Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2014

Communication Channels: The Effects of Frequency, Duration, and Function on Gratification Obtained

Laura Zizka
Walden University

Walden University

College of Management and Technology

This is to certify that the doctoral dissertation by

Laura Zizka

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Marion Smith, Committee Chairperson, Management Faculty
Dr. Doreen McGunagle, Committee Member, Management Faculty
Dr. Christos Makrigeorgis, University Reviewer, Management Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2014

Abstract

Communication Channels: The Effects of Frequency, Duration, and Function on

Gratification Obtained

by

Laura Zizka

MA, Northern Arizona University, 2006

BA, Xavier University, 1993

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

December 2014

Abstract

The way people choose to communicate can affect current and future relationships between sender and receiver. Business professionals communicate internally and externally using a variety of communication channels, such as e-mail, letters, phone, or face-to-face and must choose the best channel for the message they are trying to convey. The purpose of this quantitative study was to examine how business professionals choose between the available channels, the premise being that users choose communication channels due to the gratification obtained (GO). Guided by gratifications theory, which proposes that choice of a communication channel depends upon the GO, this study assessed 15 communication channels to gauge how well frequency, duration, and function predict GO. A cross-sectional survey was used to collect the research data from a random sample of currently employed alumni from an international hospitality school in Switzerland. Multiple linear regression was conducted to assess statistically significant relationships between the independent variables of frequency of use (how often), duration (how long), and functions (specific tasks) and the dependent variable: GO. The results confirmed that the regression model of frequency of use, duration, and function predict GO with a 52% variance. This study concluded with implications for positive social change for employees in higher education and the workplace and recommendations for further research on other channels or variables to improve the model for predicting GO.

Communication Channels: The Effects of Frequency, Duration, and Function on

Gratification Obtained

by

Laura Zizka

MA, Northern Arizona University, 2006

B A, Xavier University, 1993

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

December 2014

Dedication

   This work is dedicated to my family and friends without whom it would never have been completed. They supported me in every step of the dissertation process and encouraged me to succeed. Some offered feedback; others just listened as I talked incessantly about my work. I owe every one of them my most sincere gratitude. I could not have done it without them.

Acknowledgments

I would like to thank my dissertation committee, Dr. Marion Smith, Dr. Doreen McGunagle, and Dr. Christos Makrigeorgis, for helping me complete this dissertation. Their feedback was appreciated. I could not have completed this dissertation without their help.

I would also like to thank the management, staff, colleagues, current students, and alumni from the international hospitality school in Switzerland which was the setting of this dissertation. They supported me in my quest to complete this dissertation and offered kind words of encouragement along the way.

This dissertation process began with a simple question: why is communication such a complicated issue? This process has helped me to learn more about my field of expertise, communications, through the current literature on this topic. I have read fascinating studies on communication theories and channels which I have been able to apply in my own courses. I have become a better teacher having been a student in the PhD Program at Walden.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Communication involves the exchange of thoughts, ideas, or emotions between two or more people. It can be verbal or nonverbal, written, or oral. Effective communication occurs when information and mutual understanding pass between the sender and receiver, thus conveying meaning and possibly producing an appropriate or desired reaction (Wrench, Thomas-Maddox, Richmond, & McCroskey, 2008). In an appropriate reaction, the communication exchange is effective and produces gratification for both the sender and receiver. Gratification from effective communication does not come from merely sending messages; it comes only after the message is understood and appropriately interpreted by the receiver. Thus, gratification from any communication derives from the receiver's interpretation. The closer the interpretation is to the intended interpretation, the more gratification the sender obtains (Wrench et al., 2008) and the more likely it is that a successful communication exchange has taken place.

Communication channels are the methods and techniques used to send messages, like the telephone, letters, reports, meetings, or the Internet. People choose between communication channels for numerous reasons, such as heuristics, ease of use, experience, or simple preference, and the communication channel may contribute to the success of the overall message (Wrench et al., 2008). A successful message in this context could be judged by the appropriateness of the receiver's reaction as desired by the sender. For example, if a new member of staff must be introduced to other employees in the company, a manager may choose to call a meeting, send an e-mail, write a memo, or introduce the new employee through a series of face-to-face encounters. Any one of these

communication channels can be effective, depending on the overall goal and available resources. While oral channels, such as formal meetings or informal face-to-face encounters may be preferable, they are time-consuming. An e-mail, by contrast, is quick to write, and all employees with e-mail accounts have the chance to see it. A memo, also easy to write, takes more time and may not be seen if posted in a place with limited access. Thus, for the manager, sending an e-mail may be the most effective and gratifying communication channel choice, saving time and ensuring that everyone has been informed. Gratification comes when other employees greet the newcomer by name and are prepared to start working with him/her. In this example, the choice of e-mail was the most gratifying.

Communication channel choice can have a significant effect on current and future relationships between sender and receiver and can be costly if not done correctly. Each communication exchange must be weighed and evaluated before choosing the best channel for the message. Dobos (1992) referred to this evaluation of communication channels as strategic communication, and for Leonard, van Scotter, and Pakdil (2009), such communication is important for establishing relationships and working effectively. Using the right channel with a clear message may change receivers' attitudes and encourage the desired reaction. Time and money may be wasted if senders do not consider their previous experience with the channel, the communication partner, and the topic, resulting in misinterpreted messages (Klyueva, 2010).

To improve communication, companies spend money on new communication channels, but these are only as effective as the people using them. Misinterpretation of

messages may come from inadequate communication skills (Hargittai, 2010). If employees do not have adequate oral or written skills, the channel is irrelevant. Communication channels can go unused if employees are not properly trained or do not receive adequate gratification when using them (Dobos, 1992)

In this study, I examined how employees selected communication channels in the workplace. My initial purpose was to identify how employees chose between communication channels to send their messages and what motivated their choice. I asked whether employees considered a specific communication function (production, maintenance, or innovation) for the content and audience of their message. I questioned how communication has changed with the arrival of new, digital alternatives such as Skype, the Internet, and video conferencing. I aimed to identify the most frequently used communication channels in the workplace and focused on the gratification senders obtain from using specific channels and at what point they reject one communication channel and replace it with another. The overall premise was that frequency of use, duration, and function predict gratification and how employees choose communication channels in the workplace. It was proposed that they choose the communication channel which gives them the most gratification.

Chapter 1 begins with a general discussion of the study of communication channels, research purpose and problem statements, and the nature of the study. An outline of the research design, including the research questions and hypotheses, is presented. The theoretical framework, uses and gratifications theory of Blumler and Katz, is discussed with its relevance to the present study. Assumptions, limitations, and

delimitations are addressed, leading to a final section on the significance of the present study.

Background

Many companies have addressed ineffective communication by training employees after recruitment. However, another solution might be to improve their communication skills before they enter the workplace (e.g., in higher education). Various authors have called for higher education courses focusing on communication technology. Hargittai (2010) found that experience, access, and differences in technology competency directly influenced students' choice of communication channels. Neuman and Brownell (2009) noted the growing importance of communication technology competencies in the hospitality workplace and their need to be included in university curricula. These two studies are pertinent as the population examined in the present study consisted of alumni from an international hospitality school in Switzerland who have a range of experience, access, and competency in respect of communication technology. Junco and Cotton (2011) noted the negative effects of multitasking between communication channels on students' academic performance. Multitasking is equally relevant for employees who may have to juggle several communication tasks at the same time. Moran, Seaman, and Tinti-Kane (2011) employed uses and gratifications theory to study the impact of social media networks on higher education. Smith and Wolverton (2010) examined the communication competencies needed to make higher education graduates more effective communicators in the workplace. Communication technology, multitasking, and

communication competencies are reviewed in Chapter 2 in relation to uses and gratifications theory and communication channel choice.

By identifying communication channels, which provide the most gratification obtained (GO), future business communication curricula could be designed to prepare undergraduates to be efficient communicators in the workplace. Too many communication courses focus only on traditional communication channels and do not reflect the reality of the workplace (Neuman & Brownell, 2009). It is necessary to evaluate traditional and modern communication channels in general business communication to reflect more accurately the communication competencies these students will need. In this study, I aimed to provide an understanding of the communication skills young graduates need that could be used to prepare new business communication curricula for higher education.

Other authors have addressed the need to improve employees' communication competencies in the workplace. Kasavana, Nusair, and Teodosic (2010), Napoli (2010), and Peng and Zhu (2011) examined the influence of traditional and modern communication channels on the relationships between senders and receivers. Im, Kim, and Han (2008) addressed perceived risks of communication technology in the workplace, finding that when new communication technology is introduced, employees must be trained in its use, or they may refuse to use it. Ahmad et al. (2010), Nordin, Halib, and Ghazali, (2011) and White, Vane, and Stafford (2010) examined the link between employee satisfaction and the amount and quality of information employees receive. Gratification may be affected by the volume and quality of messages being sent.

The link between time spent and gratification was examined in the present study when assessing frequency of use and duration (time spent) on each communication channel.

All of the studies reviewed have examined U.S. populations, for the most part, U.S. students. The population chosen for the present study consisted of alumni of an international hospitality school in Switzerland who worked in different positions, organizations, and countries around the world. This population included 84 different nationalities who studied in one of two languages, French or English. With such a diverse population, the present study gave a broad view of GO from communication channel choice from an international population.

Uses and gratifications theory has evolved over time. Include a topic sentence. Katz, Blumler, and Gurevitch (1973-1974), McQuail (1984), Rubin (1993), and Siraj (2007) provided a historical background of uses and gratifications theory in mass media communication research and suggested its application to other communication channels. The theory has since been applied to modern communication channels, such as the Internet and social media networks. Bagdasarov et al. (2010), Urista, Dong, and Day (2008), and Kink and Hess (2008) applied uses and gratifications theory to various communication channels, including the Internet, television, and social media networks to examine how users choose among channels. Although the Internet was tested in the present study, many other modern channels such as teleconferencing, Skype, instant messaging, and mobile phone were also included as they occur in workplace communication. Previous scholars have targeted a few communication channels or grouped channels into categories such as written, oral, or electronic. However, uses and

gratifications theory has not been applied to the range of traditional and modern

communication channels commonly used in the workplace, and for this reason, the

present study filled a gap in the current knowledge on this subject.

Although uses and gratifications theory has been applied predominantly to mass

or electronic media, the concept of GO is applicable to any communication channel. Each

user seeks some gratification in sending a message and chooses a communication channel

accordingly. In mass media research the user is the receiver, but, in general

communication, the user is generally considered to be the sender (Bagdasarov et al.,

2010; Dobos, 1992; Kink & Hess, 2008; Urista et al., 2008). Once a channel no longer

provides adequate gratification, the sender seeks out an alternative (Dobos, 1992). In the

literature review in Chapter 2, I discuss research into sender's motivations for choosing

one communication channel amongst many alternatives in the workplace. In the present

study, I aimed to provide a more detailed examination with an extensive list of 15

communication channels currently used in the workplace.

Problem Statement

In this study, I examined choices among traditional and modern communication

channels in the workplace. Traditional communication channels include telephone,

letters, faxes, business reports, presentations, and face-to-face meetings. Modern

communication channels include the Internet, e-mail, instant messaging,

teleconferencing, and video conferencing (e.g., Skype). While the modern channels are

all dependent on technology, they differ in their purpose. For instance, the Internet may

be used as a research engine to find and share information, while Skype represents a

bundle (voice, text message, video) of individual communication possibilities. Many studies have been directed at specific communication channels, such as social media networks (Kasavana et al., 2010), instant messaging (Junco & Cotton, 2011), the Internet, and e-mail (Dobos, 1992; Neuman & Brownell, 2009). However, no research has been found on the link between duration, frequency of use, function, and GO when choosing amongst individual communication channels.

Previous researchers have concentrated on individual communication channels or groups of channels. For instance, Newman and Brownell (2009) examined positive and negative sides of two communication technologies, e-mail and instant messaging, and Kasavana et al. (2010) defined online social networking and its implications on the hospitality industry. Hargittai (2010) examined university students' skills and experiences in using the Internet, while Dobos (1988) studied three communication functions (production, maintenance, and innovation) as applied to face-to-face meetings, written memos, and electronic media. These and other studies (D'Urso & Rains, 2008; Dobos, 1992; Timmerman, 2010) included only a limited range of communication channels. The present study widened the range of channels examined to encompass all those used in the workplace, which were assessed in terms of the GO each channel provides. Thus, it served as an initial step in understanding how one group (i.e. hospitality professionals) chose communication channels based on frequency of use, duration, function, and GO.

Purpose of the Study

The purpose of the present study was to measure GO derived from the different functions (production, maintenance, and innovation) of traditional and modern

communication channels used in the workplace. GO was also measured through frequency of use and duration of each communication channel. In uses and gratifications theory in mass media, researchers focuses on the gratification obtained by the receivers of messages (i.e., the audience). In contrast, I focused upon GO received by the senders of messages, an approach which has also been used by other authors in general communication research (Dobos, 1992; Kink & Hess, 2008; Urista et al., 2008). The independent variables in this study were frequency of use, duration, function (production, maintenance, or innovation). The dependent variable was the gratification obtained when choosing these channels.

Nature of the Study

The present study was a quantitative, cross-sectional survey, which aimed to provide an overview of the current state of employees' communication channel choice at one time and place (Frey, Botan, & Kreps, 2000; Keyton, 2011). The population to whom this survey was administered was drawn from the alumni of an international hospitality school in Switzerland who were employed in different positions and companies around the world. According to G*Power, a minimum of 77 cases were necessary to run multiple linear regression using three predictor variables (Faul, Erdfelder, Buchner, & Lang, 2009). Population and sample size will be discussed in more detail in Chapter 3. It was foreseen that this one-off survey of the way these employees chose communication channels would provide sufficient information to respond to the research questions. Independent variables included duration, frequency of use, and function (production, maintenance, or innovation) of communication channels in the workplace. The dependent

variable was GO. Linear regression was employed to establish how well each
independent variable predicts GO for communication channels.

Research Questions and Hypotheses

The overarching research question (RQ) was: using multiple linear regression, can
Y (gratification obtained) be predicted in terms of three independent variables (frequency
of use, duration, and function)? The corresponding H0 can be stated as:

$H_0$1: R = 0; linear regression is a good fit.

$H_0$2: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the
variation in Y.

Furthermore, the RQ and hypotheses were analyzed in terms of various
demographic characteristics, namely gender and work experience. Therefore, lower level
RQs and corresponding hypotheses were specified. An example is provided for Gender:
RQ1: Are there gender differences when determining whether Y (gratification obtained)
can be predicted in terms of three independent variables (frequency of use, duration, and
function)?

$H_0$1M: R = 0; using only Male data, linear regression is a good fit.

$H_0$1F: R = 0; using only Female data, linear regression is a good fit.

$H_0$2M: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining
the variation in Y using Male data only.

$H_0$2F: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining
the variation in Y using Female data only.

Other examples include

RQ2: Does the number of years of work experience affect whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0 1W$ (work experience): R=0; using ranges of work experience (expressed in years), linear regression is a good fit.

$H_0 2W$: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using work experience (expressed in years).

RQ3: Does the communication channel chosen affect whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0 1C$ (communication channel): R=0; using the communication channel chosen, linear regression is a good fit.

$H_0 2C$: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using the communication channel.

Variables

The independent variables were frequency of use, duration (time spent in hours) for each communication channel, and function (production, maintenance, or innovation). The dependent variable was the GO when choosing individual communication channels in the workplace (rated on Likert scale 1-7). Multiple linear regression was run to test the hypotheses and how well the independent variables predict the dependent variable based on gender, work experience, and communication channel.

Theoretical Base

Uses and Gratifications Theory

Uses and gratifications theory assumes that communication users make active, rational choices between alternatives to maximise the gratification obtained (GO) (Katz, Blumler, & Gurevitch, 1973). The theory has been much applied to mass media, where the users, i.e. the audience, have the ability to choose one mass medium alternative over another. In the present study, the same logic has been applied to channels of general communication channels, where the users are the senders, rather than the recipients of messages. It is assumed that they choose which channel to use on the basis of GO, avoiding those which are less gratifying.

Mass media to which uses and gratifications theory has been applied include television, radio, and, more recently, the Internet, where gratification has been measured through process, content, and social use. According to Katz et al. (1973), mass media audiences seek gratification through finding entertainment (*diversion*), maintaining close *personal relationships*, creating an online *personal identity*, and controling others' behavior (*surveillance*). Uses and gratifications theory assumes that an audience continues to use a communication channel until they fail to derive sufficient gratification from it. This same theory was applied in the present study to senders of messages in the workplace, who are assumed to choose communication channels as long as they provide sufficient gratification.

Dobos (1988) expanded upon previous research by applying uses and gratifications theory to communication channels other than mass media. She examined

what she called three *functions* of communication channels: *production* or the process of giving and receiving information, *maintenance* or maintaining social relationships with others, and *innovation* or brainstorming innovative and creative new ideas. She found that different communication channels were perceived to offer different levels of gratification depending on their predominant function (Dobos, 1988). For both mass media and general communication, channel choice is made after considering the function and subsequent GO (Katz et al., 1973; Dobos, 1992).

According to uses and gratifications theory, people make rational choices by identifying their media needs and taking action to gratify them (Katz et al., 1973). For instance, a person who wants to know the latest news may choose between newspapers, radio, or television, basing their choice on availability and accessibility. On a train, the newspaper might be the best option; in the kitchen, the radio; in the family room, the television. Early uses and gratifications theorists examined why an audience chooses one medium, or channel, over the alternatives. Katz et al. (1973) defined uses and gratifications theory as the audience's relationship between gratification sought (GS) and GO when choosing between media channels to acquire information or to be entertained. An active audience will consciously choose the channel which provides the most gratification and will continue to use this as long as the gratification exists. When GS and GO are mismatched, the audience will seek out new, alternative media channels to satisfy them.

Uses and gratifications theorists assume an active audience who expect to be gratified with their choice. In this way, each medium competes with other sources of need

satisfaction and is goal-directed (Blumler, 1979; Palmgreen, Wenner, & Rosengren, 1985). Media may be chosen for the potential GO that can be derived from the content, exposure, and/or social situation. Each medium has the potential to fulfill a wide range of gratifications (Blumler, 1979; Palmgreen et al., 1985). The active audience evaluates whether there is sufficient GO and, if not, they seek out another medium to fulfill their media needs.

Individuals fulfill some need when choosing exposure to a mass media channel. The need may be straightforward (e.g., it is raining, and there is nothing to do, so a user turns on the television to pass some time). Individuals may also choose a channel because of the information it provides (e.g., a documentary or a news program). An individual who obtains gratification from this choice will continue to use this mass media channel. In this study, I tested whether this is also true of general communication channels used in the workplace.

Early uses and gratifications researchers strove to distinguish between GS and GO (Palmgreen et al., 1985) in the use of mass media channels. An active audience must first be aware of the gratifications available from using the medium (their GS) before evaluating their GO. Assuming these variables can be measured accurately, the extent to which GO matches GS will reinforce or reduce continued use of this medium (Stone, Singletary, & Richmond, 1999). However, if GO does not match GS, individuals will seek out other channels for gratification. Individual needs will prompt different media choices, and even those who choose the same medium may derive different GO from it (Stone et al., 1999).

Early researchers examined the relationship between motivation and behavior in mass media users. However, because uses and gratifications theory relates channel choice to motives and needs, it is equally relevant to workplace communicators. The theory is not limited to traditional communication channels or to traditional needs, such as social interaction, passing time, information, habit, and entertainment (Siraj, 2007). New media needs have been added, including time-shifting, on-line meetings, networking, and virtual workplaces (Siraj, 2007). Thus, uses and gratifications theory has been shown to be relevant to all communication channels and all communication needs which fit the purpose of the present study.

There are many motivations for choosing between alternatives. Bagdasarov et al. (2010) used uses and gratifications theory to identify viewers' motives for making particular television channel choices and how these choices satisfied viewers' needs. Preference, previous knowledge, and timing contribute to this choice process. For instance, viewers may decide to watch a new television program because it stars a well-known actor, is a police drama, and is shown at 9:00 p.m. for 1 hour. While watching, viewers may be drawn into the action, script, and storyline. After the program, they relive the experience by discussing the plot and trying to imagine what will happen as the series unfolds. They conclude that the program is worth watching and plan to watch it again next week. The gratification they receive from watching the program leads to an intention to watch it again the following week. Thus, one gratifying communication experience may lead to future choices of the same TV channel. Senders of communications in the workplace are similarly more likely to continue choosing a channel for future

communication exchanges if they have experienced effective communications with it (Bagdasarov et al., 2010; Dobos, 1992).

If the television program in the example above produced a negative experience for the audience (e.g., the police drama was unexciting, acting was substandard, and the plot was transparent), the audience would be expected to choose an alternative program the following week. As long as a channel produces gratification, it will continue to be used, but once it has disappointed the user, it will be replaced. In the workplace, the sender who uses e-mail to send a message but does not receive a timely response may replace that channel with a telephone call for the next exchange.

Gratification can come from two sources: process gratification and content gratification (Rubin, 1985). Process gratification relates to the experience of using media for entertainment, distraction, or companionship (Rubin, 1985) and is not linked to the content of the message, but to the act of using the medium itself. Content gratification, on the other hand, is based on the message and its intrinsic value for the reader (Rubin, 1985) and the process (i.e., the channel) may be irrelevant, as long as the message brings ultimate value to the recipient. For example, a birthday message might be sent via Facebook, e-mail, or traditional mail, the receiver being satisfied just to receive the message itself regardless of the medium. Content gratification is important in terms of transmitted meaning and future communication exchanges. However, n this study, I focused on the sender and was concerned with process gratification only.

Functions.

Mass media researchers who have employed uses and gratifications theory

propose four functions of media: *diversion*, *personal relationships*, *personal identity*, and

surveillance (Katz et al., 1973). In a similar way, Dobos (1992) identified three functions

of workplace communication: *production*, *maintenance* and *innovation*. Production

includes specific tasks that provide information using communication channels.

Maintenance relates to the social aspect of communication and entails starting new

relationships or maintaining existing ones in both positive and negative communication

exchanges. Innovation denotes creative processes and the ability to generate new ideas.

Each of these functions has been evaluated in the present study of senders' GO when

choosing common communication channels in the workplace.

Models.

Uses and gratifications theorists have created many models to support the

overarching theory. McQuail (1985) proposed two models for uses and gratifications

theory; a cultural and a cognitive model. The cultural, or affective, model considers that

the primary motivation is the expectation of involvement between two parties and that

satisfaction comes from emotional experiences such as arousal, empathy, or wonder. The

cognitive model includes interest or curiosity as the main source of motivation and

satisfaction as coming from guidance, surveillance, application, or social exchange

(McQuail, 1985). Blumler (1979) suggested that cognitive motivation facilitates

information gain as the person who seeks information from a medium will be more likely

to attain it, while affective motivation will include emotional pleasure or arousal. It is the

involvement with the medium which is likely to produce and promote reinforcement effects (Blumler, 1979).

According to uses and gratifications theory, the motivation to use mass media is based on social norms and culture as people seek reinforcement of what they appreciate, stand for, or value (Blumler, 1979). The audience expects to see a reflection of their perception of "real life". For example, early television series, like *Little House on the Prairie* or *The Waltons*, showed wholesome examples of U.S. life, and each episode dealt with moral issues which could be discussed with children afterward. In these shows, the television families had mothers and fathers, sisters and brothers, and a pet or two. There was little violence and minimal, if any, vulgar language. As the years went by, however, the status quo changed. Programs began to involve new types of family; for instance, *The Cosby Show* showed a wealthy, African American family with two working parents and more risqué themes such as living together out of wedlock, teenage sex, and drugs. Today's programs reflect still newer images of the U.S. status quo, showing divorced couples, recomposed families, scenes of violence, and vulgar language. As social culture and norms evolve, so do the television programs which mirror them.

Changes in the cultural status quo make themselves apparent in general communication channels as well and are further influenced by new technology and communication culture, as well as social norms. Meetings no longer need to be conducted in person, employees no longer need to go to the office, and documents no longer need to be sent during work hours only. Hand-written letters were sequentially augmented and replaced by the telegraph and telephone, and the latter is currently being challenged by

the Internet and e-mail. Changes in the perceived social status quo have contributed to the evolution of communication channels and the way audiences use them. Variables linked to status quo including curiosity, diversity, personal identity, and surveillance will be discussed further in Chapter 2.

Uses and gratifications theorists have often compared models to define the best one. Palmgreen and Rayburn (1985) compared six possible uses and gratifications models by defining the terms *beliefs*, *gratifications*, and *satisfaction*. Beliefs are 'the subjective probability that a media object possesses a particular attribute in the general sense' (p. 339). Gratification is "some cognitive, affective, or behavioral outcome of media behavior" (Palmgreen & Rayburn, 1985, p. 339). While both beliefs and gratifications are operationalized as expectancies, they have different referents. Satisfaction refers to a "general feeling of fulfillment as the result of repeated exposure to a particular content genre" (Palmgreen & Rayburn, 1985, p. 339). This comparison shows the strengths and weaknesses of the six models when applying current research design methodology. For example, the discrepancy models had low predictive power and were prone to reliability problems. The absolute value model was rejected for its inability to differentiate between overobtaining and underobtaining gratifications (Palmgreen & Rayburn, 1985, p. 343). According to their discussion, the best models to use are the gratification obtained models and especially the expectancy value model. Their findings were considered when elaborating on the research design in Chapter 3.

Users

The role of the user, or audience, has been essential when applying uses and gratifications theory in mass media research. According to Palmgreen et al. (1985), a key dimension for the audience is the ability to give meaning to a message, so that different audiences do not necessarily perceive messages in the same manner. Experiences, heuristics, emotions, and position may affect how the audience interprets the meaning of the message. This is problematic, and McLeod and Becker (1973) warned that if receivers can interpret messages in any way they like, the content itself becomes irrelevant. To further complicate the issue, Katz et al. (1973) suggested that any one content may serve many purposes. This may explain why communication continues to be problematic in the workplace.

The audience poses a greater challenge in applying uses and gratifications theory as people may not always be clear about the extent to which they have been gratified (McGuire, 1974). For instance, a program which gratifies a need for entertainment may not gratify the need for information. The audience is active and individuals' participation may influence, positively or negatively, the GO they receive (Levy & Windahl, 1985). McQuail and Gurevitch (1973) posited three categories which may affect audience gratification: (a) personality characteristics, (b) social roles and social experience, and (c) variations in environmental and situational circumstances (p. 289). These categories could affect how gratifying a given medium is in a specific time and place. The GO from watching a football match could be enhanced by watching it with a group of fellow supporters, but it could be limited if the crowd cheers for the other team and the other

team wins. The outcome of the match and the environment in which it is watched both affect how much gratification the audience obtains. The audience, as users, may be individually affected by personality, social roles, and environment which can cloud their judgment of the medium, message, or GO. These same elements were considered in the present study where employees rated the GO from 15 communication channels used in the workplace.

The needs of audience members may be classified into three types: (a) *selectivity*, (b) *involvement*, and (c) *utility* (Levy & Windahl, 1985, p. 113). Selectivity means the ability to choose amongst various alternatives, involvement includes perceived connection between audience and content, and utility is how individuals use or anticipate using communication channels for social and psychological purposes (Levy & Windahl, 1985). This typology is temporal, depending on whether audience activity occurs before, during, or after exposure (Levy & Windahl, 1985). The following example applies the same typology to the sender. A manager needs a quick response to an urgent message. The manager selects e-mail as the most appropriate channel for the message (selectivity). The manager knows that the reader also has and uses e-mail as they have exchanged many e-mails in the past (involvement). The format, content, context, language, and register are based on previous exchanges and should provoke a positive response (utility). However, how the message is interpreted will depend on the personal characteristics and experiences of the receiver, as discussed above. Levy and Windahl (1985) cautioned that only certain messages or parts of messages may be considered as pertinent by the audience. Thus, merely following the typology and selecting the communication channel

does not guarantee more comprehension or GO than any other alternative. Other factors may still impede communication.

One factor which may impede communication is the audience's interpretation of the message. Blumler (1979) defined *audience activity* as utility, intentionality, selectivity, and imperviousness to influence. According to Katz (1974), individuals choose a medium after evaluating alternatives which could fulfill their media needs. For Rubin (1993), people vary in terms of Blumler's four activity factors, and this may influence "whether messages even have the opportunity to affect a person's cognitions, attitudes, or behavior" (p. 100). Thus, although communication includes reflection, assessment, and final choice of communication channel, users may differ in the gratification they seek from a given medium.

Users may choose between althernatives based on certain stages of activity when using a specific medium. According to Lin (1993), there is a significant relationship between the activity of the viewers and the level of GO they experience. Rubin (1993) suggested that an involved audience actively acquire and process information from the environment through a *preinvolvement stage* which includes preexisting attitudes, beliefs, and motivations and an *involvement stage* that occurs during message reception and consists of participation, attention, and emotion. Lin posited three such phases: selectivity prior to exposure, involvement during exposure, and use of media content for cognitive processing after exposure. Siraj (2007) also identified three activity phases: *preactivity*, *duractivity*, and *postactivity*. In fact, preactivity involves selection of the content, duractivity includes psychological attentiveness and personal involvement, and

postactivity consists of behavior after the experience, such as discussion or reflection

(Siraj, 2007). An active audience takes a decision to participate in a specific

communication experience and is capable of evaluating this experience in terms of a

specific communication channel.

In mass media research, uses and gratifications theorists have focused on the

audience as users who chose the medium which gave the most gratification. When

applying uses and gratifications theory to communication in the workplace, however, the

focus shifts to a different user, the sender, who chooses the communication channel

which provides the most gratification for the communication exchange. The latter

gratification can be considered effective communication and could encourage or

discourage future use of the communication channel. Receivers are not targeted, as they

do not choose a communication channel for the exchange, but wait passively for the

choice to be made by the sender. For this reason, in the present study, the sender of

workplace messages was the focus of the research.

Alternatives

According to uses and gratifications theory, the audience makes conscious

decisions when choosing a mass media channel. However, audience effectiveness at

judging a channel could be skewed by personal motivations, but they may also be

overwhelmed or constrained by the number of possible choices (Palmgreen et al., 1985).

Therefore, both the available channels and those expected by receivers must be

considered (McQuail & Gurevitch, 1974). For instance, a company may post all daily

news messages on the company Intranet. Although such messages might be

communicated in the company newsletter or shown on in-house television screens, the employees do not look for them there because the expectation is that they will be posted on the Intranet. In this example, the Intranet is the appropriate channel for this message and provides the most gratification to the sender who uses it.

In principle, the needs satisfied by one mass media channel could be satisfied in other ways or through other channels (Carey & Kreiling, 1974). Rosengren (1973) suggested that motives for seeking functional alternatives include change, compensation, escape, or vicarious satisfaction (Rosengren, 1973). Thus, if one mass media channel does not offer sufficient GO, audience members seek out alternatives. The same concept can be applied to communication channels. Although the alternatives are numerous and ever expanding, employees must choose which channel is most effective for the message that needs to be sent. A channel that does not offer sufficient GO will be replaced by another one.

Alternatives may also be chosen if the original purpose of the message changes. For instance, a communication channel that is customarily used to convey information may prove inadequate for brainstorming creative ideas, and the sender would be obliged to choose another channel, such as a face-to-face meeting for this new function (Rubin, 1985). According to Rubin (1985), motives may need to be realigned to meet situational constraints, or messages may not be successfully communicated and may not produce acceptable GO for the sender.

Social Change

Social change can come from effective communication. For Rosengren (1974), the way messages are perceived is influenced by individuals' personal agendas and by societal variables. Individuals have needs, motivations, heuristics, and experiences which affect the interpretation of messages received, but they are also subject to societal norms and expectations. When communication is done well, GO is high and the chances that this communication channel will be further used in the future increases. This provides an opportunity for social change. When audiences are gratified and recognized for their good deeds, like corporate social responsibility (CSR), more good deeds are likely to follow. The challenge is finding the correct channel to announce the good deeds and encourage others to follow the example. This is currently often done through the Internet, as will be discussed in greater detail in Chapter 2.

There are many ways in which mass media could be used to encourage social change. According to Katz et al. (1973), mass media channels could be used to ease conflicts and tension, bring awareness of existing problems, offer real-life opportunities to satisfy certain needs, embody and promote positive values, and provide a field of expectations for the audience. Palmgreen et al. (1985) suggested that opportunities for social change can come from an active audience who use media systems to encourage further social change. For Jensen (2002), communication media can also be used to promote public events, unify institutional communication processes, and publicize certain cultural practices and worldviews. Audience members with similar values seek out a mass media channel for gratification, which springs from a need to match personality

characteristics, social roles, and environmental circumstances. For example, after

Hurricane Katrina, the Internet was used to mobilize thousands of people to rebuild

houses and entire neighborhoods. This example of positive social change has since

inspired others to use the Internet for other positive actions.

