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Current Applications of Media Niche Theory in Relationship to College Students Communicating in Local and Long Distant Relationships

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Current Applications of Media Niche Theory in Relationship to College Students Communicating in Local and Long Distant Relationships

Introduction

Mediated communication plays an integral role in society today. From phone calls to e-mail, text messaging to the Internet, mediated communications help to facilitate a significant amount of day-to-day communications. Consequently, it is no surprise that significant amounts of research have been dedicated to the study of mediated communication. As a result of previous research on the topic, the Media Niche Theory was developed as a means of describing the phenomena that occurs as a result of mediated communication.

Studies of Media Niche Theory (MNT) which was developed by Dimmick (2008) argue that new media and old media compete based convenience of usage by the user (Ramirez, Dimmick, Feaster, & Lin, 2008). Therefore, forms of media such as instant messaging (IM), phone calls, and face-to-face communication may be used in order to convey messages that are more complex in nature. These intricate messages require a richer medium that portrays variety of cues for interpretation. Consequently, it can be argued that e-mail, text messaging, and other forms of text based messages are implemented as a means of relaying messages that are nonequivocal in nature (Robert & Dennis, 2004).

While prior studies in MNT have focused on the connection between distant relationship and media usage, there is a lack of research on how local relationships use

mediated communication. Furthermore, the prior studies in MNT were done between the years 1987 and 2002 (Ledbetter, 2008) making the results less relevant in today's technological society. While several studies have examined how college students communicate using different mediated communication devices, no conclusive findings have been made. Therefore, new research is necessary in order to understand the new and emerging trends in how college students communicate through mediated forms. This study will attempt to test MNT by analyzing current trends in the use of mediated communication. The goal of this study is to evaluate the following: outline the difference between local and long distance relationships and the types of commonly used mediated communication; test the application of MNT in regards to local relationships to discover if similar predictions can be applied; as well as use MNT to evaluate how college students communicate comparatively in local and long distance relationships. The overall purpose of this study is to evaluate the differences and similarities in mediated communication patterns in long distance and local relationships.

Literature Review

Mediated communication is used to maintain both local and long distance relationships. Local relationships are based on face-to-face communication that happens on a consistent basis. Long distance relationships consist of infrequent face-to-face communication, but they normally start from local relationships. Communication is vital to maintain long distant relationships and technology has aided these efforts by giving people multiple methods of staying in touch.

The use of the telephone and e-mail allow for communication to transcend great distances. A study by Baym et al. (2004) found that communication via the Internet and telephone were used equally to maintain long distance relationships (48.99% and 49.61% respectively). When studying the communication patterns of college students, it was observed that the maintenance of relationships prior to starting college is just as important as the formation of new on campus relationships. According to Quan-Haase (2007), instant message usage by college students was the popular choice for forming and maintaining new friendships. It was cited as a daily form of computer-mediated communication that was used to keep in touch and coordinate face-to-face meetings.

A study by Chen (2002) found that people communicate in close distances foremost by telephone, followed by face-to-face, then e-mail. Utz (2007) supports with findings that close friendships, regardless of distance, communicated using multiple types of mediated communication. Instead of choosing only one mediated device as a method of communication, people in close long-distance relationships used multiple forms of mediated communication.

In today's society people communicate through numerous types of mediated communication and often use multiple forms in conjunction with each other (Quan-Haase, 2007). This study will focus on communication through the telephone, e-mail, IM, and text messaging and their uses among college students.

E-mail and instant messaging (IM) are closely related, but they have a few key differences. The first e-mail was sent in 1971 and the first IM client, ICQ was released in 1996 (Cummings, 2006). Communication through e-mail is asynchronous. This gives users time to compose and evaluate the messages being sent and/or received (Cummings,

2006). IM is a text-based form of communication that is similar to e-mail but closer to a synchronous communication like the telephone (Ramirez et al., 2008). Emanual et al. (2008) found in their study that two out of three college students considered that communicating through IM services was similar to having a conversation, not merely reading and typing. IM is a unique form of communication because students often take part in multiple conversations while multitasking on their computers. A study by Quan-Haase (2007) found that college students were often instant messaging while working on assignments online.

The phone as a form of mediated communication is a richer medium than e-mail and IM because of the addition of synchronicity and auditory cues. Telephone conversations require both users to be available simultaneously for communication to take place (Cummings, 2006). As Quan-Haase (2007) notes in his study of university students' social ties the telephone was seen as a more formal type of communication than other mediated forms of communication such as email or text messaging. Quan-Haase claimed it was the best form of communication with distant friends and family because it is "more interactive and richer in nature" (p. 688).

