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Recruiting Strategically: Increasing Enrollment in Academic Programs of Agriculture

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Agriculture continues to struggle to find enough qualified students to advance the industry. Thus, recruiting practice improvement is imperative. This study assessed the efficacy of message strategies, message channels, recruiting materials, and messages for recruiting students into an academic program with low enrollment. Focus groups were conducted with agriculture students outside of the department of interest to address the following objectives: 1) identify the most effective message strategies and message channels to reach and attract potential students, and 2) conduct testing of strategically developed recruitment materials and messages. Results indicated job stability and positive contextual messages would be effective for recruiting. Participants preferred messages delivered in person, targeted online advertisements, and campus publications. Additionally, findings showed participants wanted full-color materials with pictures; messages with statistics on the industry; online videos that are 1-2 minutes, with videos on a website based on user interest; and testimonials from a range of individuals in the industry. Participants were mixed on the perceived effectiveness of Facebook advertisements. The results of this study indicate an increased need to target recruitment efforts through a strategic communication process. This research has implications for recruiting the millennial generation using both gain and non-loss framed messages.

Keywords: recruitment; strategic communication; message strategies; material development

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There continues to be a shortage of qualified graduates for agriculture and natural resources job openings in the United States (Goecker, Smith, P. G., Smith, & Goetz, 2010). Between 2010-2015, there are an estimated 54,400 job openings available for college graduates with degrees in agricultural, food, and natural resources each year (Goecker et al., 2010). Of the open positions, it is anticipated 53,000 qualified graduates will be produced. However, only 29,300 of these jobs will be filled by graduates with degrees from colleges of agriculture and life sciences, forestry, and veterinary medicine, and 24,200 jobs will be filled by graduates from related higher education programs (Goecker et al., 2010). Five years ago, 32,000 qualified graduates were expected to be produced by colleges of agriculture and life sciences, forestry, and veterinary medicine; 17,000 were expected to be produced by the allied higher education programs (Goecker, Gilmore, Smith, E., & Smith, 2004).

One reason for this national shortage of qualified agriculture graduates may be attributed to a decline in student enrollment in colleges of agriculture (COAs). Bobbitt (2006) reported COA enrollment trends at eight colleges located in the central United States. Bobbitt revealed declining enrollment for six of the eight colleges from the fall of 2001 to the spring of 2004.This is troubling given that COAs spend a large amount of time, energy, and financial resources on their efforts to recruit students (Washburn, Garton, & Vaughn, 2002). Despite efforts to draw students into agriculture-related majors, COAs rarely use empirical research data in the development of recruitment messages and practices (Washburn et al., 2002). Promoting careers in agriculture can be particularly difficult because of negative perceptions. In particular, ag-

ricultural careers are often viewed as only being related to production agriculture and difficult work for low pay, and students are generally unaware of the wide range of careers available in agriculture (Dobbins, King, Fravel, Keels, Covington, 2002; Sutphin & Newsom-Stewart, 1995).

One model that offers insight into college recruitment is Chapman's (1981) model of student college choice. Chapman discussed three external factors that determine college choice when combined with student characteristics. These external factors include the influence of significant persons, the fixed characteristics of the academic institution, and the institution's own efforts to communicate with prospective students. The scope of this paper specifically examines the effectiveness of the institution's efforts to communicate with prospective students.

Logically, if an academic institution is communicating poorly with potential students, the students will likely not possess an accurate, complete awareness of the institution's majors and programs of study. Without an accurate awareness of the potential academic options offered by a college, Hossler and Gallagher (1987) warn that students "may mistakenly eliminate an institution which is potentially a good choice due to a lack of awareness of the range of institutions as well as the accurate information about institutions" (p. 215). This same lack of awareness can hurt individual programs. Baker, Irani, Abrams, and Telg (2010) showed that students have a preference for academic programs that have high visibility (i.e., most people know about the program). Moreover, Wildman and Torres (2001) showed that recruiting practices from individual academic departments were more influential than from the COA as a whole for students' decision to select their major. To this point, Lingenfelter and Beierlein (2006) recommended that recruiting practices should be geared toward specific interest areas, not agriculture in general. These studies indicate that promoting specific programs and fields of study would be more advantageous than promoting agriculture and natural resources careers as a whole.