Evolution of Uses and Gratifications Theory

Uses and gratifications theory has evolved over several decades. According to

Ruggiero (2000), "until the 1970's, uses and gratifications theory concentrated on

gratifications sought, excluding outcomes, or gratifications obtained" (p. 6). Palmgreen

and Rayburn (1985) reviewed the way uses and gratifications theory has been combined

with other theories, such as expectancy value theory, to create several models of GS and

GO. Amongst these, models based solely on GO have been reported to be the most

reliable (Ruggiero, 2000). Dobos (1988, 1992) repeated this exercise of testing various

combinations of GS and GO models and confirmed that GS alone does not account for

significant variance in channel choice and makes a trivial contribution to predicting

future communication channel choice. Thus, for the present study on choosing

communication channels, only GO was examined.

GS has been defined as the needs or expectations of users, while GO is the

outcome from using specific media or communication channels (Dobos, 1988; Dobos,

1992; Lin, 1999; Palmgreen & Rayburn, 1985; Ruggiero, 2000). Dobos (1992) stated

that GS is based on mutually shared expectations, company culture, and social

environment, while GO represents actual fulfillment and is, therefore, more appropriate

for predicting communication channel choice. In the present study, respondents were

asked to self-report their GO with specific functions of communication channels. They were not asked to report on their expectations or those of the company. For this reason, it was pertinent to examine only GO in the present study, as this represents actual fulfillment from using specific communication channels.

In the present study, respondents were asked to quantify actual time spent (i.e., duration) and frequency of use of individual communication channels in the workplace. These factors are also based on the outcomes of communication choice (GO), rather than expectations (GS). In fact, it could prove difficult, if not impossible, to predict how long or how often a channel may be used in the future. For this reason, it was prudent to ask respondents to base their responses on outcomes (i.e., how much time and how frequently they actually use specific communication channels in the workplace).

In the workplace, communication is often strategic, and choosing between alternatives may be crucial to the success of the communication exchange. According to Dobos (1992), risks can be minimized by basing decisions on GO from channels used in previous exchanges, and for similar functions, to choose the ideal alternative for the next exchange. This was tested in the present study.

Uses and Gratifications Theory and the Workplace

Uses and gratifications theory has been applied not only to mass media such as television, but also to modern communication channels like the Internet. The paradigm of uses and gratifications theory is based on one question: "Who uses which media, under what circumstances, for what reasons and with what effects?" (Rosengren, 1974, p. 269).

Uses and gratifications theory is based on the assumption that people know what they need and can satisfy and verbalize these needs (Elliott, 1973; Wenner, 1985). In mass communications, the content should provide the user (audience) with sufficient GO (McGuire, 1974) as a result of which the audience may choose a mass media channel for diversion, personal relationships, personal identity, or surveillance. As long as the GO is adequate, the medium will continue to be used. In this study, however, I sought to understand the GO a sender receives when choosing a specific communication channel. I assumed that senders choose appropriate channels by function, use them frequently, obtain gratification from them, and continue to use the same channels in the future.

Workplace communication may affect many people at the same time. It includes one-on-one, departmental, company-wide and corporate communication, and at each level, employees may have different roles and different interests. For example, a department manager may speak one-on-one to another department manager who is on equal terms; this is referred to as *horizontal* communication (Keyton, 2011). The same manager may then call a departmental meeting with employees who have lower status and speak to them as their boss (e.g., *downward* communication) (Keyton, 2011). When needing time off, the manager may go to the boss's office to make a request (i.e., *upward* communication; Keyton, 2011). In one day, the same manager may employ numerous communication strategies in the workplace. The individual seeks gratification through communication.

Alternatives are a key feature of uses and gratifications theory. In the modern workplace, many alternatives are available for communicating messages, and managers

may be inundated with new technology which promises quick and efficient communication. They must choose between traditional communication channels like letters or faxes, which could be slower than their newer counterparts, and new technology, which could be difficult to use or expensive to implement, or have unforeseen effects. For instance, a new Microsoft Office version may be introduced in the workplace. While it may promise more applications, simpler formats, and ease of use, managers must adapt to this new technology and, initially, may spend more time learning to use it than doing their work. The more time perceived as wasted on learning to use a new program, the less GO. Managers may continue using an older version with which they are fluent, even if a new, more efficient alternative might ultimately offer more GO. As time spent on a given medium is the most frequently used variable to measure GO in uses and gratifications research (McLeod & Becker, 1973), time spent, or duration, using specific communication channels was also adopted as a variable in the present study.

One of the most significant factors in choosing a communication channel is accessibility for both the sender and receiver. For an international project, all participants need to have access to the same communication technology. It would be futile to have video-conferencing in one building, but no access in another. Further, the sender and the receiver must have similar preferences and behavior toward specific technology. Thus, frequency of use is often associated with accessibility, since accessible technology tends to be more frequently employed than less convenient channels and provides greater GO (Weibull, 1985). For this reason, frequency of use and GO were tested in the present study.

Accessibility requires that users perceive a communication technology as relevant and also that they possess the technical skills necessary to use it (Jensen, 2002). This is, perhaps, most salient when introducing new communication technology in the workplace. If new technology is not perceived as more useful or user-friendly, staff may refuse to try it. Jensen (2002) suggested that knowledge gaps must be addressed so that the new technology does not increase, rather than diminish, social inequalities or skills differentials. A hotel in Chicago provides an example. When e-mail accounts were introduced, all messages from management to staff were sent by e-mail, rather than (as before) by a printed memo posted in the staff room. However, not all staff (for instance housekeepers) could conveniently refer to their e-mail account throughout the day. There was a computer in the staff room, but these workers preferred to eat or relax during breaks, not look at e-mails, and they missed some pertinent messages. Once the problem was identified, messages were duplicated in memos on the staff room bulletin board. The potential GO of e-mail as a quick and effective communication channel was not realized; instead, more GO was obtained from the printed memos.

Company norms and policy may facilitate communication (e.g., all pertinent messages sent by e-mail) or hinder it (e.g., employees overloaded with e-mails so they stop reading them; Elliott, 1973). The perceived meaning of communication policy rules may vary in terms of interpretation and therefore outcome (Lull, 1985). Company norms or policies may further complicate an already complex communication issue. Professional people's working behavior is related to the specific demands of their day-to-

day work environment, and this is likely to extend to communication behavior and

communication choices (Elliot, 1973).

In the workplace, upward communication is used when employees are making

requests or seeking information. Information-giving, however, tends to be directed

downward (e.g., management announces new changes or policies to the workforce).

Communication between colleagues is horizontal as each worker is seen as an equal. Katz

and Lazarsfeld (2006) suggested, however, that employees attempt to communicate their

needs through the person with the highest status. Many employees engage in personal

communication with managers who, in turn, address a larger group of employees, rather

than responding to individual concerns. Person-to-person messages flow horizontally

between colleagues and may be sent upward individually to management, but

management often responds by communicating downward to the entire group in a less

personal manner (Katz & Lazarsfeld, 2006). Katz and Lazarsfeld explained that when

there is a shared concern, a message may be more effective if given to a larger group at

one time. This may, in fact, be one reason why managers communicate top-down

messages through staff meetings or mass e-mails. By targeting the larger group, managers

do not need to address the same issue numerous times and can limit unsolicited questions.

The manager's power also influences the nature and outcome of communications.

Katz and Lazarsfeld (2006) compared two groups of workers, one of which was arranged

in a circle so that no one person had more perceived power than another, while the

second had one person placed in the middle of a wheel shape. The wheel facilitated

effective communication but limited discussion as group members simply waited for the

person in the middle to make final decisions. For a manager, using a wheel may be more gratifying, as fewer errors are made and more work is accomplished. Employees, on the other hand, received more gratification in the circle where no one was the leader, and all participants had equal say. Thus, from a uses and gratifications' perspective, there may be a disparity between what gratifies management and what gratifies employees. This will be addressed further in Chapter 2.

Uses and Gratifications and Future Research in Communications

Uses and gratifications theory can be applied to any form of communication. There have been calls upon researchers to build the theory to cope with the predicted expansion in communication technology (Williams, Phillips, & Lum, 1985, p. 241). For these authors writing in 1985, new technologies included communication satellites, videotape, computers and storage media, mobile telephones, teleconferencing, fiber optics, and video, some of which have already become near obsolete. However, the spirit of their statement stands. Uses and gratifications theory should be constantly adapted to gain further understanding of the ever-changing communication channel options available to users and the gratification they receive from using them (Williams et al., 1985). The present study contributed to that need.

<div align="center">**Definition of Terms**</div>

Communication: A process which involves the exchange of messages and meanings between sender and receiver (Berger, 2011)

Communication channels: Oral and written forms of communication which target individuals or groups (Berger, 2011).

Communication technologies: Technologies such as Internet, e-mail, instant messaging, telephone, Skype, or video-conferencing which are dependent on the tools used to communicate (Berger, 2011).

Gratifications: "Potential rewards offered, whether by the media content or by exposure per se, or by the social settings in which exposure to the media typically occurs" (McGuire, 1974, p. 167).

Mass media: Means of sending messages to a large number of people who are not necessarily chosen and may interpret the messages differently based on their own needs (Berger, 2011).

Modern communication channels: These include Skype, the Internet, e-mail, instant messaging, and video-conferencing. These channels are defined by and depend upon specific technologies which must be used in the communication process.

Traditional communication channels: These are taken to include meetings, face-to-face discussions, and written correspondence such as memos, letters, reports, agendas, and minutes. Each traditional channel has clear structure and format, and has been used for organizational communication for decades. Traditional channels are taught in business communication courses and have been the basis for workplace communication for many years.

<div align="center">

Assumptions, Limitations and Scope and Delimitations

</div>

Assumptions

The present study was based on the assumption that employees make conscious decisions when choosing one communication channel over another. I assumed that the

user of a channel, the sender of a communcation, reflects on the function, content, purpose, audience, previous relationship, tone, and register of a message when drafting it. However, senders may choose the simplest communication channel at their disposal, based on preferences, heuristics, experiences, accessibility, company policy, or perceived GO. The present study on communication channels through uses and gratifications theory ensured that the theoretical foundation accurately reflected the phenomenon being studied (Dusick, 2011) as it was based on comparable previous studies.

Methodological assumptions were that the population was appropriate and the sample was valid and sufficient for the statistical tests which were conducted. The population and sample were carefully selected to provide the data required and match the regression procedure that was used in order to test the hypotheses. This meant a randomly distributed sample of a calculated minimum size. Although the population of alumni from an international hospitality school in Switzerland is specific and was purposefully chosen, as representing a typical business community, the sample taken from this group was randomly distributed. A further assumption was that the population chosen was representative of the population at large. It is argued that although a sample drawn from the 10,000 active alumni of the one school may not represent hospitality employees in their entirety, it does offer a meaningful glimpse of the kind of problems faced by the larger business population.

The variables for the present quantitative study were defined and measurable. The instrument used consisted of 19 questions from Downs and Hazen's (1977) Communication Satisfaction Questionnaire (CSQ), which were used to measure

satisfaction with communication functions, and all items in Dobos's (1988) study on choice of new media and traditional channels, slightly modified to test individual communication channels (rather than grouping them into three categories as was done in her studies). These questionnaires have been previously tested and have proven reliable and valid instruments for measuring communication channel use and gratifications obtained.

Limitations

Limitations of a study are the elements a researcher cannot control. The present study was limited by whether the theoretical foundation accurately reflected the phenomena/variables being studied. The variables duration, frequency of use, and function supported the theoretical foundation and were defined and measurable. Of the variables defined for the present quantitative study, GO, proved to be the most difficult to measure. Respondents were asked to self-report their GO with both traditional and modern communication channels which is something they may have never done or even considered in the past.

The process of testing itself may change the variables being measured or the hypotheses being tested (Frankfort-Nachmias & Nachmias, 2008). A survey on choosing communication channels may take respondents by surprise. They may even wonder about the relevance of rating communication on the basis of gratification obtained.

Although the survey was based on existing questionnaires, which have been proven to be valid and reliable, the two instruments use different scales. Downs and Hazen's (1977) CSQ used a 7-point scale; Dobos's (1988) study employed a 4-point

scale. In the survey questionnaire for the present study, GO was rated for all variables on a scale of 1-7 to ensure consistency across the instrument and comparability of the results between variables.

According to Dusick (2011), the results of a study are limited by the ability of statistical procedures to find statistical significance. It was considered that regression procedures were the most appropriate for testing the research hypotheses and that these would find adequate statistical significance in the data. As mentioned above, the population of 10,000 active alumni was sampled randomly in order to satisfy the requirements for regression analysis.

Another potential limitation may be a lack of respondents to test the hypotheses. According to Dusick (2011), the results of a study are limited by the ability of statistical testing to detect significant differences/relationships if they exist in the population; if there are no differences in the population to begin with, there will be no differences in the analysis. There is no way to ensure that all respondents or a true representation of the overall population will respond, especially to a survey sent by e-mail. Lack of time or little interest in the topic could lead to low response rates which might influence or bias final results. A clear introduction to the purpose and importance of the topic could motivate employees to respond to this survey questionnaire. Respondents need to see the value in responding (e.g., that they might become better communicators) and the potential social change that could come out of this research. They must understand how this present study is relevant to them.

Delimitations

Participation in this study was limited to active alumni from an international hospitality school in Switzerland who graduated from one of three academic programs over the period of the past 40 years and who were actively employed. Unemployed or retired individuals were excluded from this study. Alumni come from more than 84 different nationalities and lived and worked all over the world and, therefore, potentially represent a wide range of outlooks and experiences, although presumably related mostly to the hotel and restaurant industries. Although they speak many native languages, they all followed an academic program in English or French and could be addressed in one of the two languages. I am fluent in both languages. The questions were designed and pretested to accommodate this wide spread of nationalities, and professional translation and back-translation was used to ensure that the questions had the same significance in both English and French.

The present study was limited to the function, frequency of use of, duration, and GO from choosing specific communication channels in the workplace. Communication channels used for personal purposes were not considered. Only those who chose the communication channels, assumed to be the senders of messages, were examined.

GO was measured using Likert scales which were piloted before administration. The results of the study are applicable to alumni from one international hospitality school in Switzerland, regardless of the year, who are actively employed. The results are not applicable for alumni who are currently unemployed or retired.

Significance of the Study

Previous scholars have addressed factors which contribute to the success of the communication exchange: namely, communication channel choice, accessibility, ease of use, context, motivations, heuristics, experience, and GO derived from them. While all of these factors may be relevant, it was beyond the scope of this study to analyze so many. For this reason, duration, frequency of use, function, and GO were chosen as the variables to be tested. Many articles have been written evaluating specific communication channels, but none of them have addressed as many channels as the present study.

Some researchers have evaluated employee satisfaction with communication based on clarity, transparency, pertinence, and timeliness of the content of the messages sent or the frequency with which employees are informed. These scholars did not, however, examine the specific GO when using individual communication channels. Uses and gratifications models have been applied to one or several communication channels (Dobos, 1988; Dobos, 1992; McQuail, 1984; Palmgreen & Rayburn, 1985). While each of these models contributes to communication research by examining how communication in general takes place, they do not examine so many communication channels used in the workplace or the GO from them.

In this study, I attempted to define GO from communication channels used in the workplace on the basis of duration, frequency of use, and function. The initial purpose of this research was to understand how employees chose the communication channels they used. When the most frequently used and most gratifying communication channels are

established, future researchers might aim to create a communication model reflecting the channels being used by employees in the workplace.

Summary and Transition

Chapter 1 began with an introduction to the present study on communication channels. Limitations, assumptions, and the potential for social change were also addressed. Uses and gratifications theory was examined in terms of communication channels, audience, alternatives, workplace, and future implications.

Chapter 2 will address communication research and the uses and gratifications paradigm, in terms of duration, frequency of use, function, and GO from specific technologies and communication channels.

Chapter 2: Literature Review

Introduction

A study of the GO that senders obtain from using specific channels may shed light upon channel choice, which is the topic of this dissertation. Factors identified by researchers as influencing GO included audience, alternative channels, ease and frequency of use, and functions (i.e., production, maintenance, and innovation). This approach was applied to mass media channels in early uses and gratifications research, and it is considered also applicable to other communication channels. Thus, for the purposes of the present study, uses and gratifications theory offers an effective tool for understanding why employees choose communication channels by examining duration, frequency, function, and GO from channel choices. This chapter presents an extensive review of communication research literature, in which each section is subdivided to reflect the variables discussed above (i.e., frequency and duration, function, and gratification obtained). I also discuss the (predominantly quantitative) research designs and variables used in previous research and those authors' comments about future research.

Reviewed literature derived primarily from recent, peer-reviewed articles, although relevant early articles on uses and gratifications theory (e.g.,Katz, Blumler, & Gurevitch, 1973,1974; McQuail, 1985; Rubin, 1985, 1993) were included, as well as communication research from prominent researchers such as Dobos (1988, 1992) and Lin (1993, 1999). Although some articles were written decades ago, they are relevant to the present of the dissertation through their application of uses and gratifications theory to

communication channels and their suggestions for future research. Key words for searching the literature included *uses and gratifications*, *communication*, *channels*, *satisfaction, higher education*, *traditional and modern communication channels*, and *workplace*. These terms were identified as frequently used descriptors in the literature of the themes discussed in Chapter 1.

Literature databases accessed through online libraries of Walden University and a Swiss-based international hospitality school included ABI/Inform Global, Google Scholar, ProQuest Central, and SAGE. In addition, the following journal titles were searched, which are known to include articles on communication research: *Communication Research, Journal of Applied Communication Research, Communication Quarterly, Management Communication Quarterly, Computers and Education, Communication Studies, The Uses of Mass Communication, Journal of Business Communications,* and *Media Gratifications Research*. Two researchers, Michael Hecht and Erik Timmerman, were contacted directly by e-mail. Michael Hecht gave permission to use his instrument, Interpersonal Communication Satisfaction Inventory (1978). Erik Timmerman sent a research article (Timmerman, 2010) containing details of his research instrument, which could not be accessed through databases without paying. An attempt to contact Jean Dobos was unsuccessful as, unfortunately, she is deceased.

This review is divided into five parts, starting with a historical overview of communication research and the ways in which uses and gratifications theory have been applied to it. I examine communication in educational and business settings, in each case addressing the duration, frequency of use, and predominant functions of different

communication channels, as well as the GO obtained from them. I then discuss the potential of communication channels to promote positive social change by keeping the public informed, examining duration, frequency of use, function, and GO associated with appropriate communication channels. The review concludes with a discussion of research designs used by other communication researchers and a justification of the design chosen for the present study.

Communication Research

Communication researchers examine the process by which meanings are created and interpreted (Rubin, Rubin, Haridakis, & Piele, 2010). The general discipline of communication is held to include 10 main content areas: communication and technology, group communication, health communication, instructional communication, intercultural and international communication, interpersonal communication, language and symbolic codes, mass communication, organizational communication, and public communication (Rubin et al., 2010). In this study, I focused on interpersonal and organizational communication in the workplace (i.e., how employees communicate within and outside of the company).

Mass media has been defined in numerous ways. Rubin et al. (2010) and Berger (2011) identified mass media as one facet of a wider set of communication channels or technologies. Berger and Jensen (2002) also identified mass media as a means of communication. However, for the present study, it was necessary to differentiate between mass media and other modes of communication.

Technology is one topic that researchers have used to differentiate between mass media and other types of communication. Berger (2011) noted that the technology upon which the mass media depend targets an unspecified audience and that feedback is either delayed or nonexistent. However, the message is often controlled and perhaps modified by gatekeepers whose approval influences the way the public receive it. In contrast, most other modes of communication target a specific audience and, because they are essentially private in nature, there are no gatekeepers. Technology may be required for some modes of communication, but not for others. Unlike mass media, feedback in general communication such as that in the workplace is not only possible, but quick (Berger, 2011). Because of these differences, mass media and interpersonal communication are often separated (Jensen, 2002), although some technologies can be used for both.

While I focused on communication processes in the workplace rather than mass media, it should be noted that there may be an overlap between the two when the Internet is considered. Researchers have studied the Internet (including social media networks, company websites, and intranets) in the contexts of both mass media and general communications. For example, Dobos (1988, 1992) examined the gratification obtained by users from oral, written, and electronic channels, Timmerman (2010) applied media richness theory to electronic and traditional communication channels, and D'Urso and Rains (2008) tested channel expansion theory with new and traditional communication media. D'Urso and Rains combined both concepts, demonstrating the overlap between mass media and general communication research. For the present study, however, the

term *communication channel* was preferred to *technology* or *media* because not all

channels in the workplace are media-based or rely on the use of technology. In the

present study, the Internet was not examined through a mass media perspective, but

viewed as a communication channel available to employees in the workplace.

Communication is often based on elements called modes or flows. According to

Jensen (2002), three modes of communication (one-to-one, one-to-many, and many-to-

many) occur in three types of communication flow: information flow, user flow, and

context flow. These modes and flows have been applied to mass media, but they are

equally relevant in general communication. In that context, *information flow* is the

content or message that a sender wants to communicate to one or several receivers. *User

flow* involves accessibility (i.e., a sender can only use a specific channel if the receiver (s)

also has access). *Context flow*, which brings people together, relates to the workplace

culture or to relationships between sender (s) and receiver (s). This is essential in global

workplaces where clients or employees may be stationed throughout the world. With e-

mail, for instance, a pertinent message can be sent to any or all employees and will be

instantaneously received. Although the feedback, or response, may be delayed, the

sender's role is fulfilled at the outset of the communication process.

Communication researchers have based their work primarily on three theories:

uses and gratifications theory, channel expansion theory, and expectancy value theory.

These theories differ somewhat in content, but Griffin (2009) regarded them as sharing

10 common factors: motivation, self-image, credibility, expectation, audience adaptation,

social construction, shared meaning, narrative, conflict, and dialogue. These factors are

rationalized in the following discussion. Motivation comes from a basic human need for

affirmation and control, as a result of which senders are motivated by a need to

communicate with one or many receivers. Communication affects and is affected by

senders' and receivers' sense of identity, (i.e. their self-image within their cultural

context;Griffin, 2009). In the workplace, this is demonstrated by the roles each employee

plays within and outside of the company. In each role, the employee has a self-image to

preserve as well as that of the company.

     Griffin (2009) also noted that all messages, whether verbal or non-verbal, are

validated or discounted by others. A manager who demands a report the following day

will be more likely to receive it than a peer asking another peer for a favor on a similarly

short deadline. Thus, communication may be validated or discounted on the basis of a

hierarchical relationship. Expectation involves the anticipation of action. A client

contacts a company for a service. The expectation is that the company will provide the

service in an efficient and polite manner. If the exchange is less than the expectation, the

client may choose to go to another provider of that service. Expectation also affects

perceptions, interpretations, and response (Griffin, 2009).

     Griffin's (2009) next three characteristics, audience adaptation, social

construction, and shared meaning, reflected the mutuality of general communication

processes. To be effective, a given message must target a specific audience and be based

on a shared social reality, in order for its actual interpretation to tally with the intention of

the sender. All of these depend upon sender and receiver having a shared sociocultural

perception of the world. The last three, narrative, conflict, and dialogue, to some extent,

underlie the functional content of all communication. Griffin (2009) noted that conflict

may arise between employees, management, and clients whenever they have

incompatible values and goals or are competing over scarce resources. Communication

channels often carry an element of social contact, so the choice of channel may produce a

positive or negative emotional effect, which in turn may be especially helpful or

damaging during a time of conflict or crisis. Narrative and dialog contribute to the social

effectiveness of a communication channel, by enhancing the human touch of the

encounter, by presenting the content as a story, or through the mutual responses of the

sender and receiver of the communication (Griffin, 2009).

Communication Channels and Uses and Gratifications Theory

Mass media channels such as television have provided a fruitful field for research

based on uses and gratifications theory for McQuail (1984), Rubin (1993), and Siraj

(2007), but the theory has also been applied to Internet-based media. For instance, Kink

and Hess (2008) applied uses and gratifications theory to the relationship between search

engines and traditional information sources. They found that gratification sought (GS)

only develops if the user believes that a channel possesses particular practical attributes

(Kink & Hess, 2008). They examined such variables as place and frequency of Internet

use, experience, speed of the Internet connection, frequency of using other media, age,

gender, and education. They found that online search engines outweighed older

established ways of retrieving information (specifically encyclopedias, yellow pages, and

telephone directory assistance) in regard to the gratification obtained. Kink and Hess's

(2008) study suggested users might obtain more gratification from using modern

communication channels than from traditional ones.

Other researchers have applied uses and gratifications theory to general Internet

use (Roy, 2007) and MySpace and Facebook (Urista et al., 2008). Roy (2007) identified

different motivations for using the Internet, which was based on previous uses and

gratifications studies. These included information seeking, economic incentives, self-

improvement, companionship, diversion, escapism, self-expression, amusement,

establishing status, and peer pressure. Urista et al. (2008) demonstrated empirically that

respondents use social media networks like MySpace and Facebook for perceived

efficiency and convenience, curiosity about others, popularity, relationship forming, and

reinforcement. Roy (2007) and Urista et al. (2008) examined one variable which was

relevant to the present study, (i.e. function), in the form of tasks completed through

communication channels.

In a study of television viewing, Lin (1993) created a composite GS variable

based on five factors: informational guidance, interpersonal communication, social

interaction, entertainment, and diversion. Other variables examined were demographics,

parental mediation, number of siblings, and the ability to make viewing decisions. Lin

(1993) was able to demonstrate that more motivated, captivated, and engaged viewers

tended to derive greater gratification from their experience, but suggested a need for

further studies on the relationship between different media technologies and their content.

The present study also examined the relationship between communication channel choice

and function, (i.e. how users choose appropriate channels for the message which needs to be communicated).

Communication Channels and Education

Because today's students are tomorrow's workforce, it is relevant to understand how students use communication channels. Increasingly since the 1970s, students have been expected to use technology in and outside the classroom to communicate, conduct research, and complete assignments. Although practically all university campuses expect that students will be able, or will learn during their studies, to use modern communication technology, what Junco and Cotton (2012, p. 506) referred to as *digital inequalities* still persist, as students' technological skills tend to vary with gender, racial origin, and socioeconomic status. Students are most disadvantaged by poor access to technology or by gaps in their skills or knowledge (Hargittai, 2010). Communication researchers have also addressed students' engagement and satisfaction with modern communication channels, teachers' and students' use of communication channels, and multitasking through communication channels.

Junco and Cotton (2012) reported that of 36,950 university students they surveyed, 99% had either a laptop (84%) or a desktop (15%) computer, 90% made regular use of social networking websites, and 73% sent regular instant messaging (IM) texts. However, as Hargittai (2010) pointed out, not all students have the same skill set in using these technologies or, perhaps, obtain the same satisfaction from them. Various researchers (Junco & Cotton, 2011; Kasavana et al., 2010; Neuman & Brownell, 2009) have shown that university students use modern communication technology, especially

social media networks, to keep in touch and reinforce existing social connections, but there was a discrepancy in the literature regarding the positive or negative effects of using these technologies in the classroom. Junco and Chickering (2010) found that the use of modern technologies in the classroom was positively related to academic and psychosocial outcomes, but a later study showed that using technology during class time had a negative impact on students' overall performance (Junco & Cotton, 2012).

Frequency and Duration

To study the impact of technology in the classroom upon students' academic performance, Junco and Cotton (2012) asked how much time students spent online, how much they spent overall on studying, and how often they felt they were multitasking. They found students spent over 2 hours per day on the Internet (Junco & Cotton, 2012) which agreed with previous studies (Junco & Cotton, 2011; Turner & Reinsch, 2010). Hargittai (2010) measured Internet skills using a 27-item scale and was able to compare actual online abilities with students' perceived skill level, high school GPA (a recognized predictor of overall college GPA), and parental education (as a proxy for socioeconomic status). Of these variables, time spent and frequency of use were relevant to the present study as they may be key indicators of how employees choose communication channels.

Although Junco and Cotton (2012) concluded that the Internet had a detrimental effect on academic performance, they found no such negative correlation with other communication technologies, including e-mail, cell phone, or SMS messaging. These findings suggested that in the workplace, the Internet might have an analogous detrimental effect on work performance while other technologies, including traditional

communications like memos or the telephone, may not. This assumption was indirectly tested when comparing function and GO from choosing traditional or modern communication channels in the workplace.

A study by the same authors examined the relationship between instant messaging (IM), multitasking, high speed Internet access, and sociodemographic factors. On average, IM users spent 120 minutes per day actively chatting, but considered that much of this time was spent multitasking (Junco & Cotton, 2011). Unlike their 2012 study, these researchers found in an earlier study that IM use had a detrimental effect on academic performance, of which the students were unaware (Junco & Cotton, 2011). This is interesting, in that students presumably obtained gratification while they were chatting on IM, but felt less gratification when their poor academic performance manifested itself. Junco and Cotton (2012) also found that multitasking had a negative impact upon academic performance. They defined multitasking in learning situations as divided attention between the learning objective and other ill-defined tasks which distract from the original learning objective Junco and Cotton (2012) considered multitasking as causing a task overload of the human information processing system. It was also relevant to the present study, since a range of different channels may compete for employees' attention and perhaps distract them from attending to priority tasks.

Turner and Reinsch (2010) found that the most common multitasking combination used by professionals was speaking on the phone while reading and even writing e-mails at the same time. Thus, multitasking, often given as a positive characteristic in résumés, may be disadvantageous to performance as students or workers'

attention is divided among tasks, none of which receives their full concentration (Turner & Reinsch, 2010). As Junco and Cotton (2011) noted: "no matter how good individuals become at multitasking, they might not ever be as effective and efficient as when they do one thing at a time" (p. 372). Students and employees may believe they are skilled multitaskers when, in fact, they are distracted or slacking, and impeding their performance in the long run (Galluch & Thatcher, 2011; Turner & Reinsch, 2010). The GO sought by multitaskers is linked to self-expression, since many messages may be communicated to different people at the same time. However, this actually hinders two-way communication flow as the sender is primarily concerned with sending rather than with responding. The sense of urgency to respond to multiple parties simultaneously is not equivalent to either efficiency or productivity and could produce a negative response from the receivers (Turner & Reinsch, 2010).

Junco (2011) studied the relationship between Facebook use and students' engagement in the educational process. Junco (2011) proposed that the more time students spent on social media networks, the more involved they were in campus organizations and real world issues. This scholar assessed students' use of technology, their frequency of using Facebook overall, and their engagement in various types of Facebook activities (Junco, 2011). In addition, they surveyed the time students spent preparing for class and on cocurricular activities. Gender, ethnicity, and socioeconomic status were used as control variables. Junco (2011) reported that students spent 101.09 minutes on Facebook per day and checked the site 5.75 times per day. Contrary to the two articles by Junco and Cotton (2011, 2012) showing negative effects of modern

communication technology on academic performance, these researchers showed a

positive relationship between Facebook use and student engagement. This finding was

relevant to the present study since it opened the possibility that social media networks

could increase employees' engagement in their workplace.

Junco and Chickering (2010) acknowledged the positive influence of modern

technology on student engagement and community ties. However, they urged caution

about negative effects such as shortened communication, misinterpretation of tone, and

missed communication cues. Other negative social effects included a misguided belief in

online privacy, net records, which may remain online forever, and cyberbullying (Junco

& Chickering, 2010). They suggested that educational institutions formulate institutional

policies on modern communication technology (Junco & Chickering, 2010).

Function

Although the Internet has revolutionized knowledge communication, Altbach,

Reisberg and Rumbley (2009) posited that it continues to exacerbate differences in access

and skills between nations and socioeconomic classes. Much previous literature

addressed how modern communication technology can be used in the classroom to

alleviate this problem (DiVerniero & Hosek, 2011; Galluch & Thatcher, 2011; Mondi,

Woods, & Rafi, 2008; Moran et al., 2011). In a study of how faculty use social media,

Moran et al., (2011) showed that the level of awareness did not vary with age or stage of

career, although the level of use was greater for younger instructors. DiVerniero and

Hosek (2011) reported that students they surveyed expected their instructors to be

familiar with modern technology both in and out of the classroom. This was problematic

for older faculty who, according to Moran et al. (2011), posted information significantly

less often than their younger colleagues. According to Junco and Cole-Avent (2008), the

digital divide also extends to faculty, especially in terms of technological skills.

The volume and detail of information posted online has had implications for both

students and faculty (DiVerniero & Hosek, 2011). Potential employers may refer to

students' online records, including those on social networks, when making a hiring

decision. Both students and instructors may feel ill at ease if they encounter each other on

social media networks like Facebook. The balance between students wanting instructors

to use modern technology in the classroom and being privy to their private online lives is

precarious. Knowing some details about instructors' lives allows students to perceive

them as more human and approachable, but information about their personal problems or

opinions may seem uncomfortable and dissonant (DiVerniero & Hosek, 2011). Although

viewing instructors' online profiles made them easier to understand as people, students

still preferred instructor disclosures that presented them in a positive light (DiVerniero &

Hosek, 2011).

Moran et al. (2011) noted that online video is the most common type of modern

communication technology used in higher education, and they reported that students

often watched YouTube videos relating to the environment, politics, and world events.

Although information that was once accessible only through books can now be accessed

at any time on the Internet, faculty members reported reluctance using it due to the time it

took to find appropriate videos and the feeling that they lacked appropriate training.

