

Annotated Bibliography of Recent Research Related to Academic Advising

Castellanos, J., Gloria, A.M., Mayorga, M., & Salas, C. (2007). Student Affairs Professionals' Self-reported Multicultural Competence: Understanding Awareness, Knowledge, and Skills. *NASPA Journal*, 44(4), 643–63.

Increased diversity on college campuses necessitates developing practices, policies, and attitudes toward multiculturalism that move beyond addressing numerical representation. However, the challenge of initiating substantive change may fall to student affairs professionals with unclear levels of multicultural competence. In this study, the authors assessed self-reported multicultural competence characteristics of student affairs professionals to understand how awareness, knowledge, and skills impact their interactions with students.

Organizational change tends to be slow although preferable. It is likely, then, that shifts in practice that support the historical status quo will start in individual offices among student affairs staff. The American College Personnel Association (ACPA) offers standards to ensure student affairs staff have skills to deliver ethical and competent student services. Pope and Reynolds adapted the ACPA standards to include multicultural competence. The framework around multicultural competence is defined by awareness, knowledge, and skill. The seven core competencies are the following: helping and interpersonal skills; assessment and evaluation; teaching and training; ethical and legal experience; theory and translation; administrative management skills; multicultural awareness, knowledge, and skills.

Past research indicates that race is a more salient aspect of identity for people of color compared to their White counterparts. Also, student affairs has become heavily populated by female staff, yet male perspectives are still espoused. Therefore, the purpose of this study was to assess Pope and Reynolds's model of multicultural competencies among student affairs professionals. The authors also reviewed the degree to which student affairs staff possessed the behavioral practices and values in their student interactions. Differences by gender and race were assessed on each of the competence domains. The authors also looked at the interrelationships of variables and degree to which the self-reported multicultural competencies of awareness and knowledge would predict skills.

One hundred student affairs professionals participated in the study: 81 females and 19 males.

Forty-seven of the respondents were White and 51 were from underrepresented groups (two participants did not report their racial/ethnic background). A variety of student affairs departments were represented ranging from the library to the student union. Offices specifically related to addressing diversity issues such as the International Center, Center for Women and Men, and the Cross Cultural Student Center, to name a few, were also included.

Surveys were distributed to the participants at a West Coast research institution. The school has 24,000 students of whom approximately 57% have underrepresented backgrounds. Participants completed a demographic sheet that included 11 questions to obtain personal characteristics as well as information about their careers in student affairs. The sheet was also used to ascertain how much time they spent in direct contact with students in their current roles. The researchers developed the Multicultural Competence Characteristics of Student Affairs Professionals Inventory (MCC-SAPI) based on Pope and Reynolds's theoretical model. There were 11 items assessing awareness and knowledge and 10 for skills.

This study found that males reported significantly higher multicultural awareness in their interactions with students than did females. No differences by race were revealed and multicultural awareness and knowledge together predicted a large variance in skills. Knowledge accounted for most of the variance. Gender was not a predictor of multicultural skills but gender differences were apparent. Males reported more awareness but as they increased in age also tended to spend less time with students. Moreover, although men reported being in their positions longer, there was not a significant difference in knowledge or skills compared to women. Increased self-reported multicultural competence in awareness among women and underrepresented staff was related to less time spent with students. The authors reason that because men had been in their positions longer, they may feel they are more competent in all of their job functions, including multicultural competency. In fact, neither age nor time in position reflected increased multicultural competence in either of the domains.

Embedded in the discussion are some recommendations the authors make to address a seeming lack of self-reported multicultural competencies among student affairs professionals: Institutions should be accountable for promoting and ensuring

competence among staff; assessment and evaluation including student assessments should be done regularly; student affairs professionals should be engaged in pursuing continuing education credits with respect to diversity; ACPA guidelines should be established to determine core training areas required for graduate program accreditation; ongoing training should be offered by professional organizations at national conferences.

Limitations of the study include a nonrandom sampling, which limits generalizability. Participants may have had a particular interest in the study; that is, they were self-selected. Participants may have responded in a socially acceptable manner because of the volatility surrounding the topic of diversity on a campus where diversity is a stated goal.

Responses could be used to identify participants because the respondents' titles and demographic information were provided. This makes respondents concerned about anonymity. The authors also pointed to differentiating units based on function instead of grouping advising office data with that of the financial aid and other student affairs offices.

There is value in gathering self-reported data with respect to multicultural competence. However, this type of information must be honest and self-reflective. Moreover, self-reported evaluation of multicultural competence should be used as a base line for developing awareness, knowledge, and skills. It should also be coupled with data based on learning outcomes and objective assessments of these domains.

