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4

5 **Abstract**

6 Face-to-Face (FTF) communication is a high social presence communications technology
7 meaning that the sender's intended message is not likely to be ignored by the receiver. In
8 comparison, text-messaging is a low social presence communications technology where the
9 sender's message has a higher tendency to be ignored by the receiver. Text-messaging is by
10 far the most popular communications technology among a sizable percentage of the college
11 population. The act of help-seeking is a behavior that arises out of a human psychological
12 attitude or process that has been studied extensively by psychologists and educational
13 scholars. This study sought to investigate the behavioral intention (BI) of college students to
14 use short messaging service (SMS) text-messaging to complete the behavioral task of academic
15 help-seeking (AHS). The entire student body at a small, private junior college in eastern North
16 Carolina were surveyed. The findings revealing that although text-messaging was extremely
17 popular across all student groups, it did not fare as well as expected as a potential AHS tool.

18

19 **Index terms**— text-messaging; short message service (SMS); information systems (IS); information technology (IT); academic help-seeking (AHS).

21 **1 I. Introduction**

22 According to DePaulo and Fisher (1980), the consideration of two different types of psychological cost creates a
23 state of constant conflict among potential help-seekers. To explain, a help-seeker will weigh the risk of perceived
24 incompetence against the need to seek help for matters that he or she should already be able to competently
25 handle or address. In addition, the help-seeker will also weigh the perceived inconvenience experienced by the
26 person providing this help against his or her individual need for assistance.

27 In essence, DePaulo and Fisher (1980) suggested that if a potential help-seeker would risk embarrassment
28 due to a perceived incompetence by asking for help, he or she would feel less comfortable about seeking help.
29 As this study attempts to bridge the two worlds of Psychology and Technology, one particular communications
30 technology that warrants further research is short message service (SMS) textmessaging. SMS text-messaging
31 is an extremely popular low social presence communications technology among American college students
32 (Quan-Haase, 2008). Text-messaging allows users to communicate in an on-screen, text-based format utilizing
33 combinations of alphanumerical characters (Soriano, Raikundalia, & Szajman, 2005). Soriano et al. (2005)
34 iterated that text-messaging offers a means for increased social interaction in addition to an accurate, efficient,
35 and distinct means of communication. Perry, O'Hara, Sellen, Brown, and Harper (2001) acknowledged that
36 research on mobile communications media, such as text-messaging, has emerged as an important field of study
37 within itself.

38 **2 II. Related Work**

39 The essence of AHS, as interpreted from definitions in the scholarly literature, suggests that AHS is a set of skills
40 that involves asking for assistance and advice from available help sources (Fallon & Bowles, 1999; Gould, Udry,
41 Bridges, & Beck, 1997).

42 One important justification for the current problem first stems from the fact that scientific study is currently
43 lacking that could possibly reveal how textmessaging can benefit college students in completing the task of AHS
44 (Kitsantas & Chow, 2007). Second, it should be noted that research involving text-messaging is still relatively

4 A) DESCRIPTIVE APPROACH

45 new (Soriano, Raikundalia, & Szajman, 2005) which could explain why few if any studies have been done to
46 address its potential as a useful mobile communications method for the completion of interpersonal tasks. The
47 primary goal of this study was to investigate college students' behavioral intention (BI) to use text-messaging
48 to complete the interpersonal task of academic help-seeking (AHS). The contribution that this study makes to
49 the scholarly community is a more in-depth understanding of text-messaging and its usefulness for completing
50 interpersonal tasks in the absence of verbal cues typically present and desirable in human communication. Three
51 research questions were investigated to achieve the primary research goal.

52 The first research question sought to measure behavioral intention (BI) to use text-messaging among college
53 students to complete tasks in an AHS context. RQ2: How was text-messaging technology viewed as a medium
54 for interpersonal task completion, specifically with regard to AHS?

55 The second research question sought to reveal how the college students' actually felt, and the opinions they
56 formed upon the potential selection of textmessaging and its usefulness towards completing AHS tasks. It
57 is argued that despite its immense popularity, no studies have been found in the scholarly literature to date
58 that have explored text-messaging exclusively for college students as a means for completing the task of AHS.
59 Additionally, previous BI to use IS studies have focused on media selection and choice regarding a variety of
60 communications media, but no studies were found to date that included text-messaging as an option. RQ3:
61 What are the characteristics of college students who prefer text-messaging technology to complete the task of
62 AHS?

63 The third research question sought to identify the characteristics of users who may actually utilize textmes-
64 saging for engaging in AHS. The third research question is important as user attitudes, gender, experience with
65 the technology, and competency, expressed as user characteristics, are useful in the human-technology matching
66 component of media selection.

67 3 III. Research Methods

68 This study employed a descriptive approach to assess behavioral intention to use text-messaging for the
69 interpersonal task of AHS among college students. The interpersonal task of AHS was assessed with the aid
70 of a variety of AHS vignettes. This study was conceived based upon previous research reviewed in the scholarly
71 information systems (IS) literature (Hoar and Flint, 2008, Kitsantas and Chow, 2007, Markett, Sánchez, Weber,
72 & Tangney, 2006).

