Societies." In 1871 it was reported that a new Literary Society had been established called Hesperian. The report indicated that "The Hesperian is conducted by the young ladies." (Indiana University, 1871, p. 29). It seemed to be a positive step for women, that they were being provided opportunities equal to those of their male counterparts, but it was also noted that, "To head off a confrontation on the social front, Professor Amzi Atwater was given the task of organizing a "feminine" literary society (Clark, 1970, p. 125). No additional mention of women was made in any subsequent Annual Reports with the exception of the female graduates names listed along with the male graduates. The Annual Reports made it quite clear that women were being "admitted on the same terms as men" and that they were "entitled to the same rights and privileges" with little or no additional support or services (Indiana University, 1868, p. 24). The Indiana Student, as has been mentioned previously, also offered information about the how the University was reacting to women in the college courses.

The student newspaper was organized in 1867, published for a few years, suspended and then restarted in 1882 (Woodburn, 1940). The newspaper offered information regarding both local and college affairs from community members and students. (The Indiana Student, 1868). The Indiana Student advertised the admission of women to Indiana University during 1868 and continued to advertise the education of women until 1870. The newspaper periodically referenced the success of coeducation at Indiana.

There were eight ladies in attendance last term, two in the freshman class and six in the classes in modern languages. The whole number

of ladies is now nineteen, twelve in the freshmen class, and seven in modern languages... No other institution in the West furnishes equal facilities for obtaining a thorough education, on as favorable terms as the Indiana State University, which never before was in so prosperous a condition; the future was never so bright. The citizens of Indiana and the friends of education have just reason to be proud of their State University. (The Indiana Student, 1868, p. 24)

The Indiana Student was clearly supportive of the coeducation movement. In 1871, the Pantograph, a local publication, announced that "Ladies have just been admitted to Indiana University, and also to equal standing in its literary societies" (The Indiana Student, 1871 p. 43). The Student quickly responded.

The Pantograph has made a slight mistake. Ladies have been attending the University for four years. Nor do they belong to the literary societies although one of the societies opened her doors to them and bid them welcome. They preferred to be in a society themselves and consequently organized a society of their own, which they called Hesperian. We rejoice to know that they are prospering finely...Indiana University will have seven ladies to graduate on next Commencement day. (The Indiana Student, 1871 p. 43)

The newspaper was committed to helping Indiana University honestly describe women's experiences as college students. Overall, women did not receive an overabundance of either negative or positive press. Women regularly contributed to the articles and personals, although no more or less than did their male counterparts.

Some of the first institutions of higher education that admitted women either provided separate services for both male and female students or they provided significant support for the female students that were to be integrated into the all-male courses. Oberlin developed a model for coeducation that included significant support for their female students. For example, a residence hall and a Female Department full employed by female faculty and staff members was provided to Oberlin women upon their admission in the college courses. Indiana University took its own path and gave no special privileges or support to its female students. Some might say that Indiana University was a pioneer with regard to gender equity as they admitted women on the "same terms as young men" (Indiana University, 1868, p. 24). Others might think that because no special preparations seem to have been made for women at Indiana, the female students may have had diffi-

culty adapting to college life or may have felt unwelcome. Neither the University's Annual Report nor the student newspaper mentioned the admission of Sarah Parke Morrison until she had completed half of her collegiate course work at Indiana. Aside from the organization of the Hesperian Literary Society for women (which was organized simply to avoid future social conflict), no additional support services were developed for the female students at Indiana University. From the very beginning, Indiana University established itself as an institution that would provide ultimate equality to all its students. The institution successfully implemented this model and offered no special privileges to any individuals or groups of students.

Indiana University was a successful pioneer with regard to women's education. Current Indiana University female students outnumber their male counterparts by a significant margin, and the numbers of female students continues to rise (Indiana University, 2001). Contemporary student affairs professionals and student support staff may question the efficacy of Indiana University's complete gender equity model especially recognizing the fact that women were not equal to men outside of the university environment. Considering the idea that students had not experienced gender equality until they arrived at Indiana University, it seems curious that the institution felt as though no special support for female students actually created an equal environment. In retrospect it seems as though the Oberlin model, offering some assistance to its female students, may have been more effective. At the time, however, Indiana University was striving to provide quality education to the citizens of their state and neighboring states regardless of gender, with little or no help from any predecessors. Its foresight allowed Indiana University to establish itself as a predecessor for many institutions that became coeducational. It is fascinating to note that Indiana University's 1867 groundbreaking equity for all students, is the same standard to which the university holds itself today.

