Efficacy of Advising Outreach on Student Retention, Academic Progress and Achievement, and Frequency of Advising Contacts: A Longitudinal Randomized Trial

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Previous research on advising outreach, including intrusive or proactive advising, suggests required advising improves contact frequency, student retention, and academic achievement, especially for students on probation. We show results of a 4-year randomized trial of 501 students at an urban state university. One half the cohort received advising outreach every semester of enrollment. The other half received typical university announcements about advising but no additional outreach. Advising outreach increased student contact with professional advisors but offered minimal support for outreach to improve retention. Future researchers should continue evaluating advising outreach and proactive advising to improve student success.

KEY WORDS: advising approaches, intrusive advising, proactive advising

As academic advising emerges as an established discipline and field of research inquiry, experts have called for improved scholarship to evaluate the tools of the profession (Habley, 2009; Shaffer, Zalewski, & Leveille, 2010). In particular, they cite a need for longitudinal research evaluating advising strategies and techniques, including assessment of approaches designed to influence student retention, academic performance, and advising contacts. Also needed is research based on the randomized assignment of participants to treatment groups, which permits rigorous scientific comparison of one advising strategy to another.

We present a longitudinal randomized trial used to evaluate the efficacy of advising outreach on student retention, academic performance, and frequency of advising contacts. Using a case-control longitudinal research design, we strongly encouraged (but did not require) one group of randomly assigned students to attend advising sessions over a 4-year period of enrollment. A second group of randomly assigned students received typical uni-

versity announcements about advising but no extra outreach. We followed both groups of students over 4 years to assess their retention at the university, their academic performance, and their frequency of advising contacts.

Advising Outreach and Intrusive Advising

The most common form of advising outreach involves an intrusive strategy. That is, advisors intentionally seek out students for advising contact and, in most cases, the advising contact is mandated such that student failure to fulfill advising obligations results in academic punishments (Earl, 1988; Glennen, 1975, 1983; Jeschke, Johnson, & Williams, 2001; Varney, 2007). We use the term advising outreach in this manuscript to distinguish the strategies we implemented in our study—a series of contacts whereby students were urged to schedule and attend advising sessions but were not required to do so—from typical intrusive or proactive advising.

Intrusive advising, now increasingly called proactive advising (Varney, in press) but developed several decades ago, offers a strategy to reduce student attrition due to academic failure or social discontent. In one of the earliest published models of implementing intrusive advising, Glennen (1975) trained existing faculty members at the University of Nevada, Las Vegas, in academic counseling and then intrusively required students to see those faculty members for academic guidance. As a result of the program, attrition at the university was reduced drastically—from 45 to 6% among freshmen during the first 2 years of the program. The intrusively advised cohort also experienced increased academic performance, reduced numbers on academic probation, and increased course enrollment. From that beginning. a substantial body of literature has accumulated that addresses the effectiveness of intrusive advising, advising outreach, and efforts to increase student-advisor contact.

Historical Background

Advising Outreach and Proactive Advising for Students on Probation

At the turn of the 21st century, significant research examined the efficacy of intrusive advising or advising outreach for at-risk and probationary students. In one large study, Abelman and Molina (2001, 2002; Molina & Abelman, 2000) considered 210 students on probation. All participants were sophomores or juniors with grade-point averages (GPAs) less than 2.0. The students were randomly assigned to one of three equally sized groups: nonintrusion, moderate intrusion, or full intrusion. Students in all three groups received a letter from the student services office informing them that they had been placed on academic probation. Those in the moderate intrusion group also received a phone call from an advisor, who spent about 20 minutes reviewing an appropriate plan of action with them. Students in the full intrusion group received a phone call requesting an in-person meeting with an advisor and then attended a 30-40 minute appointment with the advisor to review the letter and create a plan of action.

Results were telling. The more intrusion students received, the greater their GPAs improved and the more likely they were to be retained at the university (Abelman & Molina, 2001). Students at greatest risk—those with the more serious probation status—demonstrated the greatest change (Molina & Abelman, 2000) as did those identified post hoc as having a learning disorder and who were, therefore, considered at greater risk of attrition or academic failure (Abelman & Molina, 2002). Taken together, findings from Abelman and Molina suggest that advising outreach can effectively increase advising contact, improve student retention, and reduce academic failure of students who are on probation for poor academic performance. They also suggest that the students at greatest risk may gain the most from advising outreach and that more intrusion may yield better outcomes than less intrusion.