73 As part of an overview session, the participants were asked to complete an open-ended questionnaire where
74 they answered a series of questions pertaining to their individual opinions with regard to text-messaging. The
75 open-ended questions were analyzed using the process of content analysis to seek any common themes that were
76 tallied to reveal the respondents viewpoints and preferences with regard to textmessaging.

77 The participants then viewed a series of vignettes depicting hypothetical scenarios that ultimately suggested
78 the need for some type of AHS assistance. Based on the information contained in the vignettes, the participants
79 were then asked to indicate whether textmessaging would be a viable option for that particular scenario and to
80 provide a brief rationale for their answers. A 6-point Likert-scale survey instrument was administered to measure
81 computer user self-efficacy (CUSE) as it influences behavioral intention (BI) to use. Additionally, an ordinal scale
82 instrument was administered to capture the participant's experience using technology (EUT), in this instance,
83 textmessaging. The participants concluded by completing a survey instrument recording demographic data.

84 4 a) Descriptive Approach

85 This study involved descriptive research. Utilizing the survey method, the participants were administered surveys,
86 questionnaires, and open-ended questions in order for the principal researcher to answer the three research
87 questions posed. The observations (data) that were collected were then described in both textual and graphical
88 form. What this study did not attempt to do was draw relationship-based conclusions from the data that was
89 received. Qualitative and quantitative research methods were employed to report the findings.

90 Qualitative research deals almost exclusively with meanings, expressed either verbally or in writing, while
91 quantitative research deals specifically with numerical distributions and frequencies when collecting and analyzing
92 the data (Spratt, Walker, & Robinson, 2004). The quantitative aspect of this study consisted of a 6-point Likert-
93 scale survey instrument that was utilized to collect data pertaining to the participants' stated comfort and skill
94 levels with regard to text-messaging. The 6-point Likert-scale consisted of a range from (1) "Disagree" to (6)
95 "Agree". The qualitative aspect of this study consisted of an open-ended questionnaire where the participants
96 stated, in their own words, their likes and dislikes and frequency of use with regard to textmessaging that was
97 the focus of this study. Consequently, the written statements from the participants assisted in explaining several
98 items of interest such as if they would in fact utilize textmessaging for AHS, and a content analysis revealed
99 why text-messaging was found to be effective for AHS, or not. Utilizing descriptive research methods, this study
100 sought to meet the research goal to examine BI to use SMS text-messaging to allow college students to engage in
101 a specific interpersonal task. The following sections of this paper will describe in detail how each of the research
102 questions for this study was answered.

103 Research Question One RQ1 addressed: How does the availability of textmessaging technology impact intention
104 toward completing interpersonal tasks among college students?

105 5 Instrument Selection

106 An open-ended questionnaire was administered as part of an overview session after the participants read
107 descriptive passages regarding the features and capabilities of SMS text-messaging. Forman (2009) utilized
108 an open-ended questionnaire to elicit additional responses from the participants with regard to the construct
109 of perceived consequences. This study used a slightly modified version of Foreman's instrument to allow the
110 participants to state their individual likes and dislikes with regard to text-messaging. This data was analyzed
111 and categorized for a detailed qualitative summary of the findings. The open-ended questionnaire also revealed
112 how the participants may or may not elect to use text-messaging for AHS completion.

113 6 b) Data Analysis and Statistical Measures

114 The participants initially completed an openended questionnaire allowing them to state one advantage or like
115 and one disadvantage or dislike with regard to text-messaging. Utilizing descriptive statistics, the responses
116 were tallied and averaged, expressed as total percentages. The responses from the open-ended questionnaire
117 were also calculated as total percentages and displayed as frequency counts in a distribution table. Part one
118 of a validated survey instrument from Cassidy and Eachus (2002) assisted in measuring CUSE toward text-
119 messaging for completing the task of AHS. This instrument asked the respondents to indicate the strength of
120 their agreement or disagreement with select statements using a numerical rating scale between 1 and 6 that
121 most closely represented how much they agreed or disagreed with each statement. The lower their number, the
122 more they disagreed with the statement. The higher their number, the more they agreed with the statement.
123 Frequency distribution tables were created with data from the 6-point Likert-scale to reveal the distribution and
124 compare how they were viewed by the respondents as a means to complete the interpersonal task of AHS.

125 7 Research Question Two RQ2 addressed: Out of the available 126 selection of communications media, how was text-messaging 127 technology viewed as a medium for interpersonal task comple- 128 tion, specifically with regard to AHS? Instrument Selection

129 Vignettes were adopted from Spendelow and Jose (2010), Altschuller and Benbunan-Fich (2009), Gattiker and
130 Kelley (1999), and Hoar and Flint (2008) to aid in revealing the participants BI to use textmessaging for AHS.
131 The vignettes and questionnaire that were utilized were subjected to a validation process for this study. The
132 nominal group technique (NGT) was implemented for this purpose. According to Abdullah and Islam (2011), the
133 NGT is designed to generate a large number of ideas related to an issue resulting in brainstorming and the equal
134 presentation of ideas from within a structured group, while also preventing one single person from dominating
135 the discussion.