Privacy was also a potential issue when using online technology inside and outside the classroom, and DiVerniero and Hosek (2011) suggested a system of rules to determine when private information should be revealed or concealed, which they called communication privacy management theory. For instance, sharing class notes might be acceptable, but sending a completed paper to another student could incite copying. Although new technology offered more possibilities for engaging students academically, this technology also offered more opportunities for plagiarism, and other unethical behavior, including cyberbullying. Moran et al. (2011) defined the challenge as finding ways in which modern communication channels can be used in the classroom to the greatest positive effect.

Galluch and Thatcher (2011) noted that the Internet can be used beneficially to update course materials, post course materials and grades, communicate daily with students, and serve as a platform for online examinations. On the other hand, the Internet has intensified grade culture among both faculty and students and has made possible new forms of cheating, as well as being a focus of distraction during class, cyberloafing, and cyberslacking (Galluch & Thatcher, 2011). Students who were criticized in the past for loafing or slacking in the classroom were now using the Internet to loaf or slack because it was difficult for the instructor to tell whether their laptop was being used to take notes or to view Facebook accounts or less academic YouTube videos.

To understand the growth of such maladaptive IT use in the classroom, Galluch and Thatcher (2011) examined effort expectancy, performance expectancy, perceived opportunities, social norms, and perceived threats. They found that the first three

variables were significantly related to appropriate uses of IT. Social norms showed a

positive relationship with students' intention to cyberslack while perceived threats

showed a negative effect (Galluch & Thatcher, 2011). In terms of uses and gratifications

theory, the first three factors provided enough GO to encourage repeated appropriate use

of IT in the classroom. Ironically, social norms also provided GO, but that GO motivated

them negatively, and was likely to lead to further cyberslacking.

Junco and Cole-Avent (2008) found that males and females used the Internet in

equal proportions but in different ways. Females were more likely to chat on Facebook,

while males were more likely to play games online. However, within these parameters,

age, socioeconomic status, education, and broadband access also produced significant

differences in Internet use. For example, young adults were more likely to use the

Internet than those over the age of 40. Lower income students tended to use computers in

the academic setting predominantly for basic tasks such as testing or assignments, while

upper income students might learn how to program computers. Specific Internet

applications such as social media were predominantly used by university students (Junco

& Cole-Avent, 2008). Although most professionals and university students had cell

phones and access to the Internet, university students preferred text messages to e-mail

(Junco & Cole-Avent, 2008). GO from using e-mail or text messaging, among other

modern communication channels, was tested in the three hypotheses of the current study.

Pirani and Sheehan (2009) examined how e-mail, telephone, and messaging are

accommodated in emergency communication strategies in a university setting. They

found that while e-mail remains preeminent for official communication, institutions were

increasingly considering its replacement with text messaging in emergency situations.

Junco and Cole-Avent (2008) noted university students' preference for text messaging,

which is more likely to command their attention in an emergency situation. It is possible

that this will eventually spread to other situations, and, since these students will become

employees, a similar shift from e-mail to text messaging may also occur in the workplace.

Traditional phone use was predicted to remain important, although telephone wiring and

private branch exchanges could be replaced by Voice over Internet Protocol (VoIP)

(Pirani & Sheehan, 2009).

Pirani and Sheehan (2009) reported that e-mail was the only communication

channel studied, out of 11, in which users said they would have confidence in an

emergency. Institutions were confident that emergency notifications via e-mail would

reach their intended recipients, but they were less confident that the messages would be

received in time for recipients to take appropriate action (Pirani & Sheehan, 2009).

Sending a message seems like a certainty, but it is only effectively communicated if the

receiver checks their e-mail regularly. An emergency occurring at the weekend may

remain unknown to the receiver until Monday. This may be one critical reason to

consider using text messaging for emergency messages in the future in both schools and

the workplace.

Bembridge, Levett-Jones, and Jeong (2010) noted that young graduates often

suffer from reality shock due to a gap between undergraduate programs and the realities

of the workplace, especially in terms of information and communication technology

skills. Jones (2011) questioned whether communication skills taught in colleges and

universities adequately reflect workplace requirements. Company managers assume that new graduates have sufficient digital literacy to cope with information in digital formats (Nelson, Courrier, & Joseph, 2011). Bembridge et al. (2010) referred to this generation as *digital natives*, since they have grown up in a world of technology and should be adept at using it. The problem is the variation in computer proficiency and online skills between different graduates. Jones (2011) reported that employers were only marginally satisfied with communication competencies of new employees, including three levels of digital literacy: (a) digital competence (skills, concepts, approaches, attitudes); (b) digital usage (application of competences within specific professional domains); and (c) digital transformation (digital usage that is developed to enable innovation and creativity, and stimulate significant change within the professional domain; Nelson et al., 2011).

Nelson et al. (2011) administered a questionnaire to faculty asking what specific digital literacy aspects students needed to have for their respective fields. Using factor analysis and ANOVA, these authors were able to determine commonalities and differences between colleges regarding digital literacy. They found that all colleges showed similar results for information search and retrieval, information validation, and information communication. The most significant difference came in MIS Skills required between the College of Business and the College of Social Sciences, Mathematics, and Education (Nelson et al., 2011). Digital literacy, while pertinent to current workplace communication, was not the direct focus of the present study. For this reason, specific digital skills were not addressed in the current research project although they might be inferred from employees' choice of communication channel.

Gratification Obtained

In principle, students can obtain gratification from any electronic media. Mondi et al. (2011) applied uses and gratifications expectancy theory (UGE), an offshoot of uses and gratifications theory, to determine how and why students use e-learning, or electronically supported learning, and their perceptions of its utility. They found that affective, personal integrative, and entertainment UGE positively influence the perceived e-learning experience and commented "the more the medium has to offer, the more useful it will become" (p. 255). In principle, communication channels that offer more options to the user will be employed more frequently and create greater GO. While the five types of UGE mentioned above could be tested on specific communication channels used in the workplace, it was beyond the scope of this research project.

Numerous articles have examined student skills and motivations in respect of specific communication channels (Hulea, 2009; Junco & Cole-Avent, 2008; Nelson et al., 2011; Pirani & Sheehan, 2009). The focus has mainly been on the skills students have upon entering university, acquire at university, and are expected to be able to use effectively upon graduation. Jones (2011), however, noted that little is known about the technology-based computer skills employers expect of new employees, or whether technology-related skills are more important than traditional ones (p. 248). The present study focused on hospitality employees, who were all graduates of the same international hospitality school in Switzerland. Thus, the communication skills they acquired in their academic program, both traditional and modern, and the skills they have since acquired

were relevant to this study. It will certainly be relevant for future research on communication courses and necessary curricula changes in this hospitality school.

According to Hulea (2009), expectations of communication (GS) are influenced by external stimuli, such as the social environment or the organizational culture. These elements affect content, language, tone, register, and channel chosen, to communicate a specific message in a concrete situation. A sender's GO will be high if the receiver responds promptly and as expected to the initial message (Hulea, 2009). The objective of the message, then, is to express the motivation underlying its sending (Hulea, 2009). The sender's GO in the initial exchange will influence future choices of that same communication channel. However, GS was not directly explored in the present study, which concentrated upon GO, outcome, and future communication channel choice.

Future Research

Junco (2011), Junco and Cotton (2011) and Junco and Cotton (2012) called for future research to clarify how the frequency and mode of use of modern communication technology relate to academic outcome. Galluch and Thatcher (2011) suggested further investigation into cyber-slacking and its effects on academic performance. These studies could easily be adapted to the workplace from the original educational settings.

Nelson et al. (2011) pointed out the need for further research on digital competence within life situations, including the workplace. Bembridge et al. (2010), Jones (2011), and Nelson et al. (2011), proposed a review of existing curricula, to prepare students more effectively to communicate in the workplace by digital and non-digital means. Bembridge et al. (2010) identified a need to examine the transferability of

communication technology skills acquired at university to specific workplace environments. In this context, the present study aimed inter alia to identify the communication preferences and behavior of employees, which could be used to inform existing hospitality curricula to prepare students better for communication in the workplace.

Communication Channels and the Workplace

As seen in the previous section, higher education is supposed to prepare graduates with appropriate communication and information technology skills for the workplace. The reality, however, is that as many as 20% of managers in the USA are reported to be deficient in communication skills, and some have never even learned to type (Hagler, Erthal, Walzer, & Anderson, 2009). In the past, secretaries typed written documents, but since the 1990s, managers have been expected to draft their own documents, produce their own presentations, and write their own e-mails.

Frequency and Duration

Hagler et al. (2009) examined factors contributing to productivity in the creation of business e-mail messages. They chose e-mail because its use in business, estimated at twice that of the telephone and e-mailing, was reported to take up approximately 25% of an administrators' working day (Hagler et al., 2009). Their study found that a significant correlation between text keyboard speed and the quality of the e-mail message that is produced. Their work was relevant to the present study as e-mail is widely used in all workplaces and has been demonstrated to have an impact on productivity (Hagler et al, 2009).

Previous empirical studies showed no difference in the use of telephone by different age groups (Junco & Cotton, 2012; Lee, Leung, Lo, Xiong, & Wu, 2011). However, Clark and Roberts (2010) reported that older individuals tended to prefer face-to-face communication while younger ones preferred texting. Quan-Haase and Wellman (2005) introduced the term *hyperconnected* to describe people who use seven or more communication devices in the workplace; Godfrey, Seiders, and Voss (2011) referred to this as multichannel communication. Presumably, the more communication channels available, the more complex is the choice that employees must make to match channel to message.

Godfrey et al. (2011) studied the effect of telephone, e-mail, and postal mail contacts with customers of an automobile service company. They found that the value of repurchase per customer peaked at approximately three telephone contacts, between three and four e-mail contacts, and between nine and ten postal contacts. Increasing contact volume beyond these points reduced rates of repurchase. Godfrey et al. (2011) also examined the interaction of different communication channels, finding that if one telephone contact was made, between five and six additional e-mail contacts would be tolerated up to the *ideal* point. However, if more (up to five) telephone contacts were made, the acceptable number of additional e-mail contacts fell to between two and three (Godfrey et al., 2011). The notions that communication channels obey a law of diminishing returns and that use of different channels may affect the acceptance of a message both positively and negatively are crucial considerations that may influence interpretation of data in the present study.

Function

Lee et al. (2011) noted that the absence of nonverbal cues and lack of warmth and interaction that typically characterize Internet communication tended to result in impersonality, shallow interactions, and difficulty in building social support. This absence of nonverbal cues was found to contribute negatively to the perceived quality of users' lives because they had a much weaker role in social interaction than offline (i.e., person-to-person) communications.

Lee et al. (2011) identified time and displacement as two possible causes of weakened social ties. People substituted poorer quality (online) social relationships for richer (face-to-face) ones and tended to spend more time on the poorer relationships. The Internet allowed them more apparent contact with other people for a fraction of the time that would be spent in face-to-face contact and periods when they could guarantee to be free. Age, marital status, and education also affected the frequency of Internet use and thus the quality of life. For instance, young, single, highly educated users tended to spend more time on Internet. Although the quality of life itself was outside the scope of the present study, a relationship may exist between gratification obtained by using communication technology and perceived quality of life.

Gratification Obtained

Relevant articles in this regard were that of Cho, Ramgolam, Schaefer, and Sandlin (2011), who examined communication overload and channel synchronicity and Fonner and Roloff's (2010) study on teleworkers and job satisfaction. Hyperconnected employees tended to be overloaded with the volume of messages they received and might

lack the time to process them (Cho et al., 2011; Fonner & Roloff, 2010). Cho et al. (2011) examined the relationship between channel use and communication overload among traditional forms of communication (including face-to-face meetings, telephone, and memos) and newer forms such as e-mail, cell phones, instant messaging, SMS, and blogs. They found that perceived communication overload applied to channels possessing both high and low synchronicity but that increased organizational identification could create a positive relationship between communication overload and job satisfaction. This research was compelling for the present study as it linked both traditional and modern communication channels to GO.

Nordin et al. (2011) reported that new employees tended to seek task-oriented information to complete their jobs, while established workers were more interested in organizational information such as updates on organizational events, rules, and goals. Their study found that employees had been adequately informed about their job requirements and responsibilities (Nordin et al., 2011). Job information represents another source of GO that employees may be expected to seek and was potentially relevant to the present study.

Lee et al. (2011) applied a new term, *hyperpersonal*, to people who created multiple impressions and managed multiple relationships online. These self-edited and constructed personae may be heavily amended representations of their real lives, and it has been noted elsewhere that Internet users may portray themselves in any way they like, regardless of any prevailing socially constructed reality (Beddows, 2008). According to Lee et al. (2011), this may be a release, (e.g., allowing an extremely shy

person to communicate without face-to-face interaction), or a risk, preventing users from knowing with whom they are communicating. Josgrilberg (2011) noted the growing symbiosis between humans and technology, an apparently unavoidable relationship which affects even the most remote areas of the Earth. Humans must be prepared to acknowledge both cyberspace and physical space to make sense of their existence in the 21st Century (Josgrilberg, 2011). The idea of symbiosis, which by definition provides gratification to its participants, was thus relevant to the present study.

Employee Satisfaction

Job satisfaction is an emotional response towards one's employment situation, including pay, promotion, coworkers, and customers (Ahmad et al., 2010). Among other things, employees' perceptions of management communication are directly linked to their satisfaction and retention. Philippe, Helpling, and Koehler (2009) investigated the content of managers' messages and the gratification obtained from them by employees. Their study included six areas: providing feedback, explaining the organization vision, giving reasons for change, communicating reward systems, differences between words and actions, and communication as a guide for employees' actions. Their survey showed that employees were most concerned with consistency, organizational vision, plausible explanations (e.g., of change), reward structures, and feedback (Philippe et al., 2009). They found that job satisfaction was significantly correlated with communication and that consistency and (perceived) sharing of information, together with appropriate, well-timed feedback were indispensable aspects of communication.

A number of authors have reported that employees identify more strongly with organizations that they feel communicate openly and honestly (Ahmad et al., 2010; Al Eslami Kandlousi, Ali, & Absollahi, 2010; Bakanauskiene, Bendaraviciene, & Krikstolaitis, 2010; Lowry, Romano, Jenkins, & Guthrie, 2009; White et al., 2010). For White et al. (2010), the CEO ultimately sets the tone for internal communication and thus has the most influence over mutual trust between management and staff. Communication may succeed in making employees identify with the goals and values of an organization, but communicating too little creates a vacuum and too much may result in information overload (White et al., 2010), an inverted U relationship that recalled Jones's (2011) study discussed above. White et al. (2010) suggested that this relationship encompasses both the amount of information and the appropriateness of the content communicated. For Al Eslami Kandlousi et al. (2010), the effectiveness of workplace communication was a matter of fulfilling employees' informational needs. If information is not provided officially, employees will seek information from alternative sources, most notably the hearsay and speculations of colleagues (the grapevine) which provide ample, though often inaccurate, information (Al Eslami Kandlousi et al., 2010; Nordin et al., 2011).

Informants in a qualitative study by White et al. (2010) said they found e-mail highly convenient, but still preferred face-to-face communication because of the immediate feedback it provided. This concurred with the finding of Lee et al. (2011) that face-to-face communication strengthens social ties more than the Internet. According to White et al. (2010), administrators were often satisfied with information flow, but unsure of what information needed to be conveyed to employees at a lower level in the

institution and, although they placed ample information on the company website, it often

went unseen because employees did not seek information from that channel.

Employees at the highest and lowest organizational levels said they were satisfied

with the information they received while middle managers wanted more information,

even if it did not directly affect their daily tasks (White et al., 2010). When they received

information from upper management, middle managers felt respected by being kept in the

loop and they were more inclined to engage with the company. White et al. (2010)

concluded that e-mail was appropriate for quick notices and updates, printed paper

signified importance, and websites were used as information archives. These conclusions

were tested in the present study when examining the functions for which employees use

specific communication channels.

Rogelberg, Allen, Shanock, Scott, and Shuffler (2010) reported that more than 10

million meetings occurred daily in the U.S., frequently through conference calls and

video conferencing. Meetings were reported to be a key element in employee satisfaction

offering an opportunity for employees to come together to share ideas, exchange

information, and brainstorm new concepts, and also a forum for complaints, where

frustrated employees could find empathy or sympathy in a socially acceptable venue

(Ahmad et al., 2010; Rogelberg et al., 2010). Rogelberg et al. (2010) found that

satisfaction with meetings significantly predicted overall job satisfaction, but was

unrelated to gender, job tenure, organizational type, or the number of hours worked.

However, satisfaction from meetings was correlated with job level, recalling the findings

of White et al. (2010) that middle managers welcomed more communication than

employees at the top or bottom of the organization. Accordingly, job level and organizational type and size were added as demographic questions in the present study.

Fonner and Roloff (2010) found that employees who worked from home (teleworkers) reported higher job satisfaction than office workers because they were not required to participate in so many meetings, which they characterized as unsuccessful, unproductive, and time-consuming. Working at home allowed people to limit contact with others and escape from office politics, gossip, and unplanned meetings, but reduced organizational commitment (Fay & Kline, 2011). Fonner and Roloff's (2010) study showed that telework significantly affected stress and the frequency of information exchange, but neither of these was significantly related to job satisfaction. Thus, work-life balance may be a better predictor of teleworkers' satisfaction than stress from meetings or information exchange. Fay and Kline (2011) suggested that teleworkers' satisfaction with informal communication was positively related to family talk, socializing talk, the degree to which they liked their co-workers, and organizational commitment, but found that teleworkers' overall job satisfaction was not increased by the perceived quality of either their relationships or their informal communication.

Employees spent much of their time communicating with colleagues through meetings, formal correspondence, or informal conversations. Those who had strong, positive working relationships were found to be more inclined to engage with the organization's goals and less inclined to leave (Madlock & Booth-Butterfield, 2012). At times, they even turned to colleagues for interpersonal needs normally filled by family members, or engaged in relational maintenance strategies to keep the peace. Madlock and

Booth-Butterfield (2012) reported that these strategies, which included task sharing,

positive expressions of attitude, and conflict management, predicted employees'

organizational commitment and job satisfaction.

Future Studies

Much of the research on communication and job satisfaction has been quantitative

in approach, but Al Eslami Kandlousi et al. (2010) suggested that qualitative studies on

communication and employee satisfaction would be useful. Perceptions of

communication and communication skills are subjective, and studies based on interviews

or focus groups might illuminate current knowledge about how people communicate in

the workplace. They also felt it might be profitable to compare the effectiveness of

formal and informal communication channels and the satisfaction obtained from using

them.

<div align="center">Communication Channels and Social Change</div>

Frequency and Duration

Modern technology tends to extend and democratize communication and in

principle should therefore promote positive social change. One problem with this is the

digital divide, the uneven distribution among societal groups and nations of access to

knowledge and technology (Jeffres, Neuendorf, & Atkin, 2012). However, Jung (2008)

tested the relationship between Internet connectedness and various social and

technological factors. Of the three, access, especially ownership of a home computer,

years of Internet experience, and the number of Internet access places at home or work

had the most significant effect on Internet connectedness (Jung, 2008). Jung (2008)

suggested there is a need for future research into the connectedness of other media.

Function

Communication channels differ in their effectiveness, depending upon the

circumstances of communication and the social environment (Servaes, Polk, Shi, Reilly,

& Yakupitijage, 2012). This is true when companies attempt to communicate their

corporate social responsibility (CSR) deeds and social change projects. For Clark and

Roberts (2010), communicating CSR involved numerous stakeholders such as external

investors who wanted to see profits, and internal employees who had to be encouraged to

participate in such actions. Clark and Roberts (2010) noted the conflict between social

and financial performance, which are essentially short-term concerns and corporate social

responsibility which operates on a much longer timescale. For Jeffres et al. (2012), CSR

communication was much wider than the workplace, as actions which affect social

change can potentially affect everyone in a specific community.

Although companies believe that socially sustainable development is essential,

they are often unsure how to communicate effectively that they are doing it (Du,

Bhattacharya & Sen, 2010). According to Servaes et al. (2012) such communication must

be open, inclusive, and participatory and CSR actions are easily under-publicized or over-

exaggerated, both of which result in unsuccessful communication. Einwiller, Carroll, and

Korn (2010) found that the volume of reportage on CSR actions influenced public

perception and the reputation of the company. In fact, Einwiller et al. (2010) have shown

that CSR activities are one of five cognitive dimensions that people use to evaluate a

company as customers or employees. They found that the reputation dimension of social and environmental responsibility exerted a significant influence on emotional appeal, which was in turn related to people's intentions to purchase goods or services, or to apply for a position in the company. Thus, the public are favorably influenced by reports of a company's CSR actions as long as an ideal volume of such communication is not exceeded, and CSR actions appear to be in line with the company's prime source of revenue.

Public skepticism was reported to interfere with effective communication of CSR issues since customers and others tended to distrust a company if they suspected ulterior or self-serving motives (Du et al., 2010). For instance, McDonald's was treated with suspicion when it publicized healthy menus, but communications about Ronald McDonald Houses for sick children (children being perceived as the prime consumer of fast food) have been positively received. Receivers scanning such communications ignored anything they perceived as irrelevant (Kiyatkin, Reger, & Roger-Baum, 2011) and perceptions of relevance tended to reflect individuals' roles (e.g., as employee, consumer, investor). In addition, messages were misleading as the same word often had different meanings for different target audiences (Kiyatkin et al., 2011). This might be relevant where companies use one term to denote both actions which are not CSR and those that are. Receivers may still misunderstand or misinterpret a message even if the amount of information provided and the communication channel used are appropriate. Senders of CSR messages must be aware of these issues when choosing information and communication channels to communicate CSR.

Servaes et al. (2012) used a mixed methods approach to examine communication of CSR messages in health, education, environment, and local government. These scholars demonstrated the complexity of such communication processes and especially that CSR cannot be communicated unless the intended audience accesses and uses channels in specific ways. Latzer (2009) noted how legality became blurred as new technology was introduced. For instance, programs that were broadcast over the Internet were not legally considered television and Skype was not considered a telephone service. Other nascent legal issues included the protection of intellectual property, taxation of Internet trading, and the regulation of domain-name systems (Latzer, 2009), to which Clark and Roberts (2010) added the privacy of personal information, for instance, where employers consulted social networking sites as part of their assessment of job candidates. This was a difficult area since HR departments had to demonstrate due diligence in their assessment of applicants' suitability, but were at risk of overstepping privacy boundaries (Clark & Roberts, 2010). The evolution of telecommunications and media policy and the law varied from country to country have made it nearly impossible to apply one policy to all of the countries and communities involved (Latzer, 2009).

On one hand, the Internet can affect, promote, and encourage social change; on the other hand, new technologies rarely fulfill their potential as they are dependent on complex social and political issues which may exceed the utility of the technology itself (Jeffres et al., 2012). In principle, the Internet offers an ideal platform to communicate with millions of people simultaneously, in real time, with a common voice, but as Clark and Roberts (2010) have noted, information posted online is already in the public

domain. In fact, posting honest personal observations or opinions could be detrimental if an individual is regarded as a representative of a company both inside and outside the workplace (Clark & Roberts, 2010).

Gratification Obtained

Jeffres et al. (2012) showed that the gratification audiences obtained from different mass media channels depended upon differences in volume and content and in the way individuals processed the messages they received. Unlike other mass media channels, the Internet has the potential to reduce knowledge gaps through both instrumental learning (seeking specific information) and incidental learning (gaining background information at the same time as pursuing other tasks) (Jeffres et al., 2012). Hummert (2009) reported that effective communication was directly related to people's psychological wellbeing and social adjustment and suggested that changing individuals' communication behavior might improve their social health. By clarifying the nature of workplace communication, I attempted to improve current knowledge about workplace communication and perhaps communicators' social health.

Future Research

Jeffres et al. (2012) called for further research into the relationship between social status and the use of emerging technologies. Kiyatkin et al. (2011) identified a need to distinguish between what is communicated and what is understood regarding CSR and understand why organizations focus more or less on particular social issues. Hummert (2009) suggested that communication research should investigate ways of encouraging effective and beneficial communication practices in the community. According to Frey

(2009), there is a need to research how communication can contribute to public understanding of issues such as alternative energy, climate change, or positive social change. Clark and Roberts (2010) recommended drafting company policy and guidelines on how to use information obtained online, and Latzer (2009) suggested that future research may contribute to bridging currently identified gaps in government policy and legislation on communication technology. This legislation could be a step towards encouraging and promoting positive social change.

<div align="center">**Research Design and Justification**</div>

Theoretical Models

Uses and gratifications theory was chosen as the principal basis for this dissertation, because it has been tested through numerous studies employing uses and gratifications theory in the study of mass media and general communication (Bagdasarov et al., 2010; Blumler, 1979; Katz et al., 1973; Kink & Hess, 2008; Lin, 1999; Siraj, 2007). Although various versions of the theory have emerged, for instance that of McQuail (1984), who incorporated cultural and cognitive dimensions, the basic theory outlined in Chapter 1 and discussed below, has sufficient features to make it suitable for the present study.

Over the decades, uses and gratifications theory has evolved and been embellished with other theories. Communication privacy management theory (CPM) was used by DiVieniero and Hosek (2011) to study students' perceptions of instructors' online self-disclosure. Uses and gratifications theory was combined with expectancy value theory by Mondi et al. (2008), producing what they called uses and gratifications

expectancy theory (UGE), which they used to evaluate students' perceived e-learning experiences. Uses and gratifications theory and the technology acceptance model (TAM) were used together by Galluch and Thatcher (2011) to research maladaptive IT use in the classroom. Each of these approaches investigated communication channels in terms of users' GO.

The section: Communication Channels and the Workplace, revealed six situations where other theories have been combined with uses and gratifications theory to examine employee choice of communication channels. Einwiller et al. (2010) and Jung (2008) applied media system dependency theory (MSD) to research projects into the effect of media influence on corporate reputation and the relationship of interconnectedness with the social environment, respectively. Madlock and Booth-Butterfield (2012) used Shultz's (1958) theory of interpersonal needs to investigate how employee relationships with colleagues influenced job satisfaction. Lowry et al. (2009) used a different approach based on the Computer Mediated Communication Interactivity Model (CMCIM) to examine how process satisfaction was linked to system adoption and continuance. Timmerman (2010) applied media richness theory in a study of communication channels while D'Urso and Rains (2008) used channel expansion theory to examine how employees use new and traditional communication media (e-mail, telephone, IM, and face-to-face) in the workplace. Original exponents of uses and gratifications theory, including Katz, Blumler, Gurevitch, and Rubin suggested that it was applicable to general communication channels, and the present study intended to use it to assess the selection of channels of general communication in the workplace. The research questions and

hypotheses did not require the uses and gratifications model to be augmented with other theories as some other researchers have done. It should be borne in mind that those studies dealt with extremely specific issues among a limited range of communication channels. Adapting or augmenting uses and gratification theory was not appropriate in the present study, which intends to apply a broader perspective across a greater range of communication channels.

Surveys and Measurement Tools

Jones (2011) used Warner's (1995) skills inventory to examine the written communication skills of new graduates. The Communication Satisfaction Questionnaire (CSQ) of Downs and Hazen (1977) has been employed by several groups to assess satisfaction with communication in the workplace (Al Eslami Kandlousi et al., 2010; Bakanauskiene et al., 2010; Nordin et al., 2011; Rogelberg et al., 2010). Rogelberg et al. (2010) used the Job Description Index (JDI) to assess job satisfaction in the context of meetings, and Madlock and Booth-Butterfield (2012) measured organizational commitment using the Organizational Commitment Questionnaire (OCQ) of Mowday et al. (1979); job satisfaction through Abridged Job in General Scale (AJIG); and communication satisfaction with Hecht's (1978) Interpersonal Communication Satisfaction Inventory (ICSI).

Measurement tools such as CSQ, JDI, or AJIG, could have been applied or adapted to the present study. They have been tried and tested in numerous research projects on communication and are relevant for the present study for two reasons: (a) they are established measures that have been successfully used in the past; and (b) their use

would allow the findings of the present study to be compared with those from previous studies. The final version of the survey questionnaire for the present study, used 19 questions from the CSQ.

Variables

Many variables were examined in the literature including frequency of use, tasks performed, function, satisfaction, age, previous knowledge, place, gender, education, motivation, level of awareness, perceptions, and Internet skills. Variables selected as relevant to the present study were as follows: independent variables were duration, frequency of use, and function, and the dependent variable was respondents' perception of gratification obtained.

Other variables from previous research which might have been added to the present research design included job position, company size, and gender. According to the literature, different communication channels tend to be chosen by employees holding different roles. Although job position or company size could affect communication channel choice, they were not tested as independent variables for the present study. Instead the study sought to determine whether there were differences in communication channel choice according to gender and number of years of work experience. Education level, previous knowledge, and Internet skills were not considered, although they might be tested in a subsequent study.

This review has examined literature dealing with the frequency of use, duration, and function of communication channels and the GO that users derive from them. Different researchers have applied these broad principles to education, the workplace,

and to positive social change. Frequency of use and duration have frequently been tested

by gender, level of awareness, previous knowledge, education, or Internet skills (Junco,

2011; Junco & Cotton, 2010; Junco & Cotton, 2012; Moran et al., 2011). Function was

examined through tasks performed (DiVerneiro & Hosek, 2011; Dobos, 1988; Dobos,

1992; Godfrey et al., 2011; Junco & Cole-Avent, 2008; Kink & Hess, 2008; Lee et al.,

2011; Moran et al., 2011; Philippe et al., 2001; Pirani & Sheehan, 2009; Turner &

Reinsch, 2010). Satisfaction or GO with one or several communication channels was

rated by respondents using Likert scales (Ahmad et al., 2010; Bagdasarov et al., 2010;

Fay & Kline, 2011; Kink & Hess, 2008; Madlock & Booth-Butterfield, 2012; Nordin et

al., 2011; Rogelberg et al., 2010; Siraj, 2007).

Research Designs in the Literature

The majority of the studies reviewed in this chapter used a quantitative, cross-

sectional survey design. Most of the authors acknowledged that a limitation of this design

is the difficulty of determining causality (Al Eslami Kandlousi et al., 2010; Cho et al.,

2011; Einwiller et al., 2010; Junco, 2011; Junco & Cotton, 2011; Junco & Cotton, 2012;

Mondi et al., 2011). Junco and Cotton (2012) suggested the need for future longitudinal

and controlled studies, from which the causality of observed relationships might be

determined.

Another limitation of the survey approach was self-reporting (Fonner & Roloff,

2010: Junco, 2011; Junco & Cotton, 2011; Junco & Cotton, 2012). People were prone to

over or underestimate their skills, to please the researcher, or give a correct response.

They might also misremember or misreport the time they spent and the frequency with

which they used channels, as well as sometimes being unclear about tasks, and competences. However, it would be difficult to record these variables more accurately unless users could be tracked electronically while they used communication channels. This might be practicable for telephone, e-mail, or the Internet, since accounts can be automatically controlled. With written correspondence it is more complicated, for instance it might require timing subjects with a stopwatch and such unavoidably overt observation might change the way people work or the time they spend on tasks. Thus, even measuring time under strict conditions may still not accurately determine time spent on tasks and channels.

Research Design for this Study

Like many of the studies reviewed above, I used a cross-sectional survey design, which is acknowledged as the method of choice for showing the status quo in a real-life situation (Frey et al., 2000). The instrument used for this survey contained a demographic section, together with elements from existing instruments developed by other research groups. Nineteen questions from Downs and Hazen's (1977) CSQ were used unchanged. The questionnaire items used by Dobos (1988) to study the selection of communication channels were modified to identify individual channels, rather than groups of channels. These instruments have been used extensively elsewhere and were considered reliable and valid for the present study.

<div align="center">

Summary and Transition

</div>

In this chapter, I examined the relevant literature in depth through the categories of duration, frequency of use, function, and GO in communication research studies. I

also identified various authors' suggestions for extending their research, some of which

this study proposed to undertake. In the next chapter, I examine the intended research

design, including discussions of cross-sectional survey methodology and of the

measurement tools that were employed. Reliability and validity issues are also addressed,

as well as research ethics and IRB requirements. The chapter concludes with an

explanation on how the survey questionnaire was drafted.

Chapter 3: Research Method

Introduction

This chapter begins with a description of the chosen research design as it relates to the problem statement. I then discuss the research setting and sample and justify the sampling strategy. I address data collection and analysis in relation to the hypotheses and variables that formed the basis of the study and consider the statistical procedures used to test the research hypotheses. The chapter concludes with sections on the protection of participants and dissemination of findings.

Research Design and Approach

Research Design and Research Questions

The overarching RQ was: using multiple linear regression, can Y (gratification obtained) be predicted in terms of three independent variables (frequency of use, duration, and function)? Lower level RQs are as follows:

RQ1: Are there gender differences when determining whether Y (GO) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

RQ2: Does the number of years of work experience affect whether Y (GO) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

RQ3: Does the communication channel chosen affect whether Y (GO) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

I used a cross-sectional survey design to address the research questions. A cross-sectional design involves a one-off survey where a random sample of individuals responds to a set of questions about their backgrounds, experiences, and attitudes (Frankfort-Nachmias & Nachmias, 2008). The research presented here was based on a sample of employees who had both present and past experience using communication channels and were, therefore, likely to have opinions (e.g., attitudes) about different channels. While these employees graduated from hospitality programs in an international hospitality school in Switzerland, their jobs, positions, responsibilities, and environments differed. Like those of hundreds of hospitality management programs throughout the world, this population was eclectic; graduate positions extended beyond the hospitality milieu including positions in finance, banking, hotels, restaurants, events management, marketing, and so on. The population in this study provided an overview of employees in various industries and positions and their perceptions of GO when choosing communication channels, thus offering an accurate account of the current communication channel choice in the workplace. I assumed that all participants were currently employed, used communication channels at work, and had opinions about them.