A recent study addressed student motivations to enroll in the low-enrollment academic major of ornamental horticulture. Baker et al. (2010) concluded the largest barrier for enrolling in the program was a lack of awareness about that field of study and its related careers. Myers, Breja, and Dyer (2004) found a similar lack of awareness relating to job opportunities in agricultural education. Myers et al. recommended addressing the placement of past graduates of the program and developing specifically targeted placement programs. Likewise, Bobbitt (2006) and Williams (2007) both found job availability to be important in students' selection of major.

While job availability is important, career interest is also an important part of the career decision-making process, specifically for students understanding their own interests and the options available to them. Krumboltz and Worthington (1999) suggested that secondary students should expand their career interests when making career choices instead of relying on their current interests to make decisions. Similarly, Savickas (1999) said students who were more aware of their options fared better in the transition from school to work. While these studies were intended for high school students, these same principles could apply to post-secondary students. Relating to agriculture, Boumtje and Haase-Wittler (2007) stated the variety of careers available in agriculture should be promoted to help students better understand their options. Bobbitt (2006) indicated that information about the university, college, and degree program were the most used recruiting materials and degree program information online was the most influential published recruiting practice. Rocca and Washburn (2005) also found degree program information was used the most and considered to be the most influential for students' college decisions.

The students currently being recruited into college academic programs are in a generation known by multiple names, including Millennials, igeneration, generation Y, or generation ME (Twenge, 2006). For the purpose of this study, 1982 was used as the reference date for the start of the Millennial generation (Twenge, 2006). The generation in which a person was born is more influential in the career decision-making process than income, sex, or education (Twenge, 2006). As a result, it is essential that researchers work to determine how this generation com-

municates and interacts (Provitera-McGlynn, 2005) in order to develop recruitment materials that are effective.

Theoretical Framework

While this study is qualitative in nature and is therefore not based on a true theoretical framework, theory related to recruitment informed this study, provided a conceptual framework, and guided the development of messages tested. In particular, theory provided a lens for interpreting the findings of the research (Reeves, Albert, Kuper, & Hodges, 2008). The decision to focus on career-oriented information is based on the results of past studies (Bobbitt, 2006; Baker et al., 2010, June; Myers et al., 2004; Williams, 2007), as well Chapman's Model of Student College Choice (1981). Chapman's model includes two large sections affecting decisions: student characteristics, which include socioeconomic status, aptitude, educational aspirations, and high school performance; and external influences, which include significant persons, fixed college characteristics, and university communication with students. As mentioned in the introduction, while this study largely deals with improving the effectiveness of the institution's communications with prospective students, it focuses on communicating career-oriented information, which is a component of fixed college characteristics as a part of an academic program's ability to place graduates in careers.

Recruitment is not a concern unique to higher education. Marketing and advertising disciplines have looked at recruitment issues through the lens of loss aversion. Loss aversion is a concept within prospect theory, which has been used to develop campaigns for recruiting new customers. Loss aversion refers to people's desire to avoid losses more than their desire to acquire gains (Tversky & Kahneman, 1991). There are three essential tenets represented by a value function that Traversky and Kahneman suggest are used by a decision maker, like a student choosing a major. The first of these is reference dependence, which is determined uniquely based on an individual's beginning reference point to the decision and its accompanying factors. The second is loss aversion, which is higher in the negative domain than the positive. The third component is diminishing sensitivity, which is a function of the marginal value of gains and losses decreasing with their magnitude (Tversky & Kahneman, 1991). The grouping of these components equates in a value function that is an asymmetric S-shape, which demonstrates that an "impact of a difference on a dimension is generally greater when the difference is evaluated as a loss than when the same difference is evaluated as a gain" (Tversky & Kahneman, 1991, p. 1040). Additionally, it has been suggested that losses are psychologically twice as powerful as gains (McGraw, Larsen, Kahneman, & Schkade, 2010). Thus, recruitment messages using loss aversion focus on what people may lose by not taking advantage of the academic or career opportunity being advertised as opposed to what they may gain by taking advantage of an opportunity.

