

Capturing the Student Perspective: A New Instrument for Measuring Advising Satisfaction

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Abstract

When students leave their advising appointments, how do they feel? Excited? Disappointed? If advisors and students do not have similar expectations and goals, the student may have a negative advising experience, which has the potential to lead to student withdrawal and dissatisfaction. We surveyed students at a large midwestern university aiming to see how current students feel about their past and recent advising experiences. Overall, students were satisfied with their advising involvement, as average rating scores were high and positive. The measurement scale created to evaluate student satisfaction with advising was analyzed using exploratory and confirmatory factor analyses. This analysis showed two reliable scales: advising and outreach functions, which may be used in the future to evaluate advising programs.

Keywords: advising, scale development, survey, undergraduate students

Capturing the Student Perspective: A New Instrument for Measuring Advising Satisfaction

Student retention is an important facet of higher education, and universities are dedicated to investigating the extent to which their students feel connected to campus and campus resources. An important tool that universities utilize for this purpose is academic advising. An academic advisor is someone that students can trust as they transition from high school to college, and their presence and support could mean the difference between a frustrated withdrawal and a determined student who works hard to graduate with honors (Drake, 2011).

When investigating various factors related to student retention, research shows that the quality of advising on a college campus is one of the most powerful predictors of overall campus satisfaction (Kuh, 2008). Metzner (1989) found that lower attrition rates were linked to high quality advising rather than lower quality advising, but some advising was better than no advising at all. McLaughlin and Starr (1982) cited numerous studies that have linked high quality academic advising to retention and persistence, as well as low quality or no academic advising to dropped courses and attrition.

Since advising is an integral part of a successful educational institution, continued monitoring, development, evaluation and assessment should occur in order to ensure that students are receiving consistent and high quality advising services. One of the most popular ways to indirectly measure the success of an academic advising program is to evaluate the satisfaction of its users using a standardized scale. However, previous publications on evaluation efforts have relied on one of a few well-known instruments (such as Winston & Sandor, 1984) or other scales that have not been analyzed for their statistical properties. For example, Alexitch (2002) and Hale, Graham, and Johnson (2009) used the Academic Advising Inventory (AAI) by Winston and Sandor (1984). The AAI is a four-part evaluation instrument that determines: (1)

the levels of prescriptive and developmental advising that students are receiving, (2) frequencies of various discussion topics, (3) satisfaction levels, and (4) demographic information. Further, others have utilized institution specific scales (Creeden, 1990; Ford, 1985, Grites, 1981, Habley, 1994), but these scales have not been tested for analytic fit, reliability or validity.

Other evaluation initiatives have introduced new quantitative instruments, comparing student preferences of advising to the reality of advising sessions (Dickson & McMahon, 1991; Fielstein & Lammers, 1992; Fielstein, 1989; Fielstein, Scoles, & Webb, 1992), evaluating the differences between student and faculty perceptions (Creeden, 1990; Grites, 1981; Saving & Keim, 1998; Severy et al., 1994), and measuring overall satisfaction with advising (Bitz, 2010; Kelley & Lynch, 1991; Lynch, 2004; Reinartz & Ehrlich, 2002; Smith & Allen, 2006; Zimmerman & Mokma, 2004). Additionally, Lynch (2004) investigated differences between advisor type (general advisors, departmental advisors, and faculty advisors), while Fielstein, Scoles, and Webb (1992) evaluated satisfaction differences between traditional and non-traditional students.

Furthermore, other findings based on qualitative methods are available, such as interviews (Beasley-Fielstein, 1986; Fielstein 1987; Fielstein & Lammers, 1992) and focus groups (Kramer, 1992; Smith, 2002). These qualitative studies have also focused on the relationship between graduate students and their advisors (Bloom, Propst Cuevas, Hall, & Evans, 2007; Schlosser, Knox, Moskovitz, & Hill, 2003). Srebnik (1988) and National Academic Advising Association (2012) listed numerous institutions that have created their own qualitative and/or quantitative evaluation instruments, each relevant for their respective institution's culture and needs.