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Predicting Faculty-Student Interaction: An Analysis of New Student Expectations

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Over fourteen thousand five hundred new undergraduate students from a variety of four-year colleges and universities completed the College Student Expectations Questionnaire (CSXQ) (Kuh & Pace, 1998) between 1998 and 2000. Findings indicate that background characteristics, institutional characteristics, and students' expectations for college explain expected levels of faculty-student interaction. Implications for theory and practice are presented.

Prior to beginning college, students come with expectations of themselves, the institution, and their instructors. When asked about their expectations, students describe their expected living environments, levels of extra-curricular involvement, and their interactions with faculty members in the academic environment. However, some students have a limited understanding of college life and their expectations reflect these limitations. The focus of this study is to determine if new students with diverse academic majors have different expectations of faculty-student interaction. This study evolved from three bodies of higher education literature: student expectations and motivations, faculty-student interaction, and academic organizations.

Understanding the perceptions and attitudes students bring with them to college is critical in designing effective programs and practices for their service and support. Psychology and sociology literature posit that student expectations are based on past experiences, perceptions, and attitudes (Driscoll, 2000). Drive and achievement theories shed important light on the discussion of students' expectations for college. Hull's drive theory (1943) explains that behaviors are the result of intrinsic drive coupled with habits performed over time. In this theory, some need or drive forces a person to behave in a certain way or perform a certain task. Similarly, Atkinson's achievement theory posits that individuals will work harder to achieve under certain conditions that appeal to them. This theory focuses on students' expectations for success and the value placed on achievement. It is the goal of achievement that provides the motivation for behaviors. Furthermore, Atkinson postulates that students approach individual tasks through a dichotomous

lens of either accomplishment or failure. Atkinson argues that if the tendency toward accomplishment is greater, the individual will probably succeed at the task, but if the tendency toward failure is stronger, the individual will most likely not complete the task (cited in Stipek, 1988).

Finally, Keller (1983) has proposed a model of motivation, performance, and instructional influence that links expectations with performance specifically in academic-related tasks. The model states that expectations are linked to effort, which ultimately affects performance and learning. The theory places a high level of importance on the value of cyclical expectation setting and resetting for accomplishment of the most feasible goals (Keller, 1983). In addition, other literature supports that performance and learning will ultimately be enhanced when high levels of faculty-student interaction are present. Faculty and student affairs professionals should have a solid comprehension of what students expect to get out of college in order to best meet their needs and shape their expectations and experiences.

The Seven Principles of Good Practice, developed by Chickering and Gamson (1987), support the notion of faculty-student interaction. One of the principles addresses this point by stating that quality undergraduate education, "Encourages contacts between students and faculty" (Chickering & Gamson, 1987, p. 1). Frequent faculty-student contact inside and outside the classroom is an important factor in student motivation and involvement; this, in turn, enhances students' intellectual commitment and encourages them to think about their own values and future plans (Chickering & Gamson, 1987). A host of studies indicate that faculty exert much influence in their out of class contacts with students (Terenzini & Pascarella, 1994). High levels of faculty-student interaction have been shown to influence student development (Feldman & Newcomb, 1969; Lampion, 1993; Pascarella & Terenzini, 1991; Volkwein & Carbone, 1994), persistence (Pascarella & Terenzini, 1977), academic achievement (Centra & Rock, 1971), and career and educational aspirations of college students (Thistlethwaite, 1960).

Faculty member's educational influence appears to be significantly enhanced when their contacts with students extend beyond the formal classroom to informal non-classroom settings (Terenzini & Pascarella, 1994). The out-of-classroom experience (OCE) not only involves discussing previous class events, but is also an opportunity for academic and social development for the student. This form of faculty-

student interaction develops trust and intimacy between the faculty member and student (Jaasma & Koper, 1999). Frequent faculty-student interaction also contributes to student development and leads to greater interest and commitment to intellectual concerns (Wilson, Gaff, Dienst, Wood, & Bavry, 1975). Students who interact with faculty tend to develop a greater sense of personal identity, and an increased ability to form close relationships with faculty members. Additionally, these students proceed to influence peers to pursue relationships with faculty (Wilson, et al, 1975).

