

Development of a measure of students' expectations of advising

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ABSTRACT

Advising has long been recognized as important in college students' experience. Good advisement contributes to students' taking appropriate courses and careers; improper advisement contributes to lack of motivation, delayed graduation, decreased retention, and poor career choices. This study reports on one institution's attempt to improve advising by understanding students' views of the advising process. A survey of students' expectations was developed to see what was important in advising and was administered to 583 business majors. Analysis revealed four factors: advisement about job search, information about courses and programs, advisement about personal factors, and advisement about a major and career choice. Reliable scales were formed, and students' responses were compared across gender, class level, ethnicity, and other demographic variables. Results will allow the targeting of specific subpopulations with special advising initiatives.

Keywords: advising, analysis, demographics, expectations, participants

INTRODUCTION

University faculty and administrators have long been concerned about the adequacy of undergraduate advising programs (Titley & Titley, 1982; Frost, 2002; Johnson & Morgan, 2005; Low 2000; Rajecki & Lauer, 2007). Poor academic advising may result in students' taking incorrect courses, thus taking longer to graduate; taking courses for which they are not prepared, thus negatively affecting their grade point averages; choosing majors for which they are ill-suited; failing to form a bond with the institution; and overall decreasing retention. On the other hand, effective advising presumably results in higher retention and graduation rates, higher student satisfaction and greater career success (Jeschke et al., 2001; Tinto, 1993).

Of the studies of advising that have been published, most discuss advisement from either the standpoints of what administrators and/or faculty expect advisement to accomplish, or students' evaluations of advising or advisors. However, a few have explicitly considered what students expect from college advising (Propp and Rhodes, 2006; Smith and Allen, 2006; Low, 2000). Knowing what students expect from advising is important because assumptions that faculty and administrators make about what advising should do may vary from what students expect, causing unmet expectations. This may result in students expecting help in areas in which none is provided, or administrative and faculty resources being allocated where student needs do not exist. Furthermore, Propp and Rhodes (2006) suggested that students' expectations of advising are increasing in recent years, as their view of college education has become more consumer-oriented. At the same time, the time faculty spend advising students has decreased (Milem, Berger, and Dey, 2000).

The present study attempted to improve advising in one college by learning what students expect of advising. A valid instrument was created for assessing how important various facets of the advising process are for students, and using this, were able to compare and contrast students' expectations in some subpopulations. This allows the creation of special types of advising programs to target specific student subgroups (e.g. lower division students, who are more likely to need and value advising about job search and career topics). Other institutions can use the instrument described here as a starting point for developing their own instruments that better fit the types of programs and student populations that they serve, and hence to increase understanding by administrators and faculty of what students expect from advising. Not only would this allow administrators to respond more effectively to their consumer-students, it would also make possible comparisons of students' expectations with those of faculty and administrators, and the tracking of changes in students' expectations over time.

BACKGROUND

Past research on expectations of advising has yielded mixed results (Andrews et al., 1987; Guinn and Mitchell, 1986; Kelley and Lynch, 1991; Winston and Sandor, 1984; Pascarella, 1980). These studies reflect contradictory results about what students expect from advisors (Propp and Rhodes, 2006), which may be due to differences in research design, instruments, the research setting and/or samples.

Two recent studies report findings relevant to students' expectations of advising. Smith and Allen (2006) studied 2193 undergraduates at a doctoral-research intensive urban university. Students rated the importance of 12 academic advising functions representing 5 underlying constructs they identified as important to the advising role: integration, referral, information,

individuation and shared responsibility. “Integration” reflected students’ making connections between off-campus experiences with major and general education courses (also known as “holistic”). “Referral” involved connecting students to various campus resources. “Information” referred to providing information. “Individuation” involved consideration of a student’s unique characteristics. “Shared responsibility” involved the student in planning, problem-solving, and decision making. The researchers did not include any items involving personal counseling, concentrating only on the academic role of advisors. They found that the Information functions exhibited the highest mean importance rating; however, all functions were rated as important – at least 4.21 on a 6-point scale – by the students surveyed.