While these previous initiatives have expanded the research literature, the overall

evaluation and assessment processes used in academic advising to date have been inconsistent (Allen & Smith, 2008). Likewise, few studies have been grounded in statistical analyses and scale development. Reliable and valid measures are needed to measure complex processes such as academic advising (Banta, Hansen, Black, & Jackson, 2002), but many of the existing informal assessments neglect these traditional scale properties. Additionally, some publications were missing details regarding the scale development process. Other studies were vague about their scale creation, and declared they had acceptable reliability and validity without statistical information to confirm these claims. In other words, more statistically valid measuring tools are needed to fully assess the impact and quality of academic advising. For this reason, we turn to the basics of academic advising literature to determine what should be measured.

O'Banion (1972) lists the crucial functions of academic advising in five dimensions: exploration of life goals, exploration of vocational goals, program choice, course choice, and scheduling courses. Mainly, advisors carry out these functions using two main advising styles: prescriptive advising and developmental advising. The method of advising known as prescriptive advising involves an authoritarian relationship between the advisor and the advisee, where the advisor simply tells the student what to do. Crookston (1972) compared the relationship between a prescriptive advisor and their advisee to a doctor and patient relationship, where the patient assumes no responsibility for what may go wrong. However, prescriptive functions in advising are essential to student success, as they include discussing graduation requirements, course selection, and registration procedures (Fielstein, 1994).

Developmental advising, on the other hand, is focused on an equal and deeper relationship between advisor and advisee and examines the student as a whole person. Developmental advising “goes beyond simply giving information or signing a form” (King,

2005, para. 2). In order to be effective at enhancing student development, advisors should be educated on student development theories and how to properly utilize them in their practice. Williams (2007) and Creamer and Creamer (1994) identified theories often embraced in developmental advising, including psychosocial theories of development, cognitive development theories, and career development theories. Developmental advising should be a team effort, where the advisor guides the student in developing skills and self-awareness that will lead to a rewarding college career (O'Banion, 1972). Examples of developmental advising outcomes include strengthening communication and problem solving skills, identifying values and life goals, and broadening interests (Creamer & Creamer, 1994).

While a great amount of literature on advising seeks to determine whether prescriptive advising or developmental advising is superior, both methods of advising are important and should be utilized at certain times throughout a student's college career as a comprehensive approach. Fielstein (1994) noted that much like Maslow's hierarchy of needs, a student's basic needs should be met using prescriptive advising before higher level needs can be met by developmental advising. Brown and Rivas (1994) agreed, and stated that advising should be more of a continuum, where the relationship begins with prescriptive advising and slowly transitions into a developmental mode.

The literature shows that students are positively inclined toward prescriptive advising. In fact, students from other cultures may feel more comfortable with an authority figure directing their path, as this type of relationship is expected back home (Brown & Rivas, 1994; Cornett-Devito & Reeves, 1999). Research also shows that some students may only want prescriptive functions from their advisors rather than a relationship, and rank these services higher than developmental services (Fielstein, 1994).

Regardless of an advisor's good intentions, students may be dissatisfied with the advising services they have received. One explanation for this dissatisfaction may be a simple disconnect between an advisor's expectations and values in advising and a student's expectations and values (Allen & Smith, 2008). Therefore, it is important to get a sense of what students expect from their advisors, as well as what does and does not work in advising sessions. Our initial goal when beginning this study was to examine current students' feelings about their advising experiences thus far in their collegiate career. As part of this we sought to create an evaluative tool that would serve this purpose as well as contribute to the advising literature. While the former is indeed for our local purposes, we quickly realized that the latter was much more relevant for the field of academic advising.

In this study, students were asked questions about their advising experience at a large midwestern university. Participants indicated where they have received advising services, as well as how content they were with the advising they have received. Questions were originally designed to measure satisfaction with prescriptive functions (such as class scheduling and graduation requirements), developmental functions (such as developing career goals), and overall advisor traits (personality, professionalism, etc.). Scale development is described below.

Experiment 1

Method

Participants

Participants ($N = 155$) were recruited from the university undergraduate research subject pool and received course credit for their involvement. Three participants were excluded for incomplete surveys, leaving 152 subjects for the following analyses. Table 1 contains the demographic data for all experiments.