According to a study conducted by Bouwman (2004), 95% of the college students they studied owned a mobile phone and 86% of the students used short message service (SMS), or text messaging. SMS is seen as an asynchronous form of communication because the users do not have to be present for the message to be sent or received (Ishii, 2006). While text messaging is starting to be adopted by businesses as a way to execute business activities, most text messaging takes place between friends and the content tends to be of personal nature (Faulkner & Culwin, 2005). Cell phones are seen as a

convenient mode of communication because they are readily available regardless of location and text messaging makes it easy to transmit messages in a quick manner (Quan-Haase, 2007). A Nielsen Mobile study (2008) found that text messaging has increased 450% since 2006 while mobile phone calls have remained steady. Cell phone users ages 18-24 send 790 text messages a month compared to only 265 phone calls. Faulkner and Culwin (2005) stated regarding SMS "that this is simply the tip of the iceberg and that SMS has much more profound growth to occur in the future" (p. 168).

The expectation of this study is to examine whether new technology is being used more than or in place of older forms of communication because of convenience. Furthermore, the constant presence of the mobile device lends itself to a variety of mediated communication that is more expedient. Therefore, this study expects to find a significant correlation exists between MNT and the type of media used (Ramirez et. al, 2008). Finally, this study expects to find that a substantial relationship exists between the distance of relationship and the mediated form of communication used. Thus leading us to the following hypotheses:

H1: People will use more modes of mediated communication when maintaining a long distance relationship compared with a local relationship.

H2: Long distant relationships are more likely than local relationships to use e-mail to communicate.

H3: Long distance relationships use e-mail more than telephone to communicate with each other.

H4: Local relationships of college students will use text messaging as the dominant form of communication as compared to talking on the phone.

While the study by Quan-Haase (2007) found that instant messaging was a popular form of communication among college students with local and distant friends, there is no comparison made as to which type of relationship uses it more. Because of the convenient nature of IM while on the computer and the ability to multitask and take part in multiple conversations, there is no foreseen difference in which relationship will use it more.

Method

Participants

Participants were 170 undergraduate students at a large West coast university in the United States. 54 were male (31.56 %) and 115 were female (67.25 %). The mean age of the participants was 24.64years (SD =6.48). There were 6 freshmen (3.5 %), 7 sophomores (4.1%), 28 juniors (16.4 %), and 125 seniors (73.1%). 54.1 percent of the participants reported being Caucasian, 11.2 % reported being Asian, 8.2 % reported being African American, 5.3% reported being Latin American, .6 % Native American, 1.8 % reported being Pacific Islander, 1.2 % reported being Middle Eastern, and 18.1 % responded in a non-listed ethnic or racial groups or did not respond to this question.

Our research strategy was a non-experimental design. However, in order to get a more in depth analysis of local and long distance relationships and how the participants communicate we induced the independent variable by creating two separate surveys. One survey prompted the participants to answer the questions regarding a local relationship (less than 50 miles) and the other asked about a long distance relationship (greater than 50 miles). For example, the questionnaire distributed to people measuring

long distance relationships included the prompt: “When answering the following questions: Think about a friend (not relative or significant other) with whom you maintain a plenty of communication that lives more than 50 miles away.”

In order to test the independent variable of locality we asked eight questions related to the physical distance and closeness between the subject and the person they communicate with. These questions were used to measure this variable in nominal, ordinal, interval, and ratio scales. For example, a Likert scale was used to measure closeness (i.e. “How important is this person to you (scale from 1-not at all to 7-very important)?” (Utz, 2007). A question was also asked to measure the physical distance between the subject and their friend, which returned ratio data (i.e. “How far does this person live from you (in miles)?”).

The dependent variable is the modes of communication (i.e. text messaging, email, phone calls, etc.). The participant was asked a variety of questions regarding their relationship and which devices they used to communicate. The amount of use of each communication medium was measured from the results of six questions based on nominal, interval, and ratio scales. Participants were asked to report their usage of each medium over the course of the last month (i.e. “How many e-mails did you send to your friend last month?”). These results returned ratio data. The frequency of the use of each medium was also measured using a Likert scale of 1 (never) to 7 (extremely frequently). Results in multiple scales allows for more in-depth analysis.

Ratio and interval scales were used to measure the different types of independent variables. The Cronbach alpha was calculated for the frequency of email and closeness. The frequency of email was measured by 2 items (Cronbach’s $\alpha = 1.0$). All items were

measured on a ration scale. Sample questions were (a) the number of emails sent and received and (b) the number of emails received. Closeness was measured by 2 items (Cronbach's α = .89). All items were measured on a Lickert scale ranging from ***1***, meaning not at all, to 7, meaning very close. Sample questions were (a) on a scale from 1-7 how important is this person to you and (b) on a scale from 1-7 how close is this person to you.

Procedure

The data was collected over the course of a two-week period in 5 communications studies classes, one kinesiology class, as well as two photography classes, in order to fulfill our quota of 180 participants. The surveys were distributed to the students alternating between surveys asking for a friend that lived less than 50 miles away and more than 50 miles away.

