

The Effect of Recruitment Messages on Undergraduate Beliefs about the Communication Major: A Quasi-Experiment

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Abstract

Despite the importance of attracting talented and qualified undergraduates into the major, the subject of recruitment for communication has received little attention. This study examines the effectiveness of a one-shot informative recruitment message on students' beliefs and attitudes toward the communication major. As part of a quasi-experiment using a Solomon four-group design, two upper-division majors presented recruitment presentations addressing the benefits of, and misconceptions toward, the major to 130 students enrolled in introductory public speaking classes. Post-tests revealed that students exposed to the message reported significantly more favorable attitudes toward communication than those who had not seen a presentation ($n = 65$). Belief in the value of communication skills was also found positively associated with attitude toward the major, while belief that communication skills are innate was negatively associated with major attitude. Limitations and practical implications of this study are discussed as well.

Keywords: *Recruitment, Academic Majors, Attitudes, Beliefs*

Choosing a postsecondary major is one of the most important and stressful decisions for a college undergraduate (Beggs, Bantham, & Taylor, 2008; Porter & Umbach, 2006). The choice of a major is a vital step in realizing long-term career goals and a key factor in career opportunities and earnings (Leppel, Williams, & Waldauer, 2001; Montmarquette, Cannings, & Mahseredjian, 2002; Terenzini & Pascarella, 1991). Failure to find a suitable course of study can not only be frustrating but also can prolong the time and expense required to finish a degree. For these reasons, the process by which college students choose their major has been a prominent topic of interest in higher education research.

A topic which has not received as much attention is the active recruitment of undergraduates by academic departments. Recruiting and attracting students into majors is an essential, on-going challenge for collegiate faculty and administrators (Woodhouse, 2006). The quality of any academic discipline is inevitably tied to the quality of its incoming recruits (Gilman & Handwerk, 2001), and attracting diverse, highly qualified undergraduates is important for the financial well-being of any college department. Communication departments, like many academic units facing reduced federal funding and support, face increased competition with other majors for enrollment numbers. Communication educators should thus consider proactive, creative recruitment efforts as a valuable investment to help insure long term viability.

Given the criticality of the student's choice of academic major, and the continuing need to attract new talent, undergraduate recruitment is a key issue for educators. Critically analyzing and refining recruitment strategies and techniques is likely not only to help departments increase enrollment, but should also help students make better informed choices about their interest in, and aptitude for, their major. Improving the fit between incoming students and the curriculum can help improve students' educational achievement and satisfaction as well (Porter & Umbach, 2006).

The current study examines the effectiveness of an in-class student recruitment message on undergraduate perceptions of the communication major. Using a quasi-experimental Solomon

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four-group design, this study addresses whether a one-time educational presentation can bring about enduring changes in students' beliefs and attitudes towards the major, over and above the effect of participation in an introductory oral communication course. It is hoped that this study will not only help spur further research in communication recruitment, but also guide communication educators regarding their departments' recruiting strategies and practices. In the following section we briefly summarize the research which has informed the current study.

Beliefs and Attitudes in Major Selection

Any serious efforts at systematic undergraduate recruitment must take into account the psychological process through which students choose their majors (Beggs et al., 2008; Gilman & Handwerk, 2001). Acquiring salient information is widely believed to allow students to choose fields of study offering the best fit with their own abilities, interests, and career aspirations (Kracke, 2002; Mortimer, Pimentel, Ryu, Nash, & Lee, 1996; Schultheiss, Palma, Predragovich, & Glasscock, 2002). Just as the acquisition of occupational information helps in forming career decisions (Millar & Shevlin, 2003), information on potential job and career opportunities is one of the most important beliefs impacting the selection of an academic major (Galluci, 1997; Lowe & Simons, 1997; Malgwi, Howe, & Burnaby, 2005; McInerney, DiDonato, Giagnacova, & O'Donnell 2006).

Viewing major selection as a volitional behavior, some research focuses on antecedents of undergraduates' beliefs and attitudes about various academic areas. In their study of academic major choice, Strader and Katz (1990) applied Fishbein and Ajzen's (1975) Theory of Reasoned Action (TRA). TRA suggests that people's behavioral intentions are a function of both their attitude toward the behavior and their perceived subjective norms regarding the behavior. Attitudes consist of the sum of the cross-products of salient behavioral beliefs and evaluations of the related outcomes. This theoretical approach suggests that information is the currency of change for behavioral intentions through its effect on attitudes and beliefs. Under this framework, changes in attitudes can be brought about through multiple routes, including altering the target persons' beliefs about a behavior, altering the perceived value of the behavioral outcome, or creating new salient beliefs about the target behavior (Fishbein & Ajzen, 1975).

