THE COMMUNICATION PREFERENCES
OF COLLEGIATE STUDENTS

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ABSTRACT

This paper presents findings on communication preferences of college students (N=1986) related to academic and non-academic purposes. This study also examines the use of technological tools which influence student communication preferences. Findings indicate a preference for face-to-face interactions despite the heavy utilization of technological devices. Educational implications are shared which challenge educators to incorporate communication involving not only reading or hearing others, but using tools for technological interactions to also view others, thus creating situations utilizing face-to-face encounters via those tools.

KEYWORDS

Communication, College Students, Preferences, Technology

1. INTRODUCTION

An estimated 20.6 million students will enter degree-granting postsecondary institutions in the United States in the fall of 2018 (National Center for Education Statistics, 2017). Each of these individuals will communicate in some fashion for academic related purposes with educational administrators, faculty and students, and as well as communicating with many others for personal purposes. A majority of these students in institutions of higher education today were born into a generation immersed in technology and thus are referred to as digital natives, digital learners, and digital residents (Gutiérrez-Porlán et al, 2018; White & Le Cornu, 2011; Prensky, 2001).

Today's technological environment has not only greatly influenced how our society communicates; technology has also redefined learning and educational opportunities in many ways. In the academic realm, it is of immense importance to recognize and reconcile college student communication needs and preferences, and how they should impact corresponding educational practices.

For the purposes of this paper, communication is defined as the collaborative transmission of information between individuals through a common verbal or nonverbal system based upon an understanding of their strengths and limitations (Munodawafa, 2008). This collaborative process can be accomplished in a multitude of ways and may be enhanced through the use of technological tools. For the sake of learning situations, communication is the key venue with which messages are disseminated, whether written, spoken, or through non-verbal means. With the rapid proliferation of technological communication tools, colleges and instructors can potentially connect with students anytime and anywhere. Colleges need to stay abreast of the most effective ways to communicate with today's college students.

2. LITERATURE REVIEW

With the onslaught of potential ways to communicate, administrators and instructors struggle to know the most effect means by which to relay messages and important details to collegiate students. These students represent individuals who most likely own and use mobile devices, yet utilize a multitude of platforms from

which messages could potentially be disseminated. Collegiate communication specialists state that relying on only one method of communication to college students can result in messages not being received; thus a growing trend now is to additionally utilize Facebook, Twitter, Pinterest, and other forms of social media (Mangan, 2012).

Additionally, preferences and patterns for use of communication devices may vary a great deal among college students. Even though most have grown up in a digital age, their competencies may vary. As this study seeks to understand communication preferences and patterns of college students, it also acknowledges that not all students are the same, and adjustments may be needed for varied levels of competence related to communication tools and methods.

2.1 Communication and Technology

The use of technological tools has become so wide spread that these tools permeate daily functioning. The Pew Research Center reports (2018) that 95% of American adults own a cellphone and 77% own a smartphone. This trend of mobile device ownership has become a key factor in communication modes today, not only for simple conversation, but as a means to access the Internet and its accompanying vast variety of communication avenues including social media outlets. Perrin and Duggan (2015) report 96% of 18-29 year olds use the Internet daily. Additionally, Pew reports three quarters of adults in the United States own desktop or laptop computers.

In 2010 and then again in 2013, Cassidy and colleagues (2014) investigated the trends in higher education student usage of emerging technologies, they noted the increasing variety in technological tools as well as the utilization and dependence on technology in education. These technologies expand the options for choosing modes of communication.

2.2 Communication Competence and Purpose

Communication often occurs in contexts that may overlap. There are also ramifications when communication is unsuccessful, such as embarrassment, disruption in a relationship, and misunderstandings. When technological tools enter the communication equation, Conole and colleagues (2008) found students select technologies they feel comfortable with to meet their learning needs and rely upon those technologies for their interactions as well. This supports the concept that personalization and a sense of control build toward communication competence while using familiar tools for communication purposes.

