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ILLUSIONS OF CONTROL: MEDIA USES AND PREFERENCES AMONG UNIVERSITY STUDENTS

A Master's Project by

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Abstract

Uses and gratifications theory and the situational theory of publics are used to frame an analysis of media uses and preferences of university students. Results of a survey of university students (*n*=202) reveal that students reported different levels of use and preference for e-mail, Facebook, Twitter and text messaging with campus leadership and their own instructors. Students who considered themselves more active in campus issues preferred newspapers, magazines and UT websites to obtain more information about the university. Professional recommendations on maximizing communication effectiveness between universities and their students include using UT websites, text messages and campus and Knoxville newspapers to share troublesome news announcements, and Facebook and Twitter updates to share good news announcements.

Keywords: communication, gratifications, media, publics, students, uses

communication between an organization and its publics" (p. 4).

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Illusions of Control: Media Uses and Preferences Among University Students

Universities and colleges in the United States, especially state land-grant institutions,
serve three primary purposes: instruction, research, and public service. It can be argued that
students play a major role in all three. The population of students on college campuses in the
United States can range from a few dozen to many tens of thousands. Since students are
(presumably) highly motivated to be on campus, take classes, and earn a degree or professional
certification, they have a stake in their relationships with their colleges or universities.

Ledingham (2003) proposed that the management and cultivation of relationships is a central aim
of public relations, and Grunig (1992) defined public relations as "the management of

Given that students comprise a "public" that universities should better understand in order to more effectively manage their communications with them, it would seem appropriate to understand how the students themselves communicate and specifically how they use technology to facilitate that communication. Leung and Wei (2000) found college students moving away from land-line telephones to cell phones because of their mobility, immediacy, and sociability. Flanagin (2005) wrote that instant messaging was increasingly displacing e-mail as the favored communication channel among college students. In a study of media use by college students, Hwang and Lombard (2006) found students were the vast majority of instant message users, and that they used instant messaging to increase their social presence, their "sense of being with another in a mediated environment" (p. 51). However, Ling and Baron (2007) and Leung (2007) revealed that university students were moving away from PC-based instant-messaging technology and increasingly using cell phone-based text messaging, because text messaging was

seen by students as less intrusive than cell phone calls, more immediate than e-mail, and not tethered to a desktop as was instant messaging technology.

In a study of university administrators using text messaging to communicate with both their students and staffs, Naismith (2007) wrote that when administrators learned best practices for text-message communication and consistently implemented those practices, they were more effective in their overall communication with their students. Naismith found that because students associated text messages with taking action, the texts were effective prompts to behaviors preferred by administrators. The text messages also were used as retention tools, in the form of "thank you" messages to students who participated in campus events. And in a study of time spent by college students on social network sites such as Facebook and MySpace, Raacke and Bonds-Raacke (2008) found that students spent a significant amount of time using the sites to gratify needs such as to stay connected with old friends and meet new friends. The Facebook website reports that, as of October 2010, it had more than 500 million active users, with 150 million of those users accessing Facebook through mobile devices (Facebook, 2010). Text messaging and social media channels, then, are clearly not only important in the lives and communication behaviors of students but also represent an opportunity for universities to connect with students, and do so effectively, in a manner preferred by those students.

So it is pressing to explore how university students are using both old and new communication technologies to share and receive information from their academic institution. The practical outcomes of this exploration would include a greater understanding by faculty and administrators of the nature of their relationships with their students and how they manage their communications with this (oftentimes quite large) stakeholder group. It also would seem prudent to conduct this inquiry at a large state land-grant institution that offers doctoral and professional

degrees. The range of student backgrounds and experiences is presumably larger than one would find at smaller, liberal arts colleges that only offer bachelor's degrees, and therefore the communications management challenge also is presumably more difficult. This study examines which media channels are the most effective in reaching students with managed communications from the large state land-grant university in which they are enrolled.

Media Usage and Preferences Communication Theories

Uses and gratifications theory. Several communications theories inform this study. One theory that relates to media choice is uses and gratifications theory (Cantril, 1942; E. Katz, Blumler and Gurevitch, 1974), which began in the 1940s as media effects research to understand audience motivations for using radio and early television. Over the decades this research grew in scope to attempt to explain why people use media in general and how and why they select specific types of media to gratify specific types of needs. According to uses and gratifications theory, people use media channels selectively, not randomly, and their use of specific media channels stems from a self-knowledge of what their needs are as well as an expectation that certain media channels are better at any given moment at gratifying those needs (Ruggiero, 2000). Katz et al. (1974) wrote that, unlike previous media effects research, which assumed that control resided in the sender of the content, uses and gratifications research moved the locus of control to the receiver -- the audience.

Lundberg and Hulten (1968) laid out five elements of uses and gratifications: 1) the audience is active in that people use media in order to achieve a goal; 2) the power to connect need gratification with media outlet choice lies with the audience members, not with the media; 3) various media compete with many other sources of need satisfaction; 4) audience members are able to self-report their media uses and gratifications; and 5) value judgments about the cultural

significance of mass communication should suspended while audience orientations are explored on their own terms. Blumler and Katz (1974) wrote that in that scientific exploration of audience orientations, it is important for media researchers to understand what these active users are doing with the media they consume. McQuail, Blumler and Brown (1972) examined the interactions of people with the media they consume within four classes of gratifications. The first was surveillance, or any form of information seeking. This can be information of a personal nature, or information on current events in the house, the neighborhood or around the world. The second class of gratification was personal identity. This was the use of media to reinforce personal values, beliefs and self-knowledge. The third class of gratification was personal relationships. This included companionship and social utility. The fourth class of gratifications was diversion. This included entertainment and emotional escape or release.

Katz et al. (1974) extended the theory by identifying three sources of audience gratifications: 1) the context of the media; 2) exposure to and usage of the media channel itself; and 3) the social context of the situation surrounding exposure to different media. Again, the audience members, collectively and individually, are at the center of the theory. The users get to choose their communication channels based on how much they like the channel itself, or the content of the channel, or how much their friends like the channel. They get to decide if they like what they are consuming, whether to stop consuming it if they don't like it, or if some other pastime strikes their fancy.

If a broad consensus had formed among researchers regarding the active nature of the audience, Ruggiero (2000) opened the doors to renewed argument. He explored three separate differences of opinion that had opened among uses and gratifications researchers; in the first group, some held that audiences are active and discriminating, while others viewed audiences as

essentially passive. In the second group, some researchers believed that media use was based on individual characteristics, while others believed that societal structures played more of a role in media use. Finally, in the third group, some researchers asserted that it is the content of the media channel that gratifies needs, while others asserted that it is the usage of the medium itself, rather than any specific content, that gratifies needs. Rubin (2002), however, tried to downplay the various disagreements, writing that squabbles over single-variable explanations for interrelated social phenomena may distract researchers from the overall complexity of media effects and how they are constrained by socio-psychological factors and affected by individual choice.