Kuh and Whitt (1988) posit that subunits within an institution, like academic departments, exemplify distinct cultures. Disciplinary cultures may vary in reflection of the intellectual tasks amongst disciplines, departmental missions, and level of commitment to undergraduate education (Kuh & Whitt, 1988). While most department-level analyses compare faculty experiences, several studies suggest that students' experiences and perceptions also vary in different undergraduate majors. Riley, Ryan, and Lifshitz (1950) asked students to rate the qualities most important to good teaching for teachers in the arts, social sciences, and physical and biological sciences. Results indicated that students' perceptions of effective teaching varied across disciplines; in other words, students have different perceptions of faculty in different academic disciplines. In a related study, Birney, Coplin, and Grose (1960) examined the differences in faculty personality traits as perceived by students. Again, differences emerged in how students viewed faculty in different academic areas.

Biglan (1973) offers a classification of academic subunits based on subject matter in different disciplines. In a study of faculty-scholars, Biglan determined that three main criteria (e.g. existence of a paradigm, concern with application, and concern with life systems) could be used to classify academic units. Biglan identified the differences within these academic subunits as "hard-soft" (Biglan, 1973, p. 201). Today, academic departments are commonly referred to as either "hard" or "soft" disciplines and this distinction carries with it a set of expectations about the subject matter, teaching pedagogies, and environment within that type of academic department. The second dimension Biglan refers to is the practical and applied nature of such fields as education, engineering, and agriculture versus a theoretical purpose for social sciences and humanities. Again, this emphasis on the practical applications of subject matter has implications for the environment of the

department. For purposes of the current study, the differences between academic disciplines must be acknowledged.

Baird (1986), Biglan (1973), Chickering (1969), and Kolb (1988) support that organizational sub-environments, such as the major department, can produce variable influences on student development. Other studies examining the academic subunit culture and its influence on students include Smart (1985), Moran and Volkwein (1988), Hartnett and Centra (1977), and Weidman (1979). The current study is an extension of these early works that attempted to discover differences between academic disciplines.

While student expectations are a good predictor of later experiences, analyzing students at the level of academic major requires acknowledgments of other potentially impacting factors. The need to control for extraneous variables that have been shown to influence major field, faculty-student interaction, or expectations is important. For example, faculty-student interaction differs amongst races in addition to amongst academic disciplines. Clearly, there are a number of extraneous variables that have been shown to impact either levels of faculty-student interaction, expectations, and/or major choice that need to be controlled for in the current study. Race, gender, residency, parents' level of education, institutional characteristics, other expectations for college, and additional variables may explain some part of students' expectations for faculty-student interaction.

Method

Sample

The participants for this study were 14,511 new students that completed the CSXQ between 1998 and 2000. This population includes first-year, full-time students, 19 years of age or younger, who have not had previous college experience and are currently enrolled in public or private institutions of varying enrollment size and Carnegie type. In an effort to ensure a normal distribution of cases across institutional types, only Doctoral and Masters institutions are included in this study. Table 1 provides frequencies on selected background variables (e.g. gender, race, residence status, and first-generation college student status).

Instrument

The College Student Expectations Questionnaire (CSXQ) national database was used to gather data for this study. The CSXQ (2nd

Table 1

Frequencies of Background Variables

<u>Variable Name</u>		<u>Frequencies</u>
Gender	Men	47.1
	Women	52.9
Race	Caucasian	84.4
	Black/African-American	3.9
	Asian/Pacific Islander	3.7
	Hispanic (Mexican-American/Puerto Rican/Other Hispanic)	3.4
	Other Race (Multiracial, American Indian, Other)	4.6
Residence Status	On-campus	80.9
	Off-campus	19.1
First-generation college student	Yes	29.3
	No	69.0

edition, Kuh & Pace, 1998) is designed to gauge what incoming students expect to do in college. The CSXQ was adapted from the College Student Experiences Questionnaire (CSEQ) (Pace & Kuh, 1998), which is based on the belief that what students do in college and how they use institutional resources for learning is critical to their success.