Materials and Procedure

In surveying the literature on academic advising noted above, questions for a new questionnaire (created using Qualtrics survey software) were created in the spirit of previous evaluative scales (Cuseo, 2003; Winston & Sandor, 1984). These questions were developed to match specific university goals and academic advising mission statements, such as the public affairs mission. Additionally, numerous aspects of academic advising were investigated, including advisor traits (such as patience and trustworthiness), activities relating to prescriptive advising (such as schedule planning and graduation requirements), and activities relating to developmental advising (such as campus/community involvement and overall student development). The complete scale is shown in Table 3. The scale was randomized for each participant so that they all saw a different order of scale questions.

After indicating experimental consent, participants completed the questionnaire. Participants were asked to rate statements describing different characteristics of an academic advising session using a seven-point Likert-type scale (where 1 indicated “strongly disagree,” 4 indicated “neutral,” and 7 indicated “strongly agree”). For example, participants were asked to indicate to what extent they trust their advisor. Basic demographic information was also collected, such as gender, status (freshman, sophomore, etc.), major, transfer status, and ethnicity. After completing the survey, participants were thanked and granted participation credit.

Data Analytic Approach

Exploratory factor analysis (EFA) was used to analyze the underlying factor structure of the advising scale presented to participants. Guidelines established by Preacher and MacCallum (2003) were followed, including the selection of EFA over a principle components analysis. We

originally hypothesized that the ratings on our scale were based on an underlying understanding of prescriptive, development and advisor traits, where questions would group together based on the participant conceptualization of how they felt about their advisor and the services they were receiving (developmental and prescriptive functions). When factors are thought to cause ratings, factor analysis is a more appropriate exploration of the data. Further, we believe that these factors will be correlated, so oblique rotations (direct oblimin) were used when more than one factor was selected. To select the number of factors, we considered both a scree plot and parallel analysis, which was calculated using the FACTOR program (freely available from Lorenzo-Seva & Ferrando, 2006). Maximum likelihood estimation was chosen to calculate question loadings for each analysis. As per Preacher and MacCallum standards, questions were considered to “load” on a factor if their relationship to the factor was over .300. Additionally, questions should load on at least and only one factor. Therefore, questions that loaded on more than one factor were considered poor and discarded from analyses with more than one factor, as well as questions that did not load on any factor. The following fit indices were used to assess model fit: (1) root mean square error of approximation (RMSEA; Steiger, 1990), (2) standardized root mean residual (SRMR; Jöreskog & Sörbom, 1981), (3) Tucker-Lewis non-normed fit index (NNFI; Bentler & Bonett, 1980), and (4) the comparative fit index (CFI; Bentler, 1990). RMSEA and SRMR are scaled so that very low values are said to have good model fit (<.06 excellent, <.10 moderate fit, Browne & Cudeck, 1993), and the NNFI and CFI are scaled such that high values are good model fit (>.90; Bryant & Yarnold, 1995; Thompson 2004).

Results

The data were first screened for missing information, multivariate assumptions, and outliers. Several data points (six) were missing at random, usually due to participants skipping a

question in the online survey. These missing data were replaced with linear trend at point calculations through SPSS 20. Eight multivariate outliers were found using Mahalanobis distance as a criterion, but were included in analyses because they did not change results when excluded (Tabachnick & Fidell, 2012). All other assumptions were found to be satisfactory.

The advising scale was designed to examine prescriptive, developmental, and advisor functions, so accordingly, three factors were expected. However, scree plots and parallel analyses indicated that a one-factor model would be more appropriate. Therefore, we examined one, two, and three-factor models for fit indices and factor loadings. Table 2 contains the fit indices for all experiments, and Table 3 shows the final factor loadings for our first draft of the scale. Exact questions can also be seen in Table 3. After examining both the factor loadings and fit indices for each model, we selected the one-factor model as the best fit combination. Fit indices will increase with additional factors, which is seen in Table 2. Even though the three-factor model appears to be better than the other models when examining only fit indices, the factor loadings for both the two and three-factor models were unsatisfactory. Many questions split loadings between multiple factors and testing their removal from the scale indicated that factors two and three were eliminated when double loading questions were removed. The factor loadings seen in Table 3 show that all questions load strongly on one overall advising factor. These results appear to indicate that when students rate advising, they use their general feelings about advisors to rate those functions. The reliability of the one-factor model was .98 using Cronbach's alpha, and the average score on the survey was an encouraging $M = 5.32$ ($SD = 1.22$), indicating that student ratings are above a neutral 4 rating on the Likert scale, $t(151) = 13.30, p < .001, d = 1.08$.