Propp and Rhodes (2006) also studied expectations of advising, examining the mental constructs that underlie students’ expectations for advisor behavior. Utilizing an adapted version of Guinn and Mitchell’s (1986) Advising Role and Responsibility Inventory with 93 respondents, they developed a 2 x 2 typology of preferred advisor behavior. Based on their findings, advising behavior can be described along two dimensions: (1) Academic versus Developmental and (2) Generalized versus Individualized. In the Academic role, advisors inform the student about various requirements, deadlines, procedures, and rules. In the Developmental role, advisors mentor and advise students. Either role may be acted out in either a Generalized (relevant to groups or categories of students) or Individualized (sensitive to individual student characteristics and needs) manner. They found that students considered that the most important expectations to be guiding (generalized developmental), informing (generalized academic) and apprising (individualized academic), with expectations of mentoring (individualized developmental) significantly lower.

Student Characteristics and Expectations of Advising

Some groups of students may hold different expectations than others, and advising processes may be improved by being sensitive to these. The influences of various demographic characteristics on students’ expectations of advising have been investigated. However, results are mixed. Smith and Allen (2006), utilizing simultaneous regression, reported that women rated all but one function (shared responsibility) as more important than did men. Crockett and Crawford found that women had higher expectations, but only on their scale relating to administrative aspects of advising. However, Propp and Rhodes (2006) and Winston and Sandor (1984) found no effect of gender on advising expectations.

Smith and Allen (2006) found an impact of ethnicity on the students’ rating of importance. African-American, Asian-American and some multi-ethnic students rated 9 of the functions differently than Caucasian students. Interestingly, Hispanic and Native-American students did not rate the level of importance differently than did the White students, except on one dimension (referral to non-academic campus resources). They cautioned that this is a complex area and generalizations about students in any group should be made with caution. Propp and Rhodes (2006) also looked at effects of ethnicity on expectations, finding no significant differences between their two groups with sufficient sample sizes.

It makes sense that students’ expectations of advising will change throughout their college careers, due to both their familiarity and experience with college life as well as their changing needs. Smith and Allen (2006) found that in the advisor’s informational role, the lower division students valued help in selecting among the general education options, more than upper division students. Andrews et al. (1987) found that students’ class level did not significantly

predict advising expectations, but did find that age significantly predicted them, suggesting that maturation is a more important influence on perceived need than is the length of time a student has been at the institution.

Other demographic characteristics of students might also influence their expectations. Students who live on or close to campus may find it more difficult to seek advice from family, and thus more likely to seek out advising, while students who live with their parents may be more likely to turn to them for some types of advice. Students with high grades may have more concern about performance and may seek out advising to double check course choices and degree requirements. Students who work may have lower expectations because they have less available time to seek out advising. The possible impact of these variables is explored in this research.

METHOD

Survey Development

The survey was developed from several sources: a review of published studies of advising expectations, advising-related questions from a senior exit survey in use at the institution for a number of years, and a brainstorming session of the authors, all of whom have advised students on a broad range of issues for many years. This resulted in a list of 22 items about various aspects of advising. The items reflected five areas of advising: career issues; choosing a major; job search; information (i.e., choosing courses, checking requirements); and peripheral topics (i.e., personal questions and other topics that may not be the formal responsibility of advisors, but which may arise). The items appear in Table 1.

For each item, students responded to this question: “What do you expect from your advisor and/or the advising process?” along a 5 point Likert scale ranging from 1, “Not At All Important”, to 5, “Extremely Important.” In addition, students also reported their major, gender, age, credits completed, race/ethnicity, overall grade point average, housing, and whether or not they were living with their parents. The entire survey was approved by the university’s Human Subjects Committee.

Research Setting

The research was conducted in a mid-sized four-year university with approximately 1600 business majors in the Northeast U.S. This university is public and is basically teaching-oriented. Faculty members perform both academic and career advising, each advising approximately 55 business students each semester, in addition to the normal teaching load. These students range from first semester freshmen to graduating seniors, and may be majoring in the faculty member’s discipline or a different business major, or be “business core” students. The college does not have a staff of professional advisors, although a Career Development Center on campus does provide some career-oriented programs for students and a Counseling Center is available to students.

Procedure

A convenience sample of business majors was utilized for this research. Specific business courses were selected to yield a reasonable cross-section of business majors, as well as reasonable numbers of lower- and upper-division students. Surveys were given to faculty of these courses with the request that they be given to students for completion during class time. Of the sections intended, all but 2 were obtained.

