

What do Students Want in Advising? A Policy Capturing Study

Karen E. Mottarella, University of Central Florida

Barbara A. Fritzsche, University of Central Florida

Kara C. Cerabino, University of Central Florida

A policy capturing approach was used to examine the advising variables that contribute to student satisfaction. Students (N = 468) rated 48 scenarios in which advising approach, relationship, advisor gender, emotional nature of the relationship, and type of advisor were manipulated. Results show that being known to the advisor, having a professional advisor, and receiving warmth and support from the advisor were important factors to advisee satisfaction. Ratings differed by student gender, advising experience, and age. Relational variables can exist across multiple advising approaches, and satisfaction likely depends more on the advisor's interpersonal skills and style than advising approach.

KEY WORDS: advising approaches, developmental advising, prescriptive advising, student satisfaction with advising

Since Beal and Noel (1980) published their landmark report in which they found academic advising to be one of three major areas promoting student satisfaction and retention across 947 institutions of higher education, the importance of academic advising within universities has increased (Bedford & Durkee, 1989; Carstensen & Silberhorn, 1979; Pascarella & Terenzini, 1980; Steele, Kennedy, & Gordon, 1993; Tinto, 1998; Trombley & Holmes, 1981). The developmental advising approach, specifically, has gained increased credibility and has been referred to as the ideal approach for advising university students (Gordon, 1994). Authors of numerous studies have found that the developmental approach results in student satisfaction with advising (Alexitch, 1997; Broadbridge, 1996), and some have suggested that the developmental approach is preferred by students (Fielstein, 1989; Herndon, Kaiser, & Creamer, 1996; Winston & Sandor, 1984b).

Certain advising activities described in the literature as "growth-oriented," such as exploring the student's values and how they relate to career choice as well as helping the student with interpersonal problems or with improving interpersonal skills (Winston & Sandor, 1984b, p. 8), are associated with the developmental approach. In contrast, concrete task-oriented activities, such as discussing

course selection, explaining degree requirements and registration procedures, and making referrals to other resources on campus, are associated with the prescriptive approach (Fielstein, 1989). Advisors limit prescriptive-advising activities to academic matters (Winston & Sandor, 1984a).

The two prevailing advising approaches do not differ solely on the types of task associated with them. Many interpersonal and relationship factors are woven into and subsumed under the developmental approach, and these may be the factors that lead to student satisfaction. Relationship variables such as support, warmth, and respect (Winston & Sandor, 1984b) are associated with the developmental approach and may be mutually exclusive of the prescriptive approach. The contribution of specific elements, either those associated with the advising-advisee relationship or the advising activities, to student satisfaction with advising is unclear. Research is needed to unbundle and examine the variables in current advising approaches that are important to students. In fact, students may appreciate either a prescriptive or a developmental advising approach as long as the advisor demonstrates certain key relational elements within the advising session.

Since the 1960s, those conducting psychotherapy research have consistently argued that the nature of the therapeutic relationship rather than any specific approach or technique may contribute the most to client satisfaction with the psychotherapy they receive (Beutler, Machado, & Neufeldt, 1994; Rogers, 1957/1992; Truax & Carkhuff, 1967). In research studies, as long as the relational variables were present in the therapy, client satisfaction was reported regardless of whether the therapist was humanistic and nondirective or was quite directive, behavioral, and even therapeutically confrontative (Bergin & Suinn, 1975). A parallel situation may exist in academic advising.

Certain relational variables, such as the advisor establishment of a relationship with the student and his or her conveyance of warmth and support, may be of critical importance in producing student satisfaction. Fielstein (1987), for example, found that 28.9% of students interviewed about advising reported that it was a high priority that their advisor be personally acquainted with them. Perhaps

once these relational variables are in place and maintained, the advisor can adopt advising activities associated with multiple advising approaches, including prescriptive or developmental tasks, and alternate approaches as needed. For example, the advisor could assume a more hierarchical, expert, prescriptive role and directly instruct students on tasks they need to complete to best prepare her or him for certain career or graduate school goals. In other circumstances, the advisor could operate from a more open, egalitarian, nondirective approach to facilitate exploration of students' values and attitudes as a means of promoting resolution of an undecided major.

In addition to relational variables, the impact of other advising dynamics on student satisfaction needs to be investigated. Other variables may play a less obvious role than do relational elements in student satisfaction with advising. Unlike the relational advising variables, certain fixed characteristics, including advisor gender and type (faculty, peer, professional), may contribute to student satisfaction. When studying a situation similar to advising, researchers have found that student evaluations of satisfaction with their instructors are influenced by the instructor's gender. For example, Baslow (1987) found that female instructors were not rated as highly as were male instructors. As is the case with unconscious bias in many situations, students may not be aware of having a gender bias that relates to their satisfaction with advising.

Type of advisor is another advisor characteristic that may impact students' reported satisfaction with advising. Advisors can be faculty advisors, professional advisors at centralized advising units, or peer advisors. Researchers have suggested that students are pleased with their peer advisors (Frisz & Lane, 1987; Privette & Delawder 1982) and with available and accessible faculty advisors (Alexitch, 1997).

Preferences in advisor type may differ across types of students. Using the Myers-Briggs Type Indicator (Briggs & Myers, 1983), Crockett and Crawford (1989) found that certain personality styles are related to students' preferences for certain types of advising. Specifically, students who were more intuitive and feeling were relatively more interested in developmental advising than in the practical activities of course selection. In contrast, the more sensing and thinking students were more interested in the advising activities often associated with the prescriptive approach. Using a different personality measure (the Personal Attributes Questionnaire) (Spence & Helmreich, 1978),

Andrews (1987) found that students who are emotionally expressive have a high need for information (rather than personal support) from advisors, and those who are socially sensitive and emotionally expressive are more likely to seek academic advising. Based on these findings, Andrews (1987, p. 64) concluded, "The traditional 'all for one and one for all' approach to advising should be reexamined."

More recently, the five-factor model of personality has gained prominence as a useful description of fundamental personality traits (Goldberg, 1993), and these traits have been linked to a variety of outcomes including effective use of coping strategies (Costa & McCrae, 1992), well-being (Costa & McCrae, 1992), job performance (Schneider, Hough, & Dunnette, 1996), and success in college (Fritzsche, McIntire, & Powell Yost, 2002). Because researchers have linked personality to advising preferences and because explanations of the five-factor model have contributed to the accumulation and integration of knowledge about personality (Goldberg, 1993), we used the five-factor model to examine the advising preferences of students with different personality traits.