However, fit indices for the one factor model are fairly poor overall. The RMSEA, CFI,

and NNFI are outside acceptable ranges: low values for RMSEA (<.10 at minimum) and high values for CFI/NNFI (>.90) are desirable. The SRMR indicated good model fit (0.07) but also could improve with modifications to the scale. A further examination of our questions did indicate some problems with scale design. Several questions are compound sentences (e.g. My advisor encourages me to speak freely and listens to what I have to say.) with multiple parts that students are considering when answering questions. Further, several questions were reworded for clarity. These questions were then retested in Experiment 2 to examine factor structure for the second draft of the advising survey. The questions for the second version of the scale are listed in Table 4.

Experiment 2

Method

Participants.

Another set of participants ($N = 181$) were recruited from the university undergraduate research subject pool and received course credit for their involvement. Four participants were excluded for incomplete surveys, leaving 177 subjects for the following analyses. Further, twenty participants were excluded from analyses as multivariate outliers using Mahalanobis distance as a criterion. Table 1 contains the demographic data for all experiments.

Materials

After considering the results of the EFA examined in Experiment 1, a revised survey was created containing 30 questions. Compound sentences (such as “My advisor acts in a professional and ethical manner”) were separated into different questions (such as “My advisor acts in a professional manner” and “My advisor is ethical”), and reworded for enhanced clarity. Questions can be found in Table 4.

Procedure

Procedure was exactly the same as Experiment 1.

Results

Data were screened for multivariate assumptions and outliers. Missing data points (21 across all surveys) were replaced with linear trend at point and appeared to be at random. Twenty subjects were removed as multivariate outliers, leaving 157 participants for EFA examination. The same data analytic procedures described above were used to analyze this dataset.

Parallel analyses and scree plot examination indicated one or two factor models would be the most appropriate for our new set of advisor related questions. Therefore, both one and two factor models were analyzed on the 30-question version. For the one-factor model, fit indices were again poor as seen in Experiment 1 with high RMSEA (0.13) values, and low CFI (0.80) and NNFI (0.79) values. The two-factor model showed improved fit indices with lower RMSEA (0.10), SRMR (0.04) values and higher CFI (0.90), NNFI (0.89) values. These fit indices, while not excellent, showed improved fit and were generally in acceptable ranges.

Further, factor loadings for the two-factor model also appeared suitable. Many questions loaded cleanly (loading only on one factor $>.30$) onto Factor 1, while several questions double loaded onto both Factor 1 and 2. These questions are shown at the bottom of Table 4, but without loadings for factors. Five questions on the 30-question version cross-loaded onto both factors and were removed from further analyses. These five questions included items about advisor activity outside the scheduled meeting time: grade inquiries, adjustment to college life, and availability, as well as items about campus resources and advisor relationship. A second EFA was tested on the 25-item scale to see if removal of these cross loading questions would improve model fit. As seen in Table 2, fit indices improved or stayed the same for the 25-item version of the advising

scale. After inspecting new factor loadings, one question loaded onto both factors and was removed from the last analysis. Finally, a 24-item questionnaire was examined with EFA, showing good fit indices and appropriate factor loadings for each question. As seen in Table 4, twenty items load onto a general advising subscale with very strong loadings. These items range from questions about the actual advising appointment to relationship between advisor and advisee. The reliability for this factor was an alpha of .99. The second factor appears to concern advisor connection to student outreach, asking about public affairs and student organizations. The factors are correlated ($r = .62, p < .01$) but the second factor is a reliable subscale with a Cronbach's alpha of .92, which is high for a four-item subscale. The average score for advising functions was $M = 5.72$ ($SD = 1.30$), while the average score for outreach functions was significantly lower $M = 4.58$ ($SD = 1.42, t(176) = 13.95, p < .001, d = 1.06$).