Research applying TRA has supported the connection between beliefs, attitudes and behavioral intentions involving academic majors. Strader and Katz (1990) reported that a persuasive recruitment message based on behavioral beliefs significantly increased undecided students' intentions to apply for a registered nursing program. Among the salient behavioral beliefs about the major highlighted in that study was that the nursing profession involves "bad hours" and that it involves a "good salary." In a similarly framed study, Zhang (2007) reported beliefs about interest in the major, difficulty of the major, and job availability as key predictors of students' intentions to declare a major in information science.

Although the benefits of a thorough information search for deciding a major have been widely noted, college students seldom engage in an optimal decision-making process prior to selecting an academic major (Galotti, 1999; Orndorff & Herr, 2001). Rather than integrating large amounts of information, college freshmen often limit their attention to a few criteria and even alter their relevant criteria during the first year of exploring majors (Galotti, 1999). Given a lack of systematic information-gathering, both prior to and following matriculation to college, many students may enter introductory college coursework with misperceptions about various academic majors. These misinformed beliefs may be highly resistant to change, even in the face of counter-factual information (Fife & Nelson, 2008; Jackson & Wolski, 2001).

Communication, as a major, seems particularly vulnerable to pre-instructional misperceptions and biases on the part of potential majors. There are at least three apparent reasons why the communication major poses unique problems for academic recruitment. The first is that the communication discipline may in part suffer from an “identity crisis” on college campuses (Burgoon, 1989; Redmond & Waggoner, 1992). Given its broad scope and wide range of course offerings, in addition to little consistency in core principles between communication departments, potential majors may be prone to confuse communication for one of its related sub-fields such as public relations, journalism, theater, or broadcasting (Wiltse, 2006).

The second challenge for recruitment lies with the comparative lack of students’ exposure to communication prior to entering college. Unlike many disciplines, communication is not a part of the typical high school curriculum. Many undergraduates do not take their first communication course until arriving at college, when they may have already established a major of interest and limited their information search elsewhere. Common recruitment strategies such as community outreach, advertisements or scholarships (Zascavage, Schroeder-Steward, Armstrong, Marrs-Butler, Winterman, & Zascavage, 2008) may be of limited usefulness since these methods often target students prior to college entry, before they have had a chance to form an accurate set of beliefs about the major.

A third apparent challenge for undergraduate recruitment involves commonly-held beliefs about the nature of human communication itself. Students who *believe* that communication skills are learnable, and that their own skills can be improved through academic study, are more likely to hold a positive attitude toward the communication major, whether they pursue it or not. Those who believe that communication skills are highly intuitive or a matter of common sense, however, seem less apt to believe that these skills can be improved through formal study. These students are particularly prone to hold negative attitudes toward coursework in communication and the communication major itself (Rees, Sheard, & McPherson, 2002).

Sources of Information in Major Selection

Prior to matriculation to college, potential majors are often exposed to messages concerning the status and value of college majors from a variety of sources, including family and peers (Leppel et al., 2001; Schultheiss et al., 2002; Simpson, 2003), counselors (Sumner & Brown, 1996), early part-time jobs (Mortimer et al., 1996), and various mass media (Massoni, 2004). For students with little prior exposure to an academic area, however, early collegiate coursework can be particularly useful in attracting new majors (Rajecki, Williams, Appleby, Jeschke, & Johnson, 2005). Introductory courses often provide undergraduates their first direct exposure to the major’s content and can spark interest in further coursework. Courses meeting general education requirements at a college or university hold particularly strong potential as a recruitment vehicle for a major (Lawrenz, Huffman, & Appeldoorn, 2005).

In summary, despite relatively scant research in communication recruitment, the following claims seem justifiable:

1. Potential communication majors are often poorly informed as to the content and career implications involved with the major.
2. Effective undergraduate recruitment must not only disseminate core information as to the content of the communication major, but should also address common misperceptions about it as well, such as communication skills being common sense.