Taking a similar middle-of-the-road approach, Blumler (1979) wrote that although some uses and gratifications researchers consider individual media consumers as being either "active" or "inactive" in a binary, yes-or-no way, it is more likely that "active" status is a variable that can be measured. Rubin (2002) agreed with Ruggiero's (2000) statement that uses and gratifications represents a "cutting-edge" approach to media effects studies on new and emerging communication channels, and Rubin (2002) added that audience activity, involvement, and attitudes about media content all play central roles in media effects research. In the context of this study, therefore, it may be productive to examine whether concepts from uses and gratifications theory can help explain why students may prefer some media channels over others, whether that preference is for its content or the nature of the channel, what gratifications students may receive based on how they communicate with the university, and whether universities can use that understanding to be more effective in communicating with their students.

Situational theory of publics. Another communications theory that underlies this investigation is Grunig's (1993) situational theory of publics. As proposed by Grunig (1993,

1997, 2009), this theory posits that people seek information based on their recognition of the existence of a problem and categorizes people as being in one of three stages: 1) latent, when a person does not recognize a problem, 2) aware, when the person does recognize that a problem exists, and 3) active, when the person decides to take some action because of the problem. Active publics can be measured in three ways: 1) their level of involvement, when they perceive that what an organization does involves them; 2) their level of problem recognition, when they perceive that what an organization does is a lesser or greater problem; and 3) their level of constraint recognition, when they perceive there's nothing holding them back or preventing them from doing something about the problem. Grunig (2009) wrote that these distinctions can explain why people take control of the media channels they use, why they make an active choice to consume or not to consume media, and that the control lies in the hands of the publics rather than with organizations.

Grunig (2009) used the phrase "illusion of control" to describe this phenomenon of organizations maintaining a belief that they, and not their publics, control the messages to which those publics are exposed. Organizations, and specifically public relations practitioners working on behalf of organizations, tend to describe the recipients of their messages as 'audiences,' a passive group whose knowledge, awareness, attitudes, and behaviors can be shaped with little or no regard for the self-interests of the group (Grunig, 2009). Grunig (1992) and others (Dozier, Grunig and Grunig, 1995) have described this lack of regard for message recipients as 'asymmetrical' communication, as opposed to 'symmetrical' communication, which (ideally) takes into account the needs and customs of the message recipients and is practiced in a way that leaves the organization open to receiving information and perhaps adjusting its own knowledge, awareness, attitudes, and behaviors.

Grunig (2009) wrote that the "illusion of control" has always been just that: an illusion. Publics have always controlled the messages to which they are exposed rather than the organizations that distribute them. This finding may be relevant to the study if universities adopt an "official" method of notifying students of important information, to attempt to force the students to consume official communications through the organization's preferred channel rather than the students' preferred channels. It is possible that students, as an active public, demonstrate this illusory nature of organizational communication control by not reading their e-mails or by exclusively using text messaging or social media posting to communicate with each other. It can also be argued that this is where the uses and gratifications theory and the situational theory of publics converge, if individuals and groups that identify themselves as stakeholders of an organization then selectively use media channels that bring them the following gratifications: 1) additional information about that organization in the form and time of their choosing, and 2) a reassertion of individual control over which media messages they consume.

Research Questions

Uses and gratifications theory may shed light on why university students use and prefer certain media channels over others and may suggest that university leaders and communicators who are aware of the media uses and preferences of their students are more prepared to effectively communicate official messages with them. If the results of the study indicate that students deliberately assert control by choosing some communications channels over others, especially if the other channels are those officially endorsed by their university, then the situational theory of publics may help provide a theoretical underpinning for that result.

Universities communicate with their students for a variety of reasons, many of which may have serious implications for students who do not receive certain types of important

information. Some communications inform students of their progress through their academic fields of study, such as official notices of the grades that students received in their courses the previous term and notifications of unpaid fees or fines. On occasion, these unpaid fees and fines may result in a student being unable to register for classes for the following term or to graduate on time, so it is in the best interest of the student to learn about these kinds of problems before they result in the student being unable to register or to graduate. Other high-importance communications from university leadership teams include notifying students of larger public policy issues that may affect the operation of the university, such as tuition increases or budget cuts that result in reduced numbers of classes or reduced hours of operation for university services such as libraries, recreation centers, and cafeterias. Clearly, it is in the best interest of both the university and the student to explore the communication channels that students prefer to receive this information, and it is the responsibility of the university to insure that it is reaching its students effectively.

Other information that universities wish to communicate to their students is of a more routine nature, including opportunities for study abroad, scholarships, internships, professional development, membership in special interest groups and political organizations, as well as recreational events such as intramural athletics, films, lectures, music concerts, plays, and "Homecoming"-type group events, to name but a few. These communications from universities to their students come through a variety of channels: letters sent to the students via campus mail or the U.S. Postal Service; letters, flyers, or posters displayed on bulletin boards in dormitories, cafeterias, libraries, and student unions or student centers; e-mail distributions to listservs to which students are subscribed; advertisements in student newspapers and campus radio and television stations; notices posted on student-oriented sections of university websites; broadcast

e-mails sent to all registered students (the term 'broadcast' is used because an e-mail can be sent to everyone with an e-mail address in a certain domain, much like radio and television signals are broadcast over the air to everyone with receiving equipment); text messages sent to the e-mail addresses or mobile phone numbers of students; and updates posted to social networking sites such as Facebook and Twitter. One could assume, then, that universities should have a great interest in learning more about how to use these new interactive media channels to more effectively communicate with their student publics. Thus, the following questions are asked:

RQ1: Is there a significant difference between how students *receive* messages from campus leadership and how they would *prefer* to receive that information?

RQ2: Is there a significant difference between how students *communicate* with their instructors and how they would *prefer to communicate* with their instructors?

RQ3: Which communication channels are most preferred overall by students?

RQ4: Is there a correlation between communication channel preference among students and the degree to which they are active in university information-seeking?