Participants

583 students (182 first-year and sophomores, 396 juniors and seniors, 5 not responding to this question) completed the survey. The respondent group averaged 21.7 years of age, and was composed of 242 women (41.5%) and 339 males (58.1%), of which 483 reported their race/ethnicity as Caucasian. These approximated the age, gender and racial/ethnic makeup of the college. Forty-three percent of students ($n = 252$) reported their GPA between 2.5 and 3.0, with a range from “under 2.0” (10 students) to “3.5 to 4.0” (78 students).

RESULTS

Mean ratings of the 24 items are shown in Table 1 (all tables are in the Appendix). The strength of students’ responses ranged from a low of 2.00 for “Helping me with personal issues” to 4.71 for “Helping me choose the right courses to graduate” and 4.69 for “Helping me understand my degree requirements.”

Scale Development

An exploratory factor analysis to assess the structure of the data was performed, utilizing SPSS to conduct a principal components analysis of the 22 items. Both varimax and oblique rotations were conducted; similar results were found. Table 2 gives the results of the oblique rotation, which converged in 7 iterations. Only items with component loadings over .45 were retained. No items cross-loaded, and each factor was supported by 5 or 6 items. The four-factor solution accounted for 63.22% of the variance.

Factor 1, explaining 37.2% of the variance, included the items related to the mechanics of getting or preparing to get a job, such as resume development and finding ways to get relevant experience. This factor was labeled, “Job Search.”

Factor 2 (10.4% of the variance) contained items related to getting or understanding information about academic topics, such as about course choice and procedures for specific courses. This factor was labeled “Information.”

Factor 3 (8.6% of the variance) contained items that were about non-academic matters. This factor was labeled, “Personal.”

Finally, Factor 4 (6.9% of the variance) contained items that were related to choice of major and/or career. This factor was labeled, “Career/Major.”

All factors were all internally consistent with acceptable Cronbach’s alphas (Job Search = .89; Information = .80; Personal = .83; Career/Major = .84) (Nunnally, 1967). Composite indices for each group were then created by calculating the mean of each. These indices can be interpreted on the same 1 – 5 scale as the original items. The indices were moderately

intercorrelated (r 's ranged from .46 - .56). Finally, in order to assess the usefulness of these indices for understanding possible differences in expectations, means of the indices between demographic groups of students (upper versus lower division, majors, gender, race/ethnicity, and GPA) were compared. Table 3 gives the means of each of the composite indices.

Overall, students reported highest expectations for the area of informational advising – course selection and degree requirements. Less important were advising related to job search and choice of major. Least important, overall, was advising about personal issues. However, even the lowest rating (2.7) is higher than the midpoint of the scale.

Student Characteristics and Expectations

Simultaneous regression analyses were conducted next. The predictor variables were class level (upper versus lower division), ethnicity, gender, hours working at a job, housing (on campus, off-campus within 5 miles of the university, off-campus more than 5 miles), overall GPA, and whether or not the student was living with his/her parents. Age was not included in the analysis because the sample was highly homogeneous and covaried significantly with class level.

The results are presented in Table 4. This table only includes predictors significant at the .05 level or below.

When student characteristics were taken into consideration simultaneously, gender, class level, and ethnicity predicted one or more of the dependent variables. Class level predicted both Job Search and Major/Career, with upper division students expressing lower expectations of advisement than lower division students. Gender predicted both job search and information, with women expecting more advisement than men in both areas. Finally, non-Caucasian student expressed significantly higher expectations for Personal advisement than Caucasian students.

Differences were further explored in means of expectations between upper and lower division students. Upper (students with 60 or more credits) differed significantly from lower division students in their expectations of advising (Table 5). Lower division students had significantly higher expectations of Job Search (3.98 versus 3.71, $p < .01$), and Career/Major (3.79 versus 3.48, $p < .01$). This is not surprising; students new to the university know less about how their academic career will unfold and look to professionals and faculty for help. However, it also implies that colleges need to be aware of and sensitive to these higher expectations and allocate sufficient and possibly different types of resources to these students. It can also be noted that regardless of the level of students, Information advising is considered most important and Personal advising the least.