The reader is cautioned that this information was based on a campus where more than one half of the student population comes from underrepresented groups. This may impact how people working in this environment would self-rate their abilities compared to someone working at a predominately White institution. Despite its limitations, the article illuminates the need to continue developing multicultural competence among student affairs professionals and the training programs and evaluation systems to support them.

Hwang, W.-Y., Wang, C.-Y., & Sharples, M. (2007). A Study of Multimedia Annotation of Web-Based Materials. *Computers & Education, 48*, 680–99.

Web-based learning is becoming increasingly commonplace. However, its drawback is students' limited ability to annotate and personalize the learning materials they receive. Annotation, or the pro-

cess of making marks on the text as one reads, can improve the process of reading and reading comprehension (Marshall, 1997). If students continue to enroll in Web-based courses or courses that use Web-materials, electronic annotation tools will need to be developed and evaluated.

The Virtual Pen System (VPen), is a Web-based tool for annotating materials accessed via the Web. The tool features text highlighting and underlining, text and voice annotations (comments), and picture capture. Via the VPen system, when a user underlines or highlights text from an electronic document, the system prompts the user to add a text-, voice-, or a picture-capture annotation. In addition, annotations can be added anywhere in an electronic document that the user desires, even if no text has been highlighted. The VPen system tracks and stores users' annotations so that multiple readers can share their annotations with each other.

Hwang, Wang, and Sharples investigated the effectiveness of VPen in various learning scenarios, the interaction between cognitive variables and use of VPen, the relationship between level of achievement and use of VPen, and students' perceptions of the tool. To assess the effectiveness of VPen, they used a quasi-experimental design, dividing students into two groups: a control group of 32 students who read assignments individually and did not use VPen, and an experimental group of 38 students each of whom used the VPen in four different learning scenarios.

In the first learning scenario, individual annotation, learners in the experimental group read texts individually and were free to annotate the text but could not look at each other's annotations. In the second scenario, small-group annotation, the experimental group was divided into subgroups of three or four students. Students in each small group had access to each other's annotations. In the third and fourth scenarios, whole-class annotations, students in the entire experimental group could read each other's annotations as well as see, in descending order, who in their class made the most annotations. In other words, if a student wanted to see all of the annotations by the student who made the most, she or he could find this student's name at the top of a pull-down list, click on the name, and view the annotations. The third and fourth scenarios were identical except that testing after the fourth scenario was a final exam instead of a regular course exam. The control group, by contrast, did not work in groups or share annotations.

Before completing reading assignments for each of the four experimental scenarios, students in the

control and the experimental groups took pretests that accessed their prior knowledge of the content contained in the reading materials. No significant differences in prior knowledge were found between groups for any of the scenarios. After completing the readings assigned for each scenario, both groups took a posttest, the results of which were used as a dependent variable.

In the first three learning scenarios, individual annotation, small group annotation, and whole class annotation, the experimental groups achieved significantly better test results than the control group, who had not used VPen. However, in the fourth scenario, the final exam scenario, there were no significant differences on test achievement between the experimental and control groups. The authors hypothesize that both groups spent significant time studying for the final exam resulting in a ceiling effect for the benefits of using VPen.

A second goal of the study was to compare the quantity of annotations made by higher and lower achieving students. Hwang et al. used posttest data from the second scenario (small group annotations) to define a high achieving group, comprised of those students whose test scores were in the top 27%, and a low achieving group of students whose scores were in the lowest 27%. The high achievers made significantly more annotations than did the low achievers. A Pearson correlation analysis showed a positive relationship between quantity of annotations and achievement level.

Using the same procedures and cutoff scores with the posttest results from the third scenario (whole group annotations), Hwang et al. again compared the number of annotations made by low achievers and high achievers, but this time found no significant differences between them. For this scenario, the standard deviations for mean number of annotations were larger than in the small group scenario. The authors hypothesized that the ability to see others' annotations may reduce students' desire to make their own annotations and suggested that this should be an avenue of future research.

In a third line of investigation in this study, Hwang et al. examined whether the cognitive variable field independence/field dependence (FI/FD) would be correlated with the number of annotations students made. Citing Witkin, Dyk, Faterson, Goodenough, and Karp (1962), Hwang et al. described FI learners as those who "tend to analyze, organize and reorganize the location they perceive" whereas (citing Witkin and Goodenough, 1981), "field-dependent learners prefer structural instructional methods." After the experimental group com-

pleted their final examination, the authors administered a well-known test of FI/FD called the GEFT (Witkin, Oltman, Raskin, & Karp, 1971) but found no differences in the number of annotations made by students with an FI style versus those with an FD style.