3. Introductory communication courses meeting university requirements can be an ideal arena for filling undergraduates' information needs concerning the major and launching recruitment efforts.

It is not the purpose of this study to develop a comprehensive theoretical model of predictors of declaring the communication major. Instead, this study aims to shed light on the twin issues of what communication departments can do to actively promote their major, and how general education communication courses can be utilized to recruit for majors. Given the apparent importance of beliefs and attitudes as predictors of the behavioral intention to select a major, our research addresses the following question:

RQ: What is the effect of a one-shot educational/recruitment presentation on undergraduates' beliefs and attitudes toward the communication major?"

Method

Participants

This study's sample consisted of 195 undergraduates enrolled in introductory oral communication classes at a mid-sized regional university in the southeast United States. Ages of participants ranged from 19 to 41 years ($m = 19.99$, $sd = 2.95$). The sample consisted of 107 freshmen, 51 sophomores, 26 juniors, and 10 seniors. The majors represented the most often in the sample were education, nursing, communication, undecided, criminal justice, and psychology.

Materials and Procedure

The experimental induction for this study was a one-shot, live, in-class informative recruitment presentation. The presentations were made by a team comprised of one male and one female upper-division communication major, each judged by the department faculty to have excellent public speaking skills based on previous coursework. This project was presented to them as an opportunity to acquire experience in the fields of recruitment, sales, and persuasive speaking. Each of the student-recruiters earned three hours of independent study credit through participating in this project. Student-recruiters were encouraged to share their enthusiasm and apply what they had learned in previous communication coursework regarding persuasive appeals, thesis statements, credibility, and impression management.

The recruitment presentations were delivered periodically during regular class meetings between the 8th and 10th weeks of the semester. The presentations consisted, first, of a review of the research supporting the importance of oral communication skills. This review included percent of time in the workplace spent communicating, ratings of the importance of communication to employers, and the skills viewed as most important to college graduates. Second, the presentation consisted of testimonials from recent graduates regarding the importance of the major to their present jobs, and their starting salary. Third, student-recruiters shared their personal experiences with the major. This included reasons for choosing the major, what they liked about the major, their favorite class, and a story about their experiences with professors. The presentations lasted on average 30 minutes.

Survey instrument. With the assistance of other communication faculty, the principal researchers constructed a survey instrument designed to assess students' attitudes and beliefs about human communication, and the communication major. This initial pool consisted of 16 items assessing the student perceptions of importance of communication as a beneficial career

and life skill, the nature of human communication, and the value of the communication major. Each Likert-type item included a 5-point scale, anchored with “Strongly Agree” and “Strongly Disagree.” Higher scores on the scales reflected higher levels of agreement with the item stems.

Research design. To test the effect of the recruitment presentation, a quasi-experimental Solomon four-group design. This design utilizes two experimental groups, (each receiving a treatment), and two control groups (neither receiving a treatment). Each of the four groups was assessed using a post-test, while one of the experimental groups and one of the control groups completed pretests (See Figure 1).

This design offered several advantages. First, it allowed us to separate the effect of the recruitment intervention, controlling for initial differences between participants. The design also allowed us to check for a possible sensitization effect whereby exposure to a pre-test would have an impact on post-test scores, either as a main effect or as part of an interaction with the treatment itself.

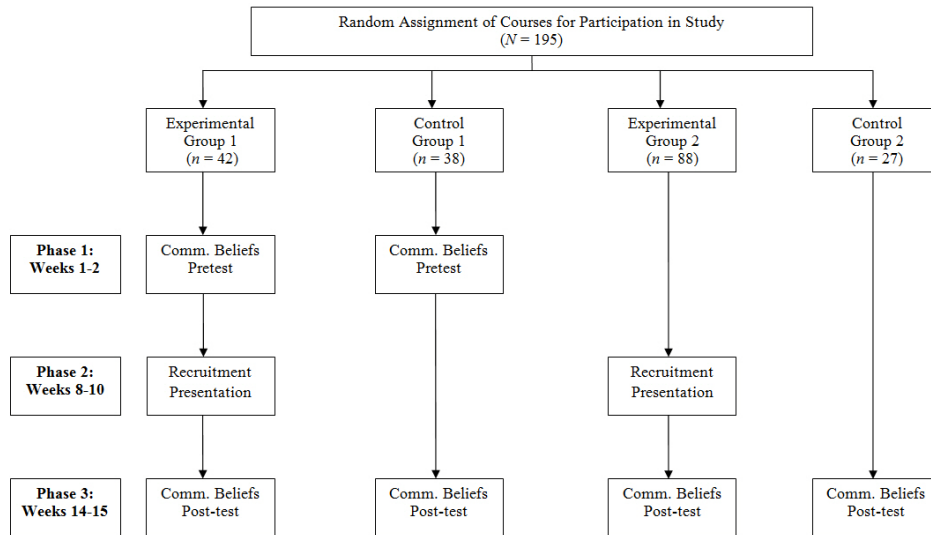
For Phase 1, pretest measures were collected during one of the initial three class meetings of the semester in five different sections of the oral communication course. All constructs were measured with pencil-and-paper surveys. The survey also included items to assess participants’ gender, age, class, and academic major.