Methods

To answer these research questions, a survey was conducted of students at the University of Tennessee, Knoxville, a large state land-grant university. The study employed a Web-based questionnaire consisting of quantitative and qualitative questions. The survey was hosted by the Office of Information Technology's statistical consulting center. Data were collected from respondents from Sept. 27 to Oct. 13, 2010. The questionnaire operationalized concepts of Blumler and Katz's (1974) uses and gratifications theory by asking students to report their usage of and their preferences for communicating with the university through a variety of communication channels: blogs, bulletin boards, magazines, micro-bogging applications

(Twitter), newspapers, personal and UT provided e-mail, radio, social networking (Facebook), telephone, television, text messaging, the Blackboard class assignment website, U.S. Mail, and UT websites. Respondents were asked to report their uses and preferences for these communication channels in order to receive academic information as well as communication with campus leaders and instructors. The concept of active, inactive, and passive publics from Grunig's (1993) situational theory of publics was operationalized by using a five-point Likert scale to ask students to rate their perceived levels of (1) involvement in campus issues, (2) recognition of campus problems, and (3) recognition of constraint, or barriers to their involvement with campus issues. The wording of questions designed to measure respondents' active status was alternated, with some questions phrased in a positive manner ("I am completely aware of issues on campus") and others phrased in a negative manner ("I am never able to find information about campus issues"). The questions were part of an omnibus survey. See Appendix for the complete survey.

The omnibus survey questions were uploaded into the Office of Information

Technology's Web-based survey administrative site, and branching pathways through the questions were constructed based on the answers given by respondents. The survey administrative site generated a hyperlink to a test version of the survey. Pre-testing of the survey was then conducted using the test site. The researcher conducted the first pre-tests, checking for logical flow between the sections of the survey based on responses. The link to the test site then was sent by the researcher to professional and academic colleagues. A total of 23 testers began the questionnaire on the test site, with 10 successfully completing the survey and 13 testers timing out. Feedback was sought and received, and suggested changes were incorporated into the version of the survey that was to go live.

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Invitations to participate in the study were sent to UT Knoxville students in the form of an item in the Sept. 27, 2010, issue of "student@tennessee," a weekly e-mail newsletter sent to students and other subscribers on Mondays during the academic year. The newsletter is sponsored by the university's Office of Student Affairs and is produced by the university's Office of Media Relations with assistance from a student editor from Student Affairs. When the survey was distributed, 39,067 individuals were subscribed to student@tennessee, and all subscribers received an invitation to complete the survey, as well as the Web link to the live version of the survey. Flyers with the URL to the survey were printed and distributed on bulletin boards in academic buildings, residence halls, and the university center, in areas where students walk by and can observe the flyer. In order to make the survey URL easier to enter in the event that a student wanted to use a multimedia phone, the survey URL was entered into a URL-shortener website and the "shortened" URL was utilized in the flyers. The researchers who collaborated on creating the survey then used snowball sampling by e-mailing faculty and instructors in their academic department and in the college, asking them to consider sharing the survey URL with their students and asking them to complete it. The survey closed on Oct. 13, 2010, and the resulting data set was downloaded on Oct. 13, 2010, and imported into the PAWS (SPSS 18) statistical program for analysis. The data set was inspected and responses to the questions dealing with the individual's active-public status were recoded so that all responses fell in the same positive direction on a five-point Likert scale. A total of 202 completed surveys was received (n=202), for a response rate of .52%. It took the respondents 9.6 minutes on average to complete the survey. Although the response rate was low, it should be taken into consideration that recruitment occurred from a census sample, and every effort was made to reach students through a variety of channels.

Results

Of the 202 individuals who completed the survey, 145 (71.8%) were female and 57 (28.2%) were male. The mean age of respondents was 23.6 years, and ages ranged from 17 to 63. In self-reported ethnicity, 167 (82.7%) were Caucasian, 11 (5.4%) were African American, 4 (2.0%) were Hispanic, 8 (4.0 %) were another ethnicity, and 12 (5.9%) preferred not to answer the question. Of the 202 respondents, 195 were enrolled in a college at UT Knoxville, and of those enrolled, 70 (34.7%) were enrolled in the College of Communication and Information, 51 (25.2%) were enrolled in the College of Arts and Sciences, 27 (13.4%) were enrolled in the College of Business Administration, and 20 (9.9%) were enrolled in the College of Education, Health, and Human Sciences. The rest indicated they were enrolled in agricultural sciences and natural resources, architecture and design, engineering, nursing, social work, veterinary medicine, and undecided majors. The statistical tests used to analyze the data included the McNemar test, which is a variant of the chi-square distribution that compares agreement between repeated categories; a repeated-measures analysis of variance (ANOVA), which compares equality of multiple means; and a Pearson's correlation coefficient, which measures dependence between two quantities. The results must be considered preliminary and exploratory rather than definitive, due to the small sample size.

RQ1: Is there a significant difference between how UTK students receive messages from campus leadership and how they would prefer to receive that information?

The McNemar test was used in this analysis to compare agreement between student use and preference of communication channels to receive official messages from campus leadership. Significant findings included: Blackboard use was reported by 13.4% but preferred by 22.3 % (McNemar (1, N = 202), p < .05), Facebook use was reported by 3.0% but preferred by 12.4%

(McNemar (1, N = 202), p < .001), text messaging use was reported by 1.5% but preferred by 11.9% (McNemar (1, N = 202), p < .001), Twitter use was reported by 0.5% but preferred by 6.9% (McNemar (1, N = 202), p < .05), and UT Web site use was reported by 26.7% but preferred by 35.1% (McNemar (1, N = 202), p < .05). One non-significant finding was that UT-provided e-mail use to receive official messages from campus leadership was reported by 85.1% but preferred by only 82.2%.

RQ2: Is there a significant difference between how UTK students communicate with their instructors and how they would prefer to communicate with their instructors?

The McNemar test was used in this analysis to compare agreement between student use and preference of communication channels to communicate with their instructors. Significant findings included: Facebook use was reported by 5.4% of students but preferred by 17.3% (McNemar (1, N = 202), p < .001), personal e-mail use was reported by 17.3% but preferred by 23.3% (McNemar (1, N = 202), p < .05), UT-provided e-mail use was reported by 95.0% but preferred by 90.1% (McNemar (1, N = 202), p < .05), text messaging use was reported by 1.5% but preferred by 19.3% (McNemar (1, N = 202), p < .001), and Twitter use was reported by 0.5% but preferred by 6.4% (McNemar (1, N = 202), p < .05).

RQ3: Which communication channels are most preferred overall by UTK students?

Table 1 - Channel Use	Yes	
	Count	Row N % (a)
UT-provided e-mail - Use	172	85.10%
UT websites - Use	54	26.70%
Blackboard - Use	27	13.40%
Personal e-mail - Use	20	9.90%
U.S. Mail - Use	17	8.40%
Newspapers - Use	16	7.90%
None - Use	10	5.00%
Facebook - Use	6	3.00%
Bulletin boards - Use	4	2.00%
Text messaging - Use	3	1.50%
Magazines - Use	2	1.00%
Television - Use	2	1.00%
Radio - Use	1	0.50%
Telephone - Use	1	0.50%
Twitter - Use	1	0.50%
Other - Use	1	0.50%

a - Respondents could select more than one channel, so percentages do not total 100%.