136 Furthermore, the NGT is a useful tool in problem identification and its small group approach promotes
137 shared solutions and the ranking of ideas (van der Waal & Uys, 2009). Vignettes were utilized to provide the
138 contextual hypothetical scenarios that allowed the participants to state their BI to use text-messaging in order
139 to seek academic help (AH). Vignettes are popular clinical assessment methods that have led to many important
140 findings in help-seeking research (Spendelow & Jose, 2010). One type of vignette is referred to as an anchoring
141 vignette that contains a short description of a hypothetical situation measuring a single concept (King, Murray,
142 Salomon, & Tandon, (2004). According to Spendelow and Jose (2010), vignettes can be written in second
143 person reflecting the self or third person looking at a situation through the experience of another. The anchoring
144 vignette approach was adopted for this study to provide AHS scenarios that the study participants reflected upon
145 in an AHS context. A series of openended follow-up questions were devised that aligned with each vignette, thus
146 providing the participants with the opportunity to indicate their intention to use textmessaging in each of three
147 AHS scenarios. The openended questions were developed based upon the previous work of Foreman ??2009) who
148 used a similar instrument in her investigation of perceived consequences with digital piracy.

149 8 c) Data Analysis and Statistical Measures

150 The data analyzed and measured to answer RQ2 were collected with two data collection instruments. The first
151 was an instrument containing a series of AHS vignettes. The vignettes were developed depicting subjects in a
152 situation that would prompt the need for AH. Written in second person narrative, the reader placed him or herself
153 into the AHS scenario. Accompanying the vignettes was a series of corresponding questions that dictated brief
154 written responses from the participants allowing them to state whether or not they would utilize text-messaging
155 in that particular situation and also include their rationale to justify their decision.

156 **9 Research Question Three RQ3 addressed: What are the
157 characteristics of college students who prefer text-messaging
158 technology to complete the task of AHS? Instrument Selec-
159 tion**

160 This study captured and measured characteristics of the participants to include experience using technology
161 (EUT), computer user self-efficacy (CUSE) and demographic data. CUSE was measured with a validated forced-
162 choice instrument by Cassidy and Eachus (2002) measuring CUSE and EUT. Demographic data of gender, race,
163 and class rank were collected using a slightly modified version of an instrument validated and utilized by Wynn
164 (2009) who examined BI relating to the online shopping experience. However, categories from that instrument
165 pertaining to age, salary range, employment status, marital status, and level of education were omitted in the
166 modified instrument to be used in this study.

167 **10 Data Analysis and Statistical Measures**

168 A demographics survey instrument required the study participants to submit information using forced choice
169 responses. For example, Gender (1 = male, 2 = female), Race (1 = White, 2 = African American, 3 =
170 Hispanic/Latino, 4 = Asian, 5 = Native American, 6 = Other/Mixed Race), and Class (1 = Freshman, 2 =
171 Sophomore). Categories pertaining to class and membership in special student populations were substituted
172 for omitted categories deemed inapplicable to the current study. The demographic data was used to categorize
173 college students who may consider textmessaging to be useful for completing interpersonal tasks such as AHS. A
174 content analysis was conducted where the data was cross-tabulated by gender, class rank, special population, race
175 and ethnicity compared with CUSE and EUT. The responses from the demographics instrument were displayed
176 as frequency counts and percentages displayed in distribution tables. The data collected from the instrument by
177 Cassidy and Eachus (2002) to measure EUT and CUSE was analyzed to reveal the following information:

178 ? A description of the participants' actual hands-on experiences with text-messaging. ? A description of the
179 participants' perceived skill and comfort in the use of text-messaging. ? A cross-sectional view of the participants'
180 actual hands-on experiences and perceived skill and comfort in the use of text-messaging. Males were compared
181 with females to measure the AHS equivalencies between both genders and the results were displayed graphically
182 in a series of frequency tables. The same comparisons were made between freshmen and sophomores, as well as
183 students in special populations. The ordinal data from the Cassidy and Eachus instrument measuring EUT and
184 CUSE along with the data collected from the forcedchoice demographics instrument collectively represent the
185 user characteristics of college students to assist in answering RQ3.

186 **11 e) Population and Sample**

187 The sample was derived from the college student population at a small residential junior college in Northeastern
188 North Carolina with a total enrollment of approximately 600 students. Approximately 43% of the study
189 population is comprised of athletes (C.B. Sloan, personal communication, January 03, 2012). The entire
190 population was sampled in an attempt to reach the highest validity possible. However, the minimum sample
191 size required from a population of 600 is 248 participants based on a 95% confidence level with a margin of error
192 of 5%. At the conclusion of the data collection period over the course of approximately six months, a total of 313
193 students had completed the survey with 259 completing the survey in its entirety without skipping any questions.
194 A total of 54 incomplete surveys were omitted from the study altogether.