The CSXQ consists of 101 questions that ask students to self-report expected levels of interaction with people, activities, and services on campus. The activities items on the CSXQ relate to: Library and Information Technology, Student Interactions with Faculty Members, Course Learning Activities, Writing Experiences, Campus Programs and Facilities, Clubs, Organizations, and Service Projects, Student Acquaintances, Scientific and Quantitative Experiences, Topics of Conversation, Information in Conversations, and Amount of Reading and Writing. Additionally, student perceptions of the college environment are gauged. The last section of the questionnaire collects background information.

The psychometric properties of the instrument are sound. The activities and environment scales have reliability coefficients (Cronbach's alpha) greater than .73. Although participating schools determine administration methods, all sales and operations in conjunction with the instrument are coordinated by the Center for Postsecondary Research and Planning at Indiana University-Bloomington.

Procedure

While the distribution of the CSXQ varies between institutions, each student completes the survey before the end of the first academic semester. Some institutions administer the questionnaire during orientation while others use introductory classes to contact students. Participation is voluntary and each individual school is responsible to their own Human Subjects Committees' guidelines. Therefore, the individuals distributing the survey vary between institutions. Surveys are scanned, coded, and results are entered into a national database.

The dependent variable for this study is a score entitled Expected Level of Faculty- Student Interaction (ELFSI). Nine variables have been selected that provide insight into student expectations of faculty-student interaction. The nine questions ask the students to state the frequency of expected activities. Response options are coded using a Likert scale with scores of: very often (4), often (3), occasionally (2), and never (1). The Cronbach's alpha for this scale is .85. Each student's ELFSI score was the sum of his or her responses to the nine individual questions.

These data will be used to compare the expectations of students that are intending to study in different academic fields. The Major variable on the CSXQ allows students to choose one of 23 different majors; therefore, broad academic categories were recoded to compare and report results rather than using the 23 individual majors. Based on established literature, the 23 majors are categorized into seven general fields (Biglan, 1973). The academic areas are Business, Social Sciences, Science and Math, Arts and Letters, Pre-professional, Undecided, and Other.

Results*Data Analysis*

Because this study explored differences between majors on one dependent variable, Expected Level of Faculty Student Interaction (ELFSI), a one-factor analysis of variance (one-way ANOVA) was first conducted to determine whether those differences in expected levels were statistically significant ($\alpha = .05$). Additionally, the Scheffe post-hoc procedure was used to examine all possible linear combinations of group means. Results of the ANOVA and Scheffe post-hoc analysis confirmed that significant differences exist. Means and standard deviations for the major variables and ANOVA results are located in

Table 2

Major Variables

Major	M	SD	N
Arts and Letters	2.49	.51	1862
Business	2.47	.51	2485
Social Sciences	2.47	.51	1963
Science and Math	2.42	.51	4479
Pre-professional	2.56	.50	767
Undecided	2.35	.48	1257
Other	2.43	.52	1166

Analysis of Variance for Major

Source	df	F
Between groups	6	20.090*
Within groups	13972	
Total	13978	

*p < .05.

Table 2. The Scheffe post hoc procedure yielded differences between majors. Specifically, pre-professional majors were significantly more likely to expect greater levels of faculty-student interaction than business, social sciences, science and math, undecided, and other majors (p = .05). Although significant differences were found, the mean differences did not differ more than .2. Because of the large sample size, small actual mean differences become statistically significant while all majors still averaged between "occasionally" and "often" expected levels of faculty-student interaction.

Another explanation for the differences may be due to other variables that influence expected levels of interaction, major, or expectations (i.e. race, gender, institutional type). Therefore, a multiple regression was conducted.

To develop the regression model frequencies and means for all survey items and institutional characteristics were examined. Independent variable subscales were created to reduce the number of variables entered into the model. Variables were entered into a block model using the following three blocks: 1) background characteristics, 2) institutional characteristics, and 3) expectations for college.