Often communication choices, even if they are influenced by available tools, are also dependent upon the purpose for such communication. In an educational setting, the way a course is delivered (face-to-face, blended, or online) happens through some form of communication (speaking in a classroom, on-line with live videos or chat, or through information disseminated via a computer). In each of these instructional situations, communication between the instructor and the students is a key element in the learning process. Conole et al, (2008) remark about the extent to which students are now capitalizing on the social affordances of technology to communicate and build peer support. Students may have an opportunity to choose how to interact and communicate in these situations or it may be dictated to them by the instructor.

2.2.1 Academic Situations

Recent technological developments provide students with a rich variety of alternatives for interaction and communication in relation to learning; and a flexibility of use which enables them to take control of their learning (Conole et al, 2008). However, the purpose of the communication may impact the preferred method of communicating. When examining communication preferences of students involved in Massive Open Online Courses (MOOCs), Zhang et al, (2016) found students overwhelmingly preferred asynchronous text-based posts (45%) to text-based chats which were synchronous (38%) or video- and audio- based conversations (15%). Chang and colleagues (2015) additionally sought to understand student preferences related to instructor communication in online courses in light of new technological developments. They found 97% of their study participants preferred communication through email and secondly (77%) through a course learning management system. These studies demonstrate students preferred communication in computer-mediated courses to be more distant, and they especially valued communication with the instructor the most. However, these studies reflect investigation involving online course delivery. There seems to be a lack of such investigation for blended and traditional course formats.

2.2.2 Non-Academic Situations

After completing a systematic review of communication technology, Hessel and Dworkin (2017) note research gaps in the study of the manner in which emerging adults communicate. However, there is no argument or lack of evidence that today's college student is operating in a fast-paced, media saturated environment with unlimited options for communication. Research conducted by Chang and colleagues (2015) revealed that many collegiate students do communicate frequently via social media but more frequently check email. Regardless of the mode, one outstanding finding concerning college students is that staying connected is central (Robinson, Stubberud, & Anton, 2012). Mobile devices are a key part of that connection, however, the mode for the communication may vary (e.g. texting, messaging, talking, chat, social networking, emailing). Communication methods have now been found to be influenced by immediacy and mobility (Baskin & Barker, 2004; Robinson, 2011) with the most preference given to modes where communication can be accomplished quickly. Despite being in a technologically rich environment, when surveyed, researchers report many college students indicate a preference for face-to-face communication especially involving personal relationships (Morreale et al, 2015).

2.3 Theory for Communication Preferences and Choices

The construction of communication preferences and communication choices can be viewed from several theoretical lenses. According to Hoeffler & Ariely (1999), two aspects of experience impact preferences – their intensiveness and extensiveness. As college students have an increased amount and breadth of experience with any given mode of communication they will naturally have a propensity to prefer that mode. However, Glasser (1999) contends that our behavioral choices are based upon meeting certain needs (power, love and belonging, freedom, fun, and survival). In this sense, students will choose to communicate in manners that will accomplish what they need given that particular situation. Often times this looks differently in academic and non-academic situations because the purpose for the communication differs. Learning is often socially mediated (Vygotsky et al, 1980). Communication is a key part of social interactions and occurs within multiple cultural contexts. Communication is additionally influenced by opportunities afforded by choice (Glasser, 1999) such as a technological tool. Individuals can then choose how they communicate in any given situation. In summary, preferences for communication will be chosen because they align with a particular purpose within a given context, and will be based upon experiences and needs, as well as involve social mediation (Figure 1).
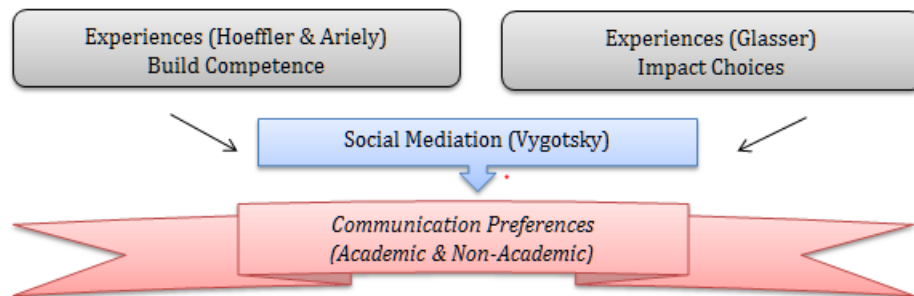

Figure 1. Theoretical lenses for communication preferences

The purpose of this study is to better understand the communication-related preferences of collegiate students and how those preferences and use patterns are affected by student interactions with technological tools. The importance of this understanding of student communication is to then provide awareness to educators of preferred and enhanced communication and learning opportunities. The following research questions guided this study:

1) What are the patterns for preferred communication for college students?
2) Do the technological preferences of college students affect their communication preferences and practices?