Sedlacek (1991) urged advisors who want to gain a deeper understanding of advisees to assess them on a number of sociocultural variables. For example, differences may exist among minority, nontraditional, and first-generation college students. To better meet the advising needs of all students, advisors need to determine if certain types of college students have unique advising preferences.

Through this study, we empirically investigated the factors that students value in the advising they receive and examined if differences exist between the preferences of non-White, first-generation, and nontraditional-aged (age 25 or older) and White, non-first-generation, and traditional-aged students. To compare students' advising preferences to their advising experiences, we used an established measure of students' prior advising experiences: the Academic Advising Inventory (AAI) (Winston & Sandor, 1984a). The AAI has been cited as the most widely used research instrument in the investigation of advising (Daller, Creamer, & Creamer, 1997) and was developed to assess students' perceptions and preferences for the advising activities they reported to have received (Winston & Sandor, 1986).

We specifically investigated student preferences across five advising dimensions. First, we looked at advising approach. We compared a prescriptive approach, in which the advisor instructs the student on degree requirements and graduate school prepa-

ration, to a developmental approach, in which the advisor and advisee discuss the student's values and preferences and work together to tailor plans to the student. Students advised with a developmental advising approach also explore the academic and personal stressors facing them.

Second, we investigated the emotional nature of the advising relationship. We asked, "Do students seem to have any preference for businesslike and efficient versus warm and supportive advising relationships?"

Third, we examined the depth of the advising relationship. We inquired, "Does it matter if the relationship is established or nearly anonymous?"

Finally, we looked at the impact of advisor variables. We investigated whether the type of advisor (peer, faculty, or professional) or advisor gender impact advising satisfaction.

Method

In this study, we used the policy capturing method (Hammond, Stewart, Brehmer, & Steinmann, 1986). Through this technique, the researcher uses multiple regression to model how individuals or groups of individuals weigh and combine information to make a judgment. Judgment profiles are created by manipulating a set of variables (called "cues") that are believed to influence the judgment of interest. Participants make judgments about each profile, and a within-subject multiple regression is calculated in which the participant's judgments are regressed onto the cue values. A policy is "captured" when judgments can be modeled reliably with a linear model (i.e., when R^2 is high). Policy capturing has been widely and effectively used in studies of clinical judgments, personnel selection, financial decision making, and social policy judgments (Fritzsche & Brannick, 2002; Fritzsche, Finkelstein, & Penner, 2000; Stevenson, Busemeyer, & Naylor, 1990).

We applied policy capturing to judgments of student-advising scenarios. Five dimensions of the advising relationship were systematically manipulated in a $2 \times 3 \times 2 \times 2 \times 2$ within-subjects factorial design (48 scenarios). Each participant rated his or her satisfaction, as if an advisee receiving the advising depicted in the vignette, on each of the 48 advising scenarios. For each participant, we used multiple regression analysis in which satisfaction ratings were regressed onto each cue. We used the squared multiple correlation coefficient (R^2) to indicate the amount of variance in satisfaction ratings captured with the cues. The standardized beta weights for each cue indicate the relative importance of each dimension in influencing the student's level

of satisfaction. This methodology allowed us to explore how students weigh information from advising scenarios containing all variables to form satisfaction judgments.

In addition to using the policy capturing method, we collected measures of individual differences in personality, demographic information, and advising experiences. Thus, we examined differences in advising experiences and preferences between groups of students (as defined by their gender, personality, age, and ethnicity).

Participants

Participants were 468 students (161 males, 305 females, and 2 who did not report gender) enrolled in undergraduate psychology courses at a large southeastern university. Participants received course credit for their participation. To receive course credit, participants either completed the research instruments in their general psychology classrooms or within a psychology lab. All participants were able to complete the study in 90 minutes or less. Participants had a median age of 18 years, and the sample was 71.8% White.

Measures

The advising scenarios. We developed scenarios of advising session in which five cues were manipulated. Cues were based on literature on the important factors that influence satisfaction with advising and the definitions of and distinctions between prescriptive and developmental advising models.

The five cues and the levels of measure, as depicted by advisor characteristic or action within the advising scenario, included

- advisor gender. The advisor was either male or female.
- advisor type. The advisor was a peer, faculty, or professional advisor.
- depth of advising relationship. The advisor asked for the advisee's name and asked how the semester is going, or the advisor knew the advisee (by name) and inquired about a particular class that had been stressful to the advisee.
- type of advising approach. The advisor printed the advisee's degree audit, checked to see if the student had completed necessary prerequisite course work, and then formulated an academic course plan (without feedback from the advisee) and made specific recommendations to the student to insure that the academic goals would be satisfactorily ful-

filled. In the alternate scenario, the advisor printed out the advisee's degree audit and discussed the advisee's career interests. The advisor encouraged the student to select the best possible electives to meet his or her goals, discussed the student's values and how they relate to psychology and a career path, and also discussed the student's ongoing personal and academic stressors.

- the emotional nature of the advising relationship. The advisor was helpful, efficient, and businesslike, or the advisor was helpful, warm, and supportive during the advising session.

Demographic form. Participants provided information about their age, gender, ethnic background, class standing, residency, student status (i.e., traditional-aged vs. nontraditional-aged, transfer vs. nontransfer, and first-generation vs. non-first-generation). They also provided data on their majors and certainty of major choice, career plans, and advising experiences at the university.

Five-factor inventory. We used the NEO Five-Factor Inventory (NEO-FFI) (Costa & McCrae, 1992) to measure the five basic personality traits. The NEO-FFI is a 60-item version of the Revised NEO Personality Inventory (Costa & McCrae, 1992). The NEO scales have gained widespread popularity as a research tool, and personality psychologists agree that this model has empirically determined five fundamental dimensions of personality (Anastasi & Urbina, 1997). Reported internal-consistency reliability estimates for the NEO-FFI subscales were as follows: neuroticism, .90; extraversion, .78; openness to experience, .76; agreeableness, .86; and conscientiousness, .90.

Academic advising inventory. The AAI (Winston & Sandor, 1984a) allows for investigation of the importance and potential impact of academic advising in higher education. The AAI is a 64-item measure of three aspects of academic advising experiences.