Experiment 3

Method

Participants

184 participants were recruited the university general human subject's participant pool. Demographic data is presented in Table 1. Participants were given course credit for their time in taking the survey. Seventeen participants were excluded from further analyses as multivariate outliers when examining scale question answers. Therefore, 167 participants were used in the presented analyses. Fifty-nine participants took the survey twice (once for Experiment 2, once for Experiment 3) and are used for test-retest reliability.

Materials

The 30-question advising scale from Experiment 2 was adjusted to remove six questions, which loaded on multiple factors, leaving 24 total questions. Questions can be found in Table 4.

Procedure

Procedure was exactly as described in Experiment 1. Participants could retake the scale through the online system, but could not see their original answers. Several weeks elapsed between the first posting of Experiment 2 and the posting of Experiment 3 for undergraduate participants to sign up.

Results

Since the factor structure in previous analyses showed good fit with adequate indices and excellent final factor loadings, this experiment tested the advisor scale with confirmatory factor analysis (CFA). In CFA, questions are programmed to load directly onto their predicted factor and only that factor to show that model structure is replicable. Fit indices are similar to EFA (as described above) with the addition of χ^2 , the ratio of chi-square to degrees of freedom (χ^2/df ; Bryant & Yarnold, 1995; Hoelter, 1983), and the TLI (TLI; Tucker & Lewis, 1973) instead of the NNFI. The CFA model was programmed into SPSS AMOS 20.0 using maximum likelihood estimation. As stated above, RMSEA and SRMR values should be very low to indicate good fit ($<.06$), while CFI and TLI values should be above .90 to indicate good fit. χ^2/df values are used to minimize the effect of sample size on chi-square, and χ^2/df should be below values of 3 to indicate well fitting models (Bollen, 1989; Bryant & Yarnold, 1995). The CFA of the two-factor 24-item scale presented in Table 5 showed excellent fit values: RMSEA (0.09), SRMR (0.04), CFI (0.94), TLI (0.94) and χ^2/df (2.26). All questions loaded highly onto their factors, as shown in Table 5. The correlation between factors was still high ($r = .72, p < .01$) but again we find high reliability coefficients for both factors: factor 1 alpha = .98, factor 2 alpha = .88. The advising factor again had a higher subscale average $M = 5.74$ ($SD = 1.26$) than the outreach functions $M = 4.76$ ($SD = 1.26, t(166) = 11.63, p < .001, d = .87$). Test-retest reliability was high for both

subscale averages where advising functions ($r = .92$) and outreach functions ($r = .85$) showed good reliability across test times.

Discussion

Here we present another tool for evaluating the perceptions of advising through a standardized advising scale. The scale was tested with three samples to determine the best questions and scale structure. Questions were reworked for clarity and/or eliminated when they did not conform to model fit, and the best combination was included. Even though original developments indicated that three subscales should exist (developmental, prescriptive, advisor traits), it appears that undergraduate students lump many of these facets of advising together. Only two factors emerged: general advising concerns and outreach functions. The outreach subscale may indicate student perception of development beyond academic concerns, as many students are aware that these extracurricular types of activities are necessary for successful applications in the job or graduate school market. While our university emphasizes the public affairs mission, it may also be that the many freshmen students we surveyed are not yet aware of these opportunities, which would lead them to group together in an uninformed category. When factor subtotals were examined, both groups (Experiment 2 and 3) showed lower subscale averages for the outreach factor, indicating that either advisors do not cover this material in their sessions or that students are less satisfied with the discussion over outreach. This finding may provide an interesting avenue of research, as freshmen should likely be the target to discuss many of these opportunities to get students engaged in university life early in their careers.