195 **12 f) Validity and Reliability**

196 Vignettes were developed in this study to answer RQ2 that was subjected to an expert NGT panel to undergo
197 the process of establishing validity and reliability. The process of reliability is meant to evaluate a measure for its
198 accuracy. Validity ensures that the process, technique or instrument that aided in measuring an intended concept
199 does in fact measure that intended concept (Sekaran, 2003). Additionally, Sekaran offered that external validity
200 indicates the generalize ability of the results of a study to other people, settings, or events. This generalize ability
201 within a study increases upon using relevant variables examined in previous research and then upon excluding
202 any non-relevant variables (Hair, Anderson, Tatham, & Black, 1998).

203 **13 g) Pre-Analysis Data Cleaning**

204 Pre-analysis data cleaning involves detecting any irregularities in order to preserve accuracy during the data
205 analysis phase. Data needs to be cleaned prior to analysis to detect and cope with response-set, missing data,
206 outliers or extreme cases, and preserving the accuracy of the data (Levy, 2006). According to Hair et al. (2006),
207 response-set occurs when there is a "series of systematic responses by a participant that reflects a bias or consistent
208 pattern" (p. 558).

209 There was a series of steps that were taken to complete the pre-analysis data cleaning stage of this study.
210 Beginning with the accuracy of the date, the fact that the participants in this study had limited responses to
211 choose from upon answering the survey questions should have resulted in either eliminating or reducing the

212 possibility of invalid responses impacting accuracy of the data. However, there were some responses found to
213 be inapplicable and unusable from the respondents when answering some of the questions within the survey
214 instruments. For example, the abbreviation "idk" (I don't know) appeared numerous times by some of the
215 respondents. "No" or "none" appeared at inappropriate times in the responses for some of the questions, as well
216 as what appeared to be other unrecognizable abbreviations instead of an appropriate response. These unusable
217 responses were separately tallied and reported as uncategorized responses.

218 Response-sets occur when the participants' responses may not reflect their true intentions, beliefs, opinions, or
219 when the participants only use a portion of the rating scale. ??erlinger consider eliminating them from the study.
220 Upon instances of what was deemed to be valid issues of response-set, the suspect questions were invalidated
221 and disqualified in the data analysis phase. Mertler and Vannatta (2005) also suggested that missing data, or
222 incomplete surveys, should be addressed in similar fashion. Skipped responses were noted in the findings within
223 the distribution tables.

224 14 IV. Results

225 15 Results for Research Question 1: How does the availability 226 of text-messaging impact intention toward completing AHS 227 tasks among college students?

228 With regard to RQ1, themes derived from a content analysis of the questionnaires revealed, as far as the most
229 "advantages", 45% (n = 117) considered text-messaging to be "fast" and another 16% (n = 43) considered it
230 to be "easy". Other themes identified from the findings indicated that 16% (n=43) considered it a favorable
231 alternative to actually talking on the telephone, % (n=37) indicated its likability due to the fact that it fosters
232 a sense of privacy, and 08x% (n=22) admired and respected text-messaging for the simple reason that it is not
233 a communication media meant for formal communication. Since text-messaging is a cell phone technology, the
234 respondents also included cell phone traits in the content analysis. As far as disadvantages, the content analysis
235 revealed that the largest disadvantage listed was "no service/signal" (n = 91) or 35%, "wait time" (n = 62) or
236 24%, "misinterpretations" (n = 56) or 21%, and "impersonal" (n = 27) or 10%. Uncategorized responses totaled
237 n = 23 or 8% of the disadvantages of using text messaging as a behavioral intention toward completing the
238 interpersonal task of AHS.

239 To better assess text-message usage and to what extent college students use it to complete interpersonal tasks
240 such as AHS, the survey asked respondents to indicate the strength of their agreement or disagreement with select
241 statements using a rating scale with numbers between 1 and 6 that most closely represented how much they agree
242 or disagree with a statement. The lower their number, the more they disagreed with the statement. The higher
243 their number, the more they agreed with the statement. All responses are reported in Table 1. In Table 1, a
244 rating average of 5.03 illustrates that the majority of respondents indicated working with text-messaging saves a
245 lot of time (Q4). Less than 23 respondents selected 3 or less as an option for the question. Stronger support for
246 clarity of using textmessaging was illustrated with a rating average of 1.64, which meant that the respondents
247 disagreed with the idea that text-messaging, was confusing (Q1). The respondents were split on the idea of using
248 textmessaging as an aid to learning, as noted by the rating average of 3.69 of Question 2. Also, as observed
249 in Question 3 (rating average of 2.67), approximately half of the respondents believe that technological things
250 happen when using text-messaging (and they do not know why). Overall, as referenced in Question 5, with a
251 rating average of 1.85, the respondents do not find issues related to text-messaging to be frustrating to them.

252 16 Results for Research Question 2: Out of the available 253 selections of communications media, how was textmessaging 254 viewed as a medium for interpersonal task completion, 255 specifically with regard to AHS?

256 Anchoring vignettes provided contextual hypothetical scenarios that allowed the respondents to state their
257 preferred source of AH and whether or not they would use text-messaging, expressed as their BI to use, in
258 the context of this study. Three vignettes were developed for this study. The first vignette depicted a student
259 who is struggling in a Biology class and summarily needs AH. The second vignette depicted a student with
260 personal family issues that were beginning to affect the student's grades. The third vignette depicted a student
261 with a problematic roommate whose antics were creating an environment where the student cannot study, thus
262 resulting in a drop in the student's grades.