Table 2 - Channel Preference	Yes	
	Count	Row N % (a)
UT-provided e-mail - Prefer	166	82.20%
UT websites - Prefer	71	35.10%
Blackboard - Prefer	45	22.30%
Facebook - Prefer	25	12.40%
Text messaging - Prefer	24	11.90%
U.S. Mail - Prefer	24	11.90%
Personal e-mail - Prefer	23	11.40%
Newspapers - Prefer	20	9.90%
Twitter - Prefer	14	6.90%
None - Prefer	11	5.40%
Bulletin boards - Prefe	7	3.50%
Magazines - Prefer	7	3.50%
Television - Prefer	7	3.50%
Radio - Prefer	4	2.00%
Telephone - Prefer	4	2.00%
Other - Prefer	3	1.50%

a - Respondents could select more than one channel, so percentages do not total 100%.

Table 1 shows reported overall use of communication channel among UTK students. The top four are UT-provided e-mail, UT web sites, Blackboard and personal e-mail. Table 2 shows

reported overall preference of communication channels among UTK students. The top four are UT-provided e-mail, UT web sites, Blackboard, and Facebook. Respondents were asked to rank on a Likert five-point scale their level of preference for different communication channels. The response options were: not preferred at all, slightly preferred, somewhat preferred, more preferred and highly preferred. Table 3 shows the means that were calculated from all responses to that question.

Table 3 - Mean preferences for **Descriptive Statistics** active students N Minimum Maximum Mean Std. Deviation 202 5 4.49 0.932 UT-provided e-mail 1 5 UT websites 202 1 3.74 1.109 202 1 5 1.305 Blackboard 3.68 1 5 Text messaging 202 3.21 1.386 Personal e-mail 202 1 5 2.83 1.578 Facebook 202 1 5 2.76 1.478 1 5 U.S. Mail 202 2.69 1.345 Newspapers 202 1 5 2.12 1.172 5 1.144 **Bulletin** boards 202 1 2.07 5 202 1 2.05 Television 1.181 Radio 202 1 5 1.95 1.237 Twitter 202 1 5 1.93 1.281 202 1 5 1.82 1.196 Telephone 5 202 1 1.74 Magazines 1.025 Valid N (listwise) 202

A repeated-measures ANOVA test was performed on the following channels to compare the equality of their means: UT-provided e-mail, UT websites, Blackboard, text messing, personal e-mail, Facebook, and U.S. mail. These channels were selected because they had the highest mean scores, and all of the means were greater than a cutoff point of 2.5. This cutoff point was chosen because 2.5 is roughly the median, with equal numbers of communication channels having means above and below 2.5. Table 4 reports the ANOVA F statistics for the channels.

Table 4 - ANOVA F statistics for selected channels

Multivariate Tests(b)

Effect		Value	F	Hypothesis df	Error df S	Sig.	
channel	Pillai's Trace		0.674 67.634a	6.000	196.000	(0.000
	Wilks' Lambda		0.326 67.634a	6.000	196.000	(0.000
	Hotelling's Trace		2.07 67.634a	6.000	196.000	(0.000
	Roy's Largest Root		2.07 67.634a	6.000	196.000	(0.000

a. Exact statistic

Within Subjects Design: channel

The repeated-measures ANOVA test also produced pairwise comparisons among the seven analyzed channels. The pairwise comparisons indicated that UT-provided e-mail, with a mean of 4.49, clearly was the most preferred of the analyzed channels. Its mean was .75 higher than UT websites (M = 3.74) and .81 higher than Blackboard (M = 3.68), which represented the second tier of preferred channels, with means which were not very different from each other but higher than text messaging, personal e-mail, Facebook, and U.S. Mail. Text messaging (M = 3.21) was slightly more preferred than personal e-mail (M = 2.83).

RQ4: Is there a correlation between communication channel preference among UTK students and the degree to which they are active in university information-seeking?

To measure each respondent's self-identification as a member of an active public, a five-point Likert scale was created, with options including "strongly disagree," "disagree," "neutral," "agree," and "strongly agree." The respondents then indicated their level of agreement with the following statements: "I am completely aware of issues on campus," "I don't get involved in any campus issues," "Nothing can prevent me from taking action on campus issues," and "I am never able to find information about campus issues." During the analysis, the negatively-worded statements and their corresponding responses were recoded in the positive direction, then the four responses were averaged together to create an overall "active public" score for each

b. Design: Intercept

respondent. A correlation analysis was then performed on the students' communication channel preference and the extent to which they are active publics, with significant results indicating that students with higher levels of campus involvement were more likely to use certain communication channels than those less active, including the use of magazines, r(200) = .283, p < .001; newspapers, r(200) = .282, p < .001; UT web sites, r(200) = .165, p < .05. There were no significant results correlating lower levels of campus involvement with student preference for certain communication channels.

Discussion

When communicating with campus leadership or with their individual instructors, UT Knoxville students consistently indicated four communication channels as the ones they used the most and preferred: UT-provided e-mail, Facebook, Twitter and text messaging. One particularly striking finding was that when communicating with their instructors, the students' preference for their UT e-mail address was less than their actual use. A similar result was found in the analysis of students receiving messages from campus leaders, although the *p*-value was greater than .05, rendering it not statistically significant, although worthy of note. These results suggest that there is an element of grudging use of UT-provided e-mail: students are using it, but perhaps wishing they weren't using it so much. Their preference for using their private e-mail address was higher than their use, which again suggests a trend in students wishing to have the option to use their personal e-mail addresses as a legitimate and accepted alternative to their UT-provided accounts.

Facebook, Twitter and text messaging are preferred more than they are actually used by students, although in absolute numbers, their overall usage rates are much smaller than those of UT-provided e-mail. Even though, for UT-provided e-mail, students reported higher levels of use than preference as a channel, the higher overall use and preference of UT-provided e-mail

accounts may be due in part to the University of Tennessee's official electronic mail policy. This policy notifies students that the university "uses the university-supplied e-mail account as an official means of communication with all students" (Hilltopics, 2010, p. 27) and that students "are responsible for activating, maintaining and checking their university-supplied account and for all official university communication send to that account" (Hilltopics, 2010, p. 27).

So two salient characteristics of student use of UT-provided e-mail are seen: the gap between the communication channel's use and preference and its high overall use and preference, compared to other channels. An explanation of this situation may lie in Grunig's (2009) concept of "illusion of control." While students may be required by the Chancellor, Provost, or Registrar to read their UT-provided e-mails, and forced by their instructor to use their UT-provided e-mail to turn in assignments and respond to the instructor's queries, the one thing students cannot be forced to do is to like it. Accordingly, students may reassert their control by using their e-mails while not actually preferring that channel and by using (and preferring) other communication channels such as Facebook, Twitter, and text messaging. Yet, in the research question on overall communication channel preference, students selected their UT-provided e-mail account as their most preferred communication channel for UT information, which may indicate that students are not completely opposed to their UT-provided e-mail and in fact find much utility in it, but rather they are expressing a wish that the university explore other communication channels. This wish may be expressed through students looking to UT websites in general and the university's Blackboard course management system website more often than any of the other channels. Blackboard's popularity in the "overall most preferred channel" category could be explained by student familiarity with and frequent usage of the academic information provided by Blackboard, rather than any inherent general-audience appeal in the site.