Further exploring differences by gender, Table 6 gives mean values for men and women in the four areas. Women rated their expectations of Job Search higher than men (3.90 versus 3.71, $p < .05$), their expectations of Information higher (4.41 versus 4.26, $p < .01$), and their expectations of Career/Major higher than men (3.69 versus 3.50, $p < .05$).

Similarly, mean values were compared by ethnicity. Non-Caucasians rated expectations of Personal significantly higher than Caucasians (3.07 versus 2.67, $p < .01$) (Table 7). Note that information is still most important for both groups.

SUMMARY

The factor structure underlying the instrument in this study is in some ways similar to the dimensions identified in previous research, for example, to the constructs from the Propp and Rhodes (2006) study. The factor labeled Information in the present study (understanding degree requirements, choosing courses, meeting graduation requirements, procedures and processes, choosing a minor) appears similar to the Informing (degree requirements, deadlines), Guiding (recommending courses, evaluating load, guiding to area of interest), and Apprising (registration details, graduation requirements, recommending instructors) factors that Propp and Rhodes identified, although in the present study the items formed only one, not three, factors. In the study Information was rated the most important aspect of advising, and similarly, in Smith and Allen's (2006) study a set of three factors similar to Information were rated most important. The Personal factor (e.g., personal issues, help with financial aid or bursar) from the present study appears to be fairly similar to Propp and Rhodes's Mentoring factor (e.g., counseling about personal concerns), and these factors were rated lowest in both studies.

The factor structure here can also be compared to the conceptual structure of Smith and Allen's (2006) study. The factor Information appears to be close to their Information Functions (assisting students with understanding how things work, giving students accurate information about requirements). The factor Personal appears somewhat similar to their construct Referral (referral to tutoring and other resources). The factor Career/Major has commonalities with both Integration (e.g., advising with career and life goals, courses in the major) and Individuation (taking into account students' skills, abilities, and interests). Again, the results are similar to theirs in that students' highest expectations were for Information in both studies.

On the other hand, some significant differences exist between the present study and those of the past. The instrument included more direct assessment of students' expectations of advisors specifically for job search and career choice issues. The inclusion of these items in the survey reflects the nature of advising at the institution, which has both academic and career development facets. Furthermore, more items were included that reflected the personal concerns that do come to advisors' attention.

The research here also underscores the importance of individual characteristics in understanding what students expect. Like Smith and Allen (2006), it was found that class level, gender, and ethnicity all played a significant role. The differences between expectations of lower and upper level students suggest that universities could create different advising mechanisms that more closely match students' perceived needs. For example, universities should make certain that lower level students are aware of and know how to take advantage of career counseling services.

Overall, women were more demanding in their expectations of what their advisors should know and should be able to do for them, particularly in providing information but also in Job Search and Career/Major. Frost (1991, p. 360) suggested that, "Although female students express higher needs concerning academic advising than do male students, most are unlikely to develop meaningful relationships with faculty members who provide enthusiastic career guidance and can serve as positive role models for academic and professional achievement.." Further exploration is warranted.

Finally, it was found that non-Caucasians in the study showed a significantly higher expectation level for Personal advising, compared with Caucasians. The limited sample size precluded the analyzing the data by breaking ethnicity down into more specific groups, but given

the importance of understanding and working with diverse students, this finding is important. Are these students more likely to be first-generation college students, and hence need more guidance? Are these students more likely to have home locations farther from the particular campus, and/or in types of locations (such as urban) that are very unlike the campus setting (which is rural)? Again, these questions are worth pursuing. Furthermore, if personal issues are considered by some faculty advisors as being inappropriate, do these students know where to turn?

The present study is not without limitations. It was a convenience sample of a fairly homogeneous population within just one institution. Furthermore, while the instrument developed appears to be robust from a measurement standpoint, the ability of students' demographic characteristics to explain variance in the measures was very limited. Nonetheless, it appears to be at least a starting point for further research and potentially helpful in the design of advising systems.