263 **17 Scenario 1: "Your Biology Professor has announced a final**
264 **exam worth 75% of your grade that will be given at your**
265 **next class meeting. You are struggling with the course**
266 **and desperately need to pass this upcoming exam. Your**
267 **professor has given you several options if you need help**
268 **preparing for the exam. First, the professor recommends**
269 **reporting to the Biology lab for FtF peer learning and**
270 **tutoring with other Biology students outside of class. The**
271 **professor also will be available for a one-hour virtual review**
272 **session of the material covered in class where you can contact**
273 **him/her by instant messaging (IM). You also are given the**
274 **option to send the professor an e-mail where you can ask**
275 **questions and seek additional study tips. Your professor**
276 **also provided a cell phone number where you can call or**
277 **send a text-message with any questions prior to the exam.**
278 **You also have friends who are serious Biology students that**
279 **you could solicit for help."**

280 Text-messaging was found to be a very popular based on the respondents' data that was received previously
281 from the open-ended questionnaire. Surprisingly, only a total of (n = 15) 5.5% of the respondents stated that
282 they would use text-messaging to seek AH in this scenario. However, the majority of the respondents (n = 257)
283 93.7% indicated that they would not use text-messaging for AHS and a negligible total of respondents (n =
284 2) 0.8% stated they would not seek AH at all in scenario one. Table 2 summarizes the full distribution of BI
285 to Use text-messaging in this context. As with vignette one, a large percentage of the respondents (n = 234)
286 88.0% indicated that they would not use text-messaging in this AHS scenario, while (n = 8) 3.0% revealed that
287 they would not seek help at all for scenario two as illustrated in table 3. Only a total of (n = 24) 9.0% of the
288 respondents stated that they would use text-messaging for AHS purposes in this scenario as illustrated in table
289 3. Scenario 3: "Your roommate seems to repeatedly make irresponsible decisions and then calls on you to bail
290 him/her out of these situations. You frequently lose sleep and are fatigued as a result of being a nursemaid to
291 your roommate, thus causing your grades to slip. You are on a full academic scholarship and you must maintain
292 a certain grade point average to maintain your eligibility.

293 **18 You need to speak with someone to get advice on how**
294 **to deal with your roommate and preserve your academic**
295 **scholarship. You could seek online help from a college official**
296 **by e-mail, contact your residence community coordinator**
297 **(RCC) by IM, visit the school counselor in person, call a**
298 **parent by phone, or text a friend for advice."**

299 The results from the third vignette yielded that text-messaging again slightly increased in frequency as it was
300 selected by (n = 24) 9.2% of the respondents. But again, it did not meet or surpass the level of respondents (n
301 = 222) 84.7% who indicated that they

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304 would not use it in this scenario to seek AH. A total of (n = 16) 6.1% revealed that they would not seek AH
305 at all for scenario three as revealed in table 4. The data were derived from part one of the CUSE instrument
306 by Cassidy and Eachus (2002) that also measured EUT for the five communications technologies utilized in
307 this study was cross-tabulated with data from a demographic collection instrument in the following categories:
308 gender, race/ethnicity, class rank, and membership in special populations. The following discussion of RQ3 offers
309 conclusions of the cross-tabulated data results for each category.

310 Results observed when examining the various demographic groups and which preferred textmessaging to
311 complete the interpersonal task of AHS were revealed using cross-tabulation. The sample consisted of a nearly
312 equal distribution of females (n = 133) 50.7% and males (n = 126) 48.0% respectively. With regard to gender and
313 technology, females respondents indicated more experience using technology overall than the male respondents.
314 However, the levels of competence varied by gender. In an examination of text-messaging, both males and females
315 were very close to equal in their level of experience, specifically as males reported "Quite a lot" of experience
316 with text-messaging (n = 26) 10% and females (n = 27) 10.4%. Text-messaging was highly popular among the
317 respondents 70%. This high response rate seems justifiable as the respondents reported that more than 98% of
318 them owned cell phones.

319 Results observed when examining the demographic "race/ethnicity" when cross-tabulated yielded interesting
320 observations. Cumulatively, each of the racial/ethnic groups responded at a rate of 80% or more that they had
321 "quite a lot" or "extensive" experience using text-messaging.

322 An examination of text-messaging yielded a high response across all special categories and the belief that they
323 have a great deal of experience using it 94%. Although text-messaging was extremely across all groups popular,
324 it was not deemed preferable for the purpose of seeking AH.

325 **20 V. Discussion**

326 Pertaining to CUSE and EUT, this generation of young adults is extremely comfortable with technology. This
327 is evident from the data obtained from the 6-point Likert-scale instrument and the forced-choice ordinal scale
328 instrument by Cassidy and Eachus (2002) for measuring CUSE and EUT. The mean scores from the 6-point
329 Likert-scale instrument for measuring CUSE indicated that the majority of the respondents described themselves
330 as skilled, competent, and comfortable with text-messaging.