Purpose & Objectives

The purpose of this study was to determine how to reach and attract potential students to majors and careers in specialized academic programs of agriculture more efficiently and effectively. Ultimately, the goal is to use this information to improve educational programs designed to raise awareness and motivate career choice among students in post-secondary academic programs. This purpose correlates with the national research agenda for agricultural education and communication, which has a priority area of "sufficient scientific and professional workforce that addresses the challenges of the 21st century" (Doerfert, 2011, p. 18). For the purpose of this study, one academic program – ornamental horticulture – was chosen. Ornamental horticulture is an example of an agriculture program area that is struggling nationally to find enough qualified students to meet industry demands (Rom, 2004). Like agriculture and natural resources overall, the industry of ornamental horticulture has a surplus of jobs when compared to the number of applicants being produced (National Center for Educational Statistics, 2007). Additionally, ornamental horticulture enrollment dropped almost 40% from 2003 to 2007 (FAEIS, 2008). In this study, ornamental horticulture has been defined as a discipline

of horticulture concerned with growing and using flowering and ornamental plants for gardens, landscapes, and floral display. The following research questions guided this study:

1. What message strategies and channels are most effective for reaching and attracting potential students?
2. What are potential students' preferences for recruiting messages and materials?

Methodology

This study used a set of two focus groups with representative members of the target population of college students. A market research firm was hired and used Computer Assisted Telephone Interviewing (CATI) telephone random digit dialing (RDD) sampling to qualify potential participants. Probability samples were generated using a predetermined sampling frame based on demographic variables for both focus groups. Thus, the sampling frame for this study was students enrolled at a land grant institution in the southeastern United States, with 30-60 hours completed toward their degree, and who were not already enrolled in a plant-related major. The focus groups were conducted February 23, 2010. Prior focus group research in this same area determined students who were already enrolled in a college of agriculture and were early enough in their program to change their major were the best choices for recruiting efforts (Baker, Irani, & Abrams, 2011). The university this study was conducted at does not allow students to have an undeclared major, so it was not possible to have students with undeclared majors in the study. Ten students were selected for participation in each group for a total sample of 20 participants.

Focus group research is common in marketing studies due in part to the researcher's ability to determine emotional and unconscious motivations, which are sometimes difficult to assess in conventional survey research (Morgan, 1998). A protocol was developed to guide both focus groups using the procedures set forth by Krueger (1998b). As this study was designed to test the previous Baker et al. (2011) study and move forward with recommendations from the prior research, the protocol in the current study was based on the same protocol. One major difference in the protocol was a new focus on testing specific messages and recruitment materials based on the recommendations from the previous research. As a part of the protocol procedure, participants were asked to evaluate recruitment messages, a postcard, and two websites, one of which included three short recruitment videos (approximately 30 seconds each). The protocol was used to guide the discussion and to keep the focus groups consistent; it was reviewed by a panel of experts for face and content validity.

The same experienced, formally trained moderator was used for both focus groups to ensure credibility. All focus groups were video and audio recorded for verbatim transcription. Verbatim transcripts are a more rigorous means of analyzing focus groups than relying on notes alone (Krueger, 1998a). Transcripts from the focus groups were imported into Weft QDA software to be analyzed for themes accordance with Glaser's (1965) constant comparative method. The constant comparative method involves coding each incident into a category, comparing each incident to prior incidents; integrating incidents into categories of shared properties; defining the boundaries of categories; and writing theory, which consists of describing the participants' responses in terms of themes, organized by research objective.

The epistemological lens this research team, including the moderator, viewed this study through was that of people outside the industry of interest. Therefore, research and reports related were able to be free of bias. However, epistemologically the researcher should try to get as close as possible to the subjects (Creswell, 2007), which was done in this study by the researchers being close to participants' age and developing a familiarly and trustworthiness with participants in the beginning of the sessions.