In addition to studying the achievement of students using VPen and the relationship between achievement and cognitive variables and quantity of annotations, Hwang et al. were interested in assessing students' perceptions of VPen. At the end of the experiment, students were given a 20-item Likert-scale questionnaire (*strongly agree, agree, undecided, disagree, strongly disagree*) concerning VPen. The majority of students believed the annotation system improved their reading and that it was easy to use. Most students also felt the annotation system increased their interest, achievements, and satisfaction with learning, and improved their interaction with the content of the materials. The majority of students felt that sharing annotations in the small group and whole class scenarios improved motivation for learning. Thus, it seems that an electronic annotation tool like VPen has positive effects on learning.

Kirk-Kuwaye, C. & Kirk-Kuwaye, M. (2007). A Study of Engagement Patterns of Lateral and Vertical Transfer Students During Their First Semester at a Public Research University. *Journal of the First-Year Experience & Students in Transition*, 19(2), 9–27.

Noting increased attendance of transfer students at multiple institutions, Christine Kirk-Kuwaye and Michael Kirk-Kuwaye discerned engagement patterns among distinct transfer student populations. The literature has focused on 2- to 4-year transfer students, which the authors define as *vertical transfer* (VT). However, transfer students follow an array of patterns including reverse (4- to 2-year institutions), swirl (to and from multiple institutions), and lateral (4- to 4-year institutions) (LT) transfers. Despite the differences among these students, transfer policies and centers at 4-year institutions focus on VT students through pre-orientation programs and community college partnerships.

Student engagement on campus is an important factor in retention. The *National Survey of Student Engagement* (NSSE) is a valid and reliable instrument to measure college student engagement. The 2002 report showed that transfer seniors were less engaged than native seniors on four of five of the survey's benchmark categories: active and collaborative learning (ACL), student-faculty inter-

action (SFI), a supportive campus environment (SCE), and enriching educational experience (EEE), which includes a subcategory of exposure to diversity (EEE-DIV).

Due to the well-documented phenomenon of transfer shock among this group, one might expect VTs to be less engaged in their new academic environment, as defined by NSSE criteria, during their first semester than their LT counterparts. A qualitative research design was used to address the complexities of transfer student engagement. A purposeful convenience sampling yielded both VT and LT student participants. The sample consisted of transfer students having 24 to 88 credits from nonscience and nonprofessional majors from the fall 2005 incoming class at the University of Hawaii at Manoa. In recent years, transfer students at this school have made up more than one half of the incoming classes.

The sample was split at nine VT and eight LT students respectively. However, the VT sample was more diverse. In the 6th and 7th week of the semester, the researchers conducted 60 to 90 minute interviews based on the NSSE benchmark categories. By waiting until this period within the semester, the researchers gave students time to adjust and an opportunity to become engaged. For further delineation, within-group comparisons with regard to previous institution attendance were also included. Utilizing the Carnegie classification system, students were grouped as medium-small residential institution (MSR) or public research institution (PRI) transfer students.

Although both VT and LT students experienced low overall engagement, LT students reported consistently lower ratings on all NSSE categories; these findings disproved the authors' hypothesis. In the results section of the article, the investigators included questions asked and topics discussed by category in a bulleted format. They also provided the reader with respondent comments that best represent the group experience.

Among LT students, ACL and SFI engagement was best experienced by students coming from PRIs. Barriers for MSR students included large class size, perception of less friendly students, and less academic rigor in class. VT students who reported poor ACL engagement seem to exhibit transfer shock. Those who seemed most prepared had taken the initiative to discuss class material.

LT MSR students reported lower levels of SCE engagement as well. Barriers included difficulty in finding Web-based information and lack of highly functioning student organizations. One half of the

VT PRI students had positive experiences in these areas. They used the campus paper, resident advisors, and orientation programs to become informed about campus resources.

Five of six students who had suffered poor SCE engagement had not attended new student orientation, which has a strong academic-advising component. This pattern was also found among VT students.

LT and VT students were similar in their responses to EEE-DIV items. Students may have known about activities but chose not to participate for various reasons. Students from out of state seem to be looking for a change and sought out the diversity offered at the Manoa campus.

To summarize, VT and LT students have similar engagement ratings across all NSSE categories except on the SFI where LT students had slightly lower scores. VT students expected the different experiences between their institution of origin and the University of Hawaii at Manoa, which made them more prepared. The findings suggest that transfer centers should pay more attention to LT students who may not be adequately prepared for the transition.

The researchers stated that institutions should be cautious of how they interpret engagement. Not talking in class does not necessarily indicate a lack of engagement. They also encourage investigations into how institutional culture shapes the transition experience as well as how students can develop better intercultural competence.

Findings may vary, especially with respect to diversity, within the continental United States. The small sample size is a concern because the University of Hawaii at Manoa tends to have a large number of transfer students. The authors, however, spotlighted the need to avoid treating transfer students as a monolithic population. Moreover, with increased credit mobility, transfer students will become larger segments of incoming classes across all of higher education. Understanding their barriers to success and how their backgrounds may impact their transition as well as level and quality of engagement is imperative to helping them meet their educational goals.