331 Three scenarios (vignettes) were administered to the respondents that ultimately prompted a need to seek
332 AH. Upon viewing each vignette the respondents were then asked to state whether or not they would utilize
333 text-messaging to seek AH in the given scenario.

334 **21 Scenario One**

335 Vignette one dealt with the respondents reacting as a student on the verge of failing a difficult course. Text-
336 messaging was viewed as popular and favorable as a form of communication among practically all of the
337 respondents; however, they did not find it to be an ideal mechanism to facilitate the AHS task. Although
338 extremely popular as a social networking communications method, text-messaging was believed to allow for
339 misinterpretation in communication and it was also identified as an impersonal method of communication for
340 more serious and formal encounters. In sum, the respondents stated that text-messaging was too informal and
341 impersonal to be an effective AHS choice for scenario one.

342 **22 Scenario Two**

343 Upon viewing vignette two, the respondents reacted as another student who was also struggling to maintain
344 his/her grades, but there was an additional underlying root cause of personal family problems that attributed
345 to the student's academic peril. It is possible that the additional personal family problems element prompted
346 a number of the respondents to favor the applicability of text-messaging, as a help-seeking mechanism, more
347 favorably in this situation than in the previous scenario. If informal contact with friends or family would be the
348 preferred means to seek help in this instance then text-messaging would have perhaps been a sensible choice.

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351 **24 Scenario Three**

352 Upon viewing vignette three, the respondents were viewed as a student who was living with an irresponsible
353 roommate whose antics ultimately began to take its toll on the respondent's grades. The responses from the
354 open-ended questionnaire and vignette for scenario three seemed to suggest that textmessaging appeared to
355 be favored for brief, informal communications among close friends, family members, and endeared inner texting
356 circles, while being discouraged for use within more structured, formal communications. Furthermore, conclusions
357 of the findings suggest that text-messaging doesn't appear to offer the same value for completing the interpersonal
358 task of AHS as a high social presence communications media might such as face-to-face (FtF) and the telephone.

359 Conclusions drawn from cross-tabulated demographic data and EUT indicate that the majority of the
360 respondents have a great deal of experience with text-messaging making them proficient and comfortable with
361 the use of it. Overall, females reporting in this study appear to have more experience with text-messaging
362 and as such, would conceivably use it more than males. Across racial boundaries, over 80% of the respondents
363 reported a great deal of experience with text-messaging and in the case of the present study, blacks indicated
364 higher frequency for experience than whites. This is attributable to the fact that the student population of the
365 target institution has a disproportionate black to white ratio in favor of black students. Only 13 respondents

366 self-identified as Hispanic and reported either "quite a lot" or "extensive experience" with text-messaging. This
367 study was not conceived to be ethnographic and therefore race and ethnicity concerns are actually beyond its
368 scope. However, since the target institution had a high racial demographic in favor of African Americans, the
369 data was additionally cross-tabulated by race/ethnicity and it is felt that this data was worthy of at least brief
370 mention in this conclusion section.

371 More freshmen responded to the surveys than sophomores in this study. However, freshmen and sophomores
372 expressed similar beliefs in their experiences with text-messaging. The age difference between traditional college
373 freshmen and sophomores is small, typically with no more than a two year difference which could explain their
374 similarly stated experience with text-messaging.

375 Across special campus populations, student athletes were the largest group represented followed by extracur-
376 ricular groups. At the target institution, student athletes comprise approximately 60% of the entire student
377 body. This disproportionate ratio explains the high student athlete response rate for this study. All groups
378 surveyed, including student athletes, expressed that they had a great deal of experience with text-messaging.
379 Since well over 90% of all respondents indicated ownership of a cell phone, this would explain the high rates
380 of experience and comfort-level reported for text-messaging across all demographic groups. Text-messaging was
381 used extensively among all groups surveyed in this study, however, the findings revealed that it was not the
382 most favored communications media for the interpersonal task of seeking AH. Even though the popularity of
383 text-messaging has superseded all other popular communications media commonly used today as the preferred
384 means of communication among college students, the age demographic of traditional college students reinforces
385 the conclusion that technology that is perceived to be outdated and not "hip" will typically be shunned in favor
386 of newer, trendier technology.

387 DePaulo and Fisher (1980) looked specifically at female college students in their study and found that the
388 female participants were reluctant to seek help during that period. However, taking into consideration that
389 DePaulo and Fisher conducted their study over 30 years ago, current literature has shifted the reluctance to seek
390 help to collegiate males, as females have now been found to be more receptive to seeking formal help (Tsang & Day,
391 2007; Vogel, Wester, & Larson, 2007). Summarily, the findings of the current study provide ongoing support for
392 the conclusion from DePaulo that potential help-seekers take into consideration the psychological cost of seeking
393 assistance.

394 25 VI. Conclusion

395 This study has several implications across the fields of information systems (IS), education, and psychology. From
396 an IS perspective, this study endeavored to ascertain if text-messaging could possibly be used in an unconventional
397 way to achieve the task of AHS. This study also identified a gap in the scholarly research on text-messaging as
398 a relatively new technology, despite its immense world-wide popularity. The results of this study also attempted
399 to reveal any gaps among a variety of groups with regard to access to technology, ownership of technology, and
400 skill and experience level with technology.