CONCLUSIONS

College students today are increasingly savvy consumers. Researchers have reported on the consumerist attitudes of the millennial students as they pertain to higher education (Delucchi, 2002; Propp & Rhodes, 2006; Rolfe, 2002). This attitude toward higher education appears to be mirrored by students' parents, as well (Carney-Hall, 2008). One can expect this attitude to continue influence educational choice and satisfaction, perhaps even more significantly as many are faced with increases in college-related expenses and reduced financial support (Rolfe, 2002). Coupled with impact of today's economic environment, this change has resulted in students and their parents emphasizing value in their consumer choices. Students and parents look for identifiable benefits in return for their tuition and room and board dollars (Delucchi, 2002, 1997). Such an attitude has implications for students' satisfaction with their higher education experience and the institution as a whole.

The literature on consumer satisfaction suggests that an individual's expectations prior to actual consumption are an important factor in post-consumption evaluations (Bolton and Drew, 1991; Oliver, 1980). If college students have a consumerist view toward a college education, then their assessment of their satisfaction with the school and its programs may be linked to their expectations and whether those expectations were met and to what degree. Higher education is seen as a complex service purchase by most students and their parents; their tuition dollars purchase a bundle of benefits, of which academic advisement is one. Since student satisfaction has been linked to important outcomes such as retention and graduation rates, this should be of concern. This highlights the importance for university administrations and faculty to understand what students expect of the advising process and how those expectations may have changed from those of the past.

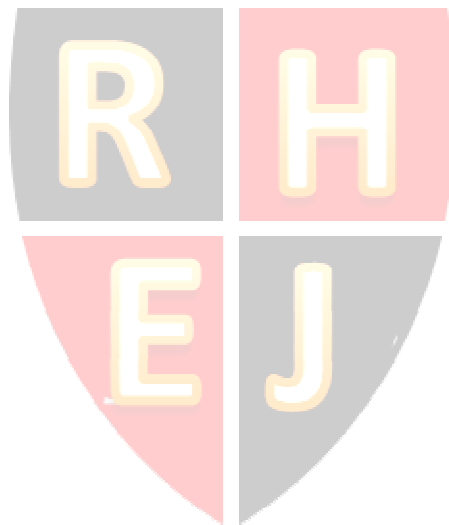
The present study sought to develop an instrument that universities could use to understand what their students expect from advising as well as how different groups of students vary in their desires. The instrument appears to have some promise. Further research should validate this study on samples of students from other majors and at other universities, particularly of different types (e.g., research-intensive). The utility of this instrument should also be explored in the contexts of comparing students' expectations to their actual experiences of advising, as well as comparing the expectations of students to those of faculty and administrators.

Future research should also explore findings here that replicate those of past studies in that women's and non-Caucasians' expectations vary from their comparison groups. Students with higher needs for advising of whatever type may be underserved if these needs are not recognized and accommodated. In the extreme, not serving these needs may put these students at a comparative disadvantage to their fellow students as well as potentially damaging a university's reputation for student support.

REFERENCES

- Andrews, M., Andrews, D., Long, E., and Henton, J. (1987). Student characteristics as predictors of perceived academic advising needs. *Journal of College Student Personnel, January*, 60-65.
- Bolton, R. N., & Drew, J. H. (1991). A multistage model of customers' assessments of service quality and value. *Journal of Consumer Research, 17(4)*, 375-384.
- Carney-Hall, K. (2008). Understanding current trends in family involvement. *New Directions for Student Services, (122)*, 3-14.
- Crockett, J.B., & Crawford, R. L. (1989). The relationship between Myers-Briggs Type Indicator (MBTI) scale scores and advising style preferences of college freshmen. *Journal of College Student Development, March 1989, Vol. 30*, 154-161.
- Delucchi, M., & Korgen, K. (2002). "We're the customer--we pay the tuition": Student consumerism among undergraduate sociology majors. *Teaching Sociology, 30(1)*, 100-107.
- Delucchi, M., & Smith, W. L. (1997). Satisfied customers versus pedagogic responsibility: Further thoughts on student consumerism. *Teaching Sociology, 25(4)*, 336-337.
- Frost, S. H. (1991). Fostering the critical thinking of college women through academic advising and faculty contact. *Journal of College Student Development, 32, July*, 359-366.
- Guinn, D., & Mitchell, R. (1986). Academic advising: And different expectations. *NACADA Journal, 6(2)*, 99-105.
- Jeschke, M. P., Johnson, K. E., & Williams, J. R. (2001). A comparison of intrusive and prescriptive advising of psychology majors at an urban comprehensive university. *NACADA Journal, 21*, 46-58.
- Johnson, E. J., & Morgan, B. L. (2005). Advice on advising: Improving a comprehensive university's program. *Teaching of Psychology, 32*, 15-18.
- Kelley, K. N., & Lynch, M. J. (1991). Factors students use when evaluating advisors. *NACADA Journal, 11(1)*, 26-33.
- Low, L. (2000). Are college students satisfied? A national analysis of changing expectations. *USA foundation New Agenda Series, February*.
- Milem, J. F., Berger, J. B., & Dey, E. L. (2000). Faculty time allocation: A study of change over twenty years. *Journal of Higher Education, 71*, 454-75.
- Nunnally, J. (1967). *Psychometric Theory*. New York: McGraw-Hill.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research (JMR), 17(4)*, 460-469.
- Pascarella, E. (1980). Student-faculty informal contact and college outcomes. *Review of Educational Research, 50(4)*, 545-95.
- Propp, K. M., & Rhodes, S. C. (2006). Informing, apprising, guiding, and mentoring: Constructs underlying upperclassmen expectations for advising. *NACADA Journal, 26(1)*, 46-55.