A second study by a different research group supports Abelman and Molina's (2001, 2002; Molina & Abelman, 2000) conclusions. Kirk-Kuwaye and Nishida (2001) studied 427 students on probation (GPA < 2.0) over three trials of low and high intrusion from advisors. As in the strategy used by Abelman and Molina (2001, 2002), students in the low involvement group received a letter inviting them to meet with an advisor and informing them of resources on campus that could help them cope with their academic-probation sta-

tus. Those in the high involvement group received a similar letter, but also attended mandatory advising meetings, were required to use available resources on campus, and received information about study strategy materials and web sites. In some research trials, students in the high involvement group also received reminder phone calls about advising appointments and required homework assignments to learn study strategies.

Results indicated that students in the high involvement group attended more advising appointments and exhibited greater improvement in GPA than those in the low involvement group. Participants in the group that received the most intensive involvement, including required homework to learn study strategies, were retained at a somewhat higher rate than those in the low involvement group. Thus, Kirk-Kuwaye and Nishida's (2001) results support those from Abelman and Molina (2001, 2002; Molina & Abelman, 2000) and suggest that intrusive advising in the form of mandated appointments may improve the retention and academic performance of students on probation. Smaller scale studies report similar results (e.g., Austin, Cherney, Crowner, & Hill, 1997; Earl, 1988; Garnett, 1990; Schwitzer, 1993; Vander Schee, 2007).

Advising Outreach and Intrusive Advising for Broad Student Populations

Glennen (1975, 1983; Glennen & Baxley, 1985) was the early champion of intrusive advising for all students. Although Glennen's research reports omit some methodological details, they showed astounding success with intrusive advising at both the University of Nevada, Las Vegas, (Glennen, 1975) and Western New Mexico University, where freshman attrition dropped from 66 to 48% in the first year of operation and to 25% in the second year of the program (Glennen & Baxley, 1985). Advising and counseling contacts also increased dramatically during the early years at those universities (Glennen, 1983; Glennen & Baxley, 1985).

After his early successes, Glennen moved to Emporia State University where he served as president and encouraged an intrusive advising system in 1984 (Backhus, 1989). In a study of 59 Emporia State students, mostly freshmen, Vowell and Karst (1987) evaluated student satisfaction with university advising and found that almost all students (between 75 and 85%, depending on the item) were satisfied or very satisfied with advising services. They also found that 32% of the students did not self-initiate the advisor contact; instead, they

attended advising sessions to meet intrusive advising requirements. In a second study at Emporia State, Backhus (1989) evaluated student retention 4 years after the advising program was instituted and found that, compared to students who had enrolled before the initiation of the intrusive advising program, the cohort receiving intrusive advising was retained at a higher rate: 64% returning a year later and 39% still enrolled or graduated after 4 years versus 59% returning a year later and 31% still enrolled or graduated after 4 years. Following utilization of the intrusive advising, Emporia State retention rates also compared positively to rates from like institutions without documented intrusive advising practices (Backhus, 1989).

More recently, Jeschke et al. (2001) conducted a study of advising outreach among 126 nontraditional psychology majors at Indiana University-Purdue University, Indianapolis. During 3 years of study, they assigned students randomly to either an intrusive advising group, in which faculty advisors initiated contact with students and attempted to reach and schedule appointments for them, or to a prescriptive advising group, in which faculty advisors assisted with course selection for students who voluntarily scheduled advising appointments. Faculty members volunteered to serve as advisors to the intrusive or prescriptive advising groups; that is, they self-selected the group of students with whom they worked. Results of the study showed little difference in students' academic success across the two groups. The intrusive advising group reported greater satisfaction with advising services, but their GPAs were similar to those of the other group, and insufficient data were available to study retention.