Part one of the AAI is used to assess a student's advising experiences on the developmental-prescriptive continuum. Three subscales are used to rate this aspect of advising and are scored separately before the data are totaled to form an overall Developmental-Prescriptive Advising score. High scores indicate that the respondent has relatively more developmental advising experiences. The Personalizing Education subscale "reflects a concern for the student's total education, including career/vocational planning, extracurricular activities,

personal concerns, goal setting, and identification and utilization of resources on the campus" (Winston & Sandor, 1984a, p. 11). The Academic Decision Making subscale is used to focus "on the process of academic decision-making and the responsibilities for making and implementing those decisions" (Winston & Sandor, 1984a, p. 11), such as assessing academic progress, student aptitude, and degree of assistance with course registration. The Selecting Courses subscale is used to assess the extent of advisor involvement with the student in course planning. Internal-consistency reliability estimates for the Developmental-Prescriptive Advising scale and subscales were reported by Winston and Sandor (1984a) as .78 for Developmental-Prescriptive Advising, .81 for Personalizing Education, .66 for Academic Decision Making, and .42 for Selecting Courses. In assessing the validity of the AAI, Winston and Sandor (1984a) found that freshmen with marginal academic preparation and freshmen who were admitted with regular academic preparation demonstrated significant differences on their Developmental-Prescriptive Advising and Personalizing Education scale scores.

Advisor-advisee activities are assessed by use of part two of the AAI, through which frequency of student experience with particular advising activities are reported. Activities such as declaring a major and providing general college-policy information are measured by the Exploring Institutional Policies scale. The Providing Information scale is used to assess activities such as discussing degree requirements, financial aid information, and job placement opportunities. The frequency with which advising activities are undertaken related to a student's future, college experiences in general, and personal experiences are measured with the Personal Development and Interpersonal Relationships scale. The Registration and Class Scheduling scale is used to describe the frequency of advising experiences involving the mechanics of course registration and scheduling. The Teaching Personal Skills scale conveys the number of experiences students have had in which advisors taught them "about study skills, time management, and personal goal-setting" (Winston & Sandor, 1984a, p.14).

Part three of the AAI is used to measure satisfaction with advising experiences during the current academic year. Students report "(1) overall satisfaction, (2) accuracy of information provided, (3) adequacy of notice about important deadlines, (4) availability of advising when desired, and (5) amount of time available during advising sessions" (Winston & Sandor, 1984a, p.14).

Procedure

In a 90-minute session, participants in our study completed the advising-scenario policy capturing task, a demographic form, the NEO Five-Factor Inventory, and the AAI. All participants completed the policy capturing task before completing the other measures. The 48 policy-capturing scenarios were randomly ordered in each packet as were the individual differences measures. During the policy capturing task, participants read each of the 48 scenarios. For each scenario, each participant indicated the degree to which he or she, as the advisee, would be satisfied with the particular advising experience. The scale ranged from 1 (extremely dissatisfied) to 7 (extremely satisfied).

Results

Table 1 presents means, standard deviations, reliability estimates, and intercorrelations for the measures used in this study. Internal-consistency reliability estimates were moderate to high for all except three scales: AAI Selecting Courses scale ($\alpha = .45$), the AAI Academic Decision Making scale ($\alpha = .65$), and the NEO Openness to Experience scale ($\alpha = .66$). Most AAI scales had small but statistically significant correlations with the NEO-FFI Extraversion scale: significant Pearson's correlation coefficients (r) ranged from .10 to .15. In addition, several AAI scales correlated significantly with the NEO-FFI Agreeableness and Conscientiousness scale. All AAI scales correlated significantly with satisfaction with prior advising experiences: r values ranged from .21 for the Selecting Courses scale to .42 for the Developmental/Prescriptive Advising scale. Satisfaction with prior advising experiences also correlated with extraversion ($r = .10$) and conscientiousness ($r = .19$).

We used the AAI to measure advising experiences. To control the family-wise error rate, we used a Bonferroni correction for the examination of group differences in AAI scores. Thus, alpha was set at .006. We found no differences between males and females on any of the AAI scales, and thus we found no evidence that differences in gender affected prior advising experiences. Nontraditional-aged students ($M = 15.57$; $SD = 2.15$) scored significantly lower on Personal Development and Interpersonal Skills than did traditional-aged students ($M = 19.04$; $SD = 8.75$), $t(18.43) = -3.206$, $p = 0.005$, $d = 1.24$), suggesting that nontraditional-aged students are less likely to discuss with their advisor various college experiences such as classroom and extracur-

ricular activities and short-and long-term plans. Moreover, non-White students ($M = 61$; $SD = 14.48$) scored significantly lower than did White students ($M = 70.65$; $SD = 16.50$) on Developmental-Prescriptive Advising, $t(124) = -2.801$, $p = 0.006$, $d = .60$. According to the mean scores (Winston and Sandor, 1984a), both Whites and non-Whites experienced more developmental than prescriptive advising. Nevertheless, non-White students reported less developmental advising experiences than did White students.

Capturing Advising-Preference Policies

In pursuing the primary purpose of this study, we examined how individuals weigh various dimensions of the advising relationship in judging their satisfaction with advising. We determined the relative contribution of each of the five dimensions, or cues, via a within-subjects regression analysis. Each participant's 48 satisfaction-with-advising judgments were regressed onto the 6 advising cues.¹ The resulting regression equation represents the participant's policy. A policy was considered to be captured if the R^2 for the regression equation was equal to or greater than 0.50. That is, the linear combination of the six cues could explain at least 50% of the variance in a participant's satisfaction-with-advising judgment. This decision rule is consistent with that used in other policy-capturing studies with a similar number of cues and judgments (Cooksey, 1996).

The R^2 for the entire sample ranged from 0.02 to 1.00 ($M = .42$; $SD = .26$). Based on the $R^2 = 0.50$ criterion, policies were captured for 180 out of 468 (39%) participants. The R^2 for the resulting sample ranged from 0.50 to 1.00 ($M = .70$; $SD = .13$). For these participants, on average, 70% of the variance in satisfaction with advising, as measured by the six manipulated cues, was captured.

Several possible reasons can explain why the linear regression model did not capture the remaining participants' policies. First, many participants rated the advising scenarios uniformly high. Mean satisfaction across all 468 participants and across all advising scenarios was 5.5 ($SD = 1.20$) on a 7-point scale, which suggests that some participants did not show a distinct preference for certain advising scenarios that were presented to them. Instead, they reported that they would be satisfied regardless of the manipulation. In other words, lack of variance in the criterion could help explain why more policies could not be captured. Second, some par-

¹The title of the advisor cue is a categorical variable with three levels (i.e., peer, faculty, or professional advisor). Thus, this cue was transformed into two variables and dummy coded.