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The gaps in usage and preference for social media channels in communicating with campus leaders as well as instructors was an interesting finding. Usage statistics were small, but preference statistics were comparatively large (Facebook use of 3.0% but 12.4% preference with campus leaders and 5.4% usage but 17.3% preference with instructors; and text messaging use of 1.5% but 11.9% preference with campus leadership and 1.5% but 19.3% preference with instructors). Perhaps the gaps between usage and preference indicate that the communication channels that students use may be constrained somewhat by the range of channels that are utilized and offered by university officials or instructors. If instructors are not using Twitter or Facebook to communicate with their students, then usage statistics will obviously be low, but the higher preference numbers may reflect pent-up demand for these communication channels.

More actively involved students indicated slightly higher preferences for magazines, newspapers, and UT websites as information channels. In contrast with websites, which began appearing in the late 1980s following the development of the Internet in the 1960s (NSF, 2010), magazines and newspapers are established media with long histories (M. Emery and E. Emery, 1988). This finding of more active students preferring magazines and newspapers more than less active students, while perhaps surprising given the rise of new media technologies including social media, does have precedent in the academic literature. O'Keefe and Spetnagel (1973) studied media use by college students and found that newspapers were the preferred source for students seeking detailed, rather than more general, information. A decade later, Henke (1985) studied patterns of media use and the role of CNN in the media choices of college students, and found that students who watched more CNN also were more likely to read newspapers and weekly news magazines.

This higher likelihood of more active audiences using magazines and newspapers for information is not limited to just student populations. In a national random telephone survey, Avery (2010) found that individuals who were actively involved with their health and informed on health issues were more likely to use magazines and newspapers to get information on health issues. It is possible that the individuals in Avery's (2010) study sought out specific health information-related gratifications, and the more active among them specifically sought out that information from newspapers and magazines, demonstrating a similar convergence of Grunig's (1993) situational theory of publics and Katz, Blumler and Gurevitch's (1974) uses and gratifications theory.

As discussed in this study, this convergence would entail individuals and groups (university students or health-conscious individuals) identifying themselves as stakeholders in an organization (the university or the local community) and, through their perceived stakeholder identity, selectively use media channels to bring them specific gratifications. If so, then the phenomenon of UT Knoxville students, particularly those who are more active, choosing which media channels to use and demonstrating certain preferences for communicating with the university can be described as predictable behavior. It remains to be seen if long-term trends in communication technology result in the reduction in the numbers of printed magazines and newspapers in favor of electronic publications, and if that reduction will manifest itself in changes in the communication channels that more-active students or individuals seek out in order to gratify their needs for more information and information that is more in-depth.

Professional Implications and Recommendations

Although the results of the survey should be considered preliminary and exploratory, given the small sample size, the results of students' indicated preferences for communicating

with the university and the kinds of media channels that are more likely to be used by active students suggest the outline of a plan for how UT Knoxville campus leaders and instructors can most effectively communicate with students. And for this study, the word "effectively" is defined as being more successful in both transmitting information and affecting behavioral outcomes of students. This "effectiveness" is accomplished by shifting communication resources so as to use the channels that students indicated they themselves preferred or that they wished the university would use in sharing information, rather than the channels the university may wish to use, since the university's control of communication channels does not necessarily lead to control of how students consume that communication content.

Avery's (2010) study found that audience involvement and choice of communication channel varied according to the context, a finding that agreed with Katz (1974). The context surrounding the decision to communicate certain information seems to be a valid construct for recommending communication strategies to UT Knoxville leadership and instructors. The four following types of communication contexts will be considered for recommendations on which communication channels to use in reaching UT Knoxville students: 1) troublesome news announcements; 2) good news announcements; 3) routine administrative and campus-wide academic announcements; and 4) specific academic information from each student's instructors.

Troublesome news announcements would include anything from a public health or public safety issue on campus to news of imminent tuition increases, funding cuts from the state, layoffs of employees, or reductions in class offerings. These kinds of announcements are arguably the exact kinds of issues that more active students would pay attention to and be more motivated to learn about, based on their recognition of a problem, in accordance with Grunig's (1993) situational theory of publics. So when campus leaders such as the Chancellor, the Provost, vice

provosts, and vice chancellors are trying to reach the general student population with these kinds of announcements, the context would suggest that the Chancellor utilize the channels correlated with more-active students. This would involve getting messages on the main UT Knoxville website, http://www.utk.edu, the Chancellor's site, and the Provost's site, as well as a story or paid advertisement in the *Daily Beacon* campus newspaper, the *Knoxville News Sentinel* daily newspaper, the Metro Pulse alternative weekly newspaper, and perhaps the Torchbearer and Alumnus magazines produced by the university. The Chancellor or Provost can send an "op-ed" of sorts directly to students through the use of broadcast e-mail to the students' UT-provided email addresses. Supplementing any paid advertisements, the university's media relations office could provide assistance in pitching and placing news stories on the initiative or announcement with local media. If a crisis has taken place on campus, the university's UT ALERT emergency text messaging system is available for use by campus leadership to share urgent safety instructions with all students, not just active students. (UT ALERT, 2010). Updated messages can be placed on the university's Facebook page and Twitter account, in accordance with students' expressed preferences, again to reach both active and inactive students.

For *good-news messages* such as announcements of study-abroad opportunities, community service projects, and recreational activities, the communication strategy would weigh less on the situational theory of publics and more on the uses and gratifications theory, in that appeals are not being made to students to take action on a topic of high importance, but to encourage students to take advantage of interesting opportunities that present themselves on campus. Media channels that would be appropriate for this kind of communication are "student@tennessee," the "current students" section of the university's website, and the university's Facebook and Twitter accounts. These channels seem well-suited to transmit

information that is interesting and useful to students, but not urgent or gravely serious. A recommendation is also given to work with the university's Office of Information Technology to set up a system that allows text messages to be sent to students' e-mail accounts or their mobile phones, based on their preferences, and that the texts can be made to appear to come from the Chancellor, the Provost, or other top campus leaders, in the same way that broadcast e-mails are sent now.