Credibility, transferability, dependability, and confirmability are commonly used terms to describe rigor in qualitative research (Ary, Jacobs, Sorenson, 2010). Triangulation was used in this study, as it is recommended to gain a detailed and balanced depiction of the situation being investigated (Altrichter, Feldman, Posch, & Somekh, 2008). This consisted of multiple researchers analyzing transcripts to ensure validity of themes for confirmability. Additionally, to

ensure veracity, an audit trail was kept and a member check was completed. The moderator summarized participants' responses at the end of each focus group, allowing participants to make clarifications or additions as a means of member checking, which also aided the credibility of the study (Creswell, 2007). Credibility of the research was also aided by the verbatim transcripts helping to maintain richness of information, low-inference descriptors through the use of quotes, putting participants at ease through the use of ice breaker questions, and having the participants serve as validators for each other's responses (Bloor, Frankland, Thomas, & Robson, 2001; Flick, 2006; Krueger, 1998c; LeCompte & Goetz, 1982). Even though this study was with one specific academic program, the factors were similar to other programs within the COA, and thus results may be transferrable to other programs with similar characteristics. To address transferability, as much description of participants' responses was provided as possible (Creswell, 2007). The dependability of the study was aided by the audit trail (Ary et al., 2010). Confirmability of the study occurred through the audit trail and member checking measures (Ary et al., 2010; McMillan & Schumacher, 2010).

Results

What Message Strategies and Channels Are Most Effective for Reaching and Attracting Potential Students?

Participants in both focus groups were asked questions about the most effective strategies for reaching students with messages about majors and/or careers. Major themes about what messages would be effective in recruiting students emerged. Key career messages that resonated with participants were job stability/availability and positive contextual messages. Message channels participants believed would be the most effective ranged from high-touch channels to online channels, and campus publications.

Job stability/availability. One of the themes was job stability and availability, which was a major concern with the slowed economy. One participant expressed this concern as "I feel like one of the main concerns for college students now is, like, not having a job when they get out of college." Participants said they would be attracted to recruitment messages addressing job availability. Specifically, one participant said "If there is like an ample amount of jobs, that's probably a really big deal to tell people that." Beyond getting a job after graduation, participants also expressed long-term concern for jobs by saying "Job stability nowadays is important." Others were concerned with the larger long-term prospects of the industry. One participant summed up the discussion by saying "Knowing if [jobs are available] is, like, good to know, but maybe, like, if the industry is increasing or decreasing, like, what are the chances that you'd still have a job in 5 or 10 years."

Positive contextual messages. Other messages participants were attracted to were positive contextual messages. These messages conveyed the positive aspects of what a student could expect if they took a position in a specific career field. One participant expressed this sentiment as "Like, the passion within the industry . . . how it relates to your life and how it's, like, ethical and a fun job type thing." Additionally, participants wanted to know their lives would be improved because of their career choices. Thus, career messages that offered more than a paycheck but a chance to make a difference were valued by participants. One participant conveyed this by saying "Like, how taking your career, like, turning your career in that certain direction would better your life." While participants desired to be happy and fulfilled, they also wanted to help others through their career, including messages about careers improving other people's lives. One participant communicated this by saying "A job that satisfies people. Like, I know for me, I know I really like to make other people happy."

High-touch channels. One of the preferred message channels for participants to receive career and major information was high-touch channels, meaning channels that involved personal contact. Some of the channels mentioned consistently were advisors' offices, seminar classes, career fairs, and preview or orientation programs. Specific to advisors, students expressed that they listened to advisors' advice and suggested "You could ask your advisor or they could have slips or something." Seminar classes were thought by participants to be a place where students sought advice on careers. One partici-

pant expressed this by saying "I think that's what that class is mainly for, to see, like, your options for that major . . . so I think yes, something like that would work." The participants expressed similar sentiments about career fairs and previews or orientations. Participants thought these situations were ideal for students to pay attention to career or major information. One participant conveyed this by saying "That's when the kids are really like, 'What's my major going to be?'"

Online channels. Participants in both groups suggested online channels of communication to deliver career and major information. Online advertisements were suggested by participants as a possible way to attract students. One participant said "Web ads, that's another good place to put them." More specifically, participants said these advertisements should be in places students already seek career and major advice online. Some participant suggestions were SAT or College Board. One participant expressed the point in targeted advertisements by saying "Put ads online but, like, when we're specifically searching, like people search majors, like ad majors or something like that out there. But not just, like, random ads for it."