Levin, J., & Hussey, R. B. (2007). Improving Advising in the Sciences: Analysis of the Educational Environments of Science- and Math-Related Majors. *Journal of College Science Teaching* 36(6), 29–35.

Levin and Hussey argue that college and university publications such as bulletins, catalogs,

schedules of classes, and Web sites, which typically provide only brief overviews of majors and lists of courses required for graduation, are not designed in such a way as to help students compare the educational environments (Levin & Wyckoff, 1989) or bodies of knowledge associated with different academic majors or the competencies developed in each major. Levin and Hussey call for a more “systematic approach to the analysis and categorization of college majors” (p. 28) to assist students in determining which programs are most “congruent with their interests and abilities” (p. 29). The need for better informational and conceptual tools (p. 28) for comparing majors may be particularly acute in math and science fields, which (the authors reported) generally have higher attrition rates than other disciplines. One such tool, eLion, an interactive on-line program, has been implemented at Penn State University.

Using eLion, students interested in math and sciences can compare their ideal major with a list of 160 available math- and science-related majors. When students open the eLion application, they first enter the number of courses they would like to take in each of four areas: biology, chemistry, math, and physics, and then enter the number of biology-based (i.e., nonbiology courses that require BIOL 1 as a prerequisite) as well as chemistry-, math-, and physics-based courses they would like to take. The data entered by the student are used to generate the student’s ideal major, which can then be matched to existing academic majors with patterns of required courses closest to those preferred by the student. For example, if a student indicates that he or she wants to take a higher number of chemistry and biology courses but a lower number of mathematics and physics courses, the application will identify majors that most closely match these preferences.

In addition to being able to see a statistical comparison between their ideal major and available majors, students can view static tables (p. 32) with comparative information about the 160 math and science majors offered at Penn State University. The static tables show the number of required courses in each of the eight dimensions (biology, biology-based, chemistry, chemistry-based, etc.) for every academic program in science and math. Alternatively, students can view static tables that sort the majors along an individual dimension. For instance, a student can request to see, in descending order, which majors require the most biology courses or which require the most physics courses. The eLion program contains a disclaimer informing students that they should not rely on the results

alone and that they should discuss the results with an academic advisor.

Levin and Hussey described various advising scenarios or applications for eLion. The software can be used to help students arrive at an informed decision about their program of study. For instance, the software can assist students in finding an alternative math or science major if they are performing poorly in a specific math or science class but still wish to pursue a science major. It can help students interested in science or math determine which major is most congruent with their interests. eLion helps ensure that students obtain the correct information about majors and programs so that they do not change or avoid majors based on false assumptions about program requirements.

The article by Levin and Hussey contains 11 tables and 5 figures that illustrate how the eLion program works. It also includes the information that students and advisors can see when the application is accessed.

Osborn, D. S., Howard, D. K., & Leierer, S. J. (2007). The Effect of a Career Development Course on the Dysfunctional Career Thoughts of Racially and Ethnically Diverse College Freshmen. *The Career Development Quarterly*, 55, 365–77.

Several studies have demonstrated the positive effects of career courses on undergraduate students. The majority of researchers have used 3-credit-hour courses and focused on students at different academic levels (freshman, sophomore, junior, senior). Osborn, Howard, and Leierer, by contrast, using a research design similar to that of Reed, Reardon, Lenz, & Leierer (2001), with an instrument called *The Career Thoughts Inventory* (CTI) (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996), studied the effects of a 6-week, 1-credit-hour, freshman-only career course on dysfunctional career thoughts.

The study was carried out at a southern research university of 42,000 students, approximately 10% of whom were freshmen. The 148 participants in the study were all alternative admits (i.e., students with high school grade-point averages [GPAs] that suggested potential for academic success, but whose test scores were below the level required for admission). All were enrolled in the 6-week career course, which was part of a freshman summer institute program, a diversity initiative designed to promote academic success and higher graduation rates. Students were aged 17 to 20 years and had a mean high school GPA of 3.31, with the highest GPA being 4.00 and the lowest 2.50. The population

was ethnically diverse: 38.0% African American, 8.9% Asian American, 14.6% Hispanic, 38.6% Caucasian. Approximately 74% were female.

Eight sections of the career course with a student-teacher ratio of 19.8:1.0 were offered. Attempts were made to minimize instructional variables across sections. The instructors, all career specialists, developed objectives, selected a text, and designed the course and syllabus together. In addition, they underwent training and participated in weekly meetings to discuss the courses. Course format and assignments included lecture, interactive group activities, reflective homework exercises, and readings. Objectives included teaching students how to a) understand the world of work; b) recognize and reframe negative thoughts; c) understand and utilize career development theories and decision-making skills; d) identify their skills, abilities, interests, and values; e) identify and use resources for exploring career options; f) relate personal characteristics and career goals to academic majors; and g) create a customized career plan. Tests and homework assignments indicated that students were able to meet most of these objectives.