Routine administrative and academic messages would include information such as when students can register for the following semester, encouragement for freshmen to enroll in a First-Year-Studies (FYS) 129 seminar, communications about academic activities related to the Life of the Mind book-reading experience, messages from the Bursar's Office regarding fee payments and confirmation of attendance, and scholarship and internship opportunities. Since the four most preferred channels in this study were UT-provided e-mail, UT websites, Blackboard and text messaging, the recommendation is for the Chancellor or other campus leaders to make use of broadcast e-mails targeted to students, the "student@tennessee" e-mail newsletter to students' UT-provided e-mail addresses, updates to the university's Facebook page and Twitter feed, and the main utk.edu webpage as well as the "current students" second-level page and the "Current Announcements" section of the university's Blackboard website. Use of text messaging appearing to come from the Chancellor or the Provost is also recommended for these kinds of communications.

Academic communications from students' instructors would include messages informing students of pending deadlines for class projects, quizzes or exams, assigning duties and roles for those projects, updating the progress of projects, asking questions of their students, receiving answers and follow-up questions from those students, and reception of homework or assignments

sent via e-mail to faculty, instructors, or lecturers. Distribution recommendations for these kinds of communications, similar to the routine campus-wide administrative and academic messages, are informed more by results of this study and uses and gratifications theory, and less by the situational theory of publics, due to the more or less routine nature of communication between students and their instructors. In the study, students indicated they preferred to communicate with their instructors via their UT-provided e-mail, their personal e-mail, Facebook, Twitter, and text messaging, so these are the channels that are recommended for use in this kind of communication.

Caution is advised in implementing these recommendations fully, due to the preliminary nature of the findings based on a small sample size. However, even a partial implementation would require campus leadership and instructors to become more educated and familiar with the latest social media communication forms. Although unreasonable to suggest that the Chancellor or Provost should stay up late at night updating the university's Facebook page or tweeting the latest Faculty Senate meeting updates (unless they have the knowledge, training, time, and desire, which is debatable), the university's media and internal relations office, the Division of Student Affairs, and staffers in the Chancellor's and Provost's office would seem to be more likely implementers of any accelerated push toward greater use of social media for communicating with students. Another suggestion would be to devolve some of the outreach to students from the central administrative office to academic colleges and departments. When students enroll in the university, they also have to be admitted to a specific college, and it may be that communicators on the college and departmental levels are even better-placed to know their students and be able to reach out to them with official university messages, along with those of the college and academic department.

Strategic communication requires organizations and their administrators on every level to use what demonstrably works. This study has endeavored to show that "what works" in a university setting is for administrators to be informed by uses and gratifications theory in understanding that students use and prefer certain communications channels over others to meet certain information needs. These channels may be different from the channels preferred by administrators themselves. Administrators then can be informed by the situational theory of publics to understand that, as contexts change and students become more engaged in certain issues, they may become more active in their selection and consumption of certain media channels, and that administrators can use that awareness in order to communicate more effectively with those students. To do anything less would be to persist in an "illusion of control" that reduces organizational communication effectiveness.

Limitations and Future Research

A few limitations to this study should be noted. A larger sample size would have added to the survey's external validity. When the survey web page was closed, 202 completed surveys were recorded (N=202), but an additional 125 surveys had timed out, so problems with the length of the survey may have prevented the inclusion of what amounted to a 62% increase in the number of completed surveys. The invitation to take the survey and its included link to the survey were received by 39,067 individual subscribers to the "student@tennessee" e-mail, so an overall completion rate of 202 surveys was surprisingly small. On the other hand, sampling biases may have included an over-reliance on respondents who took the survey after receiving the URL through the "student@tennessee" e-mail, which may in turn have skewed the results for students using and preferring either their UT-provided e-mail or their personal e-mail. There was no implementation of ways to prevent respondents from completing the survey multiple times.

Research has been conducted on the uses and gratifications of various new media technologies by college students, but further research could be conducted on how students integrate these new communication technologies into their overall media usage and preference mix, and the gratifications they seek and receive from that mix. Research also could be conducted on how campus administrators and instructors integrate new media, including social media, into their student communication management strategy. Administrators and instructors may need to take into greater account the different media source preferences of active students, in order to more effectively target them with specific messages. Additional research could include repeating the survey each year to develop longitudinal data on changing media use and preference patterns among students.

References

- Avery, E. (2010). Contextual and audience moderators of channel selection and message reception of public health information in routine and crisis situations. *Journal of Public Relations Research* 22, 1-26. doi: 10.1080/10627261003801404
- Blumler, J. G. (1979). The role of theory in uses and gratifications studies. *Communication Research* 6, 9-36. doi: 10.1177/009365027900600102
- Blumler, J. G., & Katz, E. (1974). The uses of mass communications: Current perspectives on gratifications research. Beverly Hills, Calif.: Sage.
- Cantril, H. (1942). Professor quiz: A gratifications study. In P. F. Lazarsfeld & F. Stanton (Eds.), *Radio research 1941* (pp. 34-45). New York: Duell, Sloan & Pearce.
- Dozier, D. M., Grunig, L. A., & Grunig, J. E. (1995). *Manager's guide to excellence in public relations and communication management*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Emery, M., & Emery, E. (1988). *The Press and America: An Interpretive History of the Mass Media*. Englewood Cliffs, NJ: Prentice-Hall.
- Facebook. (2010, October). Retrieved October 15, 2010, from http://www.facebook.com/press/info.php?statistics
- Flanagin, A. J. (2005). IM online: Instant messaging use among college students.

 Communication Research Reports, 22, 175-187. doi: 10.1080/00036810500206966
- Grunig, J. E. (1992). Communication, public relations, and effective organizations: An overview of the book. In J. E. Grunig (Ed.), *Excellence in public relations and communication management* (pp. 1-28). Hillsdale, NJ: Lawrence Erlbaum.
- Grunig, J. E. (1993). Implications of public relations for other domains of communication. *Journal of Communication 43*(3), 164-173.

- Grunig, J. E. (1997). A situational theory of publics: Conceptual history, recent challenges and new research. In D. Moss, T. MacManus, & D. Vercic (Eds.), *Public relations research:*An international perspective (pp. 3-46). London: International Thomson Business Press.
- Grunig, J. E. (2009). Paradigms of global public relations in an age of digitalization. *Prism* 6(2): http://praxis.massey.ac.nz/prism_on-line_journ.html
- Henke, L. L. (1985). Perceptions and use of news media by college students. *Journal of Broadcasting & Electronic Media*, 29, 421-436.
- Hilltopics. (2010, October). Retrieved October 18, 2010, from http://dos.utk.edu/files/hilltopics_10_11.pdf
- Hwang, H. S., & Lombard, M. (2006). Understanding instant messaging: Gratifications and social presence. In *Proceedings of PRESENCE 2006* (pp. 50-56).
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Uses and gratifications research. *The Public Opinion Quarterly*, *37*(4), 509-523.
- Ledingham, J. A. (2003). Explicating relationship management as a general theory of public relations. *Journal of Public Relations Research*, 15(2), 181-198.
- Leung, L. (2007). Unwillingness-to-communicate and college students motives in SMS mobile messaging. *Telematics & Informatics* 24(2), 115-129.
- Leung, L., & Wei, R. (2000). More than just talk on the move: Uses and gratifications of the cellular phone. *Journalism and Mass Communication Quarterly*, 77(2), 308-320.
- Ling, R., & Baron, N. S. (2007). Text messaging and IM: Linguistic comparison of American college data. *Journal of Language and Social Psychology*, 26, 291-298. doi:10.1177/0261927X06303480
- Lundberg, D., & Hulten, O. (1968). *Individen och massmedia*. Stockholm: EFI.