Between the 8th and 10th weeks of the semester, the recruitment presentations were delivered to eight sections of the introductory course (Phase 2). During the final two weeks of the semester, after all of the recruitment presentations were completed, post-test surveys identical to the ones used for the pretests were administered in 11 course sections (Phase 3). A total of 195 posttest surveys were collected at this time (pretest $n = 80$, no pretest $n = 115$). Approximately 67% of the sample ($n = 130$) had viewed a recruitment presentation during the semester while 33% ($n = 65$) had not.

Measurement model. To aid in data reduction and simplify statistical analyses, two principal components factor analyses were performed using both pretest and post-test data. For both data sets, a varimax rotation was employed to account for the maximum amount of variance with as few interpretable factors as necessary. Factors were included in the measurement model when they consisted of at least two items reflecting a conceptually interpretable latent construct (face validity) and the eigen value exceeded 1.0. Following convention, items were considered to load on a construct when their factor loadings exceeded .50.

For the pretest measures, four components meeting the criteria for inclusion, accounting for 61% of the total variance, were extracted. The factor accounting for the most variance consisted of 5 items reflecting a general belief in communication as a valuable skill (e.g., “Being a good communicator will help me achieve my goals in the world.”). This factor was labeled “Comm Value.” The second factor contained 3 items reflecting a positive attitude toward the communication major (e.g., “Communication Studies would be an interesting major.”). This factor was labeled “Major Attitude.” The third and fourth factors each contained 3 items that involved perceived rigor of the major (e.g., “Communication Studies seems like an easy major.”) and the innate, common sense nature of communication skills (e.g., “Good communicators are born, not made.”). These factors were labeled “Rigor” and “Innate.”

A follow-up factor analysis, identical to the one described above was conducted using the post-test items. This analysis yielded a four factor solution similar to that of the pretest, except that four items which had loaded onto factors in the pretest did not load convincingly on any factor during the post-test analysis. These items were not included in computing post-test scores.

Figure 1

Notably, the item reading “Communication Studies graduates get good jobs” loaded onto the major attitude factor for the post-test measures, but had not loaded on any factor for the pretest data. It is possible that the content of the recruitment presentation prompted this belief to become more salient for those in the experimental groups, causing it to cluster more tightly with other items reflecting positive evaluations of the major during the post-test measures (See Table 1).

Following the extraction of the four components, coefficient alphas were computed to gauge the internal consistency in each factor. The factors for “Comm Value,” “Major Attitude,” and “Innate” each exhibited acceptable reliability coefficients for the post-test ($\alpha = .88, .78,$ and $.72$, respectively). The two-item factor for rigor was not found to have an acceptable reliability ($\alpha = .58$) for the post-test and was removed from further analysis. Since the deletion of any individual item for the three remaining factors was not found to substantially increase the reliability for that dimension, each of these items was retained to compute scores for the statistical analysis.

Results

Summary statistics and bivariate correlations are presented in Table 2. Belief in the intrinsic value of communication skills had a strong positive association with attitudes toward the major ($r = .38, p < .001$). The belief that communication skills are innate and common sense was negatively associated with beliefs about the value of communication and attitude toward the major ($r = -.27, p < .001$; $r = -.22, p < .001$ respectively). These findings are consistent with the notion that attitudes toward the communication major are linked with underlying beliefs about communication as a valuable and learnable skill. In addition, the significant point bi-serial correlation between gender and the innateness factor indicated that males were more likely than females to believe communication skills were innate and common sense ($r = .20, p < .001$).