Another place where participants expressed they would pay attention to online advertisements were before or during online television programming or videos. One participant, talking about websites like YouTube, summed this idea up by saying "Those are things that, like, that a lot of times you can't avoid them. You're forced to watch them. And they're, like, shorter usually and more effective since they have less time than regular commercials." Another participant stated "I've seen a lot of them that made me really stop and think and go, like, wow! That was awesome!" However, when online advertisements were not targeted appropriately, participants did not trust them. As expressed by one participant, "Sometimes online ads are creepy, and you don't, like, know who they come from." Overall, participants expressed that online targeted advertisements would catch their attention, which would lead them to a website for more information.

Campus publications. Participants said they paid attention to advertisements in campus publications but were not attuned to messages in other publications like magazines or the city newspaper. One participant said "I sometimes read the Campus Talk just 'cause, like, it has funny ads in it and advertisements, but I don't really read anything else." The general consensus of the groups was that campus publications were convenient for them to pick up and take with them to read between and sometimes during classes. Participants conveyed that they did not read newspapers or magazines. As one participant said, "I don't read newspapers or magazines at all." Other campus printed pieces attracted students, like posters and flyers in the dorm mailboxes. One participant said

> A poster would catch your eye, too, though . . . so, like, sometimes you're sitting in the waiting room for your name to be called for the advisor. I look around or I try to read, but if there's a poster that's got beautiful flowers, I might read that and ask questions.

One participant said of advertisements placed in dormitory mailboxes, "I, like, look at it and if it catches your eye and you can keep it."

What Are Potential Students' Preferences for Recruiting Messages and Materials?

The participants were exposed to sample recruitment materials developed strategically from previous research (Baker et al., 2011). These materials included a postcard designed to be given away at career and/or major fairs, three Facebook advertisements, a traditional major website, and a career website with interactive features, including three short recruitment videos. The key findings from testing these materials were that participants wanted full-color materials with pictures, statistics and information about an industry where they might find work after graduation, short videos with multiple offerings and progression of topics, and testimonials from a range of people working in the prospective career field. Participants diverged on whether they wanted Facebook advertisements and/or groups, as seen in the following sections.

Full-color materials with pictures. Participants expressed a desire for materials that were full color and included pictures to catch their eye. One participant articulated this by saying "I mean, I feel like this industry could be very vis-

ually appealing on paper. So just in terms of pictures, it could be, like, just people standing in fields, that could be a lot more appealing than, like, [school colors]." Specifically, participants thought school colors would blend in with everything else they received on campus or at career fairs on their campus. A participant expressed this by saying "Right off the bat, if you're going to go to a career fair, I'm assuming it's going to be at [this school] . . . every paper that you're going to get is going to be [school colors]." The idea of recruitment materials needing to stand out from the other mass of materials students receive was a key concept for participants. One summed this up by stating

> You can put a lot of colors on . . . papers that you're handing out, and I think you could really make it stand out, and if I have a stack of [school color] papers when I'm going home at least this one might stay on my floor instead of ending up in the trash can.

Statistics and information about an industry. Participants in both focus groups expressed the desire to have statistics and information available about the industry or major being promoted. Participants liked hearing statistics that specifically related to the size of the industry. One participant said "Maybe . . . say it's a 40 million dollar industry, or like the 12th biggest industry or something." Participants also desired information about how much money they could expect to make and the prospects for jobs in the industry. The participants were not attracted to negative statistics about other industries or jobs in an effort to recruit them to a new industry. In response to a statistic about job dissatisfaction, one participant said "It's kind of mean." Another participant said "I feel like they're trying to, like, just lure you for no reason. Like, I feel like if you want people to come into the career, they need to be actually genuinely interested." Overall, participants expressed the desire for positive statistics and information about the industry that is recruiting. One participant said

> I think an important thing that they could add is saying something good about the industry. Like, I mean, because it's like I'm interested in that. I'm interested in that, but will I make money, like, will I have a job? You know saying something good about the industry.

Short videos with multiple offerings and progression of topics. Participants wanted short videos with information about people and careers in an industry where they make work. Participants in both groups agreed they would not be willing to watch a video that was lengthy. One participant said "I'm not going to watch a seven-and-a-half minute video for anything." Participants thought a video that was 1-2 minutes in length would be the most effective. One participant said "I think a minute to 2-minute video would probably work better." Participants suggested having multiple videos broken down by different topics. Additionally, participants suggested a possible progression of videos throughout a recruitment website, such as starting with an overall career video and then moving to testimonials from specific career areas, or beginning with a short introduction video of each career and moving to a longer video afterward if students are interested in the first. One participant summed up this idea by saying

> You have a video, and if you wanted to have longer, more in-depth videos, like, on a different link, like, under that so you can, just like, cause it gives a good overview but then have, like, the more information later.