The Present Study

Available data indicate advising outreach and proactive advising tend to help students, especially those at risk for failure or placement on probation. Greater intensity of intrusion appears to help students to a greater degree. We designed our study to extend the literature in a few ways. First, we developed a rigorous research methodology present in some, but not all, previous work. We used a case-control experimental design and followed a cohort of students longitudinally for 4 years. Second, we examined a form of advising outreach that is somewhat less intensive than that used in most previous research. Rather than mandating advising appointments, we made three attempts to encourage students to schedule and attend an advising appointment: e-mail, staff phone call, and

advisor phone call. We selected this sort of advising outreach, in part, due to financial considerations. As university budgets become tighter, we recognize that the intensive level of proactive intrusive advising that requires students to attend advising appointments is financially challenging at many institutions. Thus, we sought data through which we could evaluate whether less intrusive strategies of outreach to a full student body (rather than those just on probation) is as effective as the more intrusive styles of outreach studied by Glennen in 1975 and 1983.

Third, we examined multiple overlapping outcomes: advising contacts, academic success, and retention. All outcomes are important to universities and advisors, and so we decided to collect data in all three domains with the goal of providing fairly comprehensive data to interpret and share.

In our initial publication with this 501-student cohort, we showed the results of an examination of the students' success after one year of enrollment (Schwebel, Walburn, Jacobsen, Jerrolds, & Klyce, 2008). We found that advising outreach increased the odds of students attending an advising appointment and decreased the time until an appointment was scheduled (Schwebel et al., 2008). For this study, we present data on the same cohort of students after following them for 4 years. We posited three hypotheses for this study: a) that the outreach group would be retained/graduated at a higher rate than the no-outreach group after 4 years of enrollment (or attrition), b) that the outreach group would post higher levels of academic progress (fewer changes of major) and achievement (GPA) than the no-outreach group, and c) that the outreach group would demonstrate more frequent advising contact than the no-outreach group. We tested all three hypotheses using inferential statistical analyses (independent sample t tests) comparing outcomes of the two randomly assigned groups.

Methods

Setting

The research was conducted at the University of Alabama at Birmingham (UAB), a large state university in an urban setting. At the time of this study, a large portion of first-year students at UAB came from within the state, primarily northern and central Alabama, and 35% were of an ethnic minority background, primarily African American. UAB uses a decentralized professional advising system, and advisors serving in three areas—pre-nursing, psychology, and undeclared majors—participated in this research effort.

Participants

Five hundred one students who entered UAB in Fall 2007 and declared a major as pre-nursing (n = 180), psychology (n = 60), or undeclared (n = 261) were included in the study. The students represented a typical cross-section of students enrolling at UAB; we did not target students at risk, on probation, or vulnerable but rather sought a representative sample of first-year nontransfer students admitted and enrolled at the university.

The enrolled students included 174 (35%) men, 318 (64%) women, and 9 (2%) students who declined to report their gender. The sample was ethnically diverse, including 312 (62%) White non-Hispanic individuals, 138 (28%) African American non-Hispanic individuals, 19 (4%) Asian/Pacific Island individuals, and 32 (6%) others who were Hispanic, multi-racial, of other racial/ethnic backgrounds, or who chose not to report their race. Most of the sample was of traditional college age (mean age = 19.06 years, SD = 1.22, range = 16-32). Over 90% were from the state of Alabama and almost 75% were receiving financial aid to attend college. The sample is the same as the one reported in our previous research (Schwebel et al., 2008).

Procedure

Upon enrollment in the study, students were randomly assigned to one of two conditions: outreach or no outreach. Those students who remained enrolled (or left and then reenrolled) at UAB were followed for 4 years and received all standard university and area messages, announcements, and exposure to programs concerning advising and recommendations to schedule regular academic-advising appointments. These notices varied somewhat across student groups. Those in the psychology major, for example, received e-mails two or three times per term from the advising office concerning availability of regular or walk-in advising appointment slots. Students in some other majors received occasional electronic reminders from the Registrar, but nothing directly from their advisors.