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3. METHOD

This study was descriptive comparative and utilized survey methodology in which a sampling of the college student population in the United States was gathered through a cross-sectional design (Shaughnessy, Zechmeister, & Jeanne, 2011) to study the prevalence of college student communication patterns and preferences. This paper is part of a larger study that expanded upon previous work comparing college students' academic and non-academic technology use (Swanson & Walker, 2015). The study follows survey methodology suggestions of Busha and Harter (1980) seeking representative samples of collegiate experiences but also had the goal of increased demographic data enhancing comparative analysis.

3.1 Participants

Participants in this study included a cross section of college students (N=1,986) from four coeducational institutions in the northeastern, southeastern, southwestern, and northwestern regions of the United States (Table 1). One of the institutions was a private college only serving undergraduates with the other three institutions enrolling students in undergraduate through doctoral programs. Of the latter three institutions, one was private and the other two public. Males in this study represented 31% of the total participants while females made up 65% and another 4% indicated other or preferred not to answer. The participant age range in years varied from students under 18 years (1%), 18-26 years (53%), to over 27 years (44%), and an additional 2% preferred not to answer. While most traditional undergraduate institutions target emerging adults who are considered to be 18-26 years of age, many institutions serve students well beyond the defined emerging adult age range.

Table 1. Comparison of survey respondents' enrollment by percent

Institution	Gender		International	Emer. Adult		Coursework			
	M	F				Traditional	Blended	Online	Other
A - private	25.5	72.8	**	100	99	1		0	0
B – public	21.1	75.7	2*		74	73.9	30.9	14.1	5.9
C - private	40.7	58.7	2*		22	31.5	40.4	35.4	0.6
D - public	32.2	65.7	5*		48	48.4	28.7	31.9	4.8
Total	31	65	≥9		53	63.2	25.3	81.4	2.8

Note: *Estimate as some preferred not to answer this;**Citizenship was not asked for at this institution.

The cultural and ethnic diversity of these participants was broadly composed of African American (8%), Asian (5%), European American (68%), Hispanic (11%), American Indian/Alaskan Native (8%), other (4%), and 6% preferring not to answer. Students reported citizenship representing 40 difference countries; however 89% were from the United States, 3% international, 2% of dual citizenship and 5% preferring not to answer. Lastly, students identified 33 languages as their first language, in addition to English, but 54 students, 3% of the total respondents, did not choose to share their first language.

3.2 Survey

The data collection instrument for this project was a self-report, anonymous Internet survey administered using Survey Monkey following approval of Internal Review Boards from all four institutions. Email invitations to participate in the survey were sent to students at all four institutions with a 9% return, providing a yield of 1,986 participants. The survey was comprised of 21 questions which sought both demographic information about the students as well as their technological preferences and use patterns. Students were asked to indicate time spent using technological devices and for what purpose. They were also asked

specifically to rank their preferences for academic and non-academic communication. The format of these questions included check-off boxes, ranking for Likert-typed scaled responses, and open-ended response boxes.

4. RESULTS

Based upon the survey results of a cross sectional sample of college students in the United States, the following research questions were addressed regarding communication preferences and patterns. A more precise analysis was achieved by collecting data about communication preferences separately from technological tool use. These are related but different points of analysis.