Testimonials from a range of people in the prospective career. One of the aspects participants wanted in recruitment materials was testimonials from people currently employed at different levels within the prospective career field. Participants said it would be good to hear from someone similar to their age so they could picture themselves being in that career. One participant said "I want to hear from someone my ageish." Participants felt that by seeing people who were young and had already been successful in their careers, the participants may also be able to be successful soon after graduation. One participant expressed this by saying "It's good because it's showing, look how far you can get so quick." However, participants also valued testimonials from people who had been in the prospective career for a length of time. One participant explained this as "For a career, I would like to have someone who's been in the field long enough to tell me what it's about, pros and

cons." Participants expressed a desire to see from the testimonials that people were happy with their career choice and had stayed a long time and were able to support their families through this career. One participant expressed this sentiment humorously by commenting he/she would like to hear a testimonial that said "I've been working for 20 years, and I haven't starved yet."

Facebook advertisements and/or groups. The participants were mixed about perceptions of Facebook advertisements as a good way to reach students with messages about careers and majors. Participants were under the impression that Facebook advertisements were expensive and as a result may not be worth the investment. One participant said

> I just don't know that it's a good choice to put them [on Facebook] and spend all that money because, honestly, if I'm on Facebook, I'm going to check my messages and check friend requests and then I'm out of there.

Other participants thought the concept of Facebook advertisements made sense for recruiting students who were already interested in that area. One participant said "They are usually good at giving you ads that, like, are about what you are interested in or what you have, like, sorta searched for recently or whatever." Some participants thought the advertisements on Facebook were not authentic, so they avoided them entirely. One participant said, "I think they're like scams and stuff." However, the majority of participants expressed a desire to join groups on Facebook that mirrored their already chosen career path or major. One participant expressed this by saying "I'm going to become a fan of something I'm already interested in, so I wouldn't, like, just randomly join it because I'm there, but it is good to have once you are in that area."

Conclusions and Discussion

The results of this study indicate a greater need for recruitment materials that are targeted appropriately and designed strategically. Although this study was limited to one institution, key findings suggest recruitment materials should be developed that are segmented for the needs of different types of students. These findings support previous work by Lingenfelter and Beierlein (2006) who recommended recruiting practices be geared toward specific interest areas. However, this study indicates a need for materials to be developed with multiple target student audiences in mind, incorporating multiple channels and messages.

Messages that were likely to resonate with participants were those that conveyed job stability and availability. This corresponds with loss aversion research, which suggests losses are psychologically twice as powerful as gains (McGraw et al., 2010) in that students were afraid to enter an industry where jobs might not be available. Student comments were particularly specific about being scared of losing a job once they had it, indicating an aversion for an industry that was not stable. This corresponds to previous recruitment studies that show prospects for future careers are important in major selection (Baker et al., 2011; Bobbitt, 2006; Myers et al., 2004; Williams, 2007). It should be noted that this loss aversion may be due to the current slowed economy and intense media coverage of job losses and shortages.

Participants desired recruitment materials that portrayed positive contextual messages about the industry. They wanted to know specific details about the positive benefits of jobs in the industry. This suggests students are more attracted to messages with gain frames, which emphasize the advantages of a program. Additionally, this suggests students are less likely to respond to messages with loss-framed appeals, which emphasize the disadvantages of an alternative option (Tversky & Kahneman, 1991). This concept was confirmed by participants' opposition to negative messages against other fields or jobs in general. These results run counter to the concept of loss aversion, which suggests messages about avoiding losses are typically more powerful than gain-framed messages (Tversky & Kahneman, 1991). These results support research on Millenials, who have been taught their entire lives they can do anything and seek positive motivations for doing so (Twenge, 2006). Thus, it is not surprising that Millenials violate assumptions of the loss aversion concept by preferring gain frames over loss frames.