Table 1 Descriptive statistics, internal-consistency reliability estimates, and intercorrelation data for NEO-FFI and AAI

Subscale	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
NEO-FFI																			
1. Neuroticism	466	21.84	7.83	.83	-.25*	.00	-.21*	-.23*	-.07	-.10	-.02	-.05	-.02	.04	.03	-.02	.04	-.02	-.02
2. Extraversion	468	30.56	6.31	.79	.00	.29*	.18*	.15*	.15*	.14*	.15*	.12*	.15*	.02	.00	.10*	.14*	.10*	.10*
3. Openness to experience	468	28.26	6.39	.66	-.02	-.03	-.05	-.05	-.04	-.04	-.02	.03	.02	.01	.01	.01	.10*	.07	.07
4. Agreeableness	468	30.60	6.09	.74	.24*	.12*	.03	.15*	.17*	.17*	.17*	.15*	-.09	-.10*	-.08	-.04	-.06	-.06	.05
5. Conscientiousness	468	31.10	6.46	.82	.12*	.08	.11*	.15*	.01	.02	.00	.00	.02	.00	.00	.00	.03	.19*	.19*
AAI																			
6. Developmental-prescriptive advising	351	67.23	14.84	.78	.87*	.69*	.59*	.41*	.23*	.15*	.40*	.33*	.42*	.42*	.42*	.42*	.42*	.42*	.42*
7. Personalizing education	364	35.29	10.66	.75	.27*	.21*	.50*	.31*	.19*	.44*	.36*	.36*	.39*	.39*	.39*	.39*	.39*	.39*	.39*
8. Academic decision making	393	21.57	5.26	.65	.58*	.11*	.03	.06	.17*	.17*	.17*	.17*	.24*	.24*	.24*	.24*	.24*	.24*	.24*
9. Selecting courses	390	10.13	3.37	.45	.07	.01	.12*	.09	.12*	.09	.12*	.09	.21*	.21*	.21*	.21*	.21*	.21*	.21*
10. Personal development and interpersonal relationships	414	18.81	8.55	.93	.65*	.55*	.77*	.76*	.76*	.76*	.76*	.76*	.33*	.33*	.33*	.33*	.33*	.33*	.33*
11. Exploring institutional policies	429	7.82	3.08	.72	.51*	.58*	.66*	.25*	.73	.49*	.67*	.32*	.32*	.32*	.32*	.32*	.32*	.32*	.32*
12. Registration and class scheduling	427	7.64	3.07	.76	.69*	.29*	.69*	.29*	.76	.69*	.29*	.69*	.29*	.29*	.29*	.29*	.29*	.29*	.29*
13. Teaching personal skills	428	5.23	2.67	.85	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*	.39*
14. Academic majors and courses	425	12.06	5.13	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88
15. Satisfaction with advising	426	13.83	3.38	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88	.88

Note. Internal-consistency reliability estimates are provided on the diagonal. * Indicates that figures are statistically significant at $p < 0.05$.

ticipants may have been inconsistent in their application of a policy, or their policies may have changed as they worked through the task. Boredom or lack of involvement in the task could have resulted in randomly selected responses. Regardless of the reasons why the policies of some participants could not be captured, only participants with captured policies were used in further analyses.

The sample for analysis included 50 men and 129 women who ranged in age from 17 to 38 years. See Table 2 for additional demographic character-

istics of the sample. A higher percentage of women were included in the final sample than in the sample of participants for whom policies could not be captured, $\chi^2(1) = 5.627, p = 0.018$. We found no other demographic differences between the captured- and noncaptured-policy populations.

To examine the relative weights of the cues across participants, we averaged satisfaction scores for each profile and then regressed the data onto the cues. By this procedure, we removed individual differences in judgments from the error term: $R^2 =$

Table 2 Differences in demographic characteristics between groups in which policy was captured versus those in which it was not captured

Participant Characteristics	Percentage of Participants in Each Group		χ^2	<i>p</i>
	Policy Not Captured ($R^2 < .495$)	Policy Captured ($R^2 \geq .495$)		
Ethnic Background			1.992	0.158
Minority	29.3	23.2		
Nonminority	70.7	76.8		
Gender			5.627	0.018
Male	38.7	27.9		
Female	61.3	72.1		
Year in College			5.196	0.268
Freshman	64.1	63.7		
Sophomore	14.6	11.7		
Junior	11.1	17.3		
Senior	9.8	7.3		
Nondegree seeking	0.3	0.0		
First Generation Status			.025	0.874
First generation	32.2	31.5		
Not first generation	67.8	68.5		
Nontraditional Student Status			1.140	0.286
Nontraditional	3.5	5.6		
Traditional	96.5	94.4		
Age Status			3.073	0.080
Younger than 25 years	98.9	96.6		
25 years or older	1.1	3.4		
Transfer Status			.489	0.485
Transfer student	13.2	15.6		
Nontransfer student	86.8	84.4		
First Time in College (FTIC) Advising			.043	0.835
No FTIC advising	47.9	46.9		
Some FTIC advising	52.1	53.1		
Faculty/Professional Advising			.001	0.970
No faculty/professional advising	48.8	48.6		
Some faculty/professional advising	51.2	51.4		
Peer Advising			.361	0.548
No peer advising	68.9	71.5		
Some peer advising	31.1	28.5		
Any Advising			.667	0.414
No advising	27.9	24.4		
Some advising	72.1	75.6		

0.98; $F(6, 41) = 377.90, p < 0.000$. All of the beta weights were statistically significant. The largest regression weight was for depth of the advising relationship ($\beta = .77$). Having a more established relationship with the advisor was the most important cue in participants' satisfaction judgments.

The second most important cue was the faculty advisor variable ($\beta = -.57$). Participants preferred a nonfaculty advisor over a faculty advisor.

The third most important cue was the emotional nature of the advising relationship ($\beta = .34$). Participants were more satisfied when the relationship was warm and supportive rather than businesslike and efficient.

The fourth most important cue was the peer advisor variable ($\beta = -.32$). Participants preferred a nonpeer advisor over a peer advisor. Taken together, the ratings on faculty and peer advisor variables suggest that participants preferred a professional advisor more than a faculty advisor, and they least preferred a peer advisor.

The type of advising approach was the fifth most important cue ($\beta = -.12$). Participants preferred a prescriptive rather than a developmental approach to advising.

Finally, the gender of the advisor was the least important cue ($\beta = .10$). Participants indicated a preference for a female rather than a male advisor. The policy captured for all participants indicate advisee preference for an established relationship with a warm and supportive professional (top preference) or faculty advisor. The captured policy data reveal to a lesser degree advisee preference for a prescriptive approach in terms of tasks addressed and for a female advisor.