The CTI was assigned for homework twice, due once in the 2nd week of class and again in the 6th week (pretest and posttest design). The CTI is a 48-item, self-administered, Likert-type instrument that measures dysfunctional thinking in career problem solving and decision making. Results are in the form of a composite score and scores for three subscales, Decision Making Confusion (DMC), Commitment Anxiety (CA), and External Conflict (EC). The DMC scale measures the inability to engage in decision making due to emotional interference or lack of understanding about decision-making processes. The CA scale measures the inability to make a commitment to a career decision. The EC scale measures the inability to balance one's own perceptions with those of significant others such that one does not assume responsibility for making a decision. Higher scores on the composite and each of the subscales indicate higher levels of dysfunctional career thoughts.

Through the first research question, Osborn et al. examined whether career thoughts varied by gender or ethnicity. They found no significant differences along these demographic variables for either the pretests or posttests. The second question related to overall changes in dysfunctional career thoughts as measured by composite scores on the CTI. The researchers used a one-group repeated measure and found that the mean composite score on the CTI was significantly lower on the posttest

than on the pre-assessment, suggesting that the career course contributed to a reduction in dysfunctional career thoughts. However, the reduction was not the same for all participants. Those with the highest premeasure scores, ranging from 54 to 101, showed the greatest change between treatments, with a mean reduction of 18.89 points between the first and second measures. Those who began with the lowest level of career dysfunction, with initial CTI scores ranging from 0 to 35, showed a much smaller mean change (1.75) in overall CTI score between measures. A third group with medium levels of dysfunctional career thoughts (prescores between 36 and 53) showed a mean change in score that was greater than that for the low level group but less than that for the high level group.

In addition to looking at the results for the composite scores on the CTI, the authors compared changes in each of the subscales, DMC, CA, and EC. All groups, the high, medium and low level, showed pretest and posttest differences in mean score on each of the subscales. For two of these scales, the DMC and the CA, following the pattern for the composite scores, the high level group showed the greatest degree of change from the pretest to the posttest, the medium level group showed the next greatest change in mean, and the low level group experienced the smallest change between measures. However, on the EC subscale, the between-group differences were not significant on the posttreatment measure.

The authors concluded that a 6-week, 1-credit career course can significantly reduce overall dysfunctional career thoughts as well as reduce decision-making confusion, commitment anxiety, and external conflict. However, they were unable to determine the aspects of the course, such as assignments, lectures, small group discussions, and so forth, that contributed most to the reductions as these variables were not measured. Even though they took steps to ensure that instruction was as uniform as possible across sections, they cannot be sure that instructor variables, such as delivery style, did not affect the outcomes for some students.

The authors also pointed out one finding of special interest that merits further investigation. The low-level dysfunctional group displayed a small increase in DMC and EC scores after the treatment. Because a similar finding for the EC score was obtained by Reed et al. (2001), more information to explain this case is needed. Moreover the most effective types of interventions may differ depending on whether the individual has a high, medium, or low level of dysfunctional career think-

ing. Research that examines effectiveness of specific interventions is needed.

Robst, J. (2007). Education and Job Match: The Relatedness of College Major and Work. *Economics of Education Review*, 26, 397–407.

Students likely select a college major with the expectation of working in a job that relates to their field of study. However, the match between program of study and occupation is uncertain. Using data from the *National Survey of College Graduates* (NSCG) conducted by the National Science Foundation in 1993, and human capital theory as a foundation for analysis, Robst sought to determine the percentage of college graduates who work in jobs unrelated to their field of study, the degree fields that lead to the greatest mismatch, and whether working outside of one's field of study affects wages. Specifically, his four hypotheses were as follows:

1. Mismatches between field of study and occupation would be more likely in fields of study that provide general skills (e.g., a liberal arts major) than in fields that provide occupation-specific skills (e.g., computer science).
2. Workers who experience occupational mismatch with their degree field would earn less than those whose occupation was more closely matched with their field of study.
3. Wage declines would be greater for graduates who are able to transfer fewer skills from their major to their current occupation.
4. Wage effects among those whose occupation matches their majors would be greater for those from occupation-specific fields than those in which general skills had been learned.