The outreach group received extra reminders about advising during every fall and spring semester of enrollment through a three-step process. First, during the 3rd week of the 15-week class term, students in the outreach group who had not yet arranged an appointment with their professional advisor received an e-mail inviting them to do so. Second, during the 4th week of classes, students who had not yet arranged an appointment were telephoned by administrative support staff, who reminded the student to schedule an advis-

ing appointment and set the appointment upon the student's request. Third and finally, during the 5th week of classes, the professional advisors called all students who had not yet set an appointment. They scheduled appointments upon student request. In many instances, over the 4-year course of the study, the students changed major and also changed academic advisors. In those instances, individuals contacting students gave the name and contact information for their new advisors rather than making appointments with them. All students in the outreach group received the same set of advising outreach contacts for every semester in which they were enrolled: for students who completed their course of study on schedule, this means they received advising outreach for 8 semesters of enrollment and graduated at the end of the study in Spring 2011.

Students in the no-outreach group received no supplemental advising-outreach strategies but, like those in the outreach group, were exposed to various university- and department-wide programs designed to encourage advising appointments. These initiatives varied widely across students' majors, but typically included periodic e-mail reminders from the Registrar or the advisor about the importance of scheduling advising appointments. Statistical comparisons between the groups of students assigned to the outreach and no-outreach conditions vielded no differences on gender, age, race, major, or financial aid status, suggesting the randomization to groups was effective. The Institutional Review Board at UAB reviewed and approved all research procedures.

Advising

Sessions with students in both groups were conducted by professional advisors assigned to the students' majors of interest. Although the students started in one of three groups (pre-nursing, psychology, undeclared), over the course of the 4 years they migrated to a wide range of majors and therefore saw a wide range of advisors. Advising sessions covered standard advising topics, including logistical issues of course selection and registration as well as discussion on topics such as major selection, short- and long-term goals, career options, college success strategies, adjustment and transitional issues, and ways to gain the most from the college experience.

Measures

We assessed each of the three constructs of interest—retention, academic progress and achieve-

ment, and advising contacts—with multiple measures. We assessed student retention using four variables. First, we evaluated whether the student had either graduated or was still enrolled at the university 4 years after initial enrollment as a nontransfer student. We made this a dichotomous factor: currently enrolled (or graduated) versus not currently enrolled. Second, we considered whether the student had graduated after 4 years of enrollment, which would represent the typical, on-time graduation point for students taking a typical course load. We measured this dichotomously (ves vs. no). Third, we considered the number of terms (fall and spring) the student had been enrolled. The range for this measure was 1 to 8 because all students were enrolled in the first semester of the study and the maximum possible over 4 years was 8 semesters of enrollment. Although many students enrolled in some or all summer terms, we did not consider summer terms for this study because they are not required or expected to enroll during the summer at UAB. Last, we considered the number of credit hours the student had earned over the 4-year period. We included hours earned at other universities (e.g., during a study abroad experience or a summer term at a student's hometown university) and transferred to UAB during this time frame.

We assessed academic progress and achievement using two variables. First, we considered cumulative GPA, viewed to assess academic achievement, by computing it on the standard 4-point scale used in most U.S. institutions (maximum possible score of 4.00). Second, using official university advising records, we considered the number of times the student had changed his or her major as a measure of academic progress.

We used two measures to look at advising contact. First, we considered the total number of individual contacts with a professional advisor, which included all face-to-face personal appointments and contacts, but excluded brief e-mail exchanges. Students who followed university recommendations made at least 8 individual advising contacts over the course of their 4-year enrollment, but many attended more or less than 8 sessions. Second, we considered the number of semesters students made contact with a professional advisor. Fully effective advising outreach would result in advisor contact in all 8 semesters of enrollment. The range for this variable was 0 to 8.

Results

We were interested in three outcomes: retention and attrition, academic progress and achievement, and frequency of advising contact. Table 1 displays descriptive (means and standard deviations for continuous variables and percentages for categorical variables) and inferential (two-tailed independent samples *t* tests) statistics for the overall sample and for each group.

We used four measures of student retention. As shown in Table 1, though in the hypothesized direction, the differences in graduation and enrollment rates between the two groups were not statistically significant. None of the other measures of retention, which included graduation rate, terms enrolled at the university, and the number of credit hours earned after 4 years, yielded a statistically significant difference between groups.