Do Advising Preferences Vary Among Different Groups of Students?

To address the second purpose of our study, we examined potential differences in advising preferences across different types of students. For this analysis, we used individual judgment policies in which data on each participant's satisfaction with advising judgments were regressed onto the six advising cues. Participants' policies were then grouped according to self-reported sex, age, ethnic background, year in school, and amount of advising experience. We used t tests of independent samples to compare the standardized beta weights derived from the individual policies across groups. A significant difference suggests that the satisfaction of one group was more heavily influenced by a cue than it was for the other group. For these analyses, we applied a Bonferroni correction, and the

alpha level was set at 0.008. Moreover, we computed correlations to examine the degree of covariation in regression weights across groups. A significant Spearman's rank correlation coefficient (r_s) suggests that the rank order of the six cues was similar across the groups. In other words, the relative importance of the six cues was similar across groups.

We found no differences in the relative weights assigned to the advising variables across participant ethnic background or year in school. As seen in Table 3, we found differences for gender, amount of advising experience, and age. Specifically, the emotional nature of the advising relationship was found to be a more important cue for women (mean $\beta = 0.18$; $SD = 0.29$) than for men (mean $\beta = 0.01$; $SD = 0.28$), $t(177) = -3.575, p < 0.001, d = -.60$. Women preferred a warm advising relationship more than did men. Moreover, we found no statistically significant correlation between the rank order of the six standardized beta weights between the gender dichotomy ($r_s = .71$; $p = 0.111$), suggesting a difference in relative cue usage. Participants who had some advising experience with faculty or professional advisors preferred a female advisor (mean $\beta = .08$; $SD = .17$) more than did participants without any prior advising experience (mean $\beta = .01$; $SD = .16$), $t(177) = -2.723, p = 0.007, d = -.41$. However, we found a substantial degree of covariation in regression weights across ratings of students with and students without advising experiences with faculty or professional advisors ($r_s = .89$; $p = 0.019$). Finally, participants under 25 years indicated that they prefer that the advisor know them by name (mean $\beta = .34$; $SD = 0.34$) more than did participants age 25 years or older (mean $\beta = .07$; $SD = 0.14$), $t(7.194) = 4.283, p = 0.003, d = 1.78$. We found no statistically significant degree of covariation in regression weights across age ($r_s = -.26$; $p = 0.623$), suggesting a different pattern of cue usage across age groups.

Do Advising Preferences Vary Based on Personality or Prior Advising Experiences?

We examined potential differences in policies across participants with different personality traits. Because prior advising experience could influence preferences for advising, we also examined potential differences in advising preferences across participants with different prior advising experiences. To complete these analyses, we first grouped participants' individual policies according to their NEO-FFI and AAI subscale scores. For the NEO-FFI scales, we used the normative tables provided

Table 3 Beta weight comparisons for demographic characteristics and advising experiences

Participant Characteristics	Gender	Peer Title	Faculty Title	Depth	Type	Nature
Sex						
Male	.06	-.19	-.09	.35	-.11	.01 _a
Female	.04	-.20	-.13	.32	-.02	.18 _b
Age Status						
Younger than 25 years	.05	-.19	-.11	.34 _a	-.02	.13
25 years or older	.05	-.19	-.16	.07 _b	-.35	.18
Faculty/Professional Advising						
No faculty/professional advising	.01 _a	-.14	-.12	.37	-.03	.17
Some faculty/professional advising	.08 _b	-.24	-.10	.28	-.06	.10
Developmental-Prescriptive Advising						
Prescriptive	.04	-.16	-.13	.38	-.13	.03 _a
Developmental	.06	-.20	-.09	.29	.03	.17 _b
Personalizing Education Advising						
Prescriptive	.06	-.18	-.13	.34	-.13 _a	.06
Developmental	.04	-.19	-.09	.29	.06 _b	.19
Registration and Class Scheduling						
Less than median	.06	-.12	-.04 _a	.37	-.02	.09
Equal to or greater than median	.04	-.24	-.16 _b	.30	-.04	.16

Note. Beta weights within comparison groups that significantly differ at $p < 0.008$ have different subscripts.

by Costa and McCrae (1992) to transform participants' scores into linear T scores. Then, we formed high, average, and low groups as follows: If a participant had a T score of 44 or lower, he or she was categorized in the low group; if an individual's T score was 45 to 55, she or he was considered part of the average group; a student with a T score of 56 or higher was placed in the high group. For AAI scales, we used a median split except in instances in which Winston and Sandor's (1984a) recommendations applied. For example, Winston and Sandor (1984a) suggested score ranges for classifying participants according to the amount of prescriptive or developmental advising experiences they had received, as rated by the respondent on the Developmental/Prescriptive Advising scale, and we used their developmental-prescriptive classifications in our analysis.

After the groups were formed, we used independent sample t tests or one-way analysis of variance (ANOVA) measures to compare the standardized beta weights derived from the individual policies across groups. For these analyses, a Bonferroni correction was applied, and thus the alpha level was set at .008. Spearman rank correlation coefficients were also computed.

In an interesting result, we found no significant differences in beta weights across any of the partic-

ipants grouped by personality dimensions. We found two differences for participants grouped by prior advising experiences. A difference was found on the Personalizing Education subscale. Specifically, those who reported more prescriptive experiences also preferred the prescriptive advising scenarios (mean $\beta = -.13$; $SD = .41$), and those who reported having more developmental advising experiences preferred the developmental advising scenarios (mean $\beta = .06$; $SD = .37$), $F(1, 140) = 8.373$, $p = 0.004$. However, we found a substantial degree of covariation in regression weights across groups ($r_s = .83$; $p = 0.042$).

In addition, we found a significant difference among responses to the Registration and Class Scheduling scale. Those who reported more experience in advising related to registration and class scheduling preferred a nonfaculty advisor over a faculty advisor (mean $\beta = -.16$; $SD = .33$) more than did those who had less registration and class scheduling experience (mean $\beta = -.04$; $SD = .21$), $t(157) = 2.926$, $p = 0.004$. Moreover, a statistically significant correlation exists between the rank order of the six standardized beta weights across registration and class scheduling experience ($r_s = .71$; $p = 0.111$), which suggests a difference in relative cue usage by those with varying levels of advising experience.