These results may also indicate that we need to retool our understanding of what students perceive about advising sessions. Questions were developed to measure the differences in prescriptive and developmental advising (Williams, 2007; Creamer & Creamer, 1994;

Crookston, 1972), but these designations did not emerge during analysis. Students may comprehend advising to be a “one stop shop” for scheduling, registration, and graduation questions, but clearly advisors of all types have the opportunity to further engage students in university life. These connections to campus could potentially lead to higher retention of students who otherwise would withdraw or transfer to a university with more appealing extracurricular options.

To further assess reliability, the scale was given to a subset of participants twice over several weeks time. The correlations between factor subtotals were quite high, indicating reliability for answers across testing. Cronbach’s alpha was calculated for the second and third administration of each scale, and alpha scores indicated high reliability as well (especially important for scales with a small number of items). Therefore, we believe that the scale presented will be useful in evaluating advising at other universities to understand student perceptions of their advising services. Further, this scale could be paired with other evaluation tools, such as structured interviews (Demetriou, 2005; Hunter & White, 2004) to get a well-rounded view of current programs.

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Table 1.

Descriptive Statistics for All Versions of the Advising Scale

	Experiment 1	Experiment 2	Experiment 3
Age	20.8 (4.8)	19.76 (4.44)	19.31 (2.45)
Gender			
Female	62.5%	75.7%	78.1%
Male	37.5%	24.3%	21.9%
Classification			
Freshman	47.4%	69.6%	63.9%
Sophomore	28.3%	16.6%	22.4%
Junior	13.2%	9.4%	8.8%
Senior	11.2%	4.4%	4.8%
Transfer Students			
Transfer	23.8%	19.3%	19.7%
Non-Transfer	76.2%	80.7%	80.3%
Ethnicity			
Caucasian	82.9%	80.1%	83.0%
Other	17.1%	19.9%	17.0%
Major			
Decided	85.5%	80.7%	87.1%
Undecided	14.5%	19.3%	12.9%

Note. Age statistics listed are averages with standard deviations in parentheses. Percentages of other categories are provided for ease of comparison across different sample sizes for experiments.

Table 2

Fit Indices for All Survey Versions

Experiment	Model	Number Questions	RMSEA	SRMR	NNFI	CFI	% Variance
1	1-factor	24	0.12	0.07	0.81	0.83	59.80
1	2-factor	24	0.11	0.05	0.85	0.87	65.90
1	3-factor	24	0.10	0.04	0.89	0.92	70.50
2	1-factor	30	0.13	0.07	0.79	0.80	67.38
2	2-factor	30	0.10	0.04	0.89	0.90	73.97
2	2-factor	25	0.10	0.03	0.91	0.92	76.99
2	2-factor	24	0.10	0.03	0.91	0.92	77.57

Table 3

Factor Loadings for Version 1 of Advising Scale

Question	Factor Loading
I can easily get in touch with my advisor outside of an appointment.	0.648
I feel that my advisor sees me as a unique individual rather than a student number.	0.770
Advising appointments are worth my time.	0.789
My advisor is knowledgeable about course offerings and graduation requirements.	0.798
My advisor helps me connect with campus resources.	0.725
My advisor has helped me developed a long-term education plan.	0.659
My advisor is prepared for my advising appointments.	0.750
My advisor is concerned about my overall development as a student, leader, young adult, and member of this community.	0.793
My advisor considers my interests and talents when helping me choose courses to take.	0.813
After my advising appointments, I feel that every course in my new schedule has a purpose.	0.772
My advisor makes sure that I get the best possible educational experience.	0.895
If my advisor does not know the answer to one of my questions, he/she makes the effort to connect me to someone who does.	0.757
My relationship with my advisor is more than a signature or registration release on their part.	0.630
My advisor encourages me to speak freely and listens to what I have to say.	0.760
My advisor lets me know about the importance of our public affairs mission, as well as what role I can play in it.	0.608
I am given the time I need during my academic advising appointments, not rushed.	0.789
My advisor and I work together as a team.	0.845
My advisor acts in a professional and ethical manner.	0.639
During my advising appointments, I learn about different organizations where I would most likely thrive and obtain leadership experiences on campus.	0.642
My advisor makes sure that I am adjusting to college life well and doing well in my courses.	0.697
I can trust my advisor.	0.852
I feel like I will graduate in a reasonable amount of time thanks to my advisor's planning.	0.790
I would recommend my advisor to a friend.	0.886
I find academic advising appointments to be a positive experience.	0.879