There are positive and negative reasons to choose a cross-sectional design. According to Frey et al. (2000) and Neuman (2007), a cross-sectional design is the simplest and least costly alternative for conducting social research studies and is, therefore, the most frequently used. Cross-sectional surveys typically describe the status quo, but do not permit inferences about social processes or change because they refer only to one point in time, and in principle the same population may respond differently if

the survey is repeated. Nevertheless, it is the approach used most frequently in communication research based on uses and gratifications theory, but two limitations have been repeatedly cited: (a) that it is impossible to determine causality, and (b) that participants' self-reporting may produce inaccurate results. For instance, respondents might over or underestimate time spent using communication channels, especially as their state of mind at the time of taking the survey can affect the response (Ruggiero, 2000). In addition, cross-sectional surveys measure intended or reported behavior, rather than actual behavior (Jensen, 2012).

A cross-sectional survey was appropriate for two reasons: (a) I aimed to provide a general overview of the status quo of communication channel choice in the workplace, and (b) a study over time might have complicated the situation because new communication channels are continually introduced into the workplace. To summarize, the present study on communication in the workplace was in the domain of social science research and comprised a one-off survey of a random sample of individuals from a larger population of graduates of an international hospitality school in Switzerland. I intended to record their attitudes toward the specific topic at one particular moment in time.

Advantages of a cross-sectional design include the practicality of using a real-life situation such as communication in the workplace, and not requiring the random assignment of individual cases because all employees are capable of responding to the survey (Frankfort-Nachmias & Nachmias, 2008). However, to conduct linear regression, a random sample was necessary. As no specific position, tenure, title, or company was targeted, any graduate who was in employment could have been chosen at random to

respond to the survey questionnaire. For example, the electronic mailing list of over 10,000 active alumni was used, from which the sample necessary for conducting the linear regression was selected at random. The population and sample will be discussed further in a dedicated section below. Disadvantages of this approach include poor control of rival explanations (for instance, gratification may not be the most important factor in employees' choice of communication channels) and the fact that the direction of causality must be inferred (Frankfort-Nachmias & Nachmias, 2008). Inferred causality will be addressed in Chapter 5.

To test the questions for the final survey questionnaire, a focus group was undertaken with employees who worked at the hospitality school where the study was conducted. Participants in the focus group, some of whom were alumni, were currently employed (at the school) and had used communication channels extensively in their workplace, thus making them an appropriate population for the focus group. Their feedback, which led to changes in the initial survey questionnaire, will be discussed in greater detail later in Chapter 3 and Chapter 4.

The questionnaire used in the present study asked participants to rate the GO they obtained from specific communication channels on a series of Likert scales. There was, therefore, a risk that they might under or overestimate their gratification with each channel or were not aware of their gratification. Duration and frequency of use might also have been under or overestimated. These risks were considered when the results were analyzed, but the practical solution adopted was to offer ranges of time, such as increments of 30 minutes, or ranges of frequency, such as *every day*, *>once a day*, *once a*

week, or *once a month*. The time increments made it easier for participants to estimate

what they had done, although this did not directly solve the problem of under or

overestimation, and it reduced variance in the data.

Another concern was that employees might use the survey for ulterior reasons, for

instance, to complain about communication channels, colleagues, or bosses. Employees

may have felt misled that the survey did not allow them to complain about existing

problems, such as poor workplace communication. They may have also felt obliged by

management to respond, thus doing so with a negative attitude. They might also have

given socially correct responses to appear more efficient, for instance, by underestimating

the duration of communication tasks or overestimating their communication skills. For all

of these reasons, the purpose of the survey was made clear on the consent form and was

stated in the introduction preceding the questionnaire (See Appendix E). This consent

form served to introduce the researcher and the purpose of this research project. It

explained how the findings would later be used. Random participants who received the e-

mail directly from the alumni association who agreed to participate in my survey

questionnaire were immediately directed to the consent form. It was only by clicking on

the link to the survey at the end of the consent form that participants had full access to the

survey questionnaire.

As well as estimating duration and frequency of use for each communication

channel, participants were asked to rate GO according to the three functions of

communication channels discussed under Research Design in Chapter 2: production,

maintenance, and innovation. This required that participants understood each of these

functions. Based on feedback from the focus group, the original three functions were defined on the survey questionnaire as five potential responses: for production (*giving information, receiving information),* for maintenance *(establishing new relationships, maintaining relationships),* and for innovation (*brainstorming new ideas)*. Participants were asked to tick as many of these as necessary for each communication channel.

It was necessary to reassure employees of their anonymity, explain the survey's purpose, and state how it might affect them. Employees were informed in the consent form how the survey results would be used and were offered an opportunity to read the results at the end of the study (See Appendix E). The focus group was also able to add further comments and opinions about the survey questionnaire before the final version was sent out by e-mail.

Variables

Previous communication researchers, discussed in Chapter 2, examined a number of variables including frequency of use, tasks performed, function, satisfaction, age, previous knowledge, place, gender, education, motivation, level of awareness, perceptions, and Internet skills. In the present study, I measured three independent variables: frequency of use, duration, and function, which were tested for their predictive value of GO. Previous scholars have limited the number of communication channels investigated, or have aggregated channels into groups. For my study, I included as many as possible of the individual communication channels actually used in the workplace, which were tested individually.

Independent variables.

The overarching research question (RQ) was: using multiple linear regression, can Y (gratification obtained) be predicted in terms of three independent variables (frequency of use, duration, and function)? The corresponding H0 can be stated as:

$H_0 1$: R = 0; linear regression is a good fit.

$H_0 2$: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y.

Furthermore, the overarching RQ and hypotheses were broken down into lower level RQs and hypotheses which were analyzed in terms of various demographic characteristics, namely gender and work experience. Independent variables for the present study were frequency of use, duration, and function. These are specified below:

Frequency of use is an independent variable on a ratio scale that is discrete (ranging from *never* to *>once a day*). I measured frequency of use with 15 individual communication channels and tested frequency for all hypotheses using multiple linear regression. Figure 1 illustrates this process, showing how the independent variable, frequency of use (discrete), was tested, where it appeared on the survey questionnaire (Part 4 A, 15 communication channels), how it was assessed (1-6), and which statistical test was used (multiple linear regression). Figure 1 also shows how the dependent variable, GO, (discrete) was tested, where it appeared on the survey questionnaire (Part 4 B, 15 communication channels), how it was assessed (1-7 Likert scale), and which statistical test was used (multiple linear regression). The values for this variable were coded from 1 for *never* to 6 for *>once per day*. Dummy coding was used with 1 for *never*

up to 6 for >*once per day*. I conducted multiple linear regression using the sum of the

scores of frequency of use of all channels, duration and function, to determine whether

frequency of use predicted GO. After analyzing the overall results of the three

independent variables and GO for the overarching hypotheses, the results for gender,

work experience, and individual communication channels were analyzed as well.

Frequency of Use

Constructs	Frequency of Use	- - - -	Gratification obtained
Survey Questions	Part 4A (a to o)	- - - -	Part 4B (a to o)
X and Y	Frequency of Use Ratio scale Continuous 1-6	- - - -	Gratification obtained Interval scale Continuous 1-7
Indexes	Sum of all channels Gender Work Experience	- - - -	GO of all channels, gender, work experience, frequency of use
Regression	Multiple Linear Regression	- - - -	Multiple Linear Regression
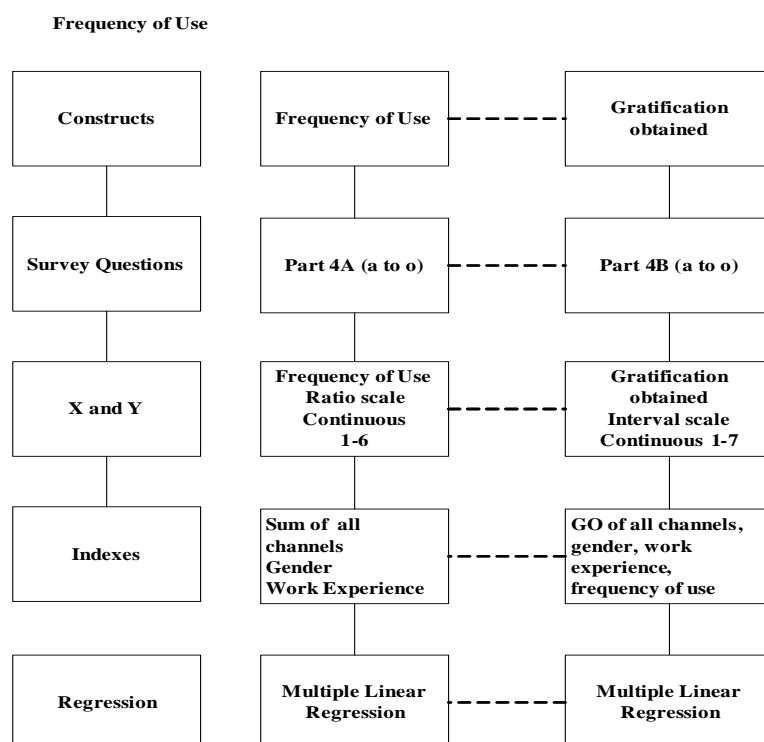
Figure 1. Frequency of use and gratification obtained.

Duration is an independent variable, also measured on a ratio scale and discrete

(ranging from *never* to *>4 hours per week*). I measured duration with 15 communication

channels and tested it in all hypotheses through multiple linear regression. Figure 2 shows

how the independent variable, duration (discrete), was tested, where it appeared on the

survey questionnaire (Part 3A, 15communication channels), how it was assessed (1-6),

and which statistical test was used (multiple linear regression). Figure 2 also shows how

the dependent variable, GO, (discrete) was tested, where it appeared on the survey

questionnaire (Part 3B, 15 communication channels), how it was assessed (1-7 Likert

scale), and which statistical test was used (multiple linear regression). The values for this

variable were coded from 1 for *never* to 6 for *>4 hours per week*. Dummy coding was

used by giving the value of 1 for *never* and 6 for *>4 hours per week*. Multiple linear

regression was initially run with the sum of the scores for duration of 15 communication

channels, frequency of use, function, and GO to determine if duration predicted GO.

After analyzing the overall results of the three independent variables and GO for the

overarching hypotheses, the results for gender, work experience, and individual

communication channels were analyzed as well.

Duration

Constructs	Duration (or time spent)	Gratification obtained
Survey Questions	Part 3A (a to o)	Part 3B (a to o)
X and Y	Duration Ratio scale Continuous 1-6	Gratification obtained Interval scale Continuous 1-7
Indexes	All channels Gender Work Experience	GO from all channels, gender, work experience, and duration
Regression	Multiple Linear Regression	Multiple Linear Regression

Figure 2. Duration and gratification obtained.

Functions (production, maintenance, and innovation) is an independent variable on a nominal scale. Figure 3 shows how the independent variable, functions (discrete), was tested, where it appeared on the survey questionnaire (Part 5A, 15 communication channels), how it was assessed (1-5), and which statistical test was used (multiple linear regression). Figure 3 also shows how the dependent variable, GO, (discrete) was tested, where it appeared on the survey questionnaire (Part 5B, 15 communication channels), how it was assessed (1-7 Likert scale), and which statistical test was used (multiple linear regression). I measured function with 15 communication channels and tested it in all hypotheses through linear multiple regression. In order to run the linear multiple regression, functions were defined as five tasks: *giving information, receiving information, establishing new relationships, maintaining relationships,* and *brainstorming new ideas*. The sum of the number of functions for each communication channel was calculated and used as a variable to indicate function, the assumption being that the greater the number of functions used for a given communication channel, the better function predicts GO for that channel. Multiple linear regression was initially run with the sum of function scores for all 15 communication channels, duration, frequency of use, and GO to determine if function predicts GO. After analyzing the overall results of the three independent variables and GO for the overarching hypotheses, the results for gender, work experience, and individual communication channels were analyzed as well.
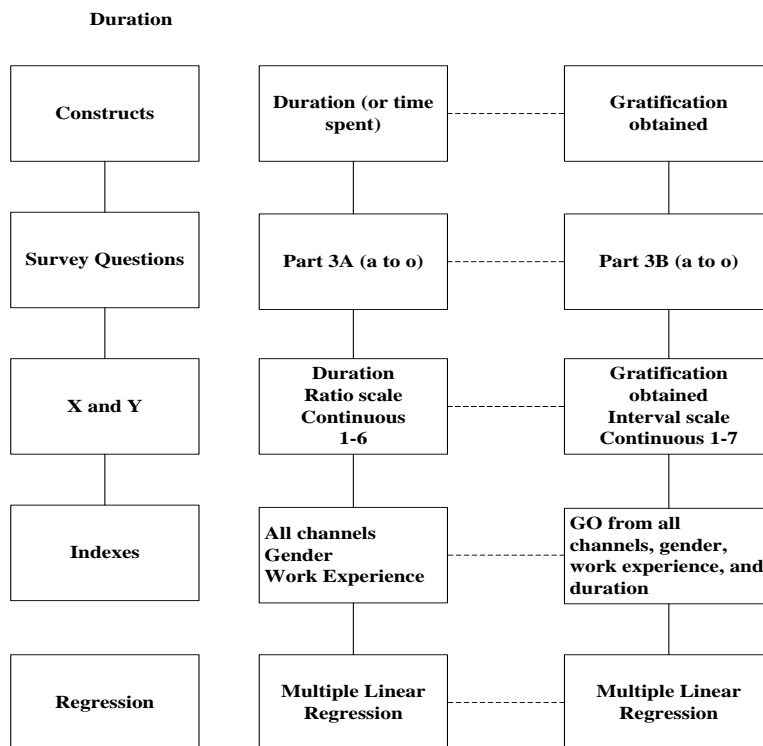
Functions (production, maintenance, and innovation)

Constructs	Functions (production, maintenance, and innovation	- - -	Gratification obtained
Survey Questions	Part 5A (a to o)	- - -	Part 5B (a to o)
X and Y	Function Nominal scale 1-5 choices	- - -	Gratification obtained Interval scale Q 1-19, Part 5B Continuous 1-7
Indexes	Sum of all channels, gender, work experience, and function	- - -	GO for channels, gender, work experience, and function
Regression	Multiple Linear Regression	- - -	Multiple Linear Regression
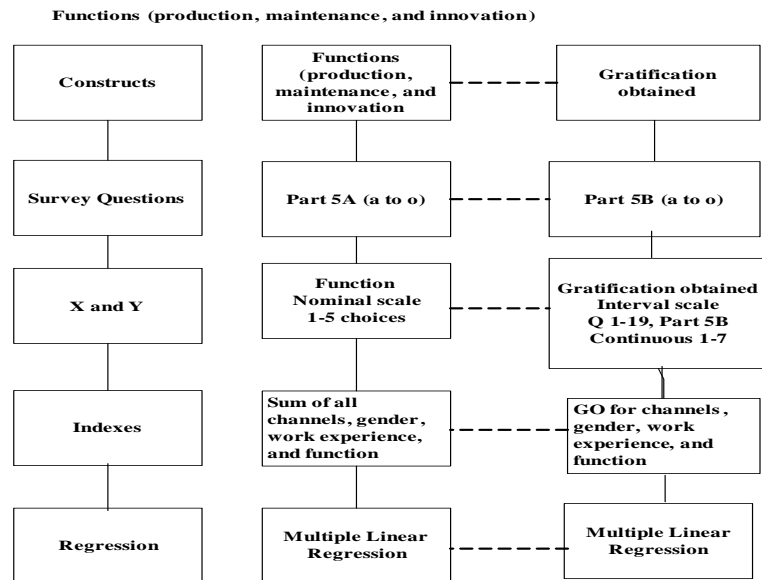
Figure 3. Functions and gratification obtained.

Dependent variable.

The dependent variable was GO from communication channels in the workplace which could be measured on an interval scale. I measured GO for each communication channel through 19 questions in Part 2 of the survey questionnaire (Q 1-19). As discussed above, this was derived from the CSQ of Downs and Hazen (1977), which measured GO on a scale of 1-7 from *very dissatisfied* to *very satisfied*. GO for each of the 15 communication channels was measured using the scale of 1-7 on the survey questionnaire in part 3B for duration, 4B for frequency, and 5B for function, the values being coded from 1 for *not gratifying at all* to 7 for *extremely gratifying*. Multiple linear regression was used to test all hypotheses.

Time and Resource Constraints

The survey questionnaire was sent out by e-mail in March 2014, participants being given two weeks to respond to the initial e-mail request. After the two week time frame, 332 responses were received. Response rates are discussed in more detail in the section on data collection in Chapter 4.

Survey instruments appropriate for this study were identified from the literature review in Chapter 2 and will be discussed in more detail below. Since they were required in both English and French, the translation department at the international hospitality school in Switzerland ensured accurate translation and back-translation of the questionnaire.

<div align="center">

Methodology: Setting and Sample

</div>

Population

The population for the present study consisted of individuals who graduated from a single international hospitality school in Switzerland and were currently in employment. As an employee, I contacted the school's Alumni Coordinator who has access to the school's database of alumni and the facilities to send an e-mail survey directly to their most recently recorded address. The population for the present study was therefore chosen on a convenience basis, but was purposeful to the extent that all participants were employed in jobs likely to require regular and extensive business communication. Their exact job titles, geographic locations, and ages were irrelevant to the present study. The only two factors taken into account were alumni membership and active employment.

The number of registered alumni was over 25,000 at the time in question, but this study addressed a subgroup who had chosen to stay in contact with the school, called the active alumni, which numbered about 10,000. Members of this group participate in on and off campus alumni events throughout the world and they tend to take an interest in changes and developments in the school and its academic programs. They often employ students for internship positions in their companies and are generally motivated to support the school and its faculty's activities. For these reasons, active alumni were the best group to target for this survey research. To ensure the sample was random, each of the individuals on the database was given an equal probability of being selected (Frankfort-Nachmias & Nachmias, 2008).

The alumni department can provide a full list of alumni e-mail addresses or create various sublists of alumni for specific research projects on request. For example, they are able to limit mailings to only general managers or only F&B staff. In the case of the present study, there was no need to specify such criteria. Any of the alumni could be selected at random. Furthermore, the alumni department sent the survey on my behalf using a random sample, so I had no role in sending out the e-mail questionnaire. They also have strict rules forbidding researchers access to their alumni database. The alumni database is frequently solicited for research projects, so the alumni department limits the number of surveys sent to one per month and they do not send out reminder e-mails as they feel this is invasive and annoying. The final response rate for my survey questionnaire sent by e-mail with no reminder was just under 4%.

Sampling and Sampling Procedures

Because the population of 10,000 active alumni was sampled on a random basis, there was no predisposition toward type of position, sector, company, or country; any position in any industry in any country was acceptable. Because all respondents had an equal chance of being chosen, sampling was considered random. This was a necessary prerequisite for conducting the regression analyses necessary to test the research hypotheses.

Sample Size

The G*Power tool was used to define an optimal sample size of 77 for multiple linear regression (Faul, Erdfelder, Buchner, & Lang, 2009). G* Power is a free tool which computes statistical power analysis for many different tests including multiple linear regression (http://www.gpower.hhu.de/). To calculate sample size, I followed the three steps in the G*Power manual:

In Step 1 for choosing the statistical test, I chose Linear multiple regression: Fixed model, R^2 deviation from zero.

In Step 2, from the Type of power analysis menu, I chose the first item which displayed input and output parameters appropriate for an a priori power analysis. In A priori, sample size is computed as a function of three things: (a) the required power lever $(1 - \beta)$; (b) the pre-specified significance level α; and (c) the population effect size to be detected with probability $1 - \beta$ (Faul, et al., 2009, p.3). In this case, I chose a medium effect size of .15.

In Step 3, I provided the input parameters required for the multiple linear regression analysis (See Figure 4.). The main output parameter of the type of analysis selected in the main window is by default selected as the dependent variable y. In an a priori analysis, for instance, this is the sample size as seen below (Faul, et al., 2009).

Thus, to calculate this number, the effect size was .15, Alpha =.05, Power = .80 and predictors (or independent variables) = 3 (See Figure 4.). The actual power is .8018 which is an acceptable number for multiple linear regression analysis (Faul et al., 2009).

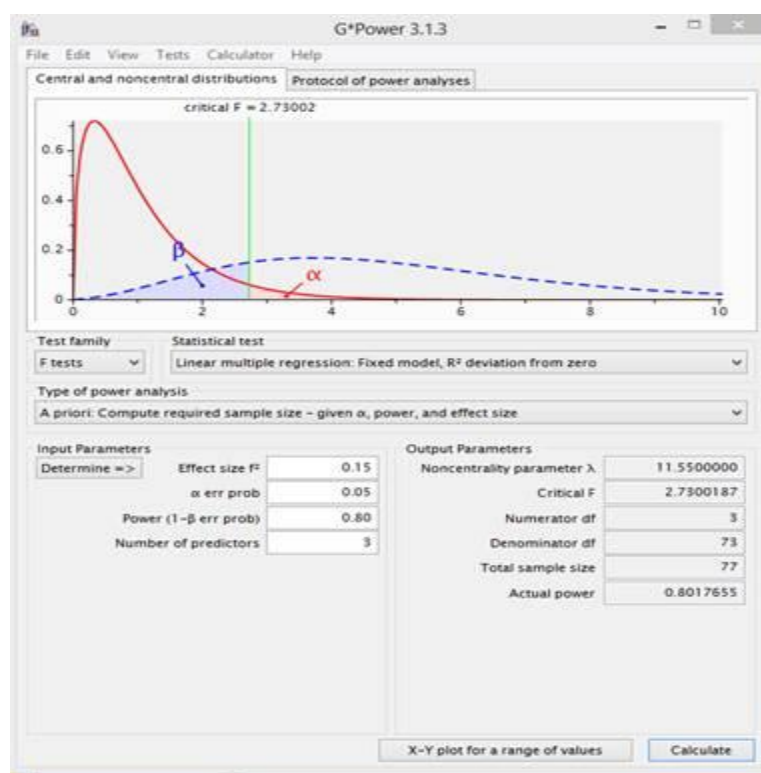

Figure 4. G*Power for linear regression.

F tests - Linear multiple regression: Fixed model, R^2 deviation from zero
Analysis: A priori: Compute required sample size
Input: Effect size f^2 = 0.15
                α err prob   = 0.05
                Power (1-β err prob)   = 0.80
                Number of predictors   = 3

Output: Noncentrality parameter λ   = 11.5500
Critical F   = 2.7300
Numerator df   = 3
Denominator df   = 73
Total sample size   = 77
Actual power   = 0.8018

As seen above in the G*Power analysis, 77 respondents were necessary for each variable which was being measured (Faul et al., 2009). To assess whether there were gender differences in communication channel choice and GO, the ideal sample of 77 was multiplied by 2 (for the 2 genders) giving a requirement of 154 respondents. To assess the effect of work experience on communication channel choice and GO, the ideal sample of 77 was multiplied by 6 (for 6 work experience ranges) giving a requirement of 462 respondents. To reach the number of respondents necessary to test work experience (462), a far greater number than 462 survey questionnaires would have needed to be sent out to ensure the ideal sample of 77 per independent variable. With the actual response rate of 4%, 11,550 participants would have been necessary to reach the number of 462 respondents. This exceeds the total number of active alumni and was not possible. With a random sample, there was no way to ensure that work experience and gender were equally distributed.

Colleagues who have conducted research among the same active alumni sample have reported response rates in the range 5-16%. For a response rate of only 5%, it would have been necessary to send questionnaires to 9,240 participants to get the 462 respondents necessary. At the average response rate (10.5 %), 4,400 questionnaires

would have been required. In fact, the survey questionnaire was sent out to 8,467 active

alumni and a 3.92% response rate was obtained.

Eligibility of Participants

All participants were equally eligible to respond as long as a working e-mail

address was available. The questionnaire was sent in French and English and respondents

were allowed to respond in the language with which they were most comfortable. It was

assumed that all were adults, over the age of 21. Alumni who were currently unemployed

were not considered, but any active alumnus who was currently employed, regardless of

job title position, or company was eligible to participate in this study. In the introduction

to the project, it was made clear that the study was intended for active alumni who were

currently employed. Individuals who did not fit this description did not continue

completing the questionnaire. Question 3 on whether the participant was employed was

an eliminatory question. Respondents who answered no to Question 3 immediately

received a message which thanked them for their time and participation. They were not

permitted to continue completing the survey questionnaire.

Characteristics of the Selected Sample

As mentioned above, the survey questionnaire was available in both English and

French. Although the selected sample of active alumni graduated from the same

international hospitality school in Switzerland, they might have followed different

academic programs or studied in English or French. Until 1996, there was no English

program, so the preponderance of participants in this research project may have been

graduates of the French programs. After conducting the survey, this was found to not be

the case as more French participants clicked on the initial survey link (6.37% for French; 5.77% for English), but more English participants completed the final survey (181 English respondents; 151 French respondents).

The school was the first hotel school in the world, founded in 1893, and had a predominantly male student population for its first 70 years. It was only after the introduction of housekeeping and receptionist programs that women began to attend the school. Since the late 1990s, gender numbers have leveled and the school administration now ensures an equal proportion of men and women in its academic programs. Thus, more recent graduates might be men or women while older graduates would be predominantly male. There was a possible risk of bias. There was also a risk that gender categories would not have sufficient numbers of participants, 77 for each gender.

Instrumentation and Materials

Data Collection Tools/Instruments

Nineteen questions from the CSQ (Downs & Hazen, 1977) were chosen for inclusion in the questionnaire used in the present study. This instrument is in the public domain, and no supplementary permission was needed to use it. Although it focuses on communication and the satisfaction (or GO) which comes from it, it has been used to test individual communication channels. The CSQ has demonstrated consistently strong reliability in previous studies where communication channels were grouped (Al Eslami Kandlousi et al., 2010; Bakanauskiene et al., 2010; Nordin et al., 2011; Rogelberg et al., 2010) and it has been shown to be appropriate for measuring satisfaction with communication functions. The 19 questions from the CSQ were selected as Part 1 of the

present research questionnaire (See Appendix B) as they provided information about the information function of communication channels and the satisfaction derived from them.

Following the 19 CSQ questions in Part 1, the questionnaire then targeted 15 specific channels through duration, frequency of use, functions, and GO (See Appendix C). For function, items from Dobos's (1988) questionnaire were used to measure satisfaction with specific communication channels (See Appendix A). This originally employed a 4-point scale to measure satisfaction based on three organizational functions: production, maintenance, and innovation. Dobos's study did not examine the GO obtained from each channel. Dobos analyzed the responses in three aggregated channel categories: oral, written, and electronic. The present study examined the GO derived from individual communication channels. Permission to use Dobos's questionnaire in a doctoral thesis was granted on August 7, 2012 by the Routledge Taylor & Francis publishing house.

The CSQ measures satisfaction with communication functions using a 7-point scale. I retained the same scale for the present study in order to enable comparisons with previous research. To measure frequency of use, participants were asked to choose from a list of responses from *never* to *>once a day* in a typical work week. Duration was measured in hours from *never* to *>4 hours* per day. As seen earlier, the three functions were defined as five tasks: *giving information, receiving information, establishing new relationships, maintaining relationships,* and *brainstorming new ideas* in. Participants could choose as many functions for each channel as applicable. GO was rated on a 7-point Likert scale. The 4-point scale used in Dobos's instrument to measure GO was

replaced with a 7-point scale in the present questionnaire in order to preserve comparability between the different sections.

Reliability

Uses and gratifications theorists employed Downs and Hazen's (1977) CSQ scale items and their reliability and validity in their research projects were clearly established. Cronbach's Alpha is the most common measure of scale reliability, which calculates the variance within the item and covariance between a particular item and other items in the scale and evaluates how strongly the individual items on the scale are connected (Frankfort-Nachmias & Nachmias, 2008). Alpha values of .7 to .8 are generally regarded as acceptable, and a value substantially lower than this indicates an unreliable scale (Field, 2009). Coefficient alpha values for Downs and Hazen's eight dimensions of satisfaction with communication have been consistently high, ranging from .72 to .96 (Rubin et al., 2004).

Focus group.

To adapt existing survey designs to the purpose of this research project, I made various changes. First of all, participants were required to self-report the estimated time spent on each of the communication channels (duration) and the frequency of use. A Likert scale response was not appropriate for this type of inquiry. To test these new elements and ensure that no communication channels were omitted, a focus group was conducted prior to drafting the final survey. In an informal 90-minute discussion with employees at the international hospitality school in Switzerland, the following questions were asked:

1. How would you define a communication channel?

2. How many do you use each day?

3. Name the top three you use (by frequency) in the workplace.

4. Name the top three you use (by frequency) at home.

5. How would you use communication channels for production?

6. How would you use communication channels for maintenance?

7. How would you use communication channels for innovation?

8. How would you define the three functions of communication channels:

    production, maintenance, and innovation?

9. What does the word gratification mean to you?

10. Which communication channel offers you the most gratification in the

    workplace? How do you rate this?

11. With all things equal, if you could only choose one communication channel

    for the workplace, which one would you choose?

12. Is there a communication channel that you would never use? If so, why not?

Based on the focus group feedback in February 2014, I readjusted the

questionnaire items as necessary. The changes included defining the functions into five

subcategories: *giving information, receiving information, establishing new relationships,*

maintaining relationships, and *brainstorming new ideas*. A second change involved

removing 24 questions from the CSQ which were not relevant to this study, as they asked

respondents to evaluate supervisors or personal relationships at the workplace. Only the

19 questions from the CSQ regarding communication function were selected for the present study.

The actual questions were piloted with a convenience sample of colleagues who worked at and were also alumni of the international hospitality school in Switzerland. This exercise confirmed that the survey questionnaire took approximately 20 minutes to complete. Once their feedback was addressed, participants in the initial focus group received the edited version for validation. They confirmed that the changes reflected their comments.

Survey design.

It was proposed to retain the 19 questions of the original Downs and Hazen's (1977) CSQ survey instrument which were linked to the function of communication channels. From Dobos's (1988) study on new media and traditional channel choice, the original functions of production, maintenance, and innovation were retained but defined as the following specific tasks: for production (giving information, receiving information*),* for maintenance (establishing new relationships, maintaining relationships*),*and for innovation *(*brainstorming new ideas*)*. Respondents were asked to rate the GO of each communication channel based on the importance of each of the functions when choosing a communication channel. The latter was important for comparing specific results in production, maintenance, and innovation with overall GO.

Part 1 of the questionnaire elicited demographic information, including year of graduation, nationality, size of company, years in the company, and language (French or English) in which the respondent studied when in school. Question 3 in Part 1 asked if

the respondent was currently employed. If the respondent was not currently employed and responded no to Question 3, the questionnaire stopped there as it was an eliminatory question. This was a setting chosen in SurveyMonkey to stop participants who were ineligible to answer the entire survey questionnaire. The 19 questions on function from Downs and Hazen's (1977) CSQ questionnaire were included in Part 2. Part 3 included the hours per week spent on each communication channel from *never* to *>4 hours* and a 7-point scale to rate GO for duration. Part 4 offered a choice of communication channels and the frequency of use of each expressed in ranges from *monthly* to *>once a day* and a 7-point scale to rate GO from frequency of use of communication channels. In Part 5, participants were asked to choose among 5 functions for each channel as well as rate GO from function on a scale of 1-7. The final version of the questionnaire for this research project can be found in Appendix C.

Testing and Validity

I conducted multiple linear regression on all hypotheses to ascertain how well frequency of use, duration, and function predict GO. The premise of the present study was that the greater the frequency, the greater the duration, and the more the functions used for a given channel, the greater would be the GO for that channel.

Regression makes four assumptions which must be addressed, namely variance, linearity, independence, and normality. Residuals, i.e. differences between observed and predicted values, can be used to check for violations in the assumptions. To determine how much variance of the dependent variable can be accounted for by each independent variable, an *F* test was run to calculate multiple R^2 and see how well the model fitted in

the population (Norusis, 2008). To check normality, linearity, and independence,

histograms were created by plotting the residuals to see if the distribution was normal

with a horizontal band of residuals. If there were patterns, or changes over the range of

the independent variable, the relationship might not have been linear (Norusis, 2008) and

the assumptions might have been violated. In the case of violated assumptions, the data

would have needed to be transformed. A Durbin-Watson test was also run to test

correlation of adjacent residuals (Norusis, 2008).

Threats to Validity

For quantitative research design to be valid, an instrument must measure what it

claims to measure. Common internal threats include history, maturation, instrumentation,

and selection, while external threats often include population generalization, environment

and time (Frankfort-Nachmias & Nachmias, 2008). I will address various kinds of

validity, including external, internal, construct, and statistical conclusion validity and

potential solutions for reducing these risks in the following sections.