Discussion

Advisor's Approach is More Important than Advising Approach

Notably important to all participants is the depth of the advising relationship. Participants also value the type of advisor and the emotional nature of the advising relationship. Most interesting, the advising approach was shown to be less important than other variables. These results are consistent with the psychotherapy literature and suggest that regardless of the particular tasks to be addressed in the advising session, an advisor needs to give specific care to establish a relationship with the advisee and convey warmth and support in this relationship.

The advising literature supports the idea that only advisors who use the developmental approach are warm and know their students. For example, in tables in which prescriptive and developmental advising activities are listed and compared, Fielstein (1989, p. 36) associated "Advisor be *personally acquainted* with the student" with the developmental approach. In their table comparing developmental and prescriptive approaches, Winston and Sandor (1984b, p. 8) listed "Advisor is *concerned* about personal, social and academic life of student" and "relationship is based on trust and respect" under the developmental approach. Thus, developmental advising is consistently described as the approach through which a warm and caring advisor takes the time to get to know the student personally. In their discussion of implementing developmental advising theory, Creamer and Creamer (1994, p. 17) stated, "A supportive, or developmental, orientation is clearly favored by advisors over an information-sharing, or prescriptive, orientation to advising." Clearly, the authors of articles on advising have the idea that an advisor's warmth and support is indicative of the developmental approach, and thus the authors and readers have assumed that an advisor cannot be both warm and supportive and also prescriptive, directive, instructive, information-sharing, or hierarchical. We challenge this conclusion noting that, as among psychology practitioners (Brunink & Schroeder, 1979), the establishment of a solid, warm, and supportive relationship can be the foundation of advising regardless of the specific approach and advising tasks to be accomplished. An advisor can warmly and supportively instruct a student on the precise tasks the student needs to accomplish to prepare for graduate school; advisors can convey warmth and support even when directly addressing a student's course of action for recovering from academic probation. Being directive and prescriptive need not mean that the advisor is uncaring, unsupportive, and cold.

Thus, operational definitions for the different approaches need to be clearly defined, and the relational assumptions that confound these approaches must be removed from the definitions.

Advising approaches may be better defined solely by the advising tasks conducted than by the theory on which they are based. In their study on nontraditional students, Fielstein, Scoles, and Webb (1992) delineated the tasks they had associated with each advising approach. For example, under developmental advising tasks, they included conversations on topics other than academics, including students' personal problems; self-esteem/interpersonal skills/study skills; student values, beliefs, and attitudes and the conflicts between them. According to the definition put forth by Fielstein et al. (1992), the prescriptive tasks involve assistance with course selection, schedule planning and registration; referrals to other student support services; explanation of degree requirements and review of student's status in relation to them.

The findings show that relational variables can exist across multiple approaches and their effect likely depends more on the advisor's interpersonal skills and style rather than the approach itself. If the descriptions of various advising approaches, such as prescriptive, developmental, and others, include warmth and supportive relational dynamics, then the exploration of contingencies (i.e., the consideration of when to use which approach) can expand along with the practice of the approach.

The importance of relational variables in academic advising is illuminated in the finding that the female students found warmth in the advising relationship to be of more importance than did male respondents. Because females are socialized to be more relationship oriented (Eagly, 1987), these findings are not surprising and may explain why the advising relationship is relatively more important to female students than it is to male students.

In another interesting finding, all students who had prior advising experience with professional and faculty advisors expressed a preference for female advisors. Both male and female students who had advising experience with professional and faculty advisors indicated that advisor gender is more important than did students who had no advising experience with professional or faculty advisors. These results are consistent also with the finding that undergraduate students find female advisors to be more empathic and are more likely to recommend female advisors to their friends (Nadler & Nadler, 1993). They may indicate that students seek out advisors who offer positive advising relationships and that stu-

dents perceive female advisors as being more warm and supportive. The results of our study are also consistent with the related finding that female faculty are viewed by students as more accessible, and in fact, female faculty devote more time to advising than do the male faculty (Bennett, 1982).

The preference for female advisors was not apparent in students' perceptions of peer advising. Students are not looking for the same depth or quality of advising from their peer advisors, who are typically trained to handle only the routine, basic academic-advising issues, as they seek from faculty or professional advisors (Privette & Delawder, 1982; Seegmiller, 2003). Peer advisors may be best characterized as "curriculum advisors" (Gordon, 1984, p. 456). Students are, therefore, unlikely to expect or desire a deeper advising relationship with peer advisors.

Advisee Personality Affects Advising Experiences and Preferences

The results of this study suggest that personality differences among students make little impact on their advising preferences; in general, students value warmth and depth in advising relationships. However, we found that personality also relates to prior advising experience. Extraverted, agreeable, and conscientious students reported that they receive better quality and more satisfying advising experiences than did more introverted, less agreeable, and less conscientious students. Keeping in mind that all students, regardless of their personality type, want established, warm, and supportive relationships with them, advisors may need to challenge themselves to build such relationships even with students who are not extraverted, agreeable, or conscientious. These results emphasize the importance of training in the area of interpersonal, relationship-building, and counseling skills that will allow advisors to be successful in meeting the needs of students with various but common personality types.

We found some that student characteristics relate to the students' advising preferences as well as their experiences. The policies of the traditional-aged students suggest that they desire depth in an advising relationship, and the results on the Personal Development and Interpersonal Skills scale of the AAI suggest that advisors are meeting this need. Compared to older students, the traditional-aged students in our study had a more significant need for the advisor to know them.

Because the sample size of nontraditional-aged students was small, in the future, researchers should examine if traditional-aged students have a greater

need than nontraditional-aged students for personal development advising as they struggle to adopt the role of college student as well as negotiate the developmental milestones that directly relate to major and career choices. The results of this study, as measured by the AAI Scale, imply that traditional-aged students both desire and receive more personal development advising. Advisors do not have sole responsibility for meeting this need. Because they are looking for an interpersonal connection, traditional-aged students are probably seeking out and engaging advisors.

In this study, nontraditional-aged and non-White students perceive that they had been receiving less interpersonal support from their advisors than did the White and traditional-aged students. Although all students reported equivalent satisfaction with their advising, nontraditional-aged students scored significantly lower on the AAI Personal Development and Interpersonal Skills scale than did traditional-aged students; this result suggests that the nontraditional-aged students were less likely to discuss with their advisors various college experiences, including classroom and extracurricular activities and short- and long-term plans. Non-White students scored significantly lower than did White students on amount of developmental advising received. Advisor training may be an effective way to increase advisors' awareness of non-White students' perceptions that they receive less developmental advising than White students perceive receiving. Academic advisors can be reminded of the crucial impact they can have with all students; academic advising has been cited as the most critical supportive resource to assist in the retention, satisfaction, and positive integration of minority students (King, 1993).