High-touch channels of communication were desired by participants. The desire for high-touch channels in recruitment efforts corresponds to Chapman's (1981) model of external factors that are influential in students' choice of where to attend college. In this study, the significant persons who had the most influence in college choice were students' advisors. The institutional programs of most significance to participants were seminar classes, career fairs, and preview or orientation programs, which were also considered high-touch communication channels. Online channels were deemed as a possible way to attract students in this study; however, participants expressed a need for these messages to be targeted appropriately and only appear in places where they were already seeking career and major information and/or advice. Online and high-touch channels were related. The participants wanted to be able to find more information online after high-touch interactions.

Campus publications were another channel where students sought career and major information. This study concluded that students would respond to career information in campus publications if it "caught their eye" and addressed their area of interest. This idea is similar to conclusions by Lingenfelter and Beierlein (2006) that recruitment messages should be targeted toward areas of interest as opposed to agriculture in general. Participants reported paying attention to campus publications, fliers, and posters, but they did not notice community or national publications.

Participants' desire for short videos may be due to their generation's need for immediate information and constant stimulation to be interested (Twenge, 2009). Additionally, it is noteworthy that participants valued testimonials from people in a prospective career. It was not surprising that participants wanted to see testimonials from people like them, as this is a concept that has been explored in advertising. However, it was unexpected that participants wanted to hear from someone who had been at this career for a long time to show that it was a stable industry. This idea, though, correlates with participants' desire for a job with stability and opportunity for long-term advancement.

Participants' perceptions that Facebook advertisements were expensive was interesting considering that Facebook is one of the cheapest ways to advertise to a large group of people in a targeted and direct way. Recruitment targeting specific interests is in line with results from Lingenfelter and Beierlein (2006) and Wildman and Torres (2001). This study indicated that whether or not students responded to Facebook advertisements was an individual preference. As a result, this study concluded Facebook advertisements are worthy of further exploration as an effective delivery method for recruitment messages for at least some students.

Recommendations

The findings in this study may be transferrable and have implications for all academic programs of agriculture, even though this study was limited as a case study of one academic program in a land grant institution. Recommendations for recruitment messages to target the Millennial generation include messages that convey job stability or availability and positive contextual messages. These results additionally indicate that future recruitment messages should focus on gain frames that emphasize the advantages of a specific academic program of agriculture. It is also important to note that participants reacted negatively to messages that used negative framing in regard to other industries.

As evidenced by the results of these focus groups, what is important in recruitment materials for this generation of students are full-color materials with pictures, statistics, and information about an industry where they would work; short videos with multiple offerings and a progression of topics; and testimonials from a range of people working in the prospective career. As a result, videos embedded in websites should include a plethora of information about the prospective career, including job duties and long-term job availability. Multiple videos should be developed that are 1-2 minutes in length and feature people in a variety of stages of their careers. Websites should be advertised and marketed through online channels where students are already seeking major and career information, and be advertised prominently on all materials delivered through high-touch channels. This will avoid wasting resources on reach-

ing individuals who are unlikely to be interested in the information.

While the participants in this study were mixed about whether Facebook advertisements were an effective method of delivery for recruitment and career messages, it is recommended that Facebook advertisements be further explored as a part of the overall recruitment campaign for academic programs of agriculture. This is primarily due to the low cost of advertising on Facebook and the results of previous work that indicates Facebook is a place where students respond to advertisements that are directed to their special interests (Baker et al., 2010). Additionally, Facebook allows for targeted advertising, which responds to students' desire for messages to appear only after they were seeking career and major information.

Finally, the results of this study indicate an increased need to target recruitment efforts through a strategic communication process, which is recommended in corporate models of communication (Smith, 2002). This is due to the differences in preferences within these groups for specific messages. Strategically developed materials should be based on empirical research, something research indicates has not been done in programs of agriculture in the past when developing recruitment strategies (Washburn et al., 2002). The students within this generation and in this study consider themselves unique individuals and believe they are highly valued (Twenge, 2009). As a result, they want materials targeted to their specific wants and desires in a program and in a future career. It is recommended that future research be conducted in a quantitative research design to test materials developed using the targeted, strategic strategies resulting from qualitative research such as used in this study.

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