External validity.

When conducting research based on a survey questionnaire, some of the threats to

external validity include population generalization, environment, and temporal concerns.

Race and cultural bias were not issues in the present study because the topic of choosing

communication channels in the workplace was not felt to be dependent on these factors.

Group power or the influence of one participant over another was likewise not considered

a threat, because of the isolation and heterogeneity of respondent group members.

There was a risk that participants who were chosen randomly from the database of alumni might have worked in the same department or company or have graduated within a close timeframe. Potentially, this might have been the greatest threat to external validity, and although in principle it could have skewed the results, it was a necessary corollary of random sampling. It seemed relatively unlikely to occur as questionnaires were randomly distributed among active alumni throughout the world. The topic of communication channels is pertinent, but not controversial. Participants were not asked to judge other people, as for the most part they were self-reporting the gratification they receive when choosing communication channels. Thus, there was little risk that this aspect would cause validity issues.

Internal validity.

Threats to internal validity in survey research include maturation and experimental mortality, history, instrumentation and human error, statistical regression, selection, diffusion and imitation of treatment. In this study, the most important consideration was what might go wrong during the research process. In previous research on uses and gratifications theory, causality could not be determined, the direction of causation had to be logically or theoretically inferred (Frankfort-Nachmias & Nachmias, 2008). This was a weakness or limitation noted in many of the previous studies.

Of the internal validity threats, maturation and experimental mortality were not issues as the survey was sent out at one point in time, and, once it had been completed, the data were analyzed and finalized. History, however, could have been an issue if a participant had had a negative communication experience immediately prior to

completing the survey. For instance, a new communication channel, which was time consuming and difficult to use, may have been introduced into the workplace. If employees who were faced with that were asked to respond about gratification received from communication channels, the response might have been negatively skewed by the experience of using a new channel. However, such individual effects were minimized by statistical treatment. Instrumentation was a minimal risk as the survey was based on tested questionnaire items from prior research, and the questionnaire was discussed and piloted with typical respondents before use. Selection was also a risk even though a random sample was used. From the original population, all participants had an equal chance of being selected to respond to the survey. It was possible that the population breakdown resulted in a disproportionate number of surveys being sent out to the same country or company which may have skewed the results. This could not be controlled as the survey was sent randomly.

Issues associated with cross-sectional design have already been discussed. Another concern was that participants, who inevitably self-select to some extent, might not have accurately reflected the greater population of this hospitality school's alumni. Further, they might not have accurately reflected the views of hospitality school graduates as a whole.

Construct and statistical conclusion validity.

Construct validity denotes the fit between what an instrument intends to measure and what it actually measures. The logical process of construct validity is composed of four steps: (a) suggesting an instrument measures a certain property; (b) inserting the

proposition into a theory; (c) predicting the properties which should be related to the instrument, and (d) collecting data to confirm or reject predicted relations (Frankfort-Nachmias & Nachmias, 2008). If the relationships cannot be demonstrated, the instrument may be considered invalid. These problems were, to a large extent, avoided by basing the instrument for this research on past survey questionnaires, the validity and reliability of which have been confirmed by many studies.

Statistical conclusion validity implies that conclusions drawn from the statistical analysis accurately reflect reality. I attempted to do this by ensuring random sampling of the general population of hospitality program graduates, which satisfied the requirements for the statistical tests employed as well as ensuring as far as possible that responses of the sample accurately reflected those of the population. As much as possible, the population used in the present study reflected the reality of alumni from one hospitality school in Switzerland.

<div align="center">**Data Collection and Analysis**</div>

Data Analyses

Data were analyzed using SPSS for Windows 20. Analysis involved the calculation of descriptive statistics such as means, standard deviations, and modes, and cross-tabulation with demographic information, including age, gender, nationality, language (French or English), graduation year, number of years working in the present company, and job position or title.

Hypotheses

Regression was used to test the research hypotheses, listed below:

The overarching research question (RQ) was: using multiple linear regression, can Y (gratification obtained) be predicted in terms of three independent variables (frequency of use, duration, and function)? The corresponding H0 can be stated as:

$H_0$1: R = 0; linear regression is a good fit.

$H_0$2: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y.

Furthermore, the RQ and hypotheses were analyzed in terms of various demographic characteristics, namely gender and work experience. Therefore, lower level RQs and corresponding hypotheses were specified. An example is provided for Gender: RQ1: Are there gender differences when determining whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0$1M: R = 0; using only Male data, linear regression is a good fit.

$H_0$1F: R = 0; using only Female data, linear regression is a good fit.

$H_0$2M: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using Male data only.

$H_0$2F: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using Female data only.

Other examples include

RQ2: Does the number of years of work experience affect whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0$1W (work experience): R=0; using ranges of work experience (expressed in years), linear regression is a good fit.

$H_0$2W: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using work experience (expressed in years).

RQ3: Does the communication channel chosen affect whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0$1C (communication channel): R=0; using the communication channel chosen, linear regression is a good fit.

$H_0$2C: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using the communication channel.

Table 1

Hypotheses and variables

Hypotheses	Gender	Work Experience (in years)	Channel	Frequency of use	Duration	Function	GO
H01M	X		X	X	X	X	X
H01F	X		X	X	X	X	X
H02M	X		X	X	X	X	X
H02F	X		X	X	X	X	X
H01W		X	X	X	X	X	X
H02W		X	X	X	X	X	X
H01C			X	X	X	X	X
H02C			X	X	X	X	X

I used regression to assess significant relationships between independent and dependent variables in all the hypotheses as seen in Table 1. To test the independent variables as to which has the most significant relationship and is the best predictor of GO, multiple linear regression was used and β values compared. To test all hypotheses, the same multiple linear regression model analysis was run on frequency of use, duration, function, and GO for 15 communication channels used in the workplace. To test the lower level hypotheses, multiple linear regression was run on the same variables, but the sample was split into two genders and six work experience ranges respectively.

Data Collection and Analysis

The survey questionnaire was sent by e-mail in March 2014 after which the data were entered and stored in SPSS. The first tests run were descriptive analyses to get reports on data status. No major problems with the accuracy or quality of measurement appeared. Initial data screening ensured that responses were legible and complete, all relevant questions were answered, and relevant contextual information was included.

Data were coded to show where and how it can be accessed. Once the data were entered, statistical tests were conducted to confirm or disprove the null hypotheses. As the present study was based on rating gratification and assessing the duration and frequency of use of communication channels, all responses were numeric. Variables were named in a clear, coherent manner so that the tests could be run. For example, frequency of use was named as *Frequency*; duration was *Duration*. The three functions (production, maintenance, and innovation) represented by five specific tasks were

aggregated and their total was named as *Functions*. Gratification obtained was named as

GO. Under the label column, a longer explanation of each variable was entered.

Variables such as frequency of use and duration, work experience ranges,

communication channels, and gender were coded as seen in Table 2. On the survey,

duration was worded as *never* to > *4 hours*. In SPSS, *never* was defined as 1, < *1 hour* as

2, *1-2 hours* as 3, *2-3 hours* as 4, *3-4 hours* as 5, and > *4 hours* as 6. The same procedure

was used with frequency of use which ranges from *never* to > *once per day.* Work

experience was aggregated into 6 groups ranging from <5 years (1) to >30 years (6).

Gender was coded as 1 for male and 2 for female.

Table 2

Example of entering variables in SPSS

	Name	Type	Label	Measure
1	Y	Numeric	GO	Scale
2	X1	Numeric	Frequency of Use	Scale
3	X2	Numeric	Duration	Scale
4	X3	Numeric	Function	Scale
5	Survey ID	Numeric	Participant ID	Scale
6	Gender	Numeric	Gender	Nominal
7	YrsWorkExperience	Numeric	Ranges work experience	Scale
8	Communication channels	Numeric	15 channels	Nominal

Once the data were entered, multiple linear regression was run in the following

steps:

Step 1: I clicked on Analyze, Regression, and Linear. Gender, work experience,

communication channel, frequency of use were entered into independent box. GO was

placed in the dependent variable box.

Step 2: I clicked on Statistics. In this box, Confidence Intervals (95%), Descriptives, Estimates, and Model Fit were selected. Once this was done, I clicked Continue and OK. This provided the output for the multiple linear regression.

Step 3: To analyze, the slope was assessed to see if the population slope was equal to 0. I looked at the ANOVA table. If p value > alpha, we cannot reject the null hypothesis. Thus, linear regression is not a good fit.

Step 4: I created a scatterplot by clicking Graphs, Legacy Dialogs, Simple Scatter, and Define. For H1, GO was moved in the Y-axis box; frequency of use was moved into the X-axis box before clicking OK. A regression line was created by clicking on Elements, Fit Line at Total, and Close. The scatterplot allowed me to assess how accurately the regression equation predicted the dependent variable scores.

Step 5: I created a plot of predicted and residual values. Once the data were entered, and the specified statistical tests were run, graphic representations, including histograms and scatter-plots were produced. Histograms were useful for recognizing violations of linear regression assumptions. Scatterplots were used to examine relationships between variables. I clicked on Analyze, Regression, Linear (with the same settings as Step 1). Then I clicked on Plots in the linear regression dialogue box. I moved GO into Y-axis and Frequency of use into X-axis before clicking Continue and OK. As no apparent pattern appeared, I deduced that no assumptions have been violated (Green & Salkind, 2011).

Protection of Human Participants

IRB International

The active alumni of the international hospitality school in Switzerland live and work throughout the world, so IRB regulations for international research had to be respected in this study, the definition being any study intentionally designed to target individuals outside the U.S. Although the language of informed consent is mentioned in international regulations, this was not an issue for the present study since alumni studied at the school in either French or English and were able to respond to the survey in these languages. The school's official, certified translator was contracted to translate the survey. According to IRB, translated documents must respect three criteria: (a) back-translation confirms the accuracy of the translation; (b) qualifications of translator and back-translator are documented; and (c) translation and back-translation procedures are documented. All of these steps were respected.

Other elements, such as permission to use human subjects, or consent from parents were not issues in the present study, as there was no testing and these surveys were sent out to participants who graduated from a Western culture establishment, who could choose to respond to the survey if they wanted to. While cultural differences must be respected, the topic of gratification from communication channels is not dependent on participants' social or economic backgrounds. Also, it is not offensive and does not promote stereotypes in any way. Since all potential participants followed academic programs at the same higher education institution, their abilities to respond to the survey were equal.

Since survey questionnaires were sent by e-mail, no local resources were required and no physical presence was needed. Participants were made aware of the purpose of the research project and where and how the data will be used. Specific ethical concerns are dealt with in the next section.

Ethical Concerns

Total anonymity could not be guaranteed as the identity of alumni from the international hospitality school in Switzerland could be traced through their e-mail addresses, although personal information such as names was not requested. No attempt was made to identify individuals and identification was not necessary for the study. Further, as the survey questionnaire was sent out directly from the alumni department, I had no knowledge of which alumni received the survey questionnaire or which ones responded. To help ensure honest responses, a signed confidentiality agreement was sent with the questionnaires (See Appendix D). In this way, participants were assured that no third party will be privy to or use their results in any way and that their data would only be used in the present study. Confidentiality was not expected to be a serious problem when participants are asked to assess their gratification with communication channels. Although there were no correct answers to these questions, participants may have been concerned that their responses will be made known to company management. They were assured that this was not the case.

<div align="center">

Dissemination of Findings

</div>

An outline of this proposal was presented in September 2012 at the BiTS Communication and Media Conference, at the Business and Information Technology

School in Iserlohn, Germany. In due course, it is intended to disseminate results of the

research at other European conferences. One such conference will be hosted by ECREA,

European Communication Research and Education Association. As a member of this

group, I am invited to participate in conferences and submit papers. Another opportunity

to present aspects of the work may be the next annual EuroCHRIE (a professional

association that links hospitality and education research) conference. The present study is

relevant as it relates to the development of communication in the hospitality management

curriculum.

When this dissertation is complete, its findings will be made available on the

Walden database and there may be opportunities to publish the findings in academic

journals such as *Communication Theory* or the *Communication Quarterly*. All findings

will be made available to those who participated in the study.

<div align="center">**Summary and Transition**</div>

Chapter 3 began with a detailed description of the research design for the present

study. The population was comprised of alumni of a single international hospitality

school in Switzerland. I analyzed the data using SPSS and evaluated the threats to

validity which were minimal in this research design. The measurement tools chosen were

based on accepted and valid tools used in the past by Downs and Hazen (1977) and

Dobos (1988). A section on protection of human participants addressed IRB requirements

for international research, ethical concerns, and confidentiality. The appendices include

the survey questions for the present study as well as the sample confidentiality

agreement.

Chapter 4: Results

Introduction

The overall purpose of this study was to measure how well the independent variables frequency of use, duration, and function predict the dependent variable, GO, when choosing communication channels. The sample was derived from alumni from an international hospitality school in Switzerland who responded to a survey on the communication channels they used in the workplace. Chapter 4 begins with a discussion of the pilot study/focus group and changes made to the survey questionnaire based on their feedback. I then describe the data collection process. In the results section, descriptive statistics are reported, followed by the findings of multiple linear regression studies conducted using SPSS. Chapter 4 concludes with a summary of the responses to the research questions.

Research Questions and Hypotheses

The overarching research question (RQ) was: using multiple linear regression, can Y (gratification obtained) be predicted in terms of three independent variables (frequency of use, duration, and function)? The corresponding H0 can be stated as:

$H_0$1: R = 0; linear regression is a good fit.

$H_0$2: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y.

Furthermore, the RQ and hypotheses were analyzed in terms of various demographic characteristics, namely gender and work experience. Therefore, lower level RQs and corresponding hypotheses were specified. An example is provided for Gender:

RQ1: Are there gender differences when determining whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0$1M: R = 0; using only Male data, linear regression is a good fit.

$H_0$1F: R = 0; using only Female data, linear regression is a good fit.

$H_0$2M: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using Male data only.

$H_0$2F: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using Female data only.

Other examples include

RQ2: Does the number of years of work experience affect whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0$1W (work experience): R=0; using ranges of work experience (expressed in years), linear regression is a good fit.

$H_0$2W: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using work experience (expressed in years).

RQ3: Does the communication channel chosen affect whether Y (gratification obtained) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

$H_0$1C (communication channel): R=0; using the communication channel chosen, linear regression is a good fit.

$H_0$2C: b1=0, b2=0, b3=0; are the 3 independent variables needed in explaining the variation in Y using the communication channel.

Pilot Study

After receiving IRB approval on January 28, 2014, I conducted a 90-minute focus group on February 6, 2014 as a pilot study with colleagues who worked at the international hospitality school in Switzerland whose graduates were to be participants in this study. Following the protocol, which was submitted to IRB, after the participants had read and signed the consent form, I began with the 10 focus group questions already discussed in Chapter 3, on communication channels and gratifications. I found that the participants understood the terms communication channels and gratifications as defined on the consent form. They were able to define communication channels and gratifications and their definitions were considered sufficiently similar to those listed on the consent form not to require changes to the consent documents (except for adding the IRB approval number and expiration date, according to IRB regulations).

Focus group participants were also able to list the communication channels they used in the workplace. They understood the differences between the three main functions of communication channels (i.e., production, maintenance, and innovation). However, when completing the survey, they had difficulty remembering what the functions were or how they should be assessed. A solution to this problem is addressed later in this chapter.

After completing the survey, participants were invited to assess each section of the survey and suggest how it might be improved. Two areas for development were discussed, and are addressed in the next two paragraphs.

The first area concerned questions from the original survey instruments from Downs and Hazen and Hecht, which I had included in their entirety in the initial version of my survey. The participants did not understand how all of the questions linked to communication channels or to this research project. After recording their comments and speaking to my mentor, I reduced the number of questions from the Downs and Hazen's CSQ survey questionnaire from 43 to 19 questions, choosing only those which involved specific communication functions in the workplace (production, maintenance, or innovation) and discarding those seeking opinions about communication with coworkers or supervisors. I also chose to omit the questions from Hecht's survey asking for opinions about communication with direct supervisors. Communications with a supervisor were not tested in my hypotheses, so these questions were not considered relevant to this survey questionnaire.

The second improvement area involved Part 6 of my original survey questionnaire, which asked participants to assess the relevance of Dobos's three functions (production, maintenance, and innovation) for each communication channel. Participants found this section long and confusing and had problems remembering what the functions were and how they should be rated. Two participants said they would have stopped completing the survey at that point if they had received it at home because it was too long. Two suggestions were made to improve this section. The first was to add a definition of each function above the scale to remind them of their meaning. The second suggestion was to change the format completely.

As discussed briefly in Chapter 3, I chose the second option. I defined the three functions in terms of five separate activities and asked respondents to tick the box (es) if they used the communication channel in these specified ways. This was the only question where more than one response was required. The functions were listed above the response format as Giving information, Receiving information, Establishing new relationships, Maintaining relationships, and Brainstorming. These are the definitions of each of the function, but in a more comprehensible and user-friendly format for the respondents. Respondents could choose as many functions as appropriate for each communication channel. The sum of the choices was entered as the independent variable, Functions Sum, in the multiple linear regression. Thus, the functions to be tested in the hypotheses were present, but in a clearer format for the participants.

A request for approval of these changes was ratified by IRB on February 19, 2014, and the full revised survey is presented in Appendix C. The survey questionnaire was also translated and back-translated by a certified linguist, as discussed in Chapter 3.

<div align="center">**Data Collection**</div>

Demographic Variables

The survey questionnaire was sent by e-mail via a SurveyMonkey link (https://de.surveymonkey.com/) on March 14, 2014 and closed on April 4, 2014. The survey was sent out by the alumni office to 8,467 random e-mail addresses of active alumni. Of the total, 8,460 reached the recipients successfully and 3,484 e-mail invitations were opened. Five hundred and twelve participants clicked on the link to SurveyMonkey (6.37% for French survey; 5.77% for English survey). The final number

of participants was 332 (181 from English survey; 151 from French survey) giving a

3.92% response rate in total.

Those who responded to the English survey were not necessarily American or

British. As stated in Chapter 3, the international hospitality school alumni population was

derived from over 84 different nationalities. Thus, those who responded to the English

survey may have followed the academic program at the school in English or just

preferred to complete the survey in English, and it was impossible to verify their

nationality or where they were located. As geographic location was not a variable in my

study, it was not necessary to analyze this further.

Table 3 shows the demographic characteristics of the study sample. Among the

332 participants who opened the survey invitation and clicked on the link, 207 were male,

117 were female, and eight did not give their gender. Since gender was one of the

variables to be tested in H_01M and H_01F, it was necessary to consider the difference in

gender numbers when analyzing the results. Question 3 asked if the respondents were

currently employed. This was an eliminatory question to which 23 respondents gave a

negative response and were automatically excluded from the rest of the survey. The

number of respondents who did not finish the survey was 161. Adding the number of

respondents who were unemployed (23) gives 184 and this, subtracted from the original

332, left 148 complete questionnaires suitable for use in the regression analysis. A

breakdown of these is shown in Table 3.

For the number of years of work experience which were tested in H_01W, 47 had

worked <5 years; 28 had worked 6-11 years; 28 had worked 12-19 years; 13 had worked

20-24 years; 15 had worked 25-29 years; and 17 had worked >30 years. This was

important when analyzing the results of each range, as the majority of the respondents

(n= 104; 70.3%) fell into the first three categories (i.e., less than 20 years of work) while

only 45 (30.4%) occupied the other three categories. As ranges of work experience were

tested in the regression as a general predictor of GO, these numbers could have caused

reliability problems for this study.

Table 3

Demographic information of the 148 respondents

Demographic	Number	Percentage
Gender		
Male	95	65%
Female	53	35%
Not given	0	0%
Years of work experience		
<5 years	47	32%
6-11 years	28	19%
12-19 years	28	19%
20-24 years	13	8.8%
25-29 years	15	10.1%
>30 years	17	11.5%
Type of organization you work for		
Hospitality	87	58.8%
High Tech	5	3.4%
Manufacturing	4	2.4%
Education	11	7.4%
Civil Service	1	1.3%
Government	1	1.3%
Other	39	26.4%
Total	148	100.0%

    Some conclusions can be made from the demographic information in Table 3,

relating to the hypotheses and overall purpose of this study. For the hypotheses

concerning gender, one issue was that the number of male respondents was almost double that of females (95 male (65%) to 53 female (35%)). This difference in number will be addressed later in Chapter 4. However, the biggest concern came from numbers in the work experience categories. Out of 148 respondents,103 (70%) were in the first three ranges of work experience, suggesting that respondents were young professionals with up to 20 years of work experience. For a dissertation on communication channels including both traditional and modern channels, this high percentage of young professionals might have distorted the results if they were particularly keen on modern communication channels such as IM, e-mail, and teleconferencing and used them significantly more frequently than would older respondents. This was addressed when analyzing the statistics relating to years of that work experience later in Chapter 5.

The most useful statistic from the demographic information was the proportion of respondents who work in the hospitality industry. Out of 148 respondents who gave their workplace industry, 87 (58.8%) identified the hospitality industry as their place of employment. While job title, position, and company were not relevant for the hypotheses tested in the present study, the overwhelming majority of respondents who have stayed in the hospitality industry since graduation was significant. With this majority of 87 (58.8%) who have remained in the hospitality industry, the study could be taken as a true representation of hospitality school graduates who often choose to work in other industries as discussed in Chapter 3 under the characteristics of sample population. A breakdown of the industries named by respondents is shown in Table 3. The second

highest choice, *Other, n=39* (26.4%), could not be analyzed because it was not further specified.

<div align="center">**Research Tools**</div>

For each of the hypotheses, I conducted multiple linear regression with one set of predictors using the Enter method (Field, 2009) as the variables did not need to be tested in a specific order. For the overarching hypotheses, $H_01$and H_02, frequency of use, duration, and functions were entered as independent variables while GO was entered as the dependent variable. I conducted multiple linear regression and reported R^2 change, descriptives, part and partial correlations, collinearity diagnostics, Durbin-Watson, and Casewise diagnostics with outliers outside 2 standard deviations. I entered ZPred in X axis and ZResid in the Y-axis to create histogram and part and partial plots.

For H_01M and H_02M and H_01F and H_02F, I split the cases into male and female data before conducting the multiple linear regression. To test H_01W and H_02W regarding ranges of work experience, the original data were split to be able to compare the six different ranges. Finally, for H_01C and H_02C, the sum of duration, frequency of use, and function for each communication channel was entered separately into the independent variable box for multiple linear regression.

<div align="center">**Outliers**</div>

When initially conducting multiple linear regression with the model of three independent variables (duration, frequency of use, and function) and sample of 148 respondents, outliers did not appear to be problematic until I saw the results. According to the original responses, the R^2 showed a variance or predictive power of .35 or 35% for

the original model with all variables and all cases included. For this reason, I chose to

omit the outliers defined in Figure 5 which depicts Cook's Distance and run the multiple

linear regression again. This resulted in R^2 of .52 or a 52% prediction rate for GO. It also

resulted in a better significance for duration (from .998 in the original model to .167) and

function (from .662 to .527). While duration may still be above .1, a better result for the

overall model is shown.
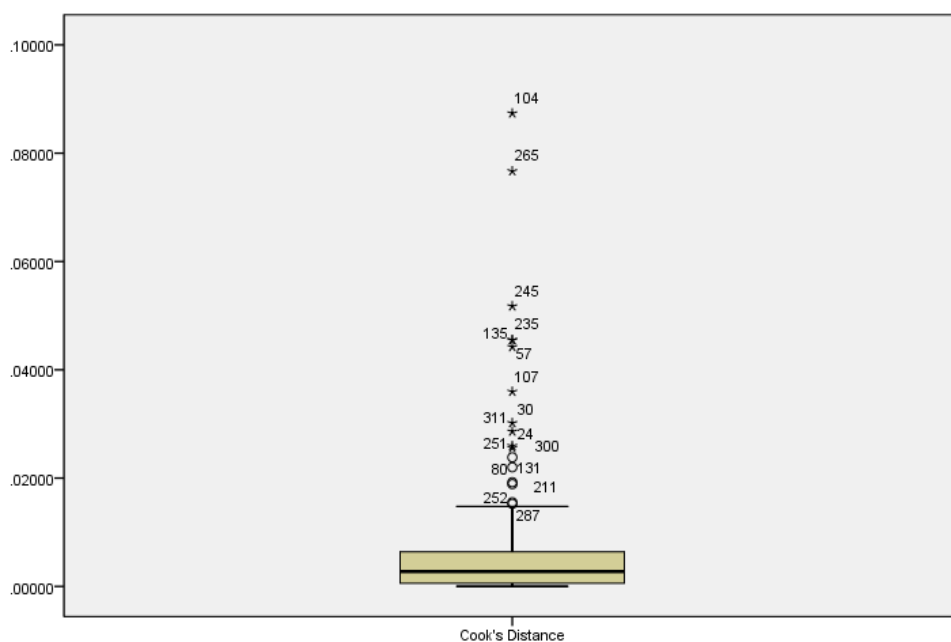
Figure 5. Cook's Distance for outliers.

After defining the outliers above, I returned to the data set and, starting from the

bottom, removed each of the respondents from highest number (311) to lowest (24). By

working my way up the list, I was able to guard the pertinent responses while omitting

the outliers. My final data set resulted in 132 responses. The sample size, n, decreased

from 148 to 132, but the latter still fell within the appropriate range for running multiple

linear regression ($n = 104 + 3 = 107$; $n=132 > n=107$).

The initial results also showed that frequency of use was the only significant

predictor of GO (significance = .000). Linear regression was also conducted using

frequency of use only. This resulted in only a slight improvement on the R^2 (from .35 to

.38). For this reason, I decided to report both the results of the multiple linear regression

for the entire model with the outliers removed and the results from frequency of use only.

Reliability Estimates

Cronbach's alpha was used to assess the reliability of dependent and independent

variables for the overarching hypotheses. Cronbach's alpha showed acceptable reliability

at .765. The number of valid cases is 132 ($n=132$), the final number of respondents used

in the regression analysis. The number of final participants is greater than the calculated

acceptable sample for multiple linear regression, $n= 104 +$ number of variables. In this

case, there are three predictor variables, so $n= 107$. Thus there are sufficient respondents

to run the multiple linear regression. Table 4 shows the reliability of the overarching and

lower level hypotheses.

Table 4

Reliability and Cronbach's Alpha for Hypotheses

Hypotheses	Cronbach's alpha for duration, frequency of use, and function	Cronbach's alpha for frequency of use only
$H_0$1and $H_0$2	.765	.760
$H_0$1M and $H_0$2M	.772	.789
$H_0$1F and $H_0$2F	.750	.626*
$H_0$1W and $H_0$2W		
<5 years	.753	.703
6-11 years	.835	.730
12-19 years	.630*	.644*
20-24 years	.794	.900
25-29 years	.819	.728
>30 years	.811	.896
$H_0$1C and $H_0$2C	.872	. 679*

*<.700; Denotes a potential reliability problem

As seen in Table 4, Cronbach's alpha for the overarching and lower level hypotheses were greater than .700 showing good reliability except for the work experience group of 12-19 years in the model including frequency of use, function, and duration. Cronbach's alpha for 6-11 years, 25-29 years, >30 years, and for individual channels showed even better reliability. Cronbach's alpha if Item Deleted was above .3 for all variable except frequency of use for male data only (.294) and female data only (.259). In the work experience ranges, Cronbach's Alpha if Item Deleted was above .3 for all variables except frequency of use for >5 years (.274). For work range experience 6-11 years, 20-24 years, 25-29 years, and >30 years, Cronbach's Alpha if Item Deleted was greater than .3 for all variables. For work range experience 12-19 years, both frequency of use (.145) and duration (.261) were well below .3.

As seen on Table 4, Cronbach's alpha for the overarching and lower level hypotheses were greater than .700 except for female data only (.626), 12-19 years (.644), and individual channels (.679) using frequency of use only. This showed weak reliability in these groups with frequency of use only. The strongest reliability was noted in work experience ranges 20-24 years (.900) and >30 years (.896) using frequency of use only.

Assumptions

Table 5 shows how the assumptions of this regression model were tested for the overarching and lower level hypotheses.

Table 5

Assumptions for all hypotheses

Hypotheses	Durbin-Watson All variables	VIF All variables	Tolerance All variables	Durbin-Watson Frequency of use only	VIF Frequency of use only	Tolerance Frequency of use only
H_01 and H_02	1.758*	Average 1.59	All variables >.1	1.828*	1.000	1.000
H_01M and H_02M	1.716*	Average 1.55	All variables >.1	1.606*	1.000	1.000
H_01F and H_02F	2.195**	Average 1.72	All variables >.1	2.148**	1.000	1.000
H_01W and H_02W						
<5 years	2.080**	2.02	All variables >.1	1.953*	1.000 for all ranges	1.000 for all ranges
6-11 years	1.980*	2.63		2.569**		
12-19 years	1.584*	1.34		1.815*		
20-24 years	1.176*	1.38		1.135*		
25-29 years	2.677**	1.90		1.859*		
>30 years	2.512**	1.58		2.360**		
H_01C and H_02C	1.922*	1.87	All variables >.1	1.836*	All variables >.1	1.41

*<2.00 = positive correlation
**>2.00= negative correlation

According to Field (2009), an average VIF of greater than one may suggest multicollinearity problems; however, the average VIF sums in Table 5 were relatively low and were not a cause for major concern. Also, the sums for tolerance and all variables were consistently greater than .1 which showed there were no serious problems of multicollinearity.

For the Durbin-Watson for all variables and the hypotheses, positive relationships were found in the overarching hypotheses, $H_0$1M and $H_0$2M, and $H_0$1C and $H_0$2C. In the work experience ranges, positive relationships were established for 6-11 years, 12-19 years, and 20-24 years, while negative relationships were found for <5 years, 25-29 years, and >30 years. The Durbin-Watson also showed a negative relationship for $H_0$1F and $H_0$2F. Part and partial results were positive for both frequency of use and function showing that the predictor and criterion variables are directly related.

For the Durbin-Watson for frequency of use only and the hypotheses, positive relationships were found in the overarching hypotheses, $H_0$1M and $H_0$2M, and $H_0$1C and $H_0$2C. In the work experience ranges, positive relationships were established for <5 years, 12-19 years, 20-24 years, and 25-29 years, while negative relationships were found for 6-11 years and >30 years. The Durbin-Watson also showed a negative relationship for $H_0$1F and $H_0$2F. Part and partial results were positive for the hypotheses except $H_0$1C and $H_0$2C showing that the predictor and criterion variables are directly related. In the case of the $H_0$1C and $H_0$2C with the individual communication channels and frequency of use, meetings, agendas, and e-mail produced negative part and partial results.