We found two other interesting differences when participants were grouped by past advising experiences. First, those students who reported more prescriptive experiences preferred the prescriptive advising scenarios, and those who reported having more developmental advising experiences preferred the developmental advising scenarios. This finding suggests that students will prefer the advising that they are accustomed to receiving. Advisors have the ability to influence the expectations and desires of their advisees. They should pay careful attention to the type of advising students are receiving because their experiences generate and influence their future expectations. This finding also has particular implications for students who transfer from one advisor or advising resource to another. In her or his approach, an advisor may want to take into consideration the type of advising the student has

received in the past.

Second, those students who reported more registration and class scheduling experience prefer a nonfaculty advisor significantly more than did those who had less registration and class scheduling experience. This finding suggests that professional and peer advisors are either doing a particularly good job in meeting registration and class-scheduling needs or that students feel more comfortable dealing with professionals and peers rather than faculty advisors for these particular needs.

Study Limitations

The primary limitation of this study is use of hypothetical advising scenarios. We studied simulated, rather than actual, judgments. Participants' responses to real advising scenario may differ from those expressed in this study. We examined "cue utilization" (Brunswik, 1943) (i.e., how cues relate to satisfaction judgments). "Ecological validity" (i.e., how judgments relate to satisfaction in actual advising experiences) still needs to be examined (Hammond et al., 1986).

Also specific to the policy capturing method, the task that students were required to complete was fairly lengthy. Fatigue or boredom with the task may have affected the results and is a potential reason why all of the participants' policies were not captured. According to Cooksey (1996), the trade-off between the participant's ability to handle the demands of the task and the researcher's need to have enough profiles to find stable regression coefficients always presents a challenge to the investigator. In this study, the number of cues and profiles were within Cooksey's recommended guidelines for balancing the trade-off. Perhaps using the results of this study as a starting point, researchers can further refine the cues, cue levels, and number of profiles to examine student satisfaction with advising.

These results were generated from students at a large, 4-year university and may not generalize to students in community colleges or small schools. Moreover, important differences may exist in the advising preferences of students who voluntarily participate in a study on advising and those who do not. In other words, students who volunteered for this study may not be representative of all college students.

Implications for Advisors

The results of this study suggest that the depth and emotional nature of the advising relationship contributes the most to student satisfaction with their advising. Advisors can strive to establish warm

and supportive advising relationships regardless of the objectives of the advising.

The results of this study also suggest that despite personality differences among them, students seek out advisors who are warm and supportive. Therefore, extra effort on the part of an advisor to build deeper and warmer connections with students who are relatively less extraverted, agreeable, or conscientious will benefit the advisee-advisor relationship. The nontraditional-aged students in this study were less likely to be self-disclosing about their educational experiences. If this trend is confirmed in future research, advisors may wish to put forth extra effort to get to know these students well and build warm advising relationships with them.

This study highlights the importance of an advisor establishing a relationship with an advisee and conveying warmth and support in this relationship. By understanding the specific elements of the current advising approaches found to be valued by students, advisors are free to adopt the advising tasks associated with various approaches as needed. Based on this study, we emphasize the need for clearly defined, operational definitions of the different approaches, such as prescriptive and developmental, based on the advising tasks conducted. We also advocate for the removal of the relational assumptions that currently confound the effectiveness of the approaches.

References

- Alexitch, L. R. (1997). Students' educational orientation and preferences for advising from university professors. *Journal of College Student Development, 38*, 333–42.
- Anastasi, A., & Urbina, S. (1997). *Psychological testing*. New York: Pearson Education.
- Andrews, M. (1987). Student characteristics as predictors of perceived academic advising needs. *Journal of College Student Personnel, 28*, 60–65.
- Baslow, S. (1987). Student evaluations of college professors: Are female and male professors rated differently? *Journal of Educational Psychology, 79*, 308–14.
- Beal, P. E., & Noel, L. (1980). *What works in student retention*. Iowa City, IA: American College Testing Program; Boulder City, CO: National Center for Higher Education Management Systems.
- Bedford, M. H., & Durkee, P. E. (1989). Retention: Some more ideas. *NASPA Journal, 27*, 168–71.
- Bennett, S. K. (1982). Student perceptions of and expectations for male and female instructors: Evidence relating to the question of gender bias in teaching evaluation. *Journal of Educational*