Overall 55% of the respondents on the NSCG reported that their job and field of study were closely related, while 25% reported that the match was somewhat related, and 20% reported that their field of study and current occupation were not related. Lower mismatch rates were reported for the fields of computer science, health professions, library science, engineering, engineering technology, architecture, business management, and (by females) in education. Higher mismatch rates were reported by those with majors in English, foreign languages, social sciences, and liberal arts. Thus, it seems that the first hypothesis, that there would be greater levels of mismatch with degree fields that provide general (as opposed to occupation-specific skills) is supported. The mismatch percentages decrease as the level of education (e.g., bachelor's,

professional, master's, doctoral) increases, and also vary by gender, race and ethnicity, marital status, and presence of a disability.

The second hypothesis, that workers whose work is mismatched with their degree earn lower wages than those whose majors and careers are well matched, is also supported by the data. Those who were partially or completely mismatched earned less than those whose field of study and occupation were closely matched. The differentials were lower for those whose job and field of study were partially related than for those whose job and major were completely unrelated, supporting the third hypothesis that wage declines are greater in situations when fewer skills are transferable to the current occupation.

The final hypothesis, in which the authors predicted that wage effects of a career-major mismatch would be greatest for those who received occupation-specific skills, seems to be supported by the fact that individuals who majored in business management, engineering, the health professions, computer science or law, and whose current occupations were completely unrelated to their field of study experienced 20% wage penalties. By contrast, the wage effect for individuals with mismatches who had majored in English or liberal arts, was insignificant, while it was significant but small for those majoring in education and the social sciences.

The findings from this study have implications for advising. In selecting a college major, in addition to considering interests and abilities and so forth, students should think about the potential for obtaining employment that is matched with their area of study, the transferability of skills, and the effects of a mismatch between field of study and occupation on earnings.

Seligman, L. D. & Wuyek, L. A. (2007). Correlates of Separation Anxiety Symptoms among First-Semester College Students: An Exploratory Study. *The Journal of Psychology*, 141(2), 135–45.

Separation anxiety disorder (SAD) is anxiety that occurs upon separation from home or from an attachment figure (American Psychiatric Association, 2000). Traditionally, it has been thought to affect primarily children and adolescents, but growing evidence suggests that adults also may experience a form of SAD. However, few researchers have investigated whether college students, many of whom have left home for the first time to attend, experience SAD. Seligman and Wuyek investigated the prevalence and effects of ASAD (adult separation anxiety disorder) among college stu-

dents. Specifically, they hypothesized that students with ASAD symptoms would a) be more likely to choose a college close to home, b) be more likely to have a friend or relative attending their same college, c) be more likely to have experienced a recent panic attack, d) have more frequent panic attacks, e) have lower GPAs, and f) be more likely to drop out of school. In addition, as found in prior research, Seligman and Wuyek expected symptoms of ASAD to be related to childhood experiences of SAD.

Participants were 190 first-semester college students living in a dormitory for first-year students. The mean age was 18.43 years. The instruments, the *Separation Anxiety Checklist* (ASA-CL) (Manicavasagar, Silove, Curtis, & Wagner, 2000) and the *Separation Anxiety Symptom Inventory* (SASI) (Seligman et al., 1993), were administered in small groups during dormitory meetings in the week prior to the start of classes. All students had been away from home for less than 2 weeks. This period for data collection was chosen so that participants who might choose to leave school immediately were not excluded from the study.

The ASA-CL is a 27-item Likert-scale instrument in which participants indicate how often 0 (*never*) to 3 (*very often*) they have experienced phenomena indicative of ASAD such as “feel more secure at home when you’re with people close to you.” Sixteen items from this ASA-CL were used for a possible score range of 0 to 48. Manicavasagar et al., (2000) the authors of the survey, had determined that a score of 17 or higher can be used to identify persons likely to experience symptoms at a clinical level.

The SASI is a 15-item Likert-scale instrument with the same range as for SAD: 0 (*never*) to 3 (*very often*). This was used by Seligman and Wuyek to obtain a retrospective account of childhood SAD from the participants. In addition to the two anxiety disorder assessments, students were given a questionnaire that asked them to supply demographic data and to indicate the travel time between their home and school, whether any family or friends were attending the university, whether they had experienced a panic attack in the last 4 weeks (a definition was provided), and if they had experienced panic attacks, how frequently had they occurred. Students also gave consent (185 of 190) for the researchers to look up their GPAs at the end of the first term and status of their enrollment for the following spring term.

The mean score on the ASA-CL was 11.02. Approximately 21% of the sample met the cutoff score of 17, meaning that nearly one quarter of

the sample could be expected to meet criteria for ASAD. ASA-CL scores were significantly related to students’ distance from home, with students with higher levels of symptomatology reporting that school is relatively close to home. Students with higher levels of ASAD also reported significantly more panic attacks in the preceding 4 weeks. ASA-CL scores were significantly related to retrospective reports of childhood SAD on the SASI.

