#### MPC MAJOR RESEARCH PAPER

# THE USE OF VISUAL ICONS AND SIGNS: INVESTIGATING THE PUNCTUATION OF TEXT BY EMOTICONS AND COMMUNICATION CLARITY IN ONLINE PROFESSIONAL COMMUNICATION ENVIRONMENTS

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The Major