As stated in Chapter 3, I prepared various figures in SPSS to confirm normality in the data. Figures 6 and 7 represent the overarching hypotheses with all variables (Figure 6) as well as the overarching hypotheses with the only significant variable, frequency of use, (Figure7), to show that the data were normally distributed. Figures 8-16 represent the lower level hypotheses. An analysis of their assumptions and distribution follows the figures.
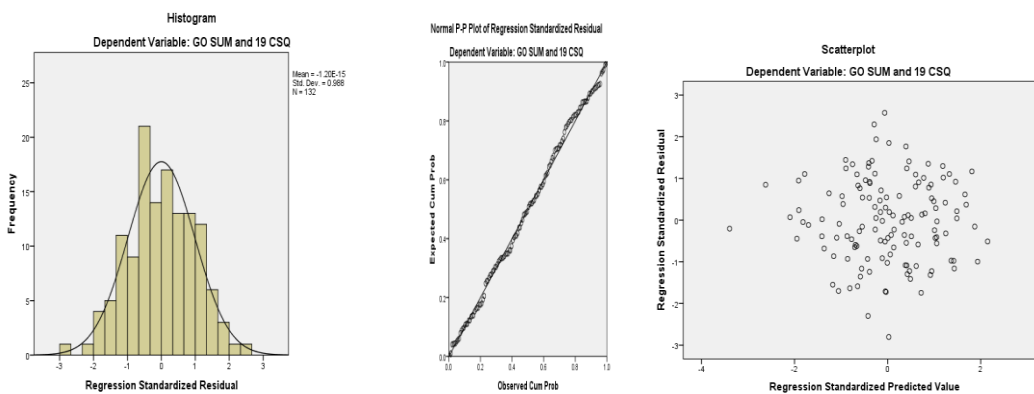

Figure 6. Distribution, probability plot, and plot of standardized residuals for overarching hypotheses all variables with outliers removed.
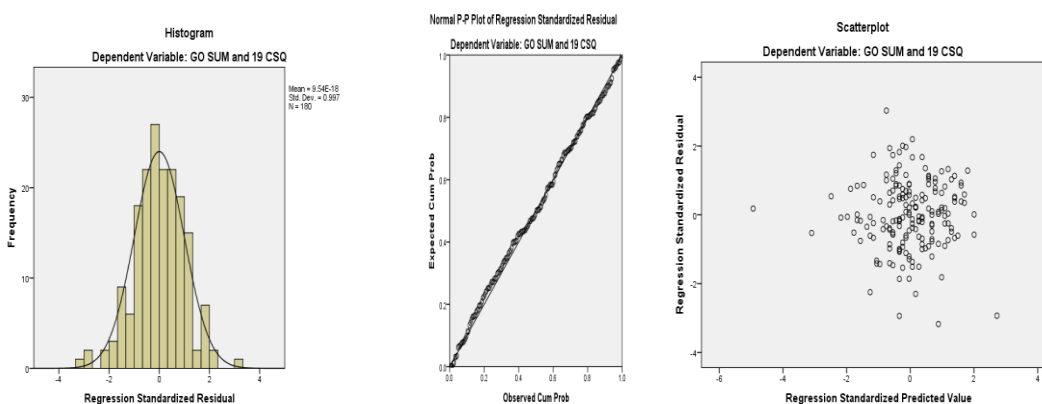

Figure 7. Distribution, probability plot, and plot of standardized residuals for overarching hypotheses with only frequency and outliers removed.
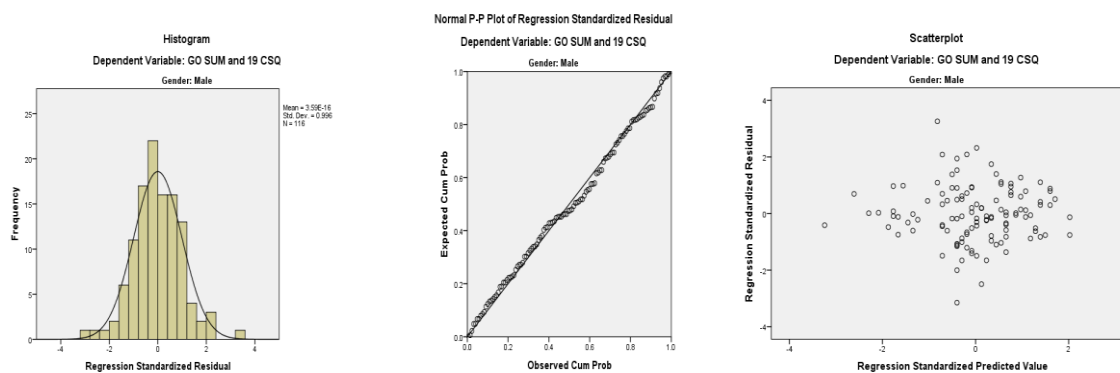
130

Figure 8. Distribution, probability plot, and plot of standardized residuals for hypotheses using Male data only.

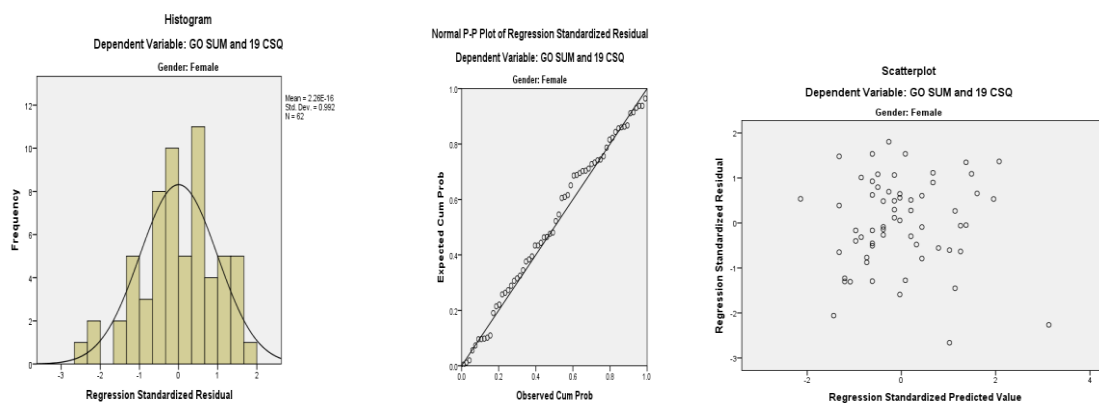*Figure 9.* Distribution, probability plot, and plot of standardized residuals for hypotheses using Female data only.

Figure 10. Distribution, probability plot, and plot of standardized residuals for less than 5 years.

Figure 11. Distribution, probability plot, and plot of standardized residuals for 6-11 years.

Figure 12. Distribution, probability plot, and plot of standardized residuals for 12-19 years.

Figure 13. Distribution, probability plot, and plot of standardized residuals for 20-24 years.

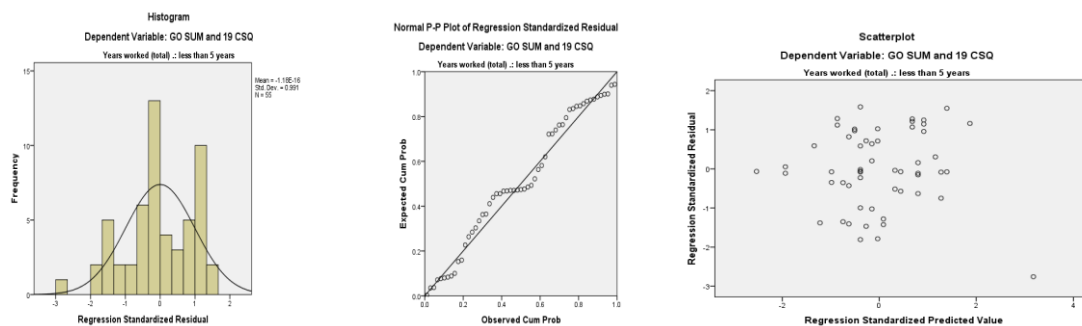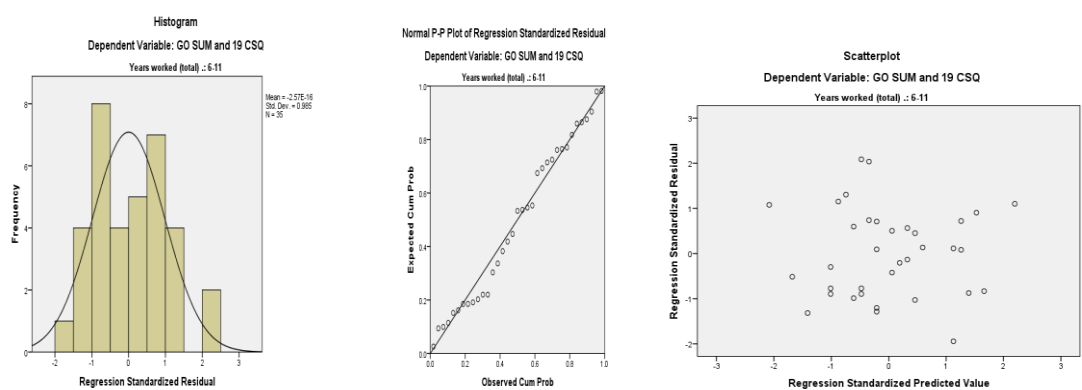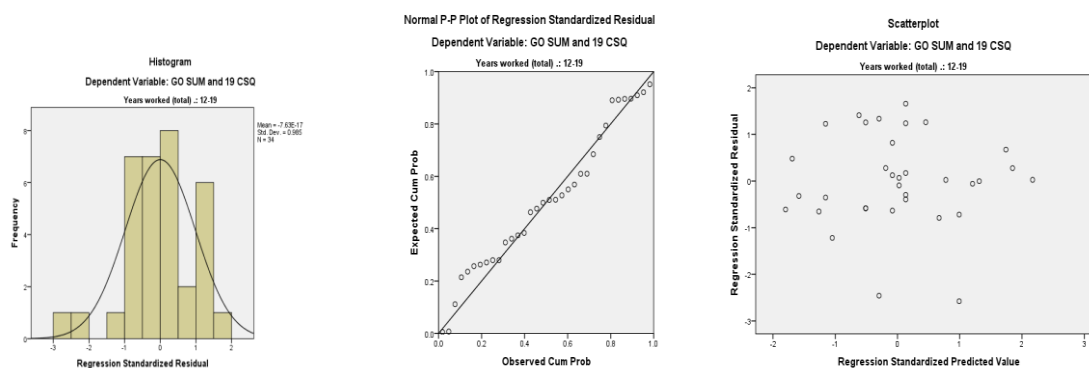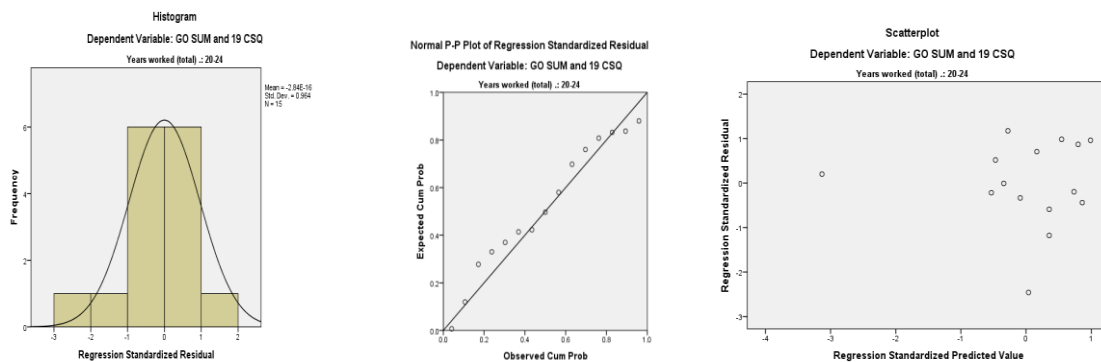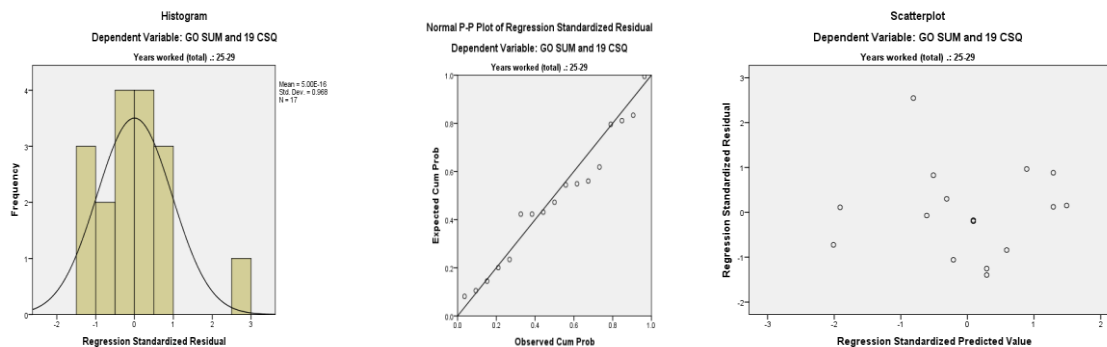*Figure 14.* Distribution, probability plot, and plot of standardized residuals for 25-29 years.
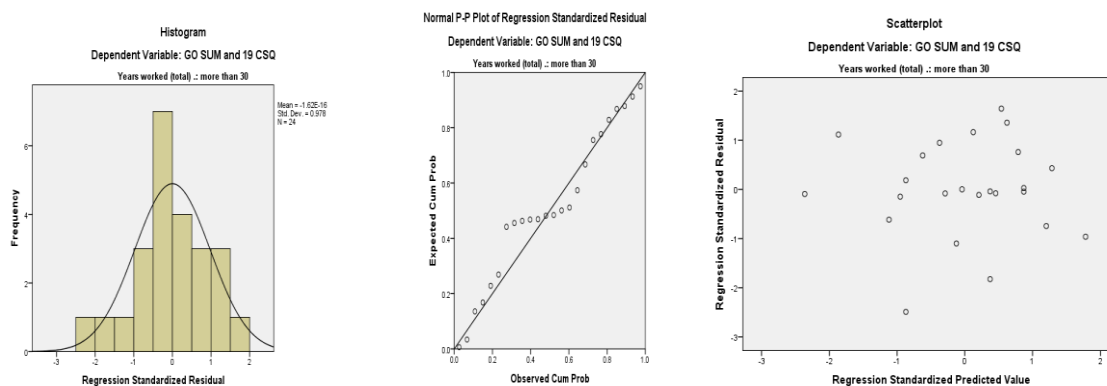
Figure 15. Distribution, probability plot, and plot of standardized residuals for More than 30 years.
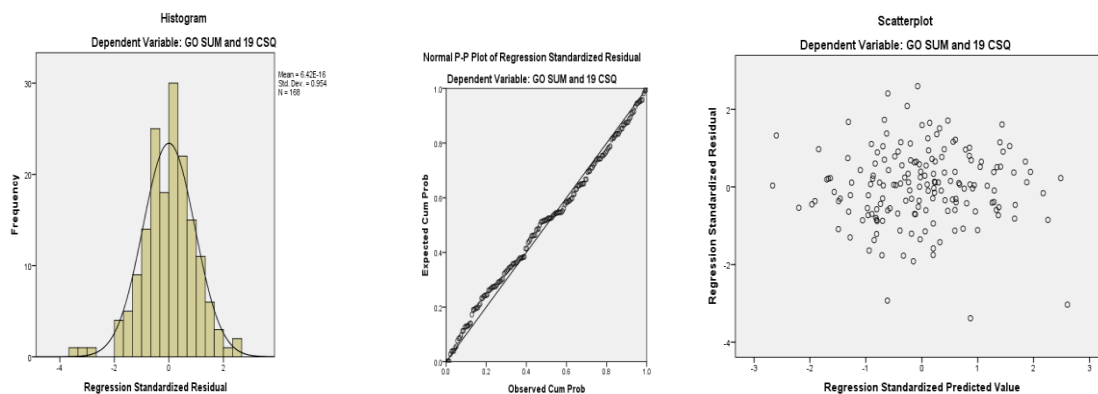
Figure 16. Distribution, probability plot, and plot of standardized residuals for hypotheses on individual communication channels.

The histograms and p-plots in figures 8, 9, and 16 showed normally distributed residuals. The histogram is a bell-shaped curve which shows the shape of the distribution (Field, 2009). The straight line in these figures represents normal distribution where the points lie on the same line (Field, 2009). The points were randomly and evenly dispersed for the overarching hypotheses and male and female data which indicates that the assumptions of linearity and homoscedasticity have been met (Field, 2009). Based on the histograms and plots shown in these figures, normality may be assumed in the data and hence the relevant assumptions for multiple linear regression were met. However, in the figures for work range experience, the points did not lie on the line; rather, they swerved in an s-shape around the line which could suggest a slight deviation from normality. The histograms in the ranges of work experience could also suggest problems with distribution.

Descriptive statistics

Descriptive Statistics for Independent and Dependent Variables

This section begins with the descriptive statistics and reliability results for the overarching hypotheses, $H_0 1$ and $H_0 2$. For these hypotheses, the cases for all 15 channels were added together to give a sum for duration, frequency, function, and GO to produce the variables Duration SUM, Frequency SUM, Functions SUM, and GO SUM. Multiple regression was run using these sums which explains the high numbers for mean and std. deviation.

Table 6

Descriptive statistics for independent and dependent variables

	Mean	Std.Deviation	N
GO SUM	243.52	58.62	132
Functions SUM of all channels	30.85	9.37	132
Duration SUM for all channels	44.19	9.43	132
Frequency SUM for all channels	54.03	9.34	132

As seen in Table 6 of descriptive statistics for the overarching hypotheses, the final sample size was 132 from the 332 participants who opened the survey. For multiple linear regression, a minimum sample size of $n=104$ + number of variables tested must be met (Field, 2009). With three variables, the sample size should be $n=107$. With $n=132$, the minimum number was exceeded. From Chapter 3, the sample size calculated using G*Power of 77 cases per variable (for gender and work experience ranges) was not

reached. However, with a confidence level of 95%, sample size = 132, population =

8460, the confidence interval was 8.46. This showed that the margin of error was

relatively small. Thus, the actual sample represented the overall population well.

Multiple Regression Model Statistics

Using SPSS, I ran Multiple regression with forced entry of the three predictor

variables (frequency of use, duration, and function) and the outcome variable (GO). As

seen in Table 7, the multiple correlation coefficient for the overarching hypotheses was

.72. The R^2 which showed the variance in the outcome was .52; otherwise stated, 52% of

the variance was accounted for when using the model of the independent variables of

frequency of use, duration, and function predict the dependent variable, GO.

Table 7

Multiple Regression Summary of all Variables and all Hypotheses

Hypotheses	R	R^2	Adjusted R^2	Standard Error	Pearson Correlation
$H_0 1$ and $H_0 2$	.719	.517	.506	41.21	GO 1.00
					Frequency of use .713
					Duration .391
					Function .315
$H_0 1M$ and $H_0 2M$	.743	.552	.536	41.02	GO 1.00
					Frequency of use .736
					Duration .390
					Function .330
$H_0 1F$ and $H_0 2F$	.670	.449	.407	43.10	GO 1.00
					Frequency of use .660
					Duration .392
					Function .288
$H_0 1W$ and $H_0 2W$					
<5 years	.692	.479	.437	40.31	All positive
6-11 years	.737	.543	.478	45.48	All positive
12-19 years	.703	.494	.422	47.81	Negative for functions
20-24 years	.725	.526	.289	53.42	All positive
25-29 years	.788	.620	.507	40.08	All positive
>30 years	.907	.823	.779	29.86	All positive
$H_0 1C$ and $H_0 2C$	.693	.481	.436	50.79	All positive

As seen in Table 7, the Pearson correlations were greater than 0 showing that

changes are made in the same direction. The only exception is the work experience range

of 12-19 years (-.001). From the R^2 in Table 8, the variance or predictive power ranged

from .449 or 45% for the model using female data only to .62 or 62% for the work

experience range of 25-29 years. While most of the R^2 and adjusted R^2 were close in

number showing they will reasonably predict the outcome when a different sample is

used, the work experience ranges showed the greatest differences in the two numbers.

The greatest difference came in the work experience range of 20-24 years (.237).

In Table 8, the results of conducting linear regression with only frequency of use and GO were recorded.

Table 8

Multiple Regression Summary of Frequency of Use Only and All Hypotheses

Hypotheses	R	R^2	Adjusted R^2	Standard Error	Pearson Correlation
$H_0$1and $H_0$2	.612	.375	.372	49.32	GO 1.00
					Frequency of use .612
$H_0$1M and $H_0$2M	.652	.425	.420	46.10	GO 1.00
					Frequency of use .652
$H_0$1F and $H_0$2F	.456	.208	.194	55.86	GO 1.00
					Frequency of use .456
$H_0$1W and $H_0$2W					GO 1.00
<5 years	.543	.294	.281	48.00	.543
6-11 years	.575	.331	.331	48.59	.575
12-19 years	.475	.226	.202	61.90	.475
20-24 years	.818	.670	.645	42.54	.818
25-29 years	.572	.327	.283	48.76	.572
>30 years	.812	.659	.643	40.33	.812
$H_0$1C and $H_0$2C	.647	.418	.361	46.79	All positive

Comparable to Table 7 where all variables were addressed, the Pearson correlations in Table 8 using frequency of use only were greater than 0 showing that changes are made in the same direction. From the R^2 in Table 9, the variance or predictive power ranged from .208 or 21% for the model using female data only to .67 or 67% for the work experience range of 20-24 years. While most of the R^2 and adjusted R^2 were close in number showing they will reasonably predict the outcome when a different sample is used, the individual channels showed the greatest differences in the two numbers (.055).

The results from the ANOVA were recorded in Table 9 to evaluate the significance of the model using all variables and all hypotheses.

Table 9

Anova Results for All Variables and All Hypotheses

Hypotheses	Regression df	Residual df	F	Sig.
$H_0$1 and $H_0$2	3	131	45.68	.000**
$H_0$1M and $H_0$2M	3	84	34.47	.000**
$H_0$1F and $H_0$2F	3	40	10.85	.000**
$H_0$1W and $H_0$2W				
<5 years	3	38	11.63	.000**
6-11 years	3	21	8.32	.001**
12-19 years	3	21	6.83	.002**
20-24 years	3	6	2.22	.187
25-29 years	3	10	5.45	.018*
>30 years	3	12	18.60	.000**
$H_0$1C and $H_0$2C	3	128	45.68	.000**

*p< .05
** p< .01

Based on the ANOVA in Table 9, $F(3,131) = 45.68$, $p<.01$, this model for the overarching hypotheses showed a significant relationship between the variables. The between groups df is 3 and the within groups df was 131. The independent variables predicted the dependent variable, thus, the null hypotheses must be rejected. The model improved the variance or ability to predict the dependent variable, GO, from 35% to 52%.

Based on the model summary in Table 9 using male data only, $F= (3,84)= 34.47$, $p<.01$. The significance of .000 suggests this is a good model. This model of all variables and male data only predicted the dependent variable, GO. Using female data only, $F= (3,40)= 10.85$, $p<.01$, the results of the F test of the multiple linear regression showed a

significance of .000, which suggests this model of all variables and female data only predicted the dependent variable, GO. For work experience ranges, all ranges showed significance of $p<.01$ except for 20-24 years (sig=.187) and 25-29 years (sig=.018). These results for gender and work experience ranges must be considered with caution as the number of respondents failed to reach the optimal number of respondents for multiple linear regression ($n=107$). Finally, for communication channels entered separately into the model, $F=(3,128)=45.68$, $p<.01$, the model with all variables is significant in predicting GO.

When conducting multiple linear regression using only frequency of use and GO, I found similar results in the predictive power as seen in Table 10.

Table 10

Anova Results for Frequency of Use Only and All Hypotheses

Hypotheses	Regression df	Residual df	F	Sig.
$H_0$1and $H_0$2	1	178	106.87	.000**
$H_0$1M and $H_0$2M	1	114	84.38	.000**
$H_0$1F and $H_0$2F	1	60	15.73	.000**
$H_0$1W and $H_0$2W				
<5 years	1	53	22.10	.000**
6-11 years	1	33	16.29	.000**
12-19 years	1	32	9.33	.005*
20-24 years	1	13	26.38	.000**
25-29 years	1	15	7.30	.016*
>30 years	1	22	42.43	.000**
$H_0$1C and $H_0$2C	15	152	7.29	.000**

*$p<.05$
** $p<.01$

Based on the ANOVA in Table 10, $F(1,178) = 106.87$, $p<.01$, this model for the overarching hypotheses showed a significant relationship between frequency of use and GO. The independent variable (frequency of use) can be used to predict the dependent variable (GO). In fact, for each of the split groups (gender, work experience range, communication channels), there were significant results for predicting GO from frequency of use. Nonetheless, these results, too, must be considered with caution as respondents of female data only and all work experience ranges fell short of the $n=105$ needed for multiple linear regression.

Regression Analysis Conclusions

$H_0 1$ and $H_0 2$.

For the overarching hypotheses, I conducted a multiple linear regression analysis to evaluate how well duration, frequency of use, and function predict gratifications obtained (GO) when using communication channels in the workplace. The predictors were duration, frequency of use, and functions while the criterion variable was GO. The overall linear combination of the predictor variables was significantly related to the criterion variable, $F(3,131) = 45.68$, $p<.01$. The sample multiple correlation coefficient was .62 indicating that approximately 52% of the variance of GO in the sample can be accounted for by the linear combination of duration, frequency of use, and functions. The regression model overall predicts GO significantly well, thus I must reject the null hypotheses although the variance is only 52%.

$H_0$1M and $H_0$2M.

To test the hypotheses $H_0$1M and $H_0$2M, I conducted a multiple linear regression analysis using only male data to evaluate how well duration, frequency of use, and functions predict gratifications obtained (GO) when using communication channels in the workplace. The predictors were duration, frequency of use, and functions while the criterion variable was GO. The overall linear combination of the predictor variables of only male data were significantly related to the criterion variable, $F(3, 84) = 34.47$, $p <$ 01. The sample multiple correlation coefficient was .74 indicating that approximately 55% of the variance of GO in the sample can be accounted for by the linear combination of duration, frequency of use, and functions for male data only. The Durbin-Watson test showed 1.72 and a positive correlation between the variables based on male data only. The regression model using male data only had a slightly higher variance (55%) than that of the original model (52%). Thus, the regression model using male data only predicted GO well, so I must reject the null hypotheses.

$H_0$1F and $H_0$2F.

To test the hypotheses $H_0$1F and $H_0$2F, I conducted a multiple linear regression analysis using only female data to evaluate how well duration, frequency of use, and functions predict gratifications obtained (GO) when using communication channels in the workplace. The predictors were duration, frequency of use, and functions while the criterion variable was GO. The overall linear combination of the predictor variables of only female data was significantly related to the criterion variable, $F(3, 40) = 10.85$, $p <$ 01. The sample multiple correlation coefficient was .67 indicating that approximately

45% of the variance of GO in the sample can be accounted for by the linear combination of duration, frequency of use, and functions for female data only. This was lower than the original regression model (52%). The Durbin-Watson test showed 2.20 suggesting a negative relationship between the variables based on female data only. The regression model using female data only predicts GO significantly well, thus I must reject the null hypotheses.

$H_0$1W and $H_0$2W.

To test the hypotheses $H_0$1W and $H_0$2W, I conducted a multiple linear regression analysis using years of work experience ranges to evaluate how well duration, frequency of use, and functions predict gratifications obtained (GO) when using communication channels in the workplace. The predictors were duration, frequency of use, and functions while the criterion variable was GO. The overall linear combination of the predictor variables of the six work experience ranges in Table 11 showed the following:

Table 11

Model Summary of Independent and Dependent Variables in Work Experience Ranges

Work Experience	Significance	Durbin-Watson
$<5 = F(3, 38) = 11.63, p<.01$	Significant	2.08
6-11 years$= F(3, 21) = 8.32, p<.01$	Significant	1.98
12-19 years$=F(3, 21) = 6.83, p< .01$	Significant	1.58
20-24 years$= F(3, 6) = 2.22, p> .01$	Not significant	1.18
25-29 years$= F(3, 10) = 5.45, p<.01$	Significant	2.68
>30 years-$= F(3, 12) = 18.60, p<.01$	Significant	2.51

According to Table 11 , the data for <5 years, 6-11 years, 12-19 years, 25-29 years*,* and >30 years were significantly related to the criterion variable. The data for 20-24 years were not significantly related to the criterion. However, when all ranges of work

experience were analyzed together using multiple linear regression, F (4, 127) = 34.20, $p<.01$, they showed significance as a whole group. Durbin-Watson for all work experience equaled 1.732 showing a positive relationship between the variables. Durbin-Watson for the individual work experience categories ranged from 1.18 to 2.68 which showed that different work experience ranges affect the directionality of the relationship. Cronbach's alpha for the range of 12-19 years was extremely weak (.630), while Cronbach's alpha for the range of 6-11 years was .835 showing good reliability. Thus the regression model using work experience range was significant in predicting GO and the null hypotheses must be rejected. The range with the lowest sample multiple correlation coefficient of .69 and lowest variance of 48% was found in the < 5 years category.

   $H_0$1C and $H_0$2C.

   I conducted a multiple linear regression analysis using data from each of the 15 communication channels individually to evaluate how well duration, frequency of use, and functions predict gratifications obtained (GO) when using communication channels in the workplace. The predictors were duration, frequency of use, and functions while the criterion variable was GO. The overall linear combination of the predictor variables of only data from the 15 communication channels was significantly related to the criterion variable, F (15, 128) = 45.68, $p<.01$. The regression model using communication channels significantly predicted GO, thus the null hypotheses must be rejected. The sample multiple correlation coefficient was .69 indicating that approximately 48 % of the variance of GO in the sample can be accounted for by the linear combination of duration,

frequency of use, and functions for data from the 15 communication channels which is lower than the original regression model (52%).

<div align="center">**Summary**</div>

The purpose of this multiple linear regression study was to examine the relationship between duration, frequency of use, and function and GO, while controlling for gender, years of work experience, and individual communication channels. The results of the statistical analyses produced the following general findings:

1. Multiple linear regression confirmed that there is a relationship between the independent variables (duration, frequency of use, and function) and the dependent variable (GO) for the overarching hypotheses. The regression model overall predicted GO significantly well with a variance of 52%. For this reason, we must reject the null hypotheses.

2. Multiple linear regression was conducted with a split data file of male and female to evaluate how well the independent variables predict GO. There was evidence from both the male and female data that the three predictors were significantly related to the criterion variable of GO. However, the male data showed a positive correlation between the variables and a variance of 55%, while the female data showed a negative correlation and a lower variance of 45%. In both models, we must reject the null hypotheses.

3. Multiple linear regression was conducted with a split file of ranges of years of work experience to evaluate how well the independent variables predict GO. There was evidence that all ranges except 20-24 years were significantly related

to the criterion variable. There were positive correlations for 6-11 years, 12-19 years, and 20-24 years and negative correlations for < 5 years, 25-29 years and >30 years. For this model, I must reject the null hypotheses for all work experience ranges except the range of 20-24 years. However, the low number of responses for each of these categories (from 6 to 38 respondents) was problematic and may have skewed the results. For example, the >30 years range showed a strong variance of 82%, but there were only 12 respondents.

4. Multiple linear regression was conducted with each of the 15 communication channels individually to evaluate how well the independent variables predict GO. There was evidence that overall linear combination of the 15 channels were significantly related to the criterion variable but had a variance of only 48%. I must reject the null hypotheses.

5. The overarching research question (RQ) was: using multiple linear regression, can Y (gratification obtained) be predicted in terms of three independent variables (frequency of use, duration, and function)? Based on the findings and analysis of the present study, the response to the overarching RQ was yes, although the variance is only 52% for the regression model of the three independent variables of frequency of use, duration, and function and the dependent variable, GO. Thus, the multiple linear regression model overall predicted GO well.

In addressing the research questions:

The overarching research question (RQ) was: using multiple linear regression, can Y (gratification obtained) be predicted in terms of three independent variables (frequency of use, duration, and function)? When tested together as a model, frequency of use, duration, and function, were significant predictors of GO ($p<.05$), although frequency of use was the only significant variable ($p<.01$). There was a positive correlation (Durbin-Watson= 1.76) between the predictor and criterion variables. I rejected the null hypothesis and confirmed that the multiple linear regression model overall predicts GO with a variance of 52%.

RQ1: Are there gender differences when determining whether Y (GO) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

While both male and female data showed significant relationships between the independent and dependent variables, male data showed a positive correlation, while female data showed a negative correlation. This may have been misleading, however, as there was double the number of male respondents to female respondents. In both cases, the sample size was below the acceptable size of $n=107$ (male = 84; female = 40).

RQ2: Does the number of years of work experience affect whether Y (GO) can be predicted in terms of three independent variables (frequency of use, duration, and function)?

The data were split into six work experience ranges and multiple linear regression was run on each group. When analyzed together, work experience ranges showed significant relationships between the independent and dependent variables. When broken

down into each range, however, all ranges were significant except for 20-24 years. Like

the gender above, none of the sample sizes met the ideal sample of $n=107$. They ranged

from 6 (20-24 years) to 38 *(<5 years)*. There were only 6 respondents in the non-

significant range which may have affected the results and led to an overall interpretation

which could be challenged.

RQ3: Does the communication channel chosen affect whether Y (GO) can be predicted in

terms of three independent variables (frequency of use, duration, and function).

To respond to the third RQ and $H_0$1C and $H_0$2C, I ran multiple linear regression

by entering each of the 15 communication channels individually into SPSS. The overall

linear combination of the independent variables was significantly related to the dependent

variable. The sample size for this regression was 189 which exceeded the ideal number of

$n=$ 119 (for the 15 channels). There was an overall positive correlation with these

variables.

The final chapter, Chapter 5, includes an interpretation of the findings as linked to

the research questions. It continues with limitations of this study and reflections on the

importance of the topic. Both recommendations for action and recommendations for

further study are addressed. Chapter 5 concludes with implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this quantitative study, I examined how professionals chose between traditional and modern communication channels used in business, the premise being that users choose communication channels due to the GO. The research design chosen was a cross-sectional survey design. A questionnaire was initially constructed using existing instruments from Downs and Hazen, Hecht, and Dobos. After conducting the survey in a pilot study, all questions from Hecht's survey and certain questions from Downs and Hazen's survey were omitted as they asked participants to rate communication satisfaction with colleagues or supervisors. This was not the objective of this dissertation. The final questionnaire was based on two existing instruments: 19 questions from the CSQ of Downs and Hazen (1977) and an instrument developed by Dobos (1988) to study functions of communication channels. The final survey consisted of six parts: Part 1 included demographic questions; Part 2 included the 19 questions from Downs and Hazen's CSQ; Part 3a asked participants to estimate how much time (in hours) spent on 15 communication channels, and Part 3b asked them to rate the GO of each channel based on this duration; Part 4a asked participants to estimate the frequency with which they use each of the 15 channels (from *never* to *> once a day*) and Part 4b asked them to rate the GO of each channel based on frequency; Part 5a asked participants to choose the functions (giving information, receiving information, establishing new relationships, maintaining existing relationships, brainstorming) they do with each of the 15 channels

(from 1 to 5 functions possible); and Part 5b asked them to rate the GO of each channel based on the functions they do with it.