- Psychology*, 74, 170–79.
- Bergin, A. E., & Suinn, R. M. (1975). Individual psychotherapy and behavior therapy. *Annual Review of Psychology*, 26, 509–56.
- Beutler, L. E., Machado, P. P., & Neufeldt, S. A. (1994). Therapist variables. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavioral change* (4th ed.) (pp. 229–69). New York: Wiley.
- Briggs, K. C., & Myers, I. B. (1983). *Myers-Briggs Type Indicator; Form G*. Palo Alto, CA: Consulting Psychologists Press.
- Broadbridge, A. (1996). Academic advising—traditional or developmental approaches? Student perspectives. *British Journal of Guidance and Counseling*, 24, 97–111.
- Brunink, S. A., & Schroeder, H. E. (1979). Verbal therapeutic behavior of expert psychoanalytically oriented, gestalt, and behavior therapists. *Journal of Consulting and Clinical Psychology*, 47, 567–74.
- Brunswik, E. (1943). Organismic achievement and environmental probability. *Psychological Review*, 50, 255–72.
- Carstensen, D. C., & Silberhorn, C. (1979). *Final report on the ACT Survey of Academic Advising*. Iowa City, IA: The American College Testing Program.
- Cooksey, R. W. (1996). *Judgment analysis: Theory, methods, and applications*. San Diego, CA: Academic Press.
- Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4, 5–13.
- Creamer, D. G., & Creamer, E. G. (1994). Practicing developmental advising: Theoretical contexts and functional applications. *NACADA Journal*, 14(2), 17–24.
- 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*, 30, 154–61.
- Crookston, B. B. (1972). A developmental view of academic advising as teaching. *Journal of College Student Personnel*, 13, 12–17.
- Daller, L. D., Creamer, E. G., & Creamer, D. G. (1997). Advising styles observable in practice: Counselor, scheduler, and teacher. *NACADA Journal*, 17(2), 31–38.
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Erlbaum.
- Fielstein, L. L. (1987). Student preferences for personal contact in a student-faculty advising relationship. *NACADA Journal*, 7(2), 34–40.
- Fielstein, L. L. (1989). Student priorities for academic advising. Do they want a personal relationship? *NACADA Journal*, 9(1), 33–38.
- Fielstein, L. L., Scoles, M. T., & Webb, K. J. (1992). Differences in traditional and nontraditional students' preferences for advising services and perceptions of services received. *NACADA Journal*, 12(2), 5–12.
- Frisz, R. H., & Lane, J. R. (1987). Student user evaluations of peer adviser services. *Journal of College Student Personnel*, 28, 241–45.
- Fritzsche, B. A., & Brannick, M. T. (2002). Representative design in judgment tasks: The case of resume screening. *Journal of Occupational and Organizational Psychology*, 75, 163–69.
- Fritzsche, B. A., Finkelstein, M. A., & Penner, L. A. (2000). To help or not to help: Capturing individuals' decision policies. *Social Behavior and Personality*, 28, 561–78.
- Fritzsche, B. A., McIntire, S. A., & Powell Yost, A. (2002). Holland type as a moderator of personality-performance predictions. *Journal of Vocational Behavior*, 60, 422–36.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34.
- Gordon, V. (1984). Training professional and paraprofessional advisors. In R. B. Winston, T. K. Miller, S. C. Ender, & T. J. Grites (Eds.), *Developmental academic advising: Addressing students' educational, career and personal needs* (pp. 440–55). San Francisco: Jossey-Bass.
- Gordon, V. (1994). Developmental advising: The elusive ideal. *NACADA Journal*, 14(2), 71–75.
- Hammond, K. R., Stewart, T. R., Brehmer, B., & Steinmann, D. O. (1986). Social judgment theory. In H. R. Arkes & K. R. Hammond (Eds.), *Judgment and decision making: An interdisciplinary reader* (pp. 56–76). New York: Cambridge University Press.
- Herdon, J. B., Kaiser, J., & Creamer, D. G. (1996). Student preferences for advising style in community college environments. *Journal of College Student Development*, 37, 637–48.
- King, M. C. (1993). Academic advising, retention, and transfer. In M. C. King, (Ed.), *Academic advising: Organizing and delivering services for student success* (pp. 21–31). San Francisco: Jossey-Bass.
- Nadler, M. K., & Nadler, L. B. (1993). The influence of student sex and instructor sex on academic

- advising communication. *Journal on Excellence in College Teaching*, 4, 119–30.
- Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary drop out decisions from a theoretical model. *Journal of Higher Education*, 51, 60–75.
- Privette, G., & Delawder, J. E. (1982). Academic peer counseling: Advising with a personal touch. *International Journal for the Advancement of Counseling*, 5, 109–14.
- Rogers, C. R. (1992). The necessary and sufficient conditions of therapeutic personality change. *Journal of Consulting and Clinical Psychology*, 60, 827–32. (Original work published 1957)
- Schneider, R. J., Hough, L. M., & Dunnette, M. D. (1996). Broadsided by broad traits: How to sink science in five dimensions or less. *Journal of Organizational Behavior*, 17, 639–55.
- Sedlacek, W. E. (1991). Using noncognitive variables in advising nontraditional students. *NACADA Journal*, 11(1), 75–82.
- Seegmiller, B. R. (2003). A peer advising course for undergraduate psychology majors. *Teaching of Psychology*, 30, 51–53.
- Spence, J. T., & Helmreich, R. L. (1978). Work and Family Orientation Questionnaire: An objective instrument to assess components of achievement motivation and attitudes toward family and career. *Catalog of Selected Documents in Psychology*, 8, 35.
- Steele, G. E., Kennedy, G. J., & Gordon, V. N. (1993). The retention of major changers: A longitudinal study. *Journal of College Student Development*, 34, 58–62.
- Stevenson, M. K., Busemeyer, J. R., & Naylor, J. C. (1990). Judgment and decision-making theory. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology: Vol. 1* (2nd ed.) (pp. 283–374). Palo Alto, CA: Consulting Psychologists Press.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *Review of Higher Education*, 21, 167–77.
- Trombley, T. T., & Holmes, D. (1981). Defining the role of academic advising in the industrial setting: The next phase. *NACADA Journal*, 1(2), 1–8.
- Truax, C. B., & Carkhuff, R. R. (1967). *Toward effective counseling and psychotherapy*. Chicago: Aldine Atherton.
- Webb, E. M. (1987). Retention and excellence through student involvement: A leadership role for student affairs. *NASPA Journal*, 24, 6–11.
- Winston, R. B., & Sandor, J. A. (1984a). *The Academic Advising Inventory*. Athens, GA: Student Development Associates.
- Winston, R. B., & Sandor, J. A. (1984b). Developmental academic advising: What do students want? *NACADA Journal*, 4(1), 5–13.
- Winston, R. B., & Sandor, J. A. (1986). *Evaluating academic advising update: Addendum to the manual for the Academic Advising Inventory*. Athens, GA: Student Development Associates.

Authors' Note

This research was supported by a grant from NACADA awarded in 2003.

Karen E. Mottarella joined the University of Central Florida (UCF) in 1998 as the Coordinator of Undergraduate Advising for the Psychology Department. She is currently instructor of psychology and a licensed psychologist in Florida. Dr. Mottarella received the 2002 University Award for Excellence in Faculty Advising at UCF, and she has published papers in journals such as Psychology Teaching and Learning, the International Journal of Reality Therapy, and the American Journal of Family Therapy. Her research interests include academic advising, in-home counseling and outreach models, psychological assessment, and Web-based training.

Barbara A. Fritzsche is associate professor and Director of the PhD Program in Industrial and Organizational Psychology at the University of Central Florida. Dr. Fritzsche's research interests include diversity issues, predictors of performance, and Web-based training. She has published papers in journals such as Journal of Personality and Social Psychology, Journal of Occupational and Organizational Psychology, Journal of Vocational Behavior, Personality and Individual Differences, Human Resource Management, Journal of Applied Social Psychology, Psychology Teaching, and Learning, and Social Behavior and Personality.

Kara C. Cerabino is a doctoral candidate in industrial and organizational psychology at the University of Central Florida. Her primary research interests include work-family conflict and diversity issues. Kara has published in Personality and Individual Differences and was a recipient of the Lyman Porter Award for Best Graduate Student Paper presented at the 2003 Academy of Management conference.

Correspondence concerning this article should be sent to: Dr. Karen Mottarella, kmottare@mail.ucf.edu, 305 Bunker Street, Melbourne, Florida 32901.