Two measures of academic progress and achievement, cumulative GPA and changes in major, are shown in Table 1. The mean cumula-

Table 1. Descriptive data and results of t tests comparing outreach and no-outreach groups (N = 501)

Characteristic	Outreach <i>M(SD)</i>	No Outreach <i>M(SD)</i>	Full Sample <i>M(SD)</i>	t (df = 498-499)
Retention				
Enrolled/Graduated	60%	55%	57%	-1.12
Graduated by 4 Years	28%	28%	28%	-0.13
Terms Enrolled	6.98 (3.45)	6.79 (3.45)	6.88 (3.45)	0.60
Credit Hours Earned	79.33 (46.90)	78.71 (46.86)	79.02 (46.83)	-0.15
Academic Progress and	· · · · · · · · · · · · · · · · · · ·	,		
Achievement				
Cumulative GPA	2.53 (0.93)	2.53 (0.95)	2.53 (0.94)	0.08
Changes in Major	1.00 (0.95)	0.91 (0.83)	0.96 (0.89)	-1.11
Advising Contact				
Individual Contacts	6.47 (4.18)	5.72 (4.16)	6.09 (4.18)	-2.02*
Semesters with Contact	4.39 (2.44)	4.03 (2.56)	4.21 (2.50)	-1.62

Note. * p < .05.

tive GPAs of the outreach and no-outreach groups were identical, with data for the no-outreach group showing a slightly broader standard deviation than the outreach group. The results did not demonstrate a statistically significant difference in students' academic progress, as measured by the number of times students changed their major, although those in the outreach group changed their major a bit more frequently than did participants in the no-outreach group.

We assessed advising contact using the number of times the students made individual contact with a professional advisor over the 4-year period of study and the number of semesters with contact. We discovered a statistically significant difference in the number of contacts with an advisor. As hypothesized, the outreach group had more contact than did the no-outreach group. Although in the hypothesized direction, we did not find a statistically significant difference in the number of semesters students saw an advisor for an appointment.

Discussion

Results of this randomized longitudinal study suggest advising outreach effectively increased students' number of professional advising appointments, but was not associated with student retention or academic progress and achievement at a statistically significant level. We discovered a slightly higher rate of student retention among the group exposed to advising outreach (60%) compared to the group not exposed (55%), but this difference was not statistically significant.

Previous work offers some indication supporting our null results with the less intensive advising outreach. Jeschke et al. (2001) found minimal change in academic performance among students randomly assigned to advising outreach in a case versus control study of 126 psychology majors at Indiana University–Purdue University, Indianapolis. Glennen's work (1975, 1983; Glennen & Baxley, 1985), though offering impressive data on student retention that contradict our findings, does not address academic performance in detail.

The interpretation of null results must be conducted cautiously, but we offer a few possible explanations for the failure to identify statistically significant differences in student retention and academic performance among the students exposed to advising outreach. First, as previous work indicates (Abelman & Molina, 2001, 2002; Kirk-Kuwaye & Nishida, 2001; Molina & Abelman, 2000), it may help at-risk students, but advising outreach—and

the subsequent increase in advising contact—simply may not help retain members of the general student body or encourage them to earn better grades. Unlike those of a generation ago, today's students live in a world with great technological distractions, financial and economic struggles (personally, across society, and within academia), and numerous competing opportunities for their attention. Perhaps advising strategies that worked to retain students successfully in the past are no longer relevant today.

Second, our advising outreach may not have been intrusive or proactive enough to yield benefits. We urged students on a few occasions to attend advising appointments, but we did not mandate it as most previous researchers have done. The students at greatest risk simply may not respond to exhortations for advising appointments, and therefore they may not benefit from advising outreach unless mandated to attend appointments.

Third, our sample may, for whatever reason, have been anomalous. This explanation seems unlikely because the findings parallel those reported by Jeschke et al. (2001), but future research and study replications are needed to elucidate fully the processes of proactive advising and advising outreach on student success.

In summary, we conclude that advising outreach that encourages students to attend advising appointments is, in fact, effective at increasing the frequency of student advising appointments. Any impact on student retention is likely small; the difference was not statistically significant in our study despite the fact that our between-group comparisons had strong power (.99) to detect a medium effect size (d=0.5) and modest statistical power (.61) to detect a small effect size (d=0.2). We also saw no evidence that advising outreach impacted academic achievement or progress in our sample.