4.1 What are the Patterns of Preferred Communication for College Students?

The survey results indicated that collegiate students preferred the following technological devices: the mobile/cell phone, the personal computer, an institutional computer, and an iPad/tablet (Figure 2). The use of these devices was then broken down into segments and analyzed for frequency of use: daily, weekly, and never used. Additionally, presentation and storage or sharing tools were used almost exclusively for academics. YouTube, online news, and TED talks were frequently used both academically and non-academically. Social media, blogs, Google Maps and games were utilized mostly for non-academic purposes.
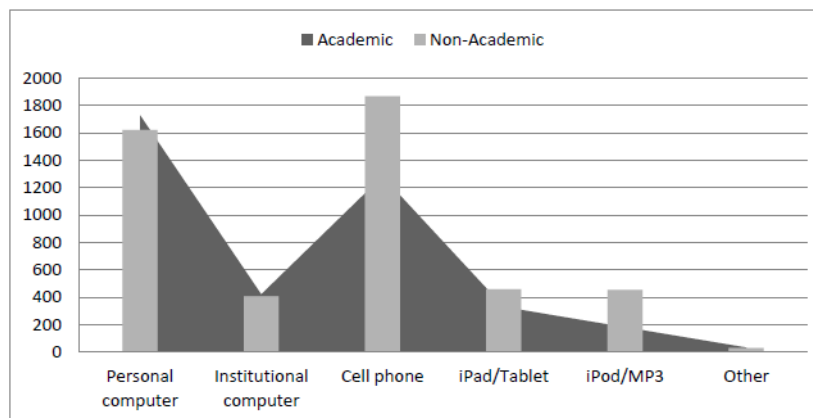

Figure 2. Preferred technological tools by collegiate students

One factor that impacts both academic and non-academic related communication is the comfort level students have using technology. When experiences increase in breadth with a particular technological tool, their comfort level and competence is likely to increase. The more students use a tool, which meets their specific needs, the more likely they are to frequently turn to that tool and will be able to transfer communication skills between academic and non-academic situations. Students in this study reported between 25 and 100% of their non-academic time involves technology, and 50 to 100% of their time related to academics involves technology.

4.2 Do the Technological Preferences of College Students affect their Communication Preferences and Practices?

Academic and non-academic communication preferences patterns in college students can first be understood by analyzing the modes of communication most frequently utilized by this population. Individuals in this study who rated traditional landline phone use high for academic communication were 64% more likely to rate landline use high for non-academic communication, 40% less likely to refrain from texting for non-

academic communication, 25% less likely to use social media for academic communication, 15% less likely to use social media personally, and 24% more likely to use postal communication. The use of a traditional landline phone likely reflects the varied demographic of the ages of today's college students.

Most participants in this study indicated daily use of a personal computer as well as a mobile phone for both academic and non-academic use. A large number of students report using institutional owned computers on a weekly basis for academic use, while half of the respondents never reported using an iPad or tablet. Communication involving a computer or mobile phone would then be supported naturally as a communication preference for either academic or non-academic use because of the depth and breadth that comes from using that tool daily and it can serve to fulfil both academic and non-academic needs. Communication then utilizing these devices supports the most preferred academic mode of communication; email since email can be accessed with these devices.

However, as indicated in the survey results, students across all four institutions and regions of the United States highly prefer in-person communication for both academic and non-academic purposes (Figure 3). The collegiate student demographics did have some additional impact on communication choices. For example, emerging adults were 13.8% less likely to want to use a landline for communicating academic purposes. Modes of communication involving the digital technology may be assumed to be preferred or favored by digital natives, yet, emerging adults who were 18-25 years of age, had a positive correlation with preference for in-person communication $r(1893) = .227$, $p < .01$, $R^2 = .052$.
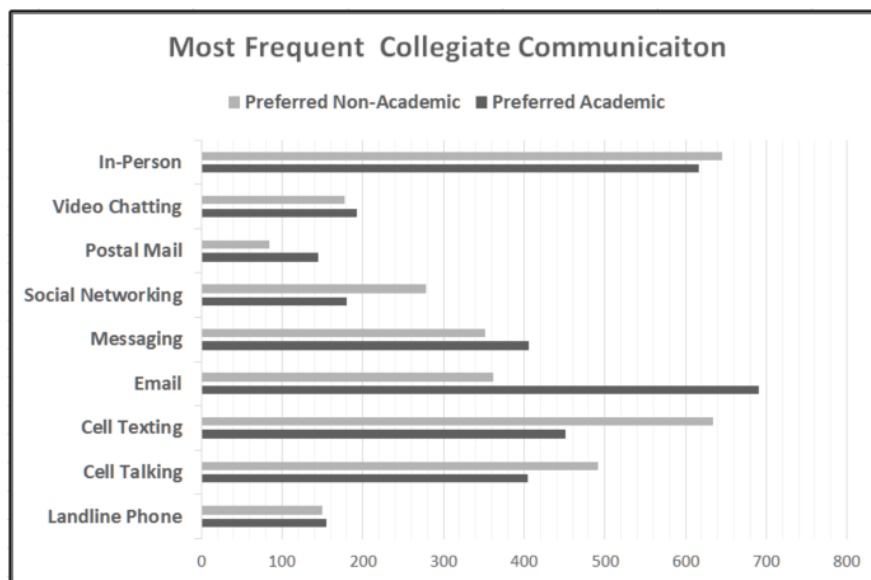