Multiple Regression Results

A total of 28 variables, entered in a three-block hierarchical regression, accounted for 44% of the variance (R² = .44) in the dependent variable. Student background characteristics explained the least amount of variance, less than two percent (R² = .019), in the dependent variable. The block of institutional characteristics accounted for an

Table 3

Regression Model for Variables Predicting Expected Level of Faculty-Student Interaction (N = 11,670)¹

Variable	Background Characteristics	Institutional Characteristics	Full Model
Background Characteristics			
Male	-.06*	-.05*	.07*
Black	.13*	.07*	.03*
Hispanic	.20*	.06*	.03*
Asian	.04	.01	.01
Other race	.04	.01	.01
First Generation	-.00	.00	.01
On-campus Resident	-.02	.01	-.03*
Major- Business	-.02	-.02	.02
Major- Social Sciences	-.04	-.02	-.01
Major- Science and Math	-.06*	-.07*	-.02
Major- Pre-professional	.05	.02*	.01
Major- Undecided	-.14*	-.08*	-.02*
Major- Other	-.04*	-.02	.02*
Institutional Characteristics			
Carnegie Type (Doctoral)	.09*	.18*	.05*
Institutional Control (public)	-.05*	-.02	.05*
Enrollment size of college (>10,000)	-.04*	-.13*	-.14*
College Expectations			
Course learning scale	.43*	.42*	.14*
Writing scale	.43*	.43*	.22*
Campus facilities scale	.45*	.44*	.15*
Student acquaintances scale	.35*	.34*	.04*
Environment scale	.33*	.33*	.10*
Reading/writing scale	.22*	.20*	.01
Conversations scale	.43*	.41*	.10*
Clubs, organizations scale	.46*	.46*	.23*
Explain scientific/math theory	.29*	.28*	.05*
Out of class academic work	.19*	.17*	.01
Advanced Degree	-.14*	-.13*	-.03*
Expected grades	.14*	.13*	-.03*
R ²	.02	.04	.44

¹ Standardized regression coefficients (Betas) are reported. Note: Italicized coefficients indicate that variables have not yet entered the regression equation.

*p < .05.

additional two percent of the variance (R² = .020). The last block, containing variables of students' expectations for college, explained most of the variance in the dependent variable, accounting for 38.2% of the variance (R² = .382). All three blocks yielded significant F changes of p = .000.

The beta coefficients for each independent variable within the three blocks are shown in Table 3. Within the first block, Student Background Characteristics, four significant contributors to the regression emerged. Men were significantly more likely than women to expect high levels of faculty-student interaction when all other variables were controlled. Black and Hispanic students were significantly more likely than White students to expect interaction with faculty. The final significant relationship existed between students' residence status and expected level of faculty-student interaction. Students planning to live on-campus were significantly less likely to expect high levels of interaction than those living off-campus. While individual student background characteristics were significantly related to expected level

of faculty-student interaction, the group of variables only explained two percent of overall variance.

As previous literature attested Carnegie type, institutional control, and enrollment size all significantly affect expected levels of faculty-student interaction. Block two of the regression model confirmed those findings, showing that students attending doctoral institutions were significantly more likely to expect interaction with faculty than students at master's institutions. Additionally, students at public schools were significantly more likely to expect interaction than students at private schools. And, students attending schools with enrollments under 10,000 expect significantly higher levels of faculty-student interaction than students at larger schools. Like the first block of the model, the second block contained significant predictors, but only explained two percent of the variance.

The third block of the regression increased R^2 by .4, explaining 38.2% of the overall variance and ten of the twelve entered variables were significantly related to the dependent variable. Interestingly, students who expect to earn high grades expect to interact with faculty significantly less than those students who expect to earn lower grades. This may be because students who expect to earn lower grades anticipate needing more academic support and assistance from faculty or students expecting to earn Bs and Cs during their first year may have more realistic expectations overall of their college experience. However, students who expect to enroll for an advanced degree were significantly less likely to expect faculty-student interaction. Additionally, the remaining six activities scales and the environment scale were positively associated with high levels of expected faculty-student interaction.

What emerges from the regression model is evidence that students who expect to be active in college, in terms of activities, coursework, peer interactions, etc. generally expect to also be actively involved with faculty members. Also, some background characteristics and institutional variables emerge as significant predictors of the variance of expected levels of faculty-student interaction among participants. And, even though the first and second blocks explained only 1.9% and 2% respectively of the overall R^2 , both blocks, as well as the third block, produced significant F changes. Although the regression model explains 44% ($R^2 = .44$) of the variance, major accounted for only 0.8% of the overall variance. In contrast, students other expectations for

college explained the majority of the variance, in contradiction to the hypothesis.