To address our research question, a two-step approach to analyze the four-group design was followed (Braver & Braver, 1988). First, we conducted a 2x2 between-subjects ANOVA with exposure to the recruitment presentation and the presence or absence of a pretest as fixed

Table 1
Factor Loadings for Post-test Scale Items

Item	Component		
	1	2	3
1. Being an effective communicator will allow me to be more influential at my place of work.	0.90	0.02	-0.01
2. Being a good communicator will help me achieve my goals in the world.	0.83	0.23	-0.09
3. Oral and written communication skills are highly sought after by potential employers.	0.83	0.13	-0.08
4. Being an effective communicator will help me improve my interpersonal relationships.	0.80	0.15	-0.11
5. Communication Studies would be an interesting major.	0.19	0.82	0.01
6. I would take a Communication Studies course as an elective, even if it was not required for my major.	0.10	0.81	-0.01
7. I would recommend Communication Studies to a friend who was trying to decide on a major.	0.10	0.76	-0.21
8. Communication Studies graduates get good jobs.	0.12	0.66	-0.10
9. Good communicators are born, not made.	-0.01	-0.08	0.91
10. Communication skills cannot be taught; you either have them or you don't.	-0.23	-0.14	0.80

Note: Primary factor loadings appear in bold. Items 1-4; Comm. Value. Items 5-8; Major Att. Items. Items 9-10: Comm. Innate.

factors. This test was conducted to examine differences in means between the students who had viewed the recruitment presentation and those who had not. This design also allowed us to test if a sensitization effect for the pretest had occurred for any of the outcome measures and to test for any conjoint effects between the treatment and the pretest. Major attitude, comm value, and innate were each examined as dependent variables. The ANOVA revealed a significant effect for the recruitment presentation on major attitude, $F(1, 190) = 20.02, p < .001, \eta_p^2 = .10$. Those exposed to the presentation reported more positive evaluations of the communication major ($m = 3.83/\sigma = 0.75$) than those who saw no presentation ($m = 3.33/\sigma = 0.68$). There was no main effect for the pretest on major attitude, $F(1, 190) = 0.14, p = .71$, nor was there an interaction between pretest and the recruitment presentation, $F(1, 190) = 1.24, p = .266$.

A similar procedure was performed to examine the effect of the presentation and pretest on communication value and innateness. Neither the presentation nor the pretest was revealed to have a significant effect for either of these outcomes. There was also no evidence of an interaction effect between the presentation and pretest for either measure.

Since this study's research design did not utilize equivalent groups, the second step entailed a follow-up analysis. A partial correlation was computed between recruitment presentation and major attitude scores, controlling for pretest major attitude. This partial correlation was significant ($pr = .32, p = .004$), indicating that the presentation led to higher scores on major attitude post-test scores, partialling out the differences in pre-test scores.

Table 2
Means, Standard Deviations, and Zero-Order Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Sex	--	--	--				
2. Age	19.99	2.45	.16*	--			
3. Comm. Beliefs	4.59	0.48	-.06	.05	--		
4. Major Att.	3.66	0.76	.05	-.03	.38**	--	
5. Innate	2.08	0.77	.20**	.02	-.27**	-.22**	--

Note: Variables 3-5 were measured using 5-point scales. * $p < .05$. ** $p < .01$.

Discussion

This study has revealed some noteworthy findings for communication educators and administrators. The central finding is that a simple 30-minute live informative presentation delivered by upper-division students had a significant effect on students' attitudes toward the communication major, beyond that of simply being enrolled in an introductory oral communication course. Given the vast amount of information the average undergraduate is exposed to during the course of a semester (and seemingly diminishing student attention spans), the significant effect for such a brief intervention measured weeks after the fact is impressive in its own right. Improved attitudes about communication not only represent a victory in terms of departmental public relations, they may indeed serve as a stepping stone toward intentions to declare communication as a major or switch to it from a different major.

Interestingly, the recruitment presentation had a larger effect upon students' attitudes toward the major than it did upon two beliefs about human communication: (1) that communication is a valuable life-skill and (2) that communication is innate and common-sense. Recall that under the theory of reasoned action, a host of constituent beliefs combine to create an attitude. The fact that the item "Communication Studies graduates get good jobs" loaded strongly on the major attitude factor for the post-test but not the pretest, may signify that job and career implications represent a critical, yet separate, belief with a sizable impact on students' evaluation of the major. It is possible that initial beliefs in the importance of communication skill, or believing that these skills are learnable, may not be sufficient in spurring intentions to declare the major. These beliefs may have to be augmented with information directly concerning career implications before lasting attitudinal change can occur.