Figure 3. Most frequently used collegiate communication disaggregated by academic and non-academic purposes

5. DISCUSSION AND CONCLUSION

These results support previous work which found that collegiate students prefer face-to-face communication in most situations (Morreale et al. 2015). However, most college students heavily use technological tools to communicate. For example, academic communication is most preferred via email (Figure 3), followed by cell texting and messaging. Although many campuses are using Facebook, Twitter, and other modes of social media, these are not as highly preferred modes to receive message for academic purposes. The communication modes involving email, texting, talking, messaging, and social networking can all be accomplished via a mobile phone and often personal computer if it is a laptop. This explains why the computer, personal and institutional, ranked in the top three for most used technological devices.

The purpose of this study was to investigate college student communication preferences and one significant and unexpected finding relates to the hesitancy of students in sharing information that communicates ethnicity and country of origin. This finding may reflect a hesitancy to communicate for fear of repercussions surrounding the current political state in the United States relating to immigration. This finding reinforces the socio-cultural role in interactions impacting student communication preferences and the role that the purpose for such communication may hold.

With the understanding of how heavily mobile phones and mobile devices are being utilized by college students, it makes sense to consider more innovative ways to communicate and instruct using these tools. However, it also makes sense to establish an understanding that there are preferred types of communication associated with such tools.

The reported lack of innovative academic uses of varied technological resources may relate to collegiate instructor's lack of incorporation of such technology into their courses. Similarly, students may not indicate a preference for certain tools or modes of communication in academic realms simply because of a not having experienced the use of such tools for academic communication.

Students across all four institutions and regions of the United States who participated in this survey overwhelmingly indicated a preference for face-to-face communication. While there are some advantages of electronic communication, such being able to correspond from a distance, and the communication being immediate, accessible and affordable; however there are also communicative disadvantages such as missing face-to-face cues like body language and voice tone (Carter & Werts, 2015).

Many factors need to be considered when choosing communication modes involving college students. Traditional educational settings, where students and instructors are face-to face, are not always feasible or optimal. However, because of technological developments, there are alternatives and possibilities involving bringing face-to-face types of experiences to academic communication. Students and instructors can communicate via a screen and still view the other person they are speaking with. This can be accomplished by web conferencing types of communication or even using applications that provide face-time with a mobile device. Understanding the importance of this type of communication to learners should influence how courses, including on-line courses, incorporate elements where face-to-face conversation can occur.

Understanding that communication is an essential, socially mediated process for collegiate students should provide the impetus for instructors to seek to explore and understand communication preferences within the context of academic and non-academic realms. Students indicate daily and weekly use for online resources yet still highly value face-to-face communication. Technology is here to stay and is continuously evolving. Educators and researchers need to value the importance of accessing and disseminating information yet understand the significance and role of in-person communications. Additionally, educators need to choose modes of communication with students and technology that best meets the educational skills, competencies and needs of their students Preferences for both academic and non-academic communications will be impacted by those students' breadth of experience, the competence they have built with particular modes of communication and additionally the purposes for specific communications. Student communication preferences will continue to develop thus making continued investigation significant.

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