401 The findings of the current study are significant in the fact that despite its popularity among college students
402 the world over, the college students who participated in this study were reluctant to use textmessaging for the
403 important self-initiating interpersonal task of AHS. Although this study sought to contribute to the scholarly
404 body of knowledge (BOK) within information systems, a main component of this research has an overarching
405 help-seeking element within it and help-seeking is a behavioral condition that is firmly rooted in psychology.
406 Therefore, the results and conclusions drawn from this work should also benefit teachers, learning specialists,
407 and school psychologists.

408 26 Future Work

409 Ample opportunities for continuing research are revealed as a result of this work. Of course, generalize ability is
410 an important factor as older age groups should be examined with regard to communications technology usage.
411 Future research could also include replicating this work in a business related unit where textmessaging is heavily
412 utilized in a team environment. Situating the study or conducting a similar study in another interpersonal context
413 other than AHS would be highly informative as well. As with older age groups, individuals who fall outside the
414 ages of traditional college students such as adolescents and senior citizens would offer a different perspective on
415 BI to use text-messaging. Because the sample size for the current study was relatively small, this study should
416 be conducted again in a larger environment with a more sizable population to see if the results and conclusions
417 drawn are similar, the same, or vastly different than the results and conclusions attained here. And finally, more
418 research is needed on text-messaging in particular, due to the fact that it is a fairly new technology and hence,
419 there is a vast amount of unexplored territory to be addressed in the scholarly literature. ^{1 2}

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1

Question	Disagree (1)	(2)	(3)	(4)	(5)	Agree (6)	Rating	Average	Response Count
189	27	14	17	9	5	1.64		261	
29	46	44	54	33	55	3.69		261	
99	45	31	42	18	26	2.67		261	
8	10	22	36	36	149	5.03		261	
170	32	19	21	7	12	1.85		261	

Figure 1: Table 1 :

2

In this scenario	Answer Options	Response Percent	Response Count
I would utilize text-messaging		5.5%	15
I would not use text-messaging		93.7%	257
I would not seek any help at all		0.8%	2
Answered question			274
Skipped question			39

Figure 2: Table 2 :

3

In this scenario	Answer Options	Response Percent	Response Count
I would utilize text-messaging		9.0%	24
I would not use text-messaging		88.0%	234
I would not seek any help at all		3.0%	8
Answered question			266
Skipped question			47

Figure 3: Table 3 :

4

In this scenario

Answer Options

I would utilize text-messaging

I would not use text-messaging

I would not seek any help at all

Answered question

Skipped question

Results for Research Question 3: What are the characteristics of college students who prefer text-messaging to complete the task of AHS?

	Response Per- cent	Response Count
I would utilize text-messaging	9.2%	24
I would not use text-messaging	84.7%	222
I would not seek any help at all	6.1%	16
Answered question		262
Skipped question		51

Figure 4: Table 4 :

420 [Everyday Communication. The Information Society] , *Everyday Communication. The Information Society* 24
421 (2) p. .

422 [Soriano et al. ()] 'A Usability Study of Short Message Service on Middle-Aged Users'. C Soriano , G K
423 Raikundalia , J Szajman . *Proceedings of the 17th Australia Conference on Computer-Human Interaction*,
424 (the 17th Australia Conference on Computer-Human InteractionAustralia) 2005. p. .

425 [Mertler and Vannatta ()] *Advanced and Multivariate Statistics: Practical Application and Interpretation*, C A
426 Mertler , R A Vannatta . 2001. Los Angeles, CA: Pyrczak Publishing.

427 [Forman (2009)] *An Exploratory Study on the Factors Associated with Ethical Intention of Digital Piracy*.
428 *Dissertation*, (UMI No. AAT3380421) Retrieved, A E Forman . 2009. July 30. 2011. (from ProQuest
429 Dissertations and Theses database)

430 [Wynn (2009)] *An Investigation of the Contributions of Gender, Shopping Orientation, Online Experience,*
431 *and Website's Interactive Features to Consumers' Intentions to Engage in Apparel E-commerce Shopping*.
432 *Dissertation*, (UMI No. AAT3387047) Retrieved, A J Wynn . 2009. June 30. 2011. (from ProQuest
433 Dissertations and Theses database)

434 [Van Der Waal and Uys ()] 'Applying the Nominal Group Technique in an Employment Relations Conflict
435 Situation: A Case Study of a University Maintenance Section in South Africa'. C S Van Der Waal , J
436 M Uys . *Journal of Human Resource Management* 2009. 7 (1) p. .

437 [Depaulo et al. ()] 'Are Shy People Reluctant to Ask for Help?'. B Depaulo , W Dull , J Greenberg , G Swaim .
438 *Journal of Personality and Social Psychology* 1989. 56 (5) p. .

439 [Levy ()] *Assessing the Value of E-learning Systems*, Y Levy . 2006. Hershey, PA: Information Science Publishing.