Discussion

Background Characteristics. The purpose of this study was to investigate the connection between students' major and expected levels of faculty-student interaction. While existing literature supports that students' experiences with faculty vary in different majors, the results of this study question previous work on the influence of departmental culture on student experiences by introducing the role of expectations as an additional variable in potentially explaining student experiences. This would suggest that student experiences at the department level might be more complicated than previous studies have suggested.

The findings that men expect higher levels of faculty-student interaction than women, and Blacks and Hispanics expect higher levels of faculty-student interaction than White students raise several questions about the demographics of faculty members on the observed campuses. For example, if the faculty is overwhelmingly male, incoming male students may feel a greater connection and comfort with that group. However, female students may concurrently feel excluded, marginalized, and underrepresented, and articulate fewer expectations for interaction.

Further, Hurtado, Milem, Clayton-Pedersen, and Allen (1999) describe the psychological climate for students on college campuses. Acknowledging this research, students' expectations may be revealing some insight into their feelings or perceptions of campus climate. That is, perhaps Black and Hispanic students feel that the institution has expressed a commitment to minority student success and the students' expectations are reflecting their comfort, inclusion, and acceptance of the campus commitment. Another possible explanation for this finding may be representative of minority students' awareness of stereotypes regarding their academic performance. Thus, their expectations to interact with faculty more frequently than their White classmates could be an attempt to negate the stereotypes.

Another significant finding was the higher expectations of students planning to live off-campus over those planning to live on-campus in regards to faculty-student interaction. This finding may be a result of the perception of on-campus students that their residency automatically creates opportunities for faculty-student interaction. On

the other hand, off-campus students may be articulating higher expectations of interaction with faculty members because they see their academic life as separate from their residence.

Institutional Variables. There was a bit of contradiction in the findings on the institutional variables type and enrollment size. Students attending Doctoral institutions reported greater expectations for faculty-student interaction than students at Master's institutions. However, students at smaller institutions reported higher expectations than students at larger institutions. These findings seem to contradict each other because typically Doctoral institutions are larger than Master's institutions. However, our dataset includes a cross-section of both large and small institutions of both Carnegie classifications. These findings tend to support the notion that regardless of type or size, students have similar expectations for faculty-student interaction.

Student expectations. Students who expect to pursue an advanced degree and students who expect higher grades in college expect lower levels of interaction with faculty members than their classmates. These findings might relate to the literature on motivation and drive theory. Particularly, students who set goals and have an intrinsic desire to achieve those goals do not anticipate or expect to be working with faculty on the road to accomplishment. Likewise, perhaps these students expect to interact with faculty in advising, counseling, and supportive roles to help clarify those future goals during their college experience.

Practical implications

Discussion groups including students who have just completed the college choice process should be conducted to gain a broader understanding of what students' expectations are for college. Further, admissions and marketing personnel should consider altering brochures, catalogues, and view books to include students' expectations of college as a factor that prospective students should consider before applying.

Additionally, faculty and staff across campus should be aware of students' expectations in order to integrate them into the activities of other programs and departments. Therefore, results of these types of surveys and interviews should be shared with all campus personnel.

Theoretical implications

To extend existing models on college choice, student satisfaction,

recruitment, and retention, a more succinct theoretical model may be developed to further explain or predict faculty-student interaction. If administrators are able to rely on theory to predict which students are more likely to interact with faculty members, then intervention efforts can be focused toward those students who do not expect high levels of interaction. A theoretical model of students' expectations may want to be considered separately for men, women, students of color, and off-campus students because students with these characteristics produced interesting findings in the current study.

Future research should seek to address the 56% of the variance that was unexplained in the current model. Therefore, the question still exists: what additional factors influence student expectations of faculty-student interaction? Future studies may want to include more information on pre-college characteristics (i.e. family, high school variables, college preparatory programs, summer bridge programs, etc.). Thus, researchers could gain a better sense of what students' actual expectations are, and perhaps a clue about the link between past experiences and future expectations. Finally, further research could explore how meeting, or not meeting, student expectations impact student satisfaction and retention on college campuses.

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