Like all research, our experiment had strengths and limitations. The most prominent strength, we believe, is the research design. We used a randomized design with a large sample that spanned academic units. We followed the cohort for 4 years and employed multiple relevant outcome measures that we consider objective. To analyze the results, we used appropriate statistics that offered adequate statistical power to test the hypotheses we posited.

Limitations of our study include a focus on students who began their studies in just three majors, and thus may not represent students in other majors, and examination of students at just one urban state university that features a decentralized professional advising system. Our findings may or may not extend to smaller colleges, settings with faculty advisors instead of professional advisors, or different styles of advising outreach, including intrusive programs where advising is mandated rather than recommended. We encourage future researchers to overcome these limitations and continue to investigate the efficacy of advising outreach and proactive advising on student success.

References

- Abelman, R., & Molina, A. (2001). Style and substance revisited: A longitudinal analysis of intrusive intervention. *NACADA Journal*, 21(1&2), 32–39.
- Abelman, R., & Molina, A. (2002). Style and substance reconsidered: Intrusive intervention and at-risk students with learning disabilities. *NACADA Journal*, 22(2), 66–79.
- Austin, M., Cherney, E., Crowner, J., & Hill, A. (1997). The forum: Intrusive group advising for the probationary student. *NACADA Journal*, *17*(2), 45–47.
- Backhus, D. (1989). Centralized intrusive advising and undergraduate retention. *NACADA Journal*, *9*(1), 39–45.
- Earl, W. R. (1988). Intrusive advising of freshmen in academic difficulty. *NACADA Journal*, 8(2), 27–33.
- Garnett, D. T. (1990). Retention strategies for highrisk students at a four-year university. *NACADA Journal*, *10*(1), 22–25.
- Glennen, R. E. (1975). Intrusive college counseling. *College Student Journal*, *9*(1), 2–4.
- Glennen, R. E. (1983). Effective outcome measures of intrusive advising program. In J. E. Roueche (Ed.), *A new look at successful programs* (pp. 59–71). San Francisco, CA: Jossey-Bass.
- Glennen, R. E., & Baxley, D. M. (1985). Reduction of attrition through intrusive advising. *NASPA Journal*, 22(3), 10–14.
- Habley, W. R. (2009). Academic advising as a field of inquiry. *NACADA Journal*, 29(2), 76–83.
- Jeschke, M. P., Johnson, K. E., & Williams, J. R. (2001). A comparison of intrusive and prescriptive advising of psychology majors at an urban comprehensive university. *NACADA Journal*, *21*(1&2), 46–58.
- Kirk-Kuwaye, M., & Nishida, D. (2001). Effect of low and high advisor involvement on the academic performance of probation students. *NACADA Journal*, *21*(1&2), 40–45.
- Molina, A., & Abelman, R. (2000). Style over substance in interventions for at-risk students:

- The impact of intrusiveness. *NACADA Journal*, 20(2), 5–15.
- Schwebel, D. C., Walburn, N. C., Jacobsen, S. H., Jerrolds, K. L., & Klyce, K. (2008). Efficacy of intrusively advising first-year students via frequent reminders for advising appointments. *NACADA Journal*, 28(2), 28–32.
- Schwitzer, W. (1993). Effects of brief mandatory advising on help-seeking and academic success among at-risk college students. *Journal of College Student Development*, *34*(6), 401–5.
- Shaffer, L. S., Zalewski, J. M., & Leveille, J. (2010). The professionalization of academic advising: Where are we in 2010? NACADA Journal, 30(1), 66–77.
- Vander Schee, B. A. (2007). Adding insight to intrusive advising and its effectiveness with students on probation. *NACADA Journal*, 27(2), 50–59.
- Varney, J. (2007). Intrusive advising. *Academic Advising Today*, 30(3). Retrieved from http://www.nacada.ksu.edu/ePub/AAT30-3.htm#12
- Varney, J. (in press). Proactive (intrusive) advising. In J. Drake, P. Jordan, & M. Miller (Eds.), Academic advising approaches: Strategies that teach students to make the most of college. San Francisco, CA: Jossey-Bass.
- Vowell, F., & Karst, R. (1987). Student satisfaction with faculty advisors in an intrusive advising program. *NACADA Journal*, 7(2), 31–33.

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