Table 4

Factor Loadings for Version 2 of the Advising Scale

Question	Factor 1	Factor 2
Advising appointments are worth my time.	0.873	-0.002
My advisor listens to what I have to say.	0.966	-0.049
My advisor is knowledgeable about course offerings.	0.960	-0.093
My advisor has helped me developed a long-term education plan.	0.646	0.156
My advisor is prepared for my advising appointments.	0.822	0.056
My advisor is concerned about my overall development as a student.	0.765	0.180
My advisor considers my interests and talents when helping me choose courses to take.	0.783	0.093
After my advising appointments, I feel that every course in my new schedule has a purpose.	0.752	0.086
My advisor makes sure that I get the best possible educational experience.	0.880	0.031
My advisor is knowledgeable about graduation requirements.	0.965	-0.166
If my advisor does not know the answer to one of my questions, he/she makes the effort to connect me to someone who does.	0.823	0.057
My advisor encourages me to speak freely in our appointments.	0.809	0.049
I am given the time I need during my academic advising appointments.	0.699	0.192
My advisor and I work together as a team.	0.725	0.188
My advisor acts in a professional manner.	1.020	-0.188
I can trust my advisor.	0.905	0.020
I feel like I will graduate in a reasonable amount of time thanks to my advisor's planning.	0.835	0.101
I would recommend my advisor to a friend.	0.849	0.100
My advisor is ethical.	0.941	-0.043
I find academic advising appointments to be a positive experience.	0.888	0.047
I learn how I can contribute to the surrounding community during my advising appointments.	0.276	0.537
My advisor lets me know about the importance of our public affairs mission.	0.068	0.758
I learn about different student organizations during my advising appointments.	0.074	0.809
My advisor tells me how I can obtain leadership experiences on campus.	0.005	0.918
I can easily get in touch with my advisor outside of an appointment.	---	---
I feel that my advisor sees me as a unique individual rather than a student number.	---	---
My advisor helps me connect with campus resources.	---	---
My relationship with my advisor is more than a signature or registration release on their part.	---	---

My advisor makes sure that I am adjusting to college life.	---	---
My advisor makes sure I am doing well in my courses.	---	---

Note. Items have been sorted by factor for ease of viewing. Six questions were excluded for split loadings on factors, but are included in the table for viewing purposes.

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Table 5

Factor Loadings for Confirmatory Factor Analysis of Advising Scale

Factor 1	Factor Loading
Advising appointments are worth my time.	.912
My advisor listens to what I have to say.	.891
My advisor is knowledgeable about course offerings.	.898
My advisor has helped me developed a long-term education plan.	.809
My advisor is prepared for my advising appointments.	.816
My advisor is concerned about my overall development as a student.	.847
My advisor considers my interests and talents when helping me choose courses to take.	.832
After my advising appointments, I feel that every course in my new schedule has a purpose.	.838
My advisor makes sure that I get the best possible educational experience.	.925
My advisor is knowledgeable about graduation requirements.	.915
If my advisor does not know the answer to one of my questions, he/she makes the effort to connect me to someone who does.	.745
My advisor encourages me to speak freely in our appointments.	.866
I am given the time I need during my academic advising appointments.	.904
My advisor and I work together as a team.	.896
My advisor acts in a professional manner.	.909
I can trust my advisor.	.928
I feel like I will graduate in a reasonable amount of time thanks to my advisor's planning.	.892
I would recommend my advisor to a friend.	.898
My advisor is ethical.	.899
I find academic advising appointments to be a positive experience.	.937
Factor 2	
My advisor lets me know about the importance of our public affairs mission.	.891
I learn about different student organizations during my advising appointments.	.910
My advisor tells me how I can obtain leadership experiences on campus.	.878
I learn how I can contribute to the surrounding community during my advising appointments.	.810

Note. In CFA questions are forced to load on only one subscale; therefore, only this loading is calculated.