The three other hypotheses were not confirmed. No significant correlation between first-semester GPA and ASA-CL score was found, although students with higher ASA-CL scores did have lower GPAs. Nor were students with higher ASA-CL scores significantly more likely to have a friend or family member attending the same university. Higher ASA-CL scores were not significantly correlated to a student’s decision to not return for the spring semester.

Seligman and Wuyek concluded that although their findings indicate that students with ASAD appear to function well academically, these students may still be under “considerable distress” (p. 143). They called for more research in adult anxiety disorder and pointed to the need for clinicians to be attuned to SAD symptoms when working with adults as well as children.

Yazedjian, A., Purswell, K. E., Sevin, T., & Toews, M. (2007). Adjusting to the First Year of College: Students’ Perceptions of the Importance of Parental, Peer, and Institutional Support. *Journal of the First-Year Experience & Students in Transition*, 19(2), 29–46.

Student adjustment to college is approached as a multifaceted construct in the higher education literature. Various factors influence the means and effectiveness of students’ acclimation to their new educational and living environment. The *Student Adaptation to College Questionnaire* (SACQ) has been cited in much of the literature that describes measuring academic, social, and personal adjustment as well as attachment to the institution. The SACQ utilizes student self-reported responses to ascertain levels of student adjustment. It does not, however, allow for delineation of student perceptions of factors that may contribute to their adjustment to college. Yazedjian, Purswell, Sevin, and Toews sought to discern student views of the support they receive from parents, peers, and their educational institutions as they adjust to college.

Research on parental support of college-aged students is limited and offers mixed findings. Some researchers report that parental support is not a

predictor of college adjustment while others find that it is positively related to student adaptation. Parents without college experience may be less able to provide consequential support than those who have attended postsecondary institutions. In addition to not having relatable experience, they may also lack the financial resources that are available to their college-educated counterparts.

The literature suggests that peer support may be a critical predictor of student social adjustment, especially for first-generation students. One study found that student perception of institutional support is shaped by university atmosphere, the surrounding community, and the helping nature of the faculty.

This project was part of a larger study in which first-year success at a 4-year public university in central Texas was examined. The researchers enlisted the assistance of the Office of Institutional Research, which subsequently E-mailed first-year students during the spring to request they complete an on-line survey. Students in good academic standing and who had indicated willingness to participate in this qualitative study took part in focus groups during the following fall (2005) semester.

Participants were separated into homogenous groups based on race and parental educational background to promote candid discussions. A total of 22 students (16 female and 6 male) took part in six focus groups. However, the sample was more racially diverse than the school's student population. Also, first-generation students were overrepresented. The focus groups study was based on a semi-structured interview protocol designed to examine how parents, peers, and institutions support college student adjustment. The six focus group questions derived from the SACQ were as follows:

1. In what ways did your family support you when you first arrived at the university?
2. What do you wish they would have done differently?
3. In what ways did your peers support you when you first arrived at the university?
4. What are your favorite/least favorite things about being a student here?
5. What was the hardest thing you had to deal with during your first year here?
6. Do you know where to go for help on campus when you need something?

The most salient acts of parental support were financial assistance through tuition payments and care packages. Phone calls were often seen as stressors because parents called to make a connection that made them feel good or to relay bad news

from home rather than to offer support. First-generation students stated that because their parents did not have an appreciation for the complexity of college life they were unable to offer reliable advice. This situation prompted them to seek more support from their peers.

Peers were described as providing both social and academic support. Having a peer group with whom to interact helped students feel more connected to the institution. Academic support is manifested in taking classes together, forming study groups, or sharing notes; it is also a source of encouragement. Peers also can be a source of distraction as too much socializing takes the place of attention to lectures. Having friends from high school on campus could also hinder establishing new relationships. Residence halls tended to be an important source for making peer connections for students who did not enter with friends.

Institutional support is evident when students have developed relationships with university personnel as well as general support on campus. Students in the focus groups reported that the faculty and staff members were friendly and student focused, which helped them to feel supported. This feeling made students more apt to ask for assistance. This institution is popular because of its big-school benefits, such as resources and sports, but its relatively small size allows for individuals to be valued. The school is situated between two large cities that offer urban attractions, but the campus has a small town atmosphere.

The orientation program was cited as helpful but overwhelming due to the amount of information provided. The follow-up seminar course was frequently described as a waste of time because it did not address their needs and the content was inconsistent across class sections.

This study clarifies student perceptions of the best types of parental, peer, and institutional supports in student adjustment to college. The student narratives also highlight the ways in which these same supports can hinder their transition. Programming that invites parental support, especially for first-generation students, may be vital to optimize the benefits of a positive connection with home life while students experience their new environment.

The findings also validate the learning community model without specifically referencing the practice. The authors promote the idea of enrolling students as cohorts with respect to their course work and the formation of study groups facilitated by the faculty. Residence hall life is a key factor in establishing peer connections.