An examination of pretest scores support this idea. The pretest measure of communication value had a rather high mean and restricted range ($m = 4.54$, $\sigma = 0.48$). This indicates that students reported initially positive beliefs in the value and importance of communication skills. The recruitment presentation had little room to move these scores further upward. This suggests that recruitment efforts focusing solely on the importance of communication skills may be emphasizing a belief which is already fairly well-established, and may be less effective as a result. Targeted recruitment efforts on the part of communication departments should not overlook the importance of career implications.

Although post-test scores for belief in the innateness of communication skills did not vary as a result of the recruitment presentation ($t(193) = -0.86$, n.s.), there was movement observed in this variable over the course of the study. A paired samples t-test revealed that belief in communication skills being innate dropped during the course of the semester (pretest $m = 2.33$, post-test $m = 2.08$; $t(79) = 2.67$, $p = .009$). This result was likely caused by exposure to the content of the introductory course. Because this issue was possibly emphasized more in the public speaking course itself than it was in the recruitment presentation, this finding does not come as a surprise. Since this belief was found to be negatively associated with attitudes toward the major, however, instructors in introductory courses should certainly be encouraged to address how communication skills *can* be learned and developed, in addition to the positive career options which can result from the communication major.

Limitations

One limitation of the current study is that its one-semester time frame did not allow for measurement of behavioral outcomes. The possible impact of the recruitment presentation on students' actual declaration of the major may not be evident for multiple semesters subsequent to the data collection. By that time, students might actually have sufficient time to weigh the criteria involved and declare the major or switch to communication from another major. Directly examining the link between recruitment interventions and major choice would require extended longitudinal data. These issues warrant further investigation.

A second limitation is evident in that, even though this study's sample was comprised mainly of first- and second-year students, the majority of the sample had already declared a major other than communication. While the intervention might have improved their outlook toward the major, the link between attitudes and behaviors will likely be weaker for students in the sample already strongly committed to their current major.

Although a large sample of undecided students might be ideal for research in this arena, the inclusion of declared majors is still valuable. For one reason, given high rates of major-switching among college undergraduates, the declaration of a major does not preclude switching to communication at a later time. Along with dissatisfaction with their current major, interest in a subject and perceived career opportunities are leading factors in undergraduates changing their majors as well (Malgwi et al., 2005). Thus, the psychological process involved in switching majors might be fairly similar to the one involved in declaring an initial major. Being better informed about the communication major and its career implications should make the major a more appealing alternative to those leaving another major. Second, a student with positive beliefs about the major, even one who remains in a different academic program, is more likely to recommend communication to friends or family members deciding on an initial major or switching out of their initial major. This indirect effect of a recruitment intervention may prove valuable to communication departments over time.

Future Applications

This study has demonstrated that a one-time student recruitment presentation can be an effective, low-cost investment for communication departments wishing to improve the image of the major among the undergraduate student body. While those enrolled in introductory courses may acquire important instruction regarding the value of communication skills, and how these skills are not merely a matter of common sense, a targeted presentation focusing on the benefits of the major itself can foster increasingly positive attitudes toward the major. Given the time and

expense involved in higher education, making students more aware of the practical aspects of the major, including career prospects, seems essential in cultivating growth in the discipline.

Of course, recruitment messages are likely not one-size-fits-all. The types of majors matriculating in the major can vary from school to school. To build more effective recruitment interventions, departments should first canvass their incoming and upper-division undergraduate majors. Possible topics include the salient beliefs underlying their declaration of the major and the sources of information most important in motivating the decision. By pinpointing undergraduates' salient beliefs about the degree, departments will be able to better fine-tune the recruitment message and make better decisions regarding appropriate channels and contexts for their recruitment efforts. Given the effectiveness of a simple one-time presentation in improving attitudes toward the communication major, it seems that more comprehensive recruitment campaigns, ones considering multiple intervention techniques, channels, and audiences, should be a valuable undertaking for communication departments wishing to remain competitive in the university landscape.

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