Results

Manipulation Check

An independent-sample *t* test was conducted to examine the where our manipulation had successfully induced different levels of physical distance (The results showed that perceived distance is greater in the long distance condition (*M = 704.74*; *SD* = 1001.01) than in the local condition (*M = 99.02*; *SD* = 470.29; (df= 160) (*t = 4.93, p =* **.**00**)** of the independent variable. The relationship is significant, which means that our manipulation was successful**.**

Hypothesis Testing

T test was conducted to test the hypothesis. The results showed that total forms of communication is greater in the local condition (*M = 3.55*; *SD* = 1.33) than in the long distance condition (*M = 3.36*; *SD* = 1.32; *t(*167*) = .95, p = .35*) of the independent variable. The relationship is not significant, which means that the H1 was not supported.

Next, we compared email frequency of local versus long distance. T test was conducted to test the relationship. The results showed that email frequency is greater in the local group (*M =8.12; SD = 6.24*) than in the long distance group (*M =6.09; SD = 6.11; t(167) = 2.13, p = .04*). The relationship is significant, however, H2 is not supported.

Further, we compared email and phone use in long distance relationships. T test was conducted to test the relationship. The results showed that frequency of communication is greater in the phone group (*M = 9.31; SD = 10.74*) than in the email group (*M =2.87; SD = 4.44; t (df 86) = -5.47 , p = .00*). The relationship is significant but H3 is not supported.

Finally, we compared voice vs. text in phone usage in local relationships. *T* test was conducted to test the relationship. The results show that the frequency of communication is greater in the text group (*M = 5.71*; *SD* = 1.74) than in the voice group (*M = 5.38*; *SD* = 1.44; *t(df 84) = -1.69, p =.09*). The relationship is marginally significant therefore H4 is supported.

Discussion

Hypothesis 1 was not supported, showing that there was no difference between type of relationship and total forms of mediated communication used. The results did yield a significant relationship between closeness and total forms of mediated communication used. The latter findings support research by Utz (2007) that closer relationships are more likely to use multiple forms of mediated communication regardless of distance.

Hypothesis 2 was not supported but returned significant findings in the opposite direction. Local relationships were more likely than long distance relationships to use e-mail to communicate. These results can be attributed to reporting error because the ratio data that was reported returned significant results towards local relationships (number of e-mails sent and received), but interval data measuring frequency of e-mail on a likert scale returned marginally significant results leaning toward distant relationships.

Hypothesis 3 was not supported but returned significant findings that showed long distance relationships used phone more frequently than e-mail. This supports research by done by Quanne-Haase (2007) that claims that distant relationships communicate using a telephone because it is a richer and more interactive medium.

Hypothesis 4 was supported and returned marginally significant results claiming that local relationships of college students used text messaging as the dominant form of communication compared to phone (voice). The results also yielded a significant negative relationship between age and frequency of text messaging, which may account for the support of hypothesis 4.

Further analysis of the survey data returned additional findings that can lead to future research. People who communicated more frequently with e-mail were more likely to communicate using other computer-mediated technologies including instant messaging, social network messaging, VoIP, and video conferencing. This could be due to familiarity with computer technology. Results also found that people who communicated frequently by telephone also used text messaging more frequently. These results can be attributed to the fact that these are similar technologies contained in the same device. Lastly, there was a significant correlation between closeness and frequency of communication using the telephone (voice). Again, this can be attributed to the richness of the medium and the fact that closer relationships prefer a medium with more non-verbal cues, which supports the Media Richness Theory.

Limitations of the study included the sampling method and frame, participant recall errors, and comparison of dependent variable. Due to our convenience sampling method, the sampling frame was largely female, Caucasian, and college senior communication majors, which limited diversity. Differences in communication style by gender and age could play a role in the results. Participants were asked to recall specific details regarding their communications in the last month. The reported data was not accurate because people under and over reported or were not specific with their answers. Also, ratio data that was collected to record the amount of communication with each technology could not be directly compared. Five text messages cannot be compared to a ten-minute phone conversation. Multiple questions for each technology reported on a likert scale would produce more precise, comparable data.

Future research of MNT and local and long distance relationships can be taken from this study. The study can be repeated in a more controlled environment with a larger, more diverse, random sample. Asking participants more information about their relationship and asking them to keep a log of their communication with this person over the course of a month would produce more accurate and precise data. Also, rewarding the subjects would help aid accuracy of reporting.

While research has been done on mediated communication in long distance and local relationships, more can be done comparing technology usage between these groups. In addition, further studies can be conducted evaluating MNT and context of communication. This would help determine if type of relationship or convenience of communication plays a larger role in selected technologies. This study revealed several interesting findings and is a fine stepping point for future research in relationships and mediated communication technology use.

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