- McQuail, D., Blumler, J. G., & Brown, J. (1972). The television audience: A revised perspective.

 In D. McQuail (Ed.), *Sociology of Mass Communication* (pp. 135-165). Middlesex,

 England: Penguin.
- Naismith, L. (2007). Using text messaging to support administrative communication in higher education. *Active Learning in Higher Education* 8, 155-171. doi: 10.1177/1469787407078000
- National Science Foundation. (2010, October). Retrieved October 16, 2010, from http://www.nsf.gov/about/history/nsf0050/internet/internet.htm
- O'Keefe, G. J., & Spetnagel, H. T. (1973). Patterns of college students' use of selected news media. *Journalism Quarterly*, 50, 543-548.
- Raacke, J., & Bonds-Raacke, J. (2008). MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites. *Cyberpsychology & Behavior* 11(2), 169-174.
- Rubin, A. M. (2002). The uses-and-gratifications perspective of media effects. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (2nd ed., pp. 525-548). Mahwah, NJ: Lawrence Erlbaum.
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication* & *Society*, 3(1), 3-37.
- Stafford, T. F., Stafford, M. R., & Schkade, L. (2004). Determining uses and gratifications for the internet. *Decision Sciences* 35(2), 259-288.
- UT ALERT. (2010). Retrieved October 21, 2010, from https://www.utk.edu/utalert/
- Wimmer, R. D., & Dominick, J. R. (1994). *Mass media research: An introduction*. Belmont, CA: Wadsworth.

Appendix

Complete Survey Instrument

Student Communication at UT Knoxville

The purpose of this survey is to learn more about how students at the University of Tennessee, Knoxville, use various kinds of communication channels and how they prefer to communicate with the university on a wide variety of issues. The results will help UT improve the way it communicates with the campus community. All answers to the following questions will be kept confidential. Only aggregate results will be used by the researchers. Please complete the survey no later than October 1, 2010. For more questions about this survey, contact Dr. Elizabeth Avery, Associate Professor, School of Advertising and Public Relations, at ejavery@utk.edu.

CLASSES

-	you currently taking at least one class at the University of nessee this semester?
O	Yes
•	No
GRADE	
Wha	t is your grade level?
O	freshman
\mathbf{C}	sophomore
\mathbf{O}	junior
O	senior
O	master's student
O	doctoral student
•	professional degree student
TAKECLASS	
How appl	do you take classes this academic semester? (check all that y)
	On campus
	Online
LIVE	
Whe	re do you currently live?

	O	On-campus housing
	\mathbf{O}	Off-campus housing
ORGS		
	Δre v	you currently involved in university-related organizations?
-	\mathbf{O}	Yes
	\tilde{O}	No
		NO .
VOI UNT	TED	
		ou currently volunteer for university-related activities?
		Yes
	\sim	
	O	No
ENVACT	-	
		you currently aware of any environmentally-friendly activities
	-	ampus?
`	\bigcirc	Yes
	\tilde{O}	
	•	No
ENVALL		
	Dlos	se check all that you are aware of: (check all that apply)
		Hall Vols
		Make Orange Green
	<u>_</u>	Resident's Hall Power Challenge
	Ш	President's Climate Commitment
		Recycling Program
		RecycleMania
		Student Environmental Initiative Funding
		Other:
		None
ENVPRA	CTICES	
I	Pleas	se indicate which environmentally-friendly practices you
(curre	ently perform: (check all that apply)
		Alternative transportation (walk, bicycle, bus, trolley, carpool, etc.)
		Buy recycled/environmentally-safe products
		Composting
		Recycling
	$\overline{\Box}$	Use compact fluorescent light bulbs
		· · · · · · · · · · · · · · · · · · ·
	_	Use reusable water bottles, coffee mugs, grocery bags, etc.
	_	Other:

	None
_	ou currently read the "student@tennessee" weekly e-mail sletter? Yes No
OFTENRDST@ How O O O O O	often do you read the newsletter? Once a semester Less than once a month Once a month Every other week Every week
Why O	do you not read the newsletter? I am too busy. I have never received it. I don't find it useful. Other:
comi medi etc), indic	al Media Social media are defined as Web-based munication channels used mainly for social interaction. Social a types include blogs, social networking (Facebook, Twitter, instant messaging and texting, among others. Please ate the types of social media you use on a regular basis: ck all that apply) Blogs Social Networking Wikis Podcasts Photo Sharing Video Sharing Instant Messaging Text Messaging Second Life Facebook Twitter

		Other :					
		None					
PCON						_	_
		ommunicates v			_	•	
		nel listed below UT use that ch					ia preiei
			Not	Slightly	Somewhat		Highly
			preferred at all	preferred	preferred	preferred	preferred
	Blackl	board	O	O	O	\mathbf{O}	O
	Bullet	in boards	O	O	O	\mathbf{O}	O
	Faceb	ook	•	\mathbf{O}	\mathbf{O}	•	•
	Magaz	zines	•	\mathbf{O}	\mathbf{O}	•	•
	News	papers	O	O	O	O	•
	Perso	nal e-mail	O	O	O	O	•
	UT-pr	ovided e-mail	O	O	O	O	O
	Radio		O	O	O	\mathbf{O}	O
	Telepl	hone	O	O	O	O	O
	Televi	ision	O	O	O	O	O
	Text r	messaging	O	O	O	\mathbf{O}	O
	Twitte	er	O	O	O	\mathbf{O}	O
	U.S. N	Mail	O	O	O	O	O
	UT we	eb sites	O	O	•	O	O
UA							
		se indicate whi					
	_	lar basis to ob emic lectures,				-	
		y abroad, etc.)	_			ips/iiiiaii	ciai aid,
		Blackboard	•	•	. 37		
		Bulletin boards					
		Facebook					
		Magazines					
		Newspapers Personal e-mail					
		UT-provided e-ma	il				
		Radio					
		Telephone					