The population consisted of currently employed alumni from an international hospitality school in Switzerland, from whom 332 responses were obtained. The survey data were downloaded from the SurveyMonkey site as an Excel file and subsequently entered into SPSS 21. After controlling for missing data, a final, usable sample of 148 was obtained. Multiple linear regression was used to assess statistically significant relationships between the independent variables: frequency of use, duration, and function, and the dependent variable GO. I confirmed that frequency of use, duration, and function respectively predict GO.

This chapter begins with an interpretation of the findings as linked to the research questions. It continues with an analysis which compares my results to those from previous, similar research from the literature review, and defines the gap which this research attempted to fill. In the third section, I discuss limitations of the study and, in the fourth section, I summarize how this study could be revised or improved for future studies. Implications for social change are discussed, as well as how these findings can contribute to positive social change. The final section of Chapter 5 is the conclusion for both this chapter and the overall dissertation itself. It includes reflections on the topic and the results from the multiple linear regression.

Interpretation of Findings

The overarching research question (RQ) was: using multiple linear regression, can Y (gratification obtained) be predicted in terms of three independent variables (frequency

of use, duration, and function)? Based on the findings and analysis seen in Chapter 4, the null hypotheses were rejected. The three independent variables were significantly related to the dependent variable. Thus, the multiple linear regression model overall predicted GO, although the variance was only 52% which suggests a weak model.

Previous scholars reviewed in Chapter 2 employed uses and gratifications theory to test communication channels in the workplace. The theory has been applied to mass media and general communication studies in education and the workplace, often being adapted or augmented with other theories to deal with specific issues or a limited range channels. I also applied uses and gratifications theory, but in a broader perspective across a range of communication channels. The basic premise was that employees choose communication channels based on their GO.

Variables examined in previous studies included frequency of use, tasks performed, functions, satisfaction, age, previous knowledge, gender, education, motivation, perceptions, and Internet skills. These researchers either focused on one to several channels or grouped the channels into traditional and modern. No previous scholar tested as many channels with predictor variables of GO as the present study. In my study, three predictor variables, frequency of use, duration, and functions were used to show how well they predicted GO for 15 communication channels. In general, I found that the more frequently (frequency), the more time spent (duration), and the more functions completed with the channel, the higher the GO. However, while the model using these three predictor variables do predict GO with these 15 communication channels, frequency of use was the only significant predictor ($p<.01$).

Many of the researchers examined in Chapter 2 looked at uses and gratifications theory from the perspective of the final user or made a comparison between GS and GO. This was especially noted in studies on TV or mass media channels. In this study, I focused on the GO of the sender who chooses the communication channel, presumably for a specific purpose. In my study, like previous studies, I was looking for gratification obtained, not gratification sought.

RQ1: Are there gender differences when determining whether Y (GO) can be predicted in terms of three independent variables (frequency of use, duration, and functions)?

Previous scholars often found differences in the use of communication channels between genders. In this study, both male data ($F(3,84)= 34.47$, $p<.01$) and female data ($F(3,40)= 10.85$, $p<.01$) showed significant relationships between the independent and dependent variables. To respond to the research question, there were gender differences when determining whether Y can be predicted in terms of frequency of use, duration, and functions. In both cases, GO could be predicted from the independent variables, but the directionality differed. Male data showed a positive correlation between the variables, while female data showed a negative correlation. For both male and female data, frequency was the highest standard deviation, while duration and functions differed. For male data only, duration was negative, while duration was positive for female data. Regarding functions, male data only showed a positive value, while female data showed a negative value. Thus, for the three predictor variables, there were similar and positive standard deviations for frequency, yet different and negative standard deviation values for

duration and functions respectively. Frequency was a positive predictor of GO, while there were gender differences regarding the predictive power of duration and functions.

RQ2: Does the number of years of work experience affect whether Y (GO) can be predicted in terms of three independent variables (frequency of use, duration, and functions)?

Age was a variable tested frequently in previous research. While I did not test age directly, the number of years of work experience could be used to estimate age range. According to official school statistics, the average age of a student starting their undergraduate studies was 19.2. Students following the 4-year undergraduate program would be 23.2 years upon graduation. With less than 5 years of work experience, this respondent must be less than 30-years-old. The average age for students entering the short 2-year program was 23.4. Again, after 2 years and with less than 5 years of work experience, they would be under 30-years-old. Conversely, someone with more than 30 years of work experience must be in their 50s or 60s, depending on their age at graduation.

Age is relevant to this type of research when testing whether older workers make different communication channel choices than younger workers. Based on my findings, the all ranges showed significant relationships among the variables except 20-24 years ($p=.187$; $p>.05$). This finding was useful as many previous scholars showed that there are no or few differences between age groups when it comes to choosing communication channels, and I confirmed the results of these other studies. There were no clear

differences between younger and older generations when it comes to choosing

communication channels.

Six ranges of work experience were analyzed in Chapter 4. The results were

mixed. For three of the ranges, a positive and significant relationship between the

variables was found (6-11 years, 12-19 years, and 20-24 years). The work experience

ranges of <5 years, 25-29 years and >30 years showed negative correlations between the

criterion and outcome variables.

The response to RQ2 is complicated, but overall the answer seems to be yes. All

work experience ranges except 20-24 years were significant and predicted GO in terms of

frequency of use, duration, and functions. When answering whether work experience

ranges affect the prediction, the response is affirmative. When all work experience ranges

were run together as work experience with the variables of frequency of use, duration,

and functions, the overall significance was $F(4,127)=34.20$, $p<.01$ with a Durbin Watson

of 1.732. Work experience and the independent variables predicted GO significantly well.

However, the low response rates in each of these categories must be considered. The

responses ranged from six in the 20-24 year category to 38 in the >5 year category. These

numbers were far below the acceptable number for multiple linear regression; thus, these

results could be questioned.

RQ3: Does the communication channel affect whether Y (GO) can be predicted in terms

of three independent variables (frequency of use, duration, and functions)?

Previous studies discussed in Chapter 2 tended to concentrate on one or several

mass media communication channels used for entertainment such as television, the

Internet, or social media networks. However, the Internet was only included in this study as a workplace communication channel, since entertainment use was beyond the scope of the present study. Previous researchers also focused on education and communication channels used by students, which were likewise irrelevant to the present study. However, all respondents derived from the same population of graduates from one international hospitality school in Switzerland, so their education level, which is a common variable in communication research, could be inferred. At minimum, they have all earned a Swiss undergraduate hospitality degree and have followed at least one course in communications in the higher education system where they learned about various communication channels as part of their curriculum. One future study could be to conduct a similar project with current undergraduate students of this international hospitality school in Switzerland to compare those findings with the ones stated in this dissertation. This could be useful in bridging the gaps mentioned in Chapter 2 between communication competencies students actually have upon graduation versus the communication competencies the professional world is expecting of them.

Based on the results in Chapter 4, the model of independent and dependent variables and communication channels was significant, thus showing a relationship between the variables. There was a positive correlation between the variables (Durbin-Watson= 1.922). All channels had values above .3 for Cronbach's Alpha if Item Deleted which is good and the overall Cronbach's alpha was .872 showing more reliability than the model for the overarching hypotheses (Cronbach's alpha = .765).

Limitations of the Study

In the present study, limitations derived from the survey questionnaire itself, the sample size, self-reporting, and the variables chosen for this model. In some cases, the limitations could be minimalized; in others, they were uncontrollable.

Survey Questionnaire

A few of the respondents who randomly received the survey were teaching colleagues of mine who were also former students of the school. Feedback I received from them included issues with the length of the survey and the perceived repetitiveness of trying to rate GO for each independent variable (frequency of use, duration, and functions) and for each of the 15 communication channels. If I conducted the survey again, I would change the format to make it easier for respondents to fill in.

Another issue involved gender and language. In Chapter 3, I discussed both gender and language in the overall alumni population. There was no program in English until 1996, so any graduates with over 18 years of work experience had to follow the program in French. I was concerned that that could lead to a majority of French-speaking respondents among the survey results. French-speaking respondents came predominantly from France, Switzerland, or Belgium, while English-speaking respondents represented 84 different nationalities. A majority of French language responses could have been problematic for a survey which tried to examine hospitality professionals on a global scale. In the final results, however, this was not the case as 181 surveys were completed by alumni who studied in the English program, while only 151 studied in the French

program. Thus a balanced mix of nationalities responded to the survey, meeting the initial goal of giving a global overview of hospitality professionals.

For gender, however, the results were more problematic. In Chapter 3, I discussed the introduction of women into this international hospitality school in Switzerland in 1963. This fact alone does not preclude their response rate. Women have attended the school long enough to fill all the possible work experience ranges, including >30 years, although their presence was minimal until the 1990s when gender numbers began to equalize in this school. Over the past 24 years, there were roughly equal numbers of female and male students, suggesting that there was an equal possibility for respondents of both genders to fill all work experience ranges. In Chapter 3, I addressed the possibility that there might be a larger proportion of male respondents among the older graduates. In fact, the survey data showed almost double the number of male (95) to female respondents (53). The average age of male respondents was 41.9, while the average age for female respondents was 33.3. This reinforced the supposition in Chapter 3 that there could be a greater number of older men who responded than women as they were the majority of students until the 1990s. Although the results for testing the model were significant for both genders, the sample size was small for multiple linear regression. Also, as seen in Chapter 4, there were minor collinearity problems with the data, suggesting that the results from this small number could be questioned.

The final potential issue with the survey derived from the demographic information about job title or industry. The present study was based on how hospitality professionals choose communication channels in the workplace. There would have been a

problem had there not been a majority of respondents with a hospitality background. In fact, more than half of the respondents cited hospitality industry as their workplace. This concurred with the reality of this international hospitality school's official statistics which reports approximately 40% of the school's graduates do not stay in the hospitality industry. Many choose other careers which allow them to apply the competencies learned in the hospitality program. My results reflected the current reality of these graduates.

Sample Size for Each Variable

Upon receiving the results from the survey, a few issues arose. First of all, the number of respondents was much fewer than anticipated. As seen in Chapter 4, the response rate was approximately 4%. As discussed in Chapter 3, colleagues who have conducted surveys with this same population of alumni from this international hospitality school in Switzerland have reported response rates in the range 5-16%. The low response rate received for my study may be explained by lack of interest in the topic, lack of time, an overload of surveys being sent out in the same month, or general avoidance of responding to any survey which was several pages in length. I spoke to the Alumni Coordinator who warned me that February was not the best time to conduct a survey. It would have been better to send it in September when relatively little information is sent out to this population. In addition, a satisfaction survey was sent to the same alumni population the week before my survey was available online and this may have affected the response rate.

My survey questionnaires were sent out on a Friday, which may have contributed to an increase in non-response rates. Further, the response rate dropped dramatically after

the first 48 hours. Without a reminder, which I was not permitted to send, the survey may have been forgotten.

Initially, an incentive was considered to encourage participation, but this was inadmissible on ethical grounds. While the researcher could have offered a token prize, there was no feasible token prize which could be distributed to all participants around the world, and therefore no prize was offered. I relied solely on the interest and good will of the alumni, whose assistance contributed to a research project at their alma mater.

Another issue which arose was the number of useable questionnaires compared to the number of respondents. While the overall number of respondents who clicked on the survey was 332, many of these surveys were incomplete and contained gaps and only 148 were valid for multiple linear regression. Some respondents did not complete the entire survey or did not complete certain sections. The initial total of 332 respondents and the number of valid cases of 148 exceeded the G*Power estimate of a total sample size of 77 when the main hypotheses were tested with the whole data set. The calculated sample size for conducting multiple linear regression is $n=104$ + number of variables (Field, 2009). In my study, the sample size is appropriate, $n=148> n=107$. However, this was only the case for the overarching hypotheses. When the data were split into gender and ranges of work experience, all samples were below $n=107$, varying between 13 and 95. These low numbers could have skewed the results and reduced the significance, but the collinearity statistics were sound for the overarching hypotheses and no multicollinearity issues were found for the original model.

Self-reporting on Frequency and Duration

One criticism of survey questionnaires examined in Chapter 3 was the necessity to self-report. In my survey questionnaire, respondents were asked to self-report duration in hours, frequency (days to months), functions (out of five), and GO for each (Likert scale of 1-7). There may have been a link between the length of the survey and self-reporting. For example, respondents may have ticked boxes with less reflection later, as they started to lose interest in responding to the questions. This was impossible to control. The limitations of self-reporting are exemplified by the data concerning fax, discussed below.

When looking at all 15 communication channels, the responses regarding duration, frequency, and functions for modern channels such as e-mail or mobile phone were as expected. Scores were high for all independent variables and for GO. However, the responses of frequency and duration for fax were higher than expected. This suggests two possibilities: either respondents use faxes much more than other channels in their professional capacity, or respondents ticked a box without reflecting on the channel. Fax was the 9th channel on the list, and this may have led to respondent complacency. Nonetheless, the fax data respected collinearity diagnostics and had positive part and partial correlations. I must report what was found regardless of my preconceptions about frequency of use or duration for faxes.

Six of the 15 communication channels were significantly inter-correlated: face-to-face, telephone, letters, agenda, e-mail, and teleconferencing. After considering the collinearity diagnostics, the most reliable communication channels seemed to be letters, e-mail, and teleconferencing. As discussed in Chapter 1, I defined face-to-face, letters,

telephone, and agendas as traditional channels, while e-mail and teleconferencing were defined as modern channels. Previous research on modern and traditional communication channels found little preference between modern and traditional channels, and this has been confirmed by my research. There were no major differences or preferences between modern and traditional communication channels in the workplace.

As mentioned in Chapter 1, the significance of this study was to evaluate specific communication channels used in the workplace and the GO associated with their use. This study filled a gap in the communication literature in three ways: (a) using an international population of hospitality school alumni; (b) testing 15 communication channels used in the workplace; and (c) establishing the relationship between frequency of use, duration, and function to predict GO. This study confirmed previous communication research results regarding traditional and modern communication channels and offers new opportunities for further research with other channels or other populations.

Variables for This Model

The variables chosen for this study, frequency of use, duration, and function, did not provide an adequate model for predicting GO. In fact, only frequency of use was significant (.000). After removing the outliers, the significance of duration decreased to .167, but that still exceeded the significance of .05 necessary to make it a viable variable. The variables chosen for this study could have been tested differently. For example, duration could have been an open question where participants record how much time they actually spend on each channel. Function could have been grouped differently such as the

previous studies by Dobos. For a future study, I would create a survey focusing on frequency of use only as a predictor of GO. Although the variables tested here did not produce a strong model, this may have been due to the survey design or audience chosen. I would not dismiss using this combination of variables again, as they have been used so often in existing communication research. I would rework the survey design and methodology.

Other variables could have been chosen as well. As seen in the literature review, other variables such as previous knowledge, job position, education, motivation, perceptions, or existing skills could have been examined. Gratifications sought could have been compared to GO for each of the channels. These are potential variables which could be examined in a future research project.

Reflections

In 2008, I spent a week at the Four Seasons Hotel, Chicago, shadowing employees in all departments to establish which communication channels they used. The purpose was to compare what is being taught in business communication courses at one international hospitality school in Switzerland to the reality of the hospitality industry. What I found was that all types of communication channels, from traditional channels like faxes, beepers, white boards, and bulletin boards to modern channels like e-mail, Intranet, the Internet, and teleconferencing were being used on a daily basis in the hotel. I interviewed department managers to discuss these channels and found that each one had its specific place in the hotel for internal or external communication. The visit not only affirmed that what I was teaching was still relevant, but it also led to my interest in

studying this topic further in a doctoral program and, later, in future research. By conducting my research with alumni from this hospitality school and analyzing their results, I can adapt my curriculum for future business communication courses.

Recommendations for Action

The results of this study are potentially applicable to graduates of this international hospitality school in Switzerland. Although some have chosen to follow careers outside the hospitality industry, the results are pertinent to their current workplace as communication channels are relevant in all work environments. In Chapter 1, the problem of poor communication skills was addressed. This type of study can serve as a forum to discuss how information is communicated and how communication could be improved.

For this reason, my results are also applicable to the hospitality school where I am teaching and should be of interest to the management and directors of the hospitality programs we offer. I can use these results to develop new courses which will reflect both traditional and modern communication channels used in the workplace. Future research could be conducted with the current students of this international hospitality school and potential employers to establish the communication gaps between what students are learning in the program and what employers expect from young graduates.

In order to disseminate the results of this study, the first step will be to share this dissertation via Walden's database and make it available to management, staff, and students in this international hospitality school in Switzerland. The next step will be to start new research projects within the school on how students choose communication

channels. I would like to focus on a small range of modern communication channels, such as telephone, IM, e-mail, and social media. Another study could be to assess students' social media use through the same independent variables of frequency of use, duration, and function. Obtaining the PhD qualification will enable me to obtain allocated time in my work schedule to do research, so I will be able to conduct other studies on my own or in collaboration with my colleagues. Communication research could easily be linked to other topics such as marketing, strategy, finance, etc. Many of my colleagues have already expressed an interest in collaborating on research projects of this nature. I would eventually like to publish future research project results in scholarly journals and present my results at one of the communication conferences that I attend.

Recommendations for Further Study

According to the results in Chapter 4, all research questions for my study showed positive and significant results, but with a predictive power of only 52%. The variables I chose and the manner in which I tested them resulted in a weak model. While multiple linear regression allowed me to determine for the whole data set whether the independent variable (GO) could be predicted in terms of three independent variables (frequency of use, duration, and functions), the only variable which was significant was frequency of use. For the corresponding lower level research questions which specified gender, years of work experience, and individual communication channels respectively multiple linear regression with the relevant restricted data sets confirmed, albeit weakly, that the independent variable (GO) could also be predicted in terms of three independent variables (frequency of use, duration, and functions).

Upon finishing this study, there are three recommendations I can make for further research: (a) conduct a qualitative study based on a series of interviews to better understand why these channels are chosen; (b) replicate Dobos's earlier studies (1988,1992) using fewer channels or grouping them as she did to compare with her results; (c) conduct future quantitative studies on other populations such as students from the same international hospitality school where this research data were gathered to compare results between the alumni examined in this study and future graduates of the same program. These options point to future studies which could continue to help fill gaps in our knowledge of how communication channels are chosen and used. By conducting these studies in Europe with a broader international population, comparisons could be made with studies discussed in Chapter 2 that were conducted entirely in the U.S. (Hargittai, 2010; Junco & Cotton, 2011; Junco & Cotton, 2012; Kasavana et al., 2010; Neuman & Brownell, 2009).

Qualitative Research

In this doctoral study, I have been able to confirm that relationships exist between independent variables (frequency of use, duration, and functions) and a dependent variable (GO) when choosing communication channels in the workplace. However, I could not gauge why these channels are chosen for a specific message or task. The section from my survey questionnaire on functions came the closest to indicating why channels are chosen, as respondents were asked to choose the functions they do with each channel. Analysis of the results showed that these responses left it unclear what motivated employees to choose one channel over another. While I was able to prove that

there is a relationship between how often, how much time, and how many functions communication channels are used for, the results do not suggest why one channel is chosen over another or at which point one channel is replaced by another one. For instance, the choice may have been based on heuristics, facility of use, or company norms. In a future study, the questions would be focused on how and not what. One way could be to ask participants why they chose one channel over another for a specific communication exchange. Their comments might offer valuable data which would be useful for understanding how communication channels are chosen.

Dobos's Study

Dobos (1988,1992) grouped, communication channels into face-to-face, written, and electronic. Not surprising, my results showed similar, significant statistics for electronic channels such as e-mail and the Internet. But my findings also showed that the most significant communication channels fall into the three groups: that is, face-to-face ($p<.01$), letter and agendas ($p<.05$), and e-mail ($p<.05$). One recommendation could be to replicate Dobos's study using more channels, while respecting the same groups. I was unable to find previous studies which tested so many individual channels, which is why I attempted to fill this gap. To test the independent variables (frequency of use, duration, and functions) and GO in the overarching hypotheses, I entered the sum of all 15 channels into the multiple linear regression equation. However, to test H_01C and H_02C, each individual channel was entered into the multiple linear regression equation. Perhaps conducting a test other than multiple linear regression, like the discriminant factor analysis used by Dobos (1988,1992), could be suggested for a future study.

Future Quantitative Studies

I imagine conducting future studies on how communication channels are chosen with a completely different population, for example, lower level employees versus managers. This type of study could help to answer the questions about why there are so many communication breakdowns in the workplace. One future study could be to reduce the number of channels to be able to do a more in depth analysis of each one. I could choose the channels most used in a more specific industry, like a hotel or restaurant, although these would clearly have to be related to employee needs. Many employees may not have used fax or teleconferencing in their daily job. A new study might help to bridge gaps between the ways messages are communicated between different levels of organizational hierarchy.

A study could also be conducted with current students enrolled in hospitality schools in and outside of Switzerland to compare how populations from different cultures choose communication channels. While my initial intention is to conduct research with students at my international hospitality school, a future research project could be imagined with other international schools as well. Conducting research with university students outside the U.S. would fill a gap in communication research which has not yet been saturated in Europe.

Another study could be to take a channel, like the Internet, and break it down into smaller subchannels, (e.g., types of sites used or purposes for using them) or to take a channel which was not addressed directly in this study like social media networks, and analyze its utility and subsequent evolution in education or the workplace. Junco and

Cotton (2011, 2012) conducted many studies focusing uniquely on social media networks and their studies could be replicated with an international student population as well. Researchers have shown how much time and for what reasons U.S. participants, both students and professionals use the Internet. A future study might confirm or disprove these findings with an international population.

A further study could be conducted on innovative communication technologies used in hospitality marketing, like Instagram, PinInterest, Google+, or Twitter. These technologies are changing the ways hotels and restaurants advertise offers and entice new clientele. As they are relatively new, the research is not yet saturated and may offer another gap in communication research. Gratifications sought could be examined with new technologies before they are introduced into the workplace. Employers could be asked what gratification they are seeking from a new communication technology before implementation into their respective establishments.

Implications for Social Change

Previous scholars have shown gaps between the communication skills possessed by young graduates and the skills that employers expect new employees to have. My research on communication channels can contribute to the literature and perhaps offer suggestions on how to adapt communication courses in undergraduate programs to the reality of the workplace. Since beginning my doctoral program at Walden, I have already made changes in my own courses in regards to social change. I address the potential for positive social change via communication channels including the Internet, social media networks, and crowd-funding projects.

Through this dissertation, I have shown that the combination of frequency of use, duration, and functions can be used to predict GO when choosing communication channels in the workplace. Better understanding of communication channels and how we communicate in the workplace could lead to less wasted time, fewer misunderstandings, less aggravation, and, eventually, greater GO. If curricula could be written to prepare undergraduates how to choose communication channels for specific communication situations encountered in the workplace, I believe there would be more successful communication exchanges. Students would become more efficient communicators, alleviating many of the communication problems discussed in Chapter 2. The potential to make a positive contribution to social change is inherent in communication.

Research such as mine could be the beginning of a new field linking hospitality, communication, and marketing. Company executives often introduce new communication technology into the workplace without sufficient training. As a result, employees refuse to use new technology. Studies on how communication channels could be best utilized could contribute to the effective use of these communication channels and the ultimate success of a company or brand.

A further social change element could be researching communication channels and their link to a company's CSR as seen in Chapter 2. With so many channels to choose from, companies are often confused as to which is the best one to communicate (and permit participation in) their social change activities. I could test recent technologies in a future study to gauge how other companies are using communication channels to report their CSR and which ones are the most effective.

Conclusion

Through the present study, I have confirmed that duration, frequency of use, and functions were significant in predicting GO in communication channels used in the workplace, although the regression model proved to be weak (52% variance). My findings confirmed previous research studies which showed that age is not a factor when choosing communication channels. Although there were some inevitable limitations (i.e., sample size), the potential for future research is great. Various new sample populations could be used for future studies. The focus could shift to minimizing the number of channels studied to be able to analyze them in greater depth. I have contributed to the literature on communication channels and could conduct future studies to inspire users to promote positive social change when using communication channels in education and the workplace.

References

Ahmad, Z., Ali, L., Ahmad, N., Ahmad, Z., Ahmed, I., & Nawaz, M. M. (2010).

Satisfaction as an outcome of communication and organizational structure: An

outcome based approach. *Interdisciplinary Journal of Contemporary Research in

Business, 2*(5), 249-257. Retrieved from http://www.ijcrb.com/

Al Eslami Kandlousi, N. S., Ali, A. J., & Abdollahi, A. (2010). Organizational citizenship

behavior in concern of communication satisfaction: The role of the formal and

informal communication. *International Journal of Business and Management,

5*(10), 51-61. doi: 10.5539/ijbm.v5n10p51

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2009). *Trends in global higher

education: Tracking a global academic revolution*. Paris: United Nations

Educational, Scientific and Cultural Organization.

Bagdasarov, Z., Greene, K., Benerjee, S.C., Krcmar, M., Yonovitsky, I., & Ruginyte, D.

(2010). I am what I watch: voyeurism, sensation seeking, and television viewing

patterns. *Journal of Broadcasting & Electronic Media, 54*(2), 299-315.

doi:10.1080/08838151003734995

Bakanauskiene, I., Bendaraviciene, R., & Krikstolaitis, R. (2010). Empirical evidence on

employees' communication satisfaction and job satisfaction: Lithuania's

university case. *Management of Organizations: Systematic Research 54*, 21-36.

Retrieved from

http://connection.ebscohost.com/c/articles/77562719/management-organizations-

systematic-research

Beddows, E. (2008). The methodological issues associated with Internet-based research. *International Journal of Emerging Technologies and Society, 6*(2), 124-139. Retrieved from http://online-journals.org/index.php/i-jet

Bembridge, E., Levett-Jones, T., & Jeong, S. Y.-S. (2010). The preparation of technologically literate graduates for professional practice. *Contemporary Nurse, 35*(1), 18-25. doi:10.5172/conu.2010.35.1.018

Berger, A. A. (2011). *Media and communication research methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Blumler, J. G. (1979). The role of theory in uses and gratifications studies. *Communication Research, 6*(9), 9-36. doi: 10.1177/009365027900600102

Blumler, J. G. (1985). The social character of media gratifications. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.), *Media gratifications research* (pp.41-59). Beverly Hills, CA: Sage Publications, Inc.

Blumler, J. G., Gurevitch, M., & Katz, E. (1985). Reaching out: a future of gratifications research. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.),. *Media gratifications research* (pp.255-273). Beverly Hills, CA: Sage Publications, Inc.

Carey, J. W., & Kreiling, A. L. (1974). Popular culture and uses and gratifications: Notes towards an accommodation. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on gratifications research* (pp. 225-248). Beverly Hills, CA: Sage Publications, Inc.

Cho, J., Ramgolam, D. I., Schaefer, K. M., & Sandlin, A. N. (2011). The rate and delay in overload: An investigation of communication overload and channel synchronicity

on identification and job satisfaction. *Journal of Applied Communication Research, 39*(1), 38-54. doi:10.1080/00909882.2010.536847

Clark, L. A., & Roberts, S. J. (2010). Employer's use of social networking sites: A socially irresponsible practice. *Journal of Business Ethics, 95*, 507-525. doi:10.1007/s10551-010-0436-y

DiVerniero, R. A., & Hosek, A. M. (2011). Students' perceptions and communicative management of instructors' online self-disclosure. *Communication Quarterly, 59*(4), 428-449. doi:10.1080/01463373.2011.597275

Dobos, J. (1988). Choice of new media and traditional channels in organizations. *Communication Research Report, 5*(2), 131-139. doi:10.1080/08824098809359814

Dobos, J. (1992). Gratification models of satisfaction and choice of communication channels in organizations. *Communication Research, 19*(1), 29-51. doi:10.1177/009365092019001002

Downs, C. W., & Hazen, M. (1977). A factor analytic study of communication satisfaction. *Journal of Business Communication*, *14*, 63-73. doi:10.1177/002194367701400306

Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): The role of CSR communication. *International Journal of Management Reviews*, *8*(19). doi:10.1111/j.1468-2370.2009.00276.x

D'Urso, S., & Rains, S. A. (2008). Examining the scope of channel expansion theory with new and traditional communication media. *Management Communication Quarterly, 21*(4), 1-20. doi:10.1177/0893318907313712

Dusick, D. M. (2011). Writing Assumptions and Limitations. BOLD Educational Software. Retrieved from http://bold-ed.com/barrc/limitations.htm

Einwiller, S. A. , Carroll, C. E., & Korn, K. (2010). Under what conditions do the news media influence corporate reputation? The roles of media dependency and need for orientation. *Corporate Reputation Review, 12*(4), 299-315. doi:10.1057/crr.2009.28

Elliott, P. (1973). Uses and gratifications research: a critique and sociological alternative. In J. G. Blumler & E. Katz (Eds.). *The Uses of Mass Communications* (pp. 249-268). Beverly Hills, CA: Sage Publications, Inc.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*, 1149-1160. Retrieved from http://dx.doi.org/10.3758/BRM.41.4.1149

Fay, M. J., & Kline, S. L. (2011). Coworker relationships and informal communication in high-intensity telecommuting. *Journal of Applied Communication Research, 39*(2), 144-163. doi:10.1080/00909882.2011.556136

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Thousand Oaks, CA: SAGE Publishing.

Fonner, K. L., & Roloff, M. E. (2010). Why teleworkers are more satisfied with their jobs than are office-based workers: When less contact is beneficial. *Journal of Applied Communication Research, 38*(4), 336-361. doi:10.1080/00909882.2010.513998

Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research Methods in the Social Sciences* (7th ed.). New York, NY: Worth Publishing.

Frey, L. R. (2009). What a difference more difference-making communication scholarship might make: Making a difference from and through communication research. *Journal of Applied Communication Research, 37*(2), 205-214. doi:10.1080/00909880902792321

Frey, L. R., Botan, C. H., & Kreps, G. (2000). *Investigating Communication: An Introduction to Research Methods* (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Galluch, P. S., & Thatcher, J. (2011). Maladaptive vs. faithful use of internet applications in the classroom: An empirical examination. *Journal of Information Technology Theory and Application, 12*(1), 5-22. Retrieved from http://aisel.aisnet.org/jitta/

Godfrey, A., Seiders, K., & Voss, G. B. (2011). Enough is enough! The fine line in executing multichannel relational communication. *Journal of Marketing, 75*, 94-109. doi:10.1509/jmkg.75.4.94

Green, S. B., & Salkind, N. J. (2011). *Using SPSS for Windows and Macintosh: Analyzing and understanding data* (6th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Griffin, E. (2009). *Communication: A first look at communication theory* (7th ed.).

Boston, MA: McGraw-Hill Higher Education.

Gunter, B. (2002). The quantitative research process. In K. B. Jensen (Ed.). *A handbook*

of media and communication research (pp. 209- 234). London: Routledge.

Hagler, B.E., Erthal, M., Walzer, D., & Anderson, M.A. (2009). Measuring future worker

productivity via business email message creations: Implications for education.

The Delta Pi Epsilon Journal, LI (3), 152-165. Retrieved from

https://www.questia.com/library/p438572/the-journal-of-research-in-business-

education

Hargittai, E. (2010). Digital natives? Variation in Internet skills and uses among members

of the 'Net Generation'. *Sociological Inquiry, 80*(1), 82-113. Retrieved from

http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291475-682X

Hecht, M. L. (1978). The conceptualization and measurement of interpersonal

communication satisfaction. *Human Communication Research, 4*, 253-264. doi:

10.1111/j.1468-2958.1978.tb00614.x

Hulea, L. (2009). The influence of certain factors upon business communication. *Annals*

of the University of Petrosani, Economics, 9(2), 29-32. Retrieved from

http://www.upet.ro/annals/economics/

Hummert, M. L. (2009). Not just preaching to the choir: Communication scholarship

does make a difference. *Journal of Applied Communication Research, 37*(2), 215-

224. doi:10.1080/00909880902792313

Im, I., Kim, Y., & Han, H. J. (2008). The effects of perceived risk and technology type on users' acceptance of technology. *Information and Management, 45*, 1-9. doi:10.1016/j.im.2007.03.005

Jeffres, L. W., Neuendorf, K., & Atkin, D. J. (2012). Acquiring knowledge from the media in the internet age. *Communication Quarterly, 60*(1), 59-79. doi:10.1080/01463373.2012.641835

Jensen, K. B. (2002). Media effects. In K. B. Jensen (Ed.). *A handbook of media and communication research* (pp. 138- 155). London: Routledge.