- Rajecki, D. W., & Lauer, Joan B. (2007). Improved advising ratings in an undergraduate psychology program. *Psychology Reports, 100*, 171-176.
- Rolfe, H. (2002). Students' demands and expectations in an age of reduced financial support: The perspectives of lecturers in four English universities.
- Smith, C. L., & Allen, J. M. (2006). Essential functions of academic advising: What students want and get. *NACADA Journal, 26*(1), 56-66.
- Tinto, V., (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition* (Second Edition). University of Chicago Press.
- Titley, R.W., & Titley, B.S. (1982). Academic advising: the neglected dimension in designs for undergraduate education. *Teaching of Psychology, 9*, 45-49.
- Winston, R. B., & Sandor, J. A. (1984). Developmental academic advising: What do students want? *NACADA Journal, 4*(1), 5-13.



APPENDICES

Table 1
Descriptive Statistics of Expectation Items

	N	Mean	Std. Deviation
Helping me choose my major	582	3.49	1.28
Helping me change my major	578	3.79	1.21
Telling me I'm in the wrong major	578	3.41	1.31
Helping me choose a career	578	3.71	1.19
Helping me identify my interests and talents	577	3.50	1.25
Helping me find work or volunteer experience that will be related to my career	579	3.85	1.15
Helping me develop my resume	579	3.84	1.15
Helping me write my resume and cover letter	579	3.59	1.23
Helping me search for jobs	577	3.68	1.21
Helping me choose the right courses to graduate	578	4.71	.65
Helping me understand my degree requirements	581	4.69	.68
Helping me choose a minor	580	3.58	1.19
Helping me manage my time better	580	2.81	1.23
Helping me with personal issues	569	2.00	1.15
Letting me talk about issues I'm facing at school	579	2.94	1.26
Helping me understand financial aid	581	2.96	1.39
Helping me get problems with the Bursar's office (e.g., parking tickets) cleared up	581	2.39	1.37
Helping me understand the processes for getting an internship, independent study, and/or individualized instruction	578	4.28	.98
Helping me find an internship	581	3.99	1.10
Seeing if I'm on track to meet graduation requirements	579	4.65	.73
Explaining how to add/drop a course, withdraw, or get a leave of absence	581	4.00	1.17
Telling me about international exchange opportunities	581	3.28	1.31

Table 2
Pattern Matrix

	Component			
	1	2	3	4
Helping me write my resume and cover letter	.836			
Helping me search for jobs	.831			
Helping me develop my resume	.827			
Helping me find work or volunteer experience that will be related to my career	.620			
Helping me find an internship	.610			
Helping me understand my degree requirements		.830		
Helping me choose the right courses to graduate		.829		
Seeing if I'm on track to meet graduation requirements		.780		
Explaining how to add/drop a course, withdraw, or get a leave of absence		.592		
Helping me understand the processes for getting an internship, independent study, and/or individualized instruction		.574		
Helping me choose a minor		.469		
Helping me get problems with the Bursar's office (e.g., parking tickets) cleared up			.792	
Helping me with personal issues			.776	
Helping me understand financial aid			.748	
Letting me talk about issues I'm facing at school			.711	
Helping me manage my time better			.647	
Telling me about international exchange opportunities			.472	
Telling me I'm in the wrong major				-.800
Helping me choose my major				-.793
Helping me change my major				-.756
Helping me choose a career				-.685
Helping me identify my interests and talents				-.589