		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:
		None
PA		
		se indicate which communication channels you would prefer se to obtain academic information at UT (such as academic
		res, class registration, scholarships/financial aid, study
		ad, etc.) if they were available: (check all that apply)
		Blackboard
		Bulletin boards
		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone
		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:
		None
UENT		
	Pleas	se indicate which communication channels you use on a
	regu	lar basis to obtain information about entertainment at UT
	•	h as athletic events, concert, movies, etc.): (check all that
	apply	
		Blackboard
		Bulletin boards
		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail

		Radio
		Telephone
		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:
		None
PENT		
	Pleas	se indicate which communication channels you would prefer
		se to obtain information about entertainment at UT (such as
		etic events, concert, movies, etc.) if they were available:
	(che	ck all that apply)
		Blackboard
		Bulletin boards
		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone
		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:
		None
UV		
		se indicate which communication channels you use on a
	_	lar basis to obtain information about volunteering
		ortunities at UT (such as Habitat for Humanity, Dance
		thon, Student Government Association, etc.): (check all that
	apply	y) Blackboard
		Bulletin boards
		Facebook
	_	Magazines

		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone
		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:
		None
PV		
	Pleas	se indicate which communication channels you would prefer
		se to obtain information about volunteering opportunities at
	-	such as Habitat for Humanity, Dance Marathon, Student
		ernment Association, etc.) if they were available: (check all
	that	apply)
		Blackboard
		Bulletin boards
		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone Television
		Television Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:None
	_	
UENI	,	
DLIVI		se indicate which communication channels you use on a
		lar basis to obtain information about environmentally-friendly
	_	vities/practices at UT: (check all that apply)
		Blackboard
		Bulletin boards

		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone
		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:
		None
PENV		
	Pleas	se indicate which communication channels you would prefer
		e to obtain information about environmentally-friendly
	activ	ities/practices at UT if they were available: (check all that
	apply	/)
		Blackboard
		Bulletin boards
		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone
		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other :
		None
UOM		
	Pleas	se indicate which communication channels you use on a
	_	lar basis to obtain official messages from campus leaders
	(char	ncellor, provost and vice chancellors): (check all that apply)
		Blackboard

		Bulletin boards
		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone
		Television
		Text messaging
		Twitter
		U.S. Mail
		UT web sites
		Other:
		None
POM		
		se indicate which communication channels you would prefer
		se to obtain official messages from campus leaders
		ncellor, provost and vice chancellors) if they were available:
	(cne	ck all that apply)
		Blackboard Dillatin haanda
		Bulletin boards
		Facebook
		Magazines
		Newspapers Personal e-mail
		UT-provided e-mail Radio
		Telephone Television
		Text messaging
		Twitter
		U.S. Mail
	_	UT web sites
	_	Other:
	_	None
UI		

Indicate which communication channels you use on a regular basis to communicate with your instructors (faculty, lecturers, GTAs). (check all that apply)

		Blackboard
		Facebook
		Magazines
		Newspapers
		Personal e-mail
		UT-provided e-mail
		Radio
		Telephone
		Television
		Text messaging
		Twitter
		UT web sites
		Other:
		None
ΡI		
	Pleas	se indicate which communication channels you would prefer
		e to communicate with your instructors (faculty, lecturers,
) if they were available: (check all that apply)
		Blackboard
		Facebook
		UT Knoxville library web site
		Personal e-mail
		UT-provided e-mail
		Telephone
		Text messaging
		Twitter
		Other:
		None
UEмG		
	Pleas	se indicate which communication channels you use on a
		ar basis to obtain information about a campus emergency
		as fire, campus shooting, bad weather, etc.). (check all that
	apply	()
		Blackboard
		Bulletin Board
		Facebook
		Newspaper
		Personal e-mail
		UT-provided e-mail
		Radio

	1 Telephone
	Television
	Text messaging
	1 Twitter
	UT web sites
	Word of mouth
	Other:
	None
PEMG Do	ace indicate which communication channels you would profer to
	ase indicate which communication channels you would prefer to e to obtain information about a campus emergency (such as
	e, campus shooting, bad weather, etc.) if they were available:
	neck all that apply)
	1 Blackboard
	Facebook
	1 Newspaper
	Personal e-mail
	UT-provided e-mail
	Radio
	1 Telephone
	Television
	Text messaging
	T witter
	UT web sites
	Word of mouth
	Other:
	None
INTENV	
WŁ	nich of the following environmentally-friendly activities and
	ograms at UT would you be interested in learning more about?
-	neck all that apply)
	Alternative transportation (walk, bicycle, bus, trolley, carpool, etc.)
	Buy recycled/environmentally-safe products
	Composting
	Energy savings
	Hall Vols
	- Household Waste readerion (Water Bettles, reasone correct mags, plates, greeny
	ags)
	Paper waste reduction (printing, etc.)

		Recycling Program RecycleMania Other: None					
СС	Please indicate how much you agree with the following statements:						
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
		completely aware ues on campus.	•	O	O	•	0
	I don't get involved in any campus issues. Nothing can prevent me from taking action on campus issues.		O	•	•	0	O
			O	O	•	•	O
	inforn	never able to find nation about us issues.	O	O	O	O	O
	of env	completely aware vironmental issues mpus.	O	•	•	O	O
	enviro activi	t take part in any onmentally-friendly ties and behaviors mpus.	O	O	O	O	O
	from regard	ng can prevent me taking action ding campus onmental issues.	O	O	O	O	O
	inforn enviro activit	always able to find nation about onmentally-friendly ties and behaviors mpus.	•	0	•	•	0
PAGE							
	If UT chose only one communication channel to communicate with you exclusively about all university-related information which would you most prefer? O Blackboard O Facebook O Instant Messaging						

	O	Personal e-mail
	O	Text messaging
	O	Twitter
	O	UT-provided e-mail
	O	UT web sites
	O	Other:
	O	None of the above
WHYPUT		
W	/hy	?
D. 051		
PAGE1		
	Fo Re pu ag	r this last section, we have a few questions about you. member, no personally-identifiable information will be blicly released. The researchers will only consider gregated data in their analysis. anks!
	/ha [·] O	t is your gender? Male Female
^{4GE} What	t is	your age?
(0 - 255))	

ETHNICITY	
Plea	ase indicate your ethnicity:
O	Caucasian
O	African American
O	Hispanic
O	Native American
O	Other (please indicate ethnicity) :
O	Prefer not to answer
COLLEGE	
Whi	ch college are you enrolled in?
O	Agricultural Sciences and Natural Resources
O	Architecture and Design
O	Arts and Sciences
O	Business Administration
O	Communication and Information
O	Education, Health, and Human Sciences
O	Engineering
O	Law
O	Nursing
O	Social Work
O	Space Institute
O	Veterinary Medicine
O	Undecided
O	Not a student
MAJOR	
Wha	at is your major?
-	