Although many studies address student transition issues, the Yazedjian et al. study adds the voices of those served by higher education to the body of knowledge. It may give institutional policy makers the insight needed to establish programming around parental and peer support. Just as important, this study points out that institutional stakeholders need to evaluate orientation programs and encourage faculty members and staff to develop mentoring relationships with students.

Zalanowski, K. (2007). Instant Messenger in Enrollment Management: Evaluating Use and Effectiveness. *Journal of College Admission* (Summer), 21–29.

Many enrollment management offices are now using Internet technologies for recruitment. One potential technological communication tool is Instant Messenger (IM), which enables real-time conversation through a computer keyboard and which seems to be used for one function or another by a vast majority of Millennial students (Hallock & Aiken, 2004). Using case study methodology, Zalanowski studied patterns of usage during first-time implementation of IM at an admissions office at a public, flagship university in the Midwest.

The admissions office used the IM chat client Trillian, which has the capacity to act as a hub for other popular chat clients such as American Online, Yahoo!, MSN, and ICQ. The admissions office created a login and the screen name “IowaAdmissions” for each of the other chat clients and loaded them into the Trillian software so that students could contact the admissions office no matter which chat client they were using. One counselor was assigned the task of responding to IMs.

Advertised hours were Monday through Thursday from 3:00 to 5:00 p.m. central standard time. This schedule was based on the rationale that it fit within the counselor’s normal working hours while at the same time convenient for prospective students arriving home from school. However, the counselor typically logged in for longer hours, from 11:00 a.m. to 5:00 p.m., including nonadvertised Fridays, to monitor potential use at other times. The service was initially advertised through a brochure given to prospective students visiting campus. Later, an advertisement similar to the brochure was posted to the admissions Web site, but the user had to click on a minimum of three pages to locate the advertisement and screen name so it did not invite “an overwhelming volume of activity” (p. 22) for the sole admissions counselor who

was monitoring the project.

Data were accumulated for one year, from June 2005 to June 2006. Number, duration, dates, and times of contacts were all recorded as were the residency of the person making the contact and his or her status (e.g., high school freshman, sophomore, junior, senior, or graduate, transfer student, etc.). Additional monitoring included keeping track of the chat client that users employed, the majors the prospective students were intending to study, and the types of questions the users asked. Although the users remained anonymous, the researchers were able to identify which prospects made repeat contacts through their screen names.

Overall, the number of contacts by in-state students (43%) and out-of-state students (45%) was similar, with a smaller percentage of contacts (7%) from international students. Overall, the mean length of IM conversations was 12.43 minutes with the mean for initial contacts a few minutes higher at 14.06. Nonresidents’ contacts tended to be longer. However, mean length of conversations varied seasonally for both residents and nonresidents. High school seniors and transfer students made the most contacts, 251 and 228 respectively, but IM contacts were also received from others such as students wishing to reenter, high school juniors and sophomores, a handful of parents, and even one admissions counselor from another university.

Monday through Wednesday were the most popular days for IMs (71%). The most frequent time of day, as anticipated and advertised, was from 3:00 to 5:00. However, IM contact occurred at nonadvertised days (Fridays) and times (153 contacts before 3:00 p.m.). AOL was the most used chat client employed by domestic students, while international students tended to use Yahoo! and MSN. No contacts were made with ICQ.

With regard to intended major, the strongest interests were expressed for business, undecided, and engineering. In all, 54 academic areas of interest were mentioned with some students indicating interest in more than one area. As with all of the variables mentioned, variances by student status and residency were found.

The IM service was advertised as an admissions service. Approximately one half of the questions were admissions related, with many students inquiring whether documents had been received by the admissions office. Other types of questions related to academic majors, academics in general, orientation, campus visits, enrollment status, housing, and scholarships. Types of questions tended to vary seasonally. For instance, questions about

admissions status and documents started being sent in mid-August and peaked in January.

Zalanowski pointed out various limitations of the study or the way the IM was applied at the admissions office in this study. First, only one counselor engaged in IM and had to do this on top of other duties such as meetings, presentations, and appointments. Advertisement was deliberately kept to a minimum to avoid overloading the counselor, and the advertised hours were fewer than the actual available IM hours. Because users were to remain

anonymous due to FERPA restrictions, when IM users inquired about their status or wanted to verify that documents had been received, the counselor directed them to contact the office by telephone or other means. In other words, transactions via IM were of a relatively generic nature. Complicated questions related to transfer audits and specific policies could not easily be handled through IM. Despite these limitations the office received more contacts than expected. IM looks to be a promising technological tool for enrollment management.

The bibliography is compiled by Jessie Carduner and Barbara Miller.