Table 3
Descriptive Statistics of Composite Indices

	N	Minimum	Maximum	Mean	Std. Deviation
Job Search	572	1.00	5.00	3.79	.98
Information	573	1.17	5.00	4.32	.65
Personal	567	1.00	5.00	2.73	.95
Career/Major	569	1.00	5.00	3.58	.98
Valid N (listwise)	545				

Table 4
Summary of Simultaneous Regression Analyses Predicting Expectations

	Job Search Beta	Information Beta	Personal Beta	Career/Major Beta
Class Level	-.11*			-.10*
Ethnicity			-.15**	
Gender	-.10*	-.12**		
Hours Worked				
GPA				
Housing				-.10*
Living with Parents				
R ²	.03	.02	.04	.04
F	2.32	1.79	3.47	3.30

Class level was coded as upper division = 2, lower division = 1; ethnicity was coded as Caucasian = 1, non-Caucasian = 0; gender was coded as male = 1, female = 0; hours worked was coded as 0 = not employed, 1 = 1 – 10 hours/week, 2 = 11 – 20 hours/week; 3 = 21 – 30 hours/week, 4 = more than 30 hours/week; GPA was coded as 1= less than 2.0, 2 = 2.0-2.5, 3 = 2.5-3.0, 4 = 3.0-3.5, 5 = 3.5-4.0; housing was coded as 1 = live on campus, 2 = live off campus within 5 miles of university, 3 = live off campus more than 5 miles from university; and living with parents was coded 1 = yes, 0 = no.

* p ≤ .05; ** p ≤ .01.

Table 5
Differences in Means by Lower/Upper Division

Class Level		Job Search	Information	Personal	Career/Major
Lower division	Mean	3.97	4.35	2.83	3.79
	N	179	182	178	180
	Std. Deviation	.91	.641	1.02	.90
Upper division	Mean	3.70	4.30	2.68	3.48
	N	389	387	385	386
	Std. Deviation	1.00	.65	.91	.99
Total	Mean	3.79	4.32	2.73	3.58
	N	568	569	563	566
	Std. Deviation	.98	.65	.95	.98

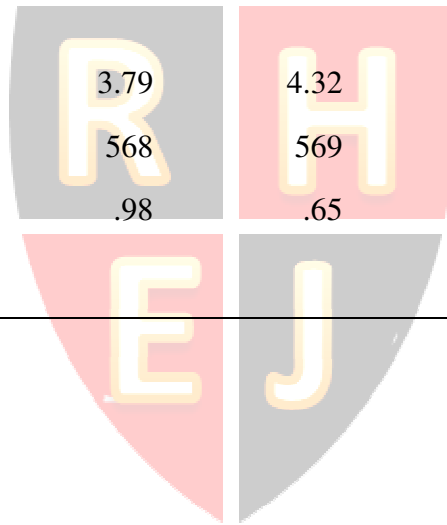


Table 6
Differences in Means by Gender

Gender		Job Search	Information	Personal	Career/ Major
Female	Mean	3.90	4.41	2.74	3.69
	N	239	239	240	236
	Std. Deviation	.98	.62	.926	.97
Male	Mean	3.71	4.25	2.72	3.50
	N	332	334	327	331
	Std. Deviation	.97	.66	.97	.98
Total	Mean	3.79	4.32	2.73	3.58
	N	571	573	567	567
	Std. Deviation	.98	.65	.95	.98



Table 7
Differences in Means by Ethnicity

		Job Search	Information	Personal	Career/ Major
Non-Caucasian	Mean	3.87	4.33	3.07	3.62
	N	93	90	92	91
	Std. Deviation	.90	.70	.96	.99
Caucasian	Mean	3.77	4.32	2.66	3.57
	N	475	479	471	474
	Std. Deviation	.99	.65	.94	.98
Total	Mean	3.79	4.32	2.73	3.58
	N	568	569	563	565
	Std. Deviation	.98	.65	.95	.98