Jones, C. G. (2011). Written and computer-mediated accounting communication skills: An employer perspective. *Business Communication Quarterly, 74*(3), 247-271. doi:10.1177/1080569911413808

Josgrilberg, F. B. (2011). Between life-world and technical systems: Dialectics in the digital locus. *Canadian Journal of Communication, 36*(2), 295-310. Retrieved from http://www.cjc-online.ca/index.php/journal

Junco, R. (2011). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education 58*, 162-171. doi:10.1016/j.compedu.2011.08.004

Junco, R., & Chickering, A. W. (2010). Civil discourse in the age of social media. *About Campus*, 12-18. doi:10.1002/abc.20030

Junco, R., & Cole-Avent, G. A. (2008). An introduction to technologies commonly used by college students. *New Directions for Student Services* (124), 3-17. doi:10.1002/ss.292

Junco, R., & Cotton, S. R. (2011). Perceived academic effects of instant messaging use. *Computers & Education, 56*, 370-378. doi:10.1016/j.compedu.2010.08.020

Junco, R., & Cotton, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. *Computers and Education, 59,* 505-514. doi:10.1016/j.compedu.2011.12.023

Jung, J.-Y. (2008). Internet connectedness and its social origins: An ecological approach to post-access digital divides. *Communication Studies, 59*(4), 322-339. Retrieved from http://www.csca-net.org/aws/CSCA/pt/sp/home_page

Kasavana, M. L., Nusair, K., & Teodosic, K. (2010). Online social networking : redefining the human web. *Journal of Hospitality and Tourism, 1*(1), 68-82. Emerald Group Publishing Limited. doi:10.1108/17579881011023025

Katz, E., Blumler, J.G., & Gurevitch, M. (1973-1974). Uses and gratifications research. *The Public Opinion Quarterly, 37*(4), 509-523. doi:10.1086/268109

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Eds.). *The uses of mass communications* (pp.19-34). Beverly Hills, CA: Sage Publications, Inc.

Katz, E., & Lazarsfeld, P. F. (2006). *Personal Influence*. New Brunswick, NJ: Transaction Publishers. doi:10.1076/jcen.20.2.221.1177

Keyton, J. (2011). *Communication Research: Asking Questions, Finding Answers* (3rd ed.). New York, NY: McGraw-Hill.

Kink, N., & Hess, T. (2008). Search engines as substitutes for traditional information sources? An investigation of media choice. *The Information Society, 24*, 18-29. doi:10.1080/01972240701771630

Kiyatkin, L., Reger, R., & Roger-Baum, J. (2011). Thought leadership on business and social issues. *Journal of Corporate Citizenship, 41*, 83-101. Retrieved from http://weatherhead.case.edu/faculty/journals/jcc

Klyueva, A. V. (2010). An integrated model of media selection in strategic communication campaigns. Retrieved from http://www.instituteforpr.org/wp-content/uploads/MediaSelection.pdf.

Laswell, H. (1948). *The structure and function of communication and society: The communication of ideas.* New York, NY: Institute for Religious and Social Studies, 203-243.

Latzer, M. (2009). Convergence revisited: Toward a modified pattern of communications governance. *Convergence: The International Journal of Research into New Media Technologies, 15*, 411-426. doi:10.1177/1354856509342342

Lee, P.S.N., Leung, L., Lo, V., Xiong, C., & Wu, T. (2011). Internet communication versus face-to-face interaction in quality of life. *Social Indicator Research, 100*, 375-389. doi:10.1007/s11205-010-9618-3

Leonard, K. M., van Scotter, J. R., & Pakdil, F. (2009). Culture and communication: Cultural variations and media effectiveness. *Administration and Society, 41*(7), 850-877. doi:10.1177/0095399709344054

Levy, M. R., & Windahl, S. (1985). The concept of audience activity. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.). *Media gratifications research* (pp.109-122). Beverly Hills, CA: Sage Publications, Inc. doi:10.1177/009365084011001003

Lin, C. A. (1993). Modeling the gratification-seeking process of television viewing. *Human Communication Research, 20*(2), 224-244. doi:10.1111/j.1468-2958.1993.tb00322.x

Lin, C. A. (1999). Uses and Gratifications. In G. Stone, M. Singletary, & V. P. Richmond (Eds.). *Clarifying communication theories* (pp. 199-208). Ames, IO: Iowa State University Press. doi:10.1016/S0736-5853(01)00014-4

Lowry, P. B., Romano, N. C., Jenkins, J. L., & Guthrie, R. W. (2009). The CMC interactivity model: How interactivity enhances communication quality and process satisfaction in lean-media groups. *Journal of Management Information Systems, 26*(1), 155-195. doi:10.2753/MIS0742-1222260107

Lull, J. (1985). The naturalistic study of media use and youth culture. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.). *Media gratifications research: Current perspectives* (pp. 209-224). Beverly Hills, CA: Sage Publications, Inc.

Madlock, P. E. (2008). The link between leadership style, communicator competence, and employee satisfaction. *Journal of Business Communication, 45*(61). doi:10.1177/0021943607309351

Madlock, P. E., & Booth-Butterfield, M. (2012). The influence of relational maintenance

    strategies among coworkers. *Journal of Business Communication, 49*(1), 21-47.

    doi:10.1177/0021943611425237

McGuire, W. J. (1974). Psychological motives and communication gratification. In J. G.

    Blumler & E. Katz (Eds). *The uses of mass communications* (pp. 167-196).

    Beverly Hills, CA: Sage Publications, Inc.

McLeod, J. M., & Becker, L. B. (1973). Testing the validity of gratifications measures

    through political effects analysis. In J. G. Blumler & E. Katz (Eds.). *The uses of*

    mass communications (pp. 137-166). Beverly Hills, CA: Sage Publications, Inc.

McQuail, D. (1985). Gratifications research and media theory: many models or one? In

    K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.). *Media gratifications*

    research (pp.149-167). Beverly Hills, CA: Sage Publications, Inc.

McQuail, D. (1984). With the benefit of hindsight: Reflections on Uses and Gratifications

    research. *Critical Studies in Mass Communication, 1*, 177-193.

    doi:10.1080/15295038409360028

McQuail, D., & Gurevitch, M. (1974). Explaining audience behavior: three approaches

    considered. In J. G. Blumler & E. Katz (Eds.). *The uses of mass communications*

    (pp.287-301). Beverly Hills, CA: Sage Publications, Inc.

Mondi, M., Woods, P., & Rafi, A. (2008). A 'uses and gratifications expectancy model'

    to predict students' 'perceived e-learning experience'. *Educational Technology &*

    Society, 11(2), 241-261. Retrieved from http://www.ifets.info/

Moran, M., Seaman, J., & Tinti-Kane, H. (2011). Teaching, learning, and sharing: How today's higher education faculty use social media. Boston, MA: Pearson Learning Solutions and Babson Survey Research Group.

Mowday, R., Steers, R., & Porter, L. (1979). The measurement of organizational commitment. *Journal of Vocational Behaviour, 14*, 224-227. doi:10.1016/0001-8791(79)90072-1

Napoli, P. M. (2010). Revisiting 'mass communication' and the 'work' of the audience in the new media environment. *Media, Culture, and Society, 32*, 505-518. doi:10.1177/0163443710361658

Nelson, K., Courier, M., & Joseph, G. W. (2011). Teaching tip an investigation of digital literacy needs of students. *Journal of Information Systems Education, 22*(2), 95-109. Retrieved from http://jise.org/

Neuman, L. W. (2006). *Social Research Methods* (6th ed.). Boston, MA: Pearson Education, Inc.

Neuman, A., & Brownell, J. (2009). Applying communication technology: introducing email and instant messaging in the hospitality curriculum. *Journal of Hospitality, Leisure, Sport, and Tourism Education, 7*(2). doi:10.3794/johlste.72.191

Nordin, S., Halib, M., & Ghazali, Z. (2011). Strengthening internal communication: a case of communication satisfaction in an organization. *European Journal of Social Sciences, 24*(4), 617-625. Retrieved from http://www.europeanjournalofsocialsciences.com/

Norusis, M. J. (2008). *SPSS statistics 17.0 statistical procedures companion*. Upper

    Saddle River, NJ: Prentice Hall.

Palmgreen, P. (1984). Uses and gratifications: a theoretical perspective. *Communication*

    Yearbook 8, 20-55. Retrieved from

    http://www.icahdq.org/pubs/commyearbook.asp

Palmgreen, P., & Rayburn II, J. D. (1985). A comparison of gratification models of

    media satisfaction. *Communication Monographs, 52*, 334-346.

    doi:10.1080/03637758509376116

Palmgreen, P., & Rayburn II, J. D. (1985). An expectancy-value approach to media

    gratifications. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.). *Media*

    gratifications research (pp.61-72). Beverly Hills, CA: Sage Publications, Inc.

Palmgreen, P., Wenner, L. A., & Rosengren, K. E. (1985). Uses and Gratifications

    research: the past ten years. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen

    (Eds.). *Media gratifications research* (pp. 7-40). Beverly Hills, CA: Sage

    Publications, Inc.

Peng, T.-Q., & Zhu, J. J. H. (2011). A game of win-win or win-lose? Revisiting the

    Internet's influence on sociability and use of traditional media. *New Media*

    Society, 13, 568-588. doi:10.1177/1461444810375976

Philippe, T. W., Helpling, S., & Koehler, J. W. (2009). Managerial communications that

    significantly affect employees' perceptions. *Review of Business Research, 9*(4),

    51-57. Retrieved from http://www.iabe.org/

Pirani, J. A., & Sheehan, M. C. (2009). Spreading the word: Messaging and communications in higher education. *EDUCAUSE Center for Applied Research,* 1-10. Retrieved from http://www.educause.edu/ecar

Quan-Haase, A., & Wellman, B. (2005). Hyperconnected net work: Computer-mediated community in a high-tech organization. In C. Heckscher & P. S. Alder (Eds.). *The corporation as a collaborative community* (pp. 281-333).

Rogelberg, S. G., Allen, J. A., Shanock, L., Scott, C., & Shuffler, M. (2010). Employee satisfaction with meetings: A contemporary facet of job satisfaction. *Human Resource Management, 49*(2), 149-172. doi:10.1002/hrm.20339

Rosengren, K. E. (1974). Uses and gratifications: a paradigm outlined. In J. G. Blumler & E. Katz (Eds.). *The uses of mass communications* (pp. 269-286). Beverly Hills, CA: Sage Publications, Inc.

Roy, S. K. (2007). Internet uses and gratifications structure. *The ICFAI Journal of Management Research, VI* (12), 43-63. Retrieved from http://www.iupindia.in/705/ijmr.asp

Rubin, A. (1993). Audience activity and media use. *Communication Monographs, 60*, 98-105. doi:10.1080/03637759309376300

Rubin, A. (1985). Media gratifications through the life cycle. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.). *Media gratifications research* (pp.195-208). Beverly Hills, CA: Sage Publications, Inc.

Rubin, R. B., Palmgreen, P., & Sypher, H. E. (Eds.). (2004). *Communication Research Methods*. New York, NY: Routledge.

Rubin, R. B., Rubin, A. M., Haridakis, P. M., & Piele, L. J. (2010). *Communication research: Strategies and resources* (7th ed.). Boston, MA: Wadsworth Cengage Learning.

Rubin, R., Palmgreen,P., & Sypher, H. (2004). *Communication research measures: A sourcebook*. LEA: Mahwah, New Jersey.

Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication and Society, 3(*1), 3-37. doi:10.1207/S15327825MCS0301_02

Servaes, J., Polk, E., Shi, S., Reilly, D., & Yakupitjage, T. (2010). Towards a framework of sustainability indicators for communication for development and social change projects. *International Communication Gazette, 74*(2), 99-123. doi:10.1177/1748048511432598

Siraj, S. A. (2007). Synthesis of the structure and functions of the uses and gratifications model. *European Journal of Scientific Research, 17*(3), 399-408. Retrieved from http://www.europeanjournalofscientificresearch.com/

Smith, Z. A, & Wolverton, M. (2010). Higher education leadership competencies: Quantitatively refining a qualitative model. *Journal of Leadership & Organisational Studies, 17*(1), 61-70. doi:10.1177/1548051809348018

Stone, G., Singletary, M., & Richmond, V. (1999). *Clarifying communication theories: A hands-on approach*. Ames, Iowa: Iowa State University Press.

Timmerman, C. E. (2010). The moderating effect of mindlessness/mindfulness upon media richness and social influence explanations of organizational media use. *Communication Monographs, 69*(2), 111-131. doi:10.1080/714041708

Trochim, W.M.K. (2006). *Statistical power*. Retrieved from

    http://www.socialresearchmethods.net/kb/power.php

Turner, J. W., & Reinsch, N. L. (2010). Successful and unsuccessful multicommunication

    episodes: Engaging in dialogue or juggling messages? *Information Systems Front,*

    12, 277-285. doi:10.1007/s10796-009-9175-y

Urista, M.A., Dong, Q., & Day, K.D. (2008). Explaining why young adults use MySpace

    and Facebook through Uses and Gratifications Theory. *Human Communication,*

    12(2), 215-229. Retrieved from http://www.icahdq.org/pubs/humancomm.asp

Weibull, L. (1985). Structural factors in gratifications research. In K. E. Rosengren, L. A.

    Wenner, & P. Palmgreen (Eds.). *Media gratifications research: Current*

    perspectives (pp. 123-147). Beverly Hills, CA: Sage Publications, Inc.

Wenner, L. A. (1985). Transaction and media gratifications research. In K. E. Rosengren,

    L. A. Wenner, & P. Palmgreen (Eds.). *Media gratifications research: Current*

    perspectives (pp.73-94). Beverly Hills, CA: Sage Publications, Inc.

White, C., Vane, A., & Stafford, G. (2010). Internal communication, information

    satisfaction, and sense of community: The effect of personal influence. *Journal of*

    Public Relations Research, 22(1), 65-84. doi:10.1080/10627260903170985

Williams, F., Phillips, A. F., & Lum, P. (1985). Gratifications associated with new

    communication technologies. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen

    (Eds.). *Media gratifications research* (pp. 241-252). Beverly Hills, CA: Sage

    Publications, Inc.

Wrench, J. S., Thomas-Maddox, C., Richmond, V. P., & McCroskey, J. C. (2008).

    Quantitative research methods for communication. New York, NY: Oxford

    University Press.

Wright, W. R. (1960). Functional analysis and mass communication. *Public Opinion*

    Quarterly, 24, 610-613. doi:10.1086/266976

Appendix A: Dobos's (1988) Table of Results

DOBOS'S (1988) TABLE OF RESULTS

Table 1 gives the CFA item loadings. Interfactor correlations ranged from .556 to .812. Model tests were all significant, indicating the model does not hold in the population. Model comparisons were significant, however, indicating that the hypothesized model was an improvement over the null model of independence. Rho and the normed fit index values approached or exceeded the ideal value of .90 for an adequate model (Bentler & Bonett, 1980).

TABLE 1
Confirmatory Factor Solutions for Gratifications Sought and Obtained

	GS	FF	MM	TK
Production Communication				
1. to coordinate activities of projects we're working on	.600	.691	.679	.646
2. to disseminate information about projects we're working on	.585	.612	.632	.674
3. to monitor progress of projects we're working on	.529	.690	.652	.819
4. to give/receive feedback on reports/ideas we're working on	.602	.658	.669	.750
Maintenance Communication				
1. to maintain relationships with other people	.383	.636	.647	.688
2. to work with others in a team approach	.641	.660	.766	.802
3. to cooperate to reach organizational goals	.590	.701	.718	.755
4. to show people how their job fits into the total operation	.725	.553	.617	.762
Innovation/Adaptation Communication				
1. to brainstorm or generate new ideas	.579	.575	.693	.711
2. to be creative in our methods of operation	.595	.667	.705	.802
3. to keep ahead of our competitors	.411	.591	.598	.702
4. to respond quickly to changes in the business environment	.493	.613	.619	.779
Rho	.866	.882	.937	.938
Normed Fix Index	.834	.868	.914	.924

All loadings significant at p .005. Standard errors range from .056 to .071.

134

Appendix B: Communication Satisfaction Questionnaire

Communication Satisfaction Questionnaire

Introduction: Most of us assume that the quality and amount of communication in our jobs contribute to both our job satisfaction and our productivity/ through this study we hope to find out how satisfactory communication practices are and what suggestions you have for improving them. We appreciate your taking time to complete the questionnaire. It should take 20 to 30 minutes.

Your answers are completely confidential so be as frank as you wish. This is not a test – your opinion is the only right answer. Do not sign your name; we do not wish to know who you are.

The answers will be combined into groups for reporting purposes.

1. How satisfied are you with your job?

_____ 1. Very Satisfied   _____ 5. Somewhat dissatisfied
_____ 2. Satisfied   _____ 6. Dissatisfied
_____3. Somewhat Satisfied   _____ 7. Very dissatisfied
_____4. Indifferent

2. In the past 6 months, what has happened to your level of satisfaction?
(check 1)
_____1. Gone up   _____2. Stayed the same   _____3. Gone down

3. If the communication associated with you job could be changed in any way to make you more satisfied, please indicate how:

_____
_____
_____

A. Listed below are several kinds of information often associated with a person's job. Please indicate how satisfied you are with the amount and/or quality of each kind of information by circling the appropriate number at the right.

	Very Dissatisfied						Very Satisfied
	1	2	3	4	5	6	7

(respondents use the above scale to respond to all items)

4. Information about my progress in my job.
---1---2---3---4---5---6---7---

5. Personal news
---1---2---3---4---5---6---7---

6. Information about organizational policies and goals
---1---2---3---4---5---6---7---

7. Information about how my job compares with others
---1---2---3---4---5---6---7---

8. Information about how I am being judged
---1---2---3---4---5---6---7---

9. Recognition of my efforts
---1---2---3---4---5---6---7---

10. Information about departmental policies and goals
---1---2---3---4---5---6---7---

11. Information about the requirements of my job
---1---2---3---4---5---6---7---

12. Information about government action affecting my organization
---1---2---3---4---5---6---7---

13. Information about changes in our organization
---1---2---3---4---5---6---7---

14. Reports on how problems in my job are being handled
---1---2---3---4---5---6---7---

15. Information about benefits and pay
---1---2---3---4---5---6---7---

16. Information about our organization's financial standing
---1---2---3---4---5---6---7---

17. Information about accomplishments and/or failures of the organization
---1---2---3---4---5---6---7---

B. Please indicate how satisfied you are with the following (write the appropriate number at right).

18. Extent to which my superiors know and understand the problems faced by subordinates
---1---2---3---4---5---6---7---

19. Extent to which the organization's communication motivates and stimulates an enthusiasm
for meeting its goals
---1---2---3---4---5---6---7---

20. Extent to which my supervisor listens and pays attention to me
---1---2---3---4---5---6---7---

21. Extent to which the people in my organization have great ability as communicators
---1---2---3---4---5---6---7---

22. Extent to which my supervisor offers guidance for solving job related problems
---1---2---3---4---5---6---7---

23. Extent to which the organization's communication makes me identify with it or feel a vital part of it
---1---2---3---4---5---6---7---

24. Extent to which the organization's communications are interesting and helpful
---1---2---3---4---5---6---7---

25. Extent to which my supervisor trusts me
---1---2---3---4---5---6---7---

26. Extent to which I receive in time the information needed to do my job
---1---2---3---4---5---6---7---

27. Extent to which conflicts are handled appropriately through proper communication channels
---1---2---3---4---5---6---7---

28. Extent to which the grapevine is active in our organization
---1---2---3---4---5---6---7---

29. Extent to which my supervisor is open to ideas
---1---2---3---4---5---6---7---

30. Extent to which horizontal communication with other organizational members is accurate and free flowing
---1---2---3---4---5---6---7---

31. Extent to which communication practices are adaptable to emergencies
---1---2---3---4---5---6---7---

32. Extent to which my work group is compatible
---1---2---3---4---5---6---7---

33. Extent to which our meetings are well organized
---1---2---3---4---5---6---7---

34. Extent to which the amount of supervision given me is about right
---1---2---3---4---5---6---7---

35. Extent to which written directives and reports are clear and concise
---1---2---3---4---5---6---7---

36. Extent to which the attitudes toward communication in the organization are basically healthy
---1---2---3---4---5---6---7---

37. Extent to which informal communication is active and accurate
---1---2---3---4---5---6---7---

38. Extent to which the amount of communication in the organization is about right
---1---2---3---4---5---6---7---

C. Answer the following only if you are a manager or supervisor. Then indication your satisfaction with the following:

39. Extent to which my subordinates are responsive to downward directive communication
---1---2---3---4---5---6---7---

40. Extent to which my subordinates anticipate my needs for information
---1---2---3---4---5---6---7---

41. Extent to which I do not have a communication overload
---1---2---3---4---5---6---7---

42. Extent to which my subordinates are receptive to evaluation, suggestions, and criticisms
---1---2---3---4---5---6---7---

43. Extent to which my subordinates feel responsible for initiating accurate upward communication
---1---2---3---4---5---6---7---

C.W. Downs and Hazen (1977) developed the Communication Satisfaction Questionnaire to discover the relationship between communication and job satisfaction. Principle-components factor analysis revealed eight stable factors, accounting for 61% of the variance. Each factor has five items, which are averaged for a factor score. Downs recommends that researchers factor analyze the scale to confirm the existence of the eight dimensions:
1. Communication Climate
2. Relationship to Superiors
3. Organizational Integration
4. Media Quality
5. Horizontal and Informal Communication
6. Organizational Perspective
7. Relationship with Subordinates
8. Personal Feedback
Item 1 is a global satisfaction item, Item 2 looks at changes within the last 6 months; Item 3 is open-ended. Academic researchers may use the instrument without permission.

NOTE: Academic researchers may **use** the instrument without **permission**.
Retrieved July 17, 2012, from 76.12.38.165/comsight/pdf/CAQ.pdf

References
Downs, C. W., & Hazen, M. (1977). A factor analytic study of communication satisfaction. *Journal of Business*

   Communication, 14, 63-73.

Rubin, R.. Palmgreen,P., & Sypher, H. (2004). *Communication research measures: A*

   sourcebook. LEA: Mahwah, New Jersey.

Appendix C: Final Version of Survey Questionnaire

Part 1
Demographic Questions

Please provide the following information:

Gender   Male   Female

Age: _____

Are you currently employed?

If not employed, please stop the survey here. Thank you for your time.

Years worked (total) _____.   Years worked (in this company): _____

Which best describes your organization? (circle one):

High Tech   Manufacturing   Service   Education   Civil Service

        Government   Other _____

Number of employees/ size of organization: _____

Year graduated from EHL: _____

Nationality: _____

Language section when studying at EHL: French   English

Part 2
Communication Satisfaction Questionnaire

Communication Satisfaction Questionnaire
A. Please indicate how satisfied you are with the amount and/or quality of each kind of information by circling the appropriate number.

    Very Dissatisfied   Very Satisfied
          1   2   3   4   5   6   7
 (respondents use the above scale to respond to all items)

1. Information about organizational policies and goals
          1   2   3   4   5   6   7
2. Information about departmental policies and goals
          1   2   3   4   5   6   7
3. Information about the requirements of my job
          1   2   3   4   5   6   7
4. Information about government action affecting my organization
          1   2   3   4   5   6   7
5. Information about changes in our organization
          1   2   3   4   5   6   7
6. Information about benefits and pay
          1   2   3   4   5   6   7
7. Information about our organization's financial standing
          1   2   3   4   5   6   7
8. Information about accomplishments and/or failures of the organization
          1   2   3   4   5   6   7

9. Extent to which the people in my organization have great ability as communicators
          1   2   3   4   5   6   7
10. Extent to which the organization's communication makes me identify with it or feel a vital part of it
          1   2   3   4   5   6   7
11. Extent to which the organization's communications are interesting and helpful
          1   2   3   4   5   6   7

12. Extent to which conflicts are handled appropriately through proper communication channels
          1   2   3   4   5   6   7
13. Extent to which the grapevine is active in our organization
          1   2   3   4   5   6   7

14. Extent to which horizontal communication with other organizational members is accurate and free flowing

            1   2   3   4   5   6   7

15. Extent to which communication practices are adaptable to emergencies

            1   2   3   4   5   6   7

16. Extent to which our meetings are well organized

            1   2   3   4   5   6   7

17. Extent to which written directives and reports are clear and concise

            1   2   3   4   5   6   7

18. Extent to which informal communication is active and accurate

            1   2   3   4   5   6   7

19. Extent to which the amount of communication in the organization is about right

            1   2   3   4   5   6   7

Source: Adapted from Downs and Hazen's (1977) Communication Satisfaction

Questionnaire

Academic researchers may use the instrument without permission.

Part 3 A

How much time do you spend using each communication channel per typical work week

(in hours)?

a.	Face to face	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
b.	Meetings	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
c.	Telephone	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
d.	Letters	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
e.	Memos	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
f.	Agendas	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
g.	Minutes	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
h.	Reports	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
i.	Faxes	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
j.	E-mail	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours

k. Teleconference	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
l. Skype	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
m. Instant messaging	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
n. Mobile phone	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours
o. Internet	Never	< 1 hour	1-2 hours	2-3 hours	3-4 hours	>4 hours

Part 3 B

Rate your gratification obtained based on duration of (or time spent on) the following communication channels on a scale of 1-7.

	Not gratifying at all						Very Gratifying	
	1	2	3	4	5	6	7	
Face to face	1	2	3	4	5	6	7	N/A
Meetings	1	2	3	4	5	6	7	N/A
Telephone	1	2	3	4	5	6	7	N/A
Letters	1	2	3	4	5	6	7	N/A
Memos	1	2	3	4	5	6	7	N/A
Agendas	1	2	3	4	5	6	7	N/A
Minutes	1	2	3	4	5	6	7	N/A
Business reports	1	2	3	4	5	6	7	N/A
Faxes	1	2	3	4	5	6	7	N/A
E-mail	1	2	3	4	5	6	7	N/A
Teleconferencing	1	2	3	4	5	6	7	N/A
Skype	1	2	3	4	5	6	7	N/A
Instant messaging	1	2	3	4	5	6	7	N/A
Mobile phone	1	2	3	4	5	6	7	N/A
Internet	1	2	3	4	5	6	7	N/A

Part 4 A

Please choose the response that best reflects the frequency with which you use the

following communication channels.

a. Face to face   never monthly bimonthly once a week once per day   >once per day

b. Meetings   never monthly bimonthly once a week once per day   >once per day

c. Telephone   never monthly bimonthly once a week once per day   >once per day

d. Letter   never monthly bimonthly once a week once per day   >once per day

e. Memos   never monthly bimonthly once a week once per day   >once per day

f. Agenda   never monthly bimonthly once a week once per day   >once per day

g. Minute   never monthly bimonthly once a week once per day   >once per day

h. Reports   never monthly bimonthly once a week once per day   >once per day

i. Faxes   never monthly bimonthly once a week once per day   >once per day

j. E-mail   never monthly bimonthly once a week once per day   >once per day

k. Teleconference never monthly bimonthly once a week once per day   >once per day

l. Skype   never monthly bimonthly once a week once per day   >once per day

m. Instant   never monthly bimonthly once a week once per day   >once per day

    messaging

n. Mobile phone never monthly bimonthly once a week once per day   >once per day

o. Internet   never monthly bimonthly once a week once per day   >once per day

Part 4 B

Rate your gratification obtained based on frequency of use of the following

communication channels on a scale of 1-7.

	Not gratifying at all						Very Gratifying	
	1	2	3	4	5	6	7	
Face to face	1	2	3	4	5	6	7	N/A
Meetings	1	2	3	4	5	6	7	N/A
Telephone	1	2	3	4	5	6	7	N/A
Letters	1	2	3	4	5	6	7	N/A
Memos	1	2	3	4	5	6	7	N/A
Agendas	1	2	3	4	5	6	7	N/A
Minutes	1	2	3	4	5	6	7	N/A
Business reports	1	2	3	4	5	6	7	N/A
Faxes	1	2	3	4	5	6	7	N/A
E-mail	1	2	3	4	5	6	7	N/A
Teleconferencing	1	2	3	4	5	6	7	N/A
Skype	1	2	3	4	5	6	7	N/A
Instant messaging	1	2	3	4	5	6	7	N/A
Mobile phone	1	2	3	4	5	6	7	N/A
Internet	1	2	3	4	5	6	7	N/A

Part 5 A

In part 5, participants are asked to tick a box for each function they use for each

communication channel. Please tick all boxes that apply.

	Giving Info	Receiving info	Establishing new relationships	Maintaining relationships	Brainstorming ideas
	☐	☐	☐	☐	☐
Face to face	☐	☐	☐	☐	☐
Meetings	☐	☐	☐	☐	☐

Telephone   ☐   ☐   ☐   ☐   ☐

Letters   ☐   ☐   ☐   ☐   ☐

Memos   ☐   ☐   ☐   ☐   ☐

Agendas   ☐   ☐   ☐   ☐   ☐

Minutes   ☐   ☐   ☐   ☐   ☐

Business
reports   ☐   ☐   ☐   ☐   ☐

Faxes   ☐   ☐   ☐   ☐   ☐

E-mail   ☐   ☐   ☐   ☐   ☐

Teleconferencing
    ☐   ☐   ☐   ☐   ☐

Skype   ☐   ☐   ☐   ☐   ☐

Instant
messaging   ☐   ☐   ☐   ☐   ☐

Mobile phone
    ☐   ☐   ☐   ☐   ☐

Internet

Part 5 B

63. Rate your gratification obtained based on function(s) of the following communication

channels on a scale of 1-7.

	Not gratifying at all						Very Gratifying	
	1	2	3	4	5	6	7	
Face to face	1	2	3	4	5	6	7	N/A
Meetings	1	2	3	4	5	6	7	N/A
Telephone	1	2	3	4	5	6	7	N/A
Letters	1	2	3	4	5	6	7	N/A
Memos	1	2	3	4	5	6	7	N/A
Agendas	1	2	3	4	5	6	7	N/A
Minutes	1	2	3	4	5	6	7	N/A
Business reports	1	2	3	4	5	6	7	N/A
Faxes	1	2	3	4	5	6	7	N/A
E-mail	1	2	3	4	5	6	7	N/A
Teleconferencing	1	2	3	4	5	6	7	N/A
Skype	1	2	3	4	5	6	7	N/A
Instant messaging	1	2	3	4	5	6	7	N/A
Mobile phone	1	2	3	4	5	6	7	N/A
Internet	1	2	3	4	5	6	7	N/A

Appendix D: Confidentiality Agreement

CONFIDENTIALITY AGREEMENT

Name of Signer: █████████

During the course of my activity in collecting data for this research: "How hospitality professionals choose and use communication channels" I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to

comply with all the terms and conditions stated above.

Signature: **Date:**

Appendix E: Final Consent Form for Survey Questionnaire

CONSENT FORM FOR FINAL STUDY

You are invited to take part in a research study entitled 'A Quantitative Study on How Hospitality Professionals Choose Communication Channels'. The researcher is inviting hospitality professionals who are actively employed and use communication channels in the workplace to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named ████████, who is a doctoral student at Walden University. You may already know the researcher as a Senior Lecturer, but this study is separate from that role.

Background Information:
The purpose of this study is to assess how hospitality professionals choose the communication channels they use in the workplace. Communication channels can be defined as oral or written forms of communication used to exchange messages between two or more people.

The study will assess how well frequency of use, duration, and function of individual communication channels predict gratification obtained. Gratification from using communication channels can be defined as the potential rewards offered by the communication channel based on content, accessibility, or setting.

Procedures:
If you agree to be in this study, you will be asked to:
- ____Read this consent form and agree to its conditions.
- ____Complete the survey questionnaire.

The survey questionnaire will take approximately 20 minutes to complete.

For the survey questionnaire, here are a few examples of the type of questions asked:

1. How much time do you spend using each communication channel per typical work week (in hours)?
2. Please choose the response that best reflects the frequency with which you use the following communication channels.
3. In part 6, participants are asked to rate the importance of function of each channel on a scale of 1-7 (not relevant to extremely relevant) based on the function: production, maintenance, and innovation.

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this study would not pose risk to your safety or wellbeing. The only possible risk is exceeding the time limit.

Some of the benefits for being part of this study is to help a Senior Lecturer with her doctoral thesis by responding to her survey questionnaire.

Payment:
There is not payment for participation.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by being stored on a personal computer which is password protected. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ If you want to talk privately about your rights as a participant, you can call ▮▮▮▮▮▮▮▮▮▮. She is the Walden University representative who can discuss this with you. Her phone number is ▮▮▮▮▮▮▮▮ (for participants outside the US). Walden University's approval number for this study is 01-28-14-0269434 and it expires on 27 January 2015.

Statement of Consent:
Read the following statement and confirm by clicking the hyperlink below and beginning the survey:
I have read the above information and I feel I understand the study well enough to make a decision about my involvement.

You may print out a copy of this consent form for your personal record.

To protect your privacy, no consent signature is requested. Instead, you may indicate your consent by clicking here and proceeding to the survey questionnaire:

Curriculum Vitae

Laura Zizka

laura.zizka@waldenu.edu

<u>Education</u>

Walden University   2014   PhD in Management- Self-Designed

Dissertation Thesis: Communication Channels: The Effects of Frequency, Duration, and

Function on Gratification Obtained

Northern Arizona University 2006   M.A.

Specialization: Professional and Technical Writing

Xavier University   1993   B.A. French

<u>Professional Experience</u>

Ecole hôtelière de Lausanne   2002-present

Senior Lecturer in Business Communications/ Advanced Business Communications

Surval Mont-Fleuri   2000-2002

English teacher

Chicago International Charter School   1997-1999

English and history teacher/ Head of English Department

<u>Additional Skills</u>

Expression Web and Visio

Project Director of Diploma Projects

<u>Personal Interests</u>

Communications, social media, communication technology