440 [Vogel et al. ()] 'Avoidance of Counseling: Psychological Factors that Inhibit Seeking Help'. D Vogel , S Wester
441 , L Larson . *Journal of Counseling & Development* 2007. 85 (4) p. .

442 [Kitsantas and Chow ()] 'College Students' Perceived Threat and Preference for Seeking Help in Traditional,
443 Distributed, and Distance Learning Environments'. A Kitsantas , A Chow . *Computers & Education* 2007. 48
444 (3) p. .

445 [Gould et al. ()] 'Coping with Season-Ending Injuries'. D Gould , E Udry , D Bridges , L Beck . *The Sport
446 Psychologist* 1997. 11 (4) p. .

447 [Perry et al. ()] 'Dealing with Mobility: Understanding Access Anytime'. M Perry , K O'hara , A Sellen , B
448 Brown , R Harper . *ACM Transactions on Computer-Human Interaction* 2001. 8 (4) p. .

449 [Hoar and Flint ()] 'Determinants of Help-Seeking Intentions in the Context of Athletic Injury Recovery'. S Hoar
450 , F Flint . *International Journal of Sport and Exercise Psychology* 2008. 6 (2) p. .

451 [Cassidy and Eachus ()] 'Developing the Computer User Self-Efficacy Scale: Investigating the Relationship
452 between Computer Self-Efficacy, Gender and Experience with Computers'. S Cassidy , P Eachus . *Journal of
453 Educational Computing Research* 2002. 26 (2) p. .

454 [Spendelow and Jose ()] 'Does the Optimism Bias Affect Help-Seeking Intentions for Depressive Symptoms in
455 Young People?'. J S Spendelow , P E Jose . *The Journal of General Psychology* 2010. 137 (2) p. .

456 [King et al. ()] 'Enhancing the Validity and Cross-Cultural Comparability of Survey Research'. G King , C J L
457 Murray , J A Salomon , A Tandon . *American Political Science Review* 2004. 98 p. .

458 [Grinter and Eldridge ()] R E Grinter , M Eldridge . *Wan2tlk?: Everyday Text Messaging. Proceedings of the
459 SIGCHI Conference on Human Factors in Computing Systems*, (Florida) 2003. p. .

460 [Quan-Haase ()] *Instant Messaging on Campus: Use and Integration in University Students*, A Quan-Haase .
461 2008.

462 [Altschuller and Benbunan-Fich ()] 'Is Music Downloading the New Prohibition? What Students Reveal
463 Through an Ethical Dilemma'. S Altschuller , R Benbunan-Fich . *Ethics Information Technology* 2009. 11 (1)
464 p. .

465 [Kerlinger and Lee ()] F N Kerlinger , H B Lee . *Foundations of Behavioral Research*, (Fort Worth, TX; Harcourt
466 College) 2000. (th ed.)

467 [Mertler and Vannatta ()] C A Mertler , R A Vannatta . *Advanced and Multivariate Statistical Methods*,
468 (Glendale, CA) 2005. Pyrczak Publishing. (rd ed.)

469 [Gattiker and Kelley ()] 'Morality and Computers: Attitudes and Differences in Moral Judgments'. U E Gattiker
470 , H Kelley . *Information Systems Research* 1999. 10 (3) p. .

471 [Hair et al. ()] *Multivariate Data Analysis*, J F Hair , R E Anderson , R L Tatham , W C Black . 1998. Upper
472 Saddle River, NJ: Pearson Prentice Hall.

473 [Hair et al. ()] *Multivariate Data Analysis*, J F Hair , W C Black , B J Babin , R E Anderson , R L Tatham .
474 2006. Upper Saddle River, NJ: Pearson Prentice Hall.

475 [Abdullah and Islam ()] 'Nominal Group Technique and its Applications in Managing Quality in Higher
476 Education'. M M Abdullah , R Islam . *Pakistan Journal of Commercial and Social Science* 2011. 5 (1)
477 p. .

478 [Tsan and Day ()] 'Personality and Gender as Predictors of Online Counseling Use'. J Y Tsan , S X Day . *Journal
479 of Technology in Human Services* 2007. 25 (3) p. .

480 [Sekaran ()] U Sekaran . *Research Methods for Business: A Skill Building Approach*, (New York) 2003. John
481 Wiley and Sons. (th ed.)

482 [Alshare et al. ()] 'Student Intention to Use Expert Systems: An Exploratory Study'. K Alshare , R Freeze , O
483 Kwun . *The Journal of Computer Information Systems* 2009. 49 (4) p. .

484 [Depaulo and Fisher ()] 'The Costs of Asking for Help'. B Depaulo , J Fisher . *Basic and Applied Social Psychology*
485 1980. 1 (1) p. .

486 [Depaulo and Fisher ()] 'Too Tuned-Out to Take: The Role of Nonverbal Sensitivity in Help Seeking'. B Depaulo
487 , J Fisher . *Personality and Social Psychology Bulletin* 1981. 7 (2) p. .

488 [Markett et al. ()] 'Using Short Message Service to Encourage Interactivity in the Classroom'. C Markett , A
489 Sánchez , S Weber , B Tangney . *Computers & Education* 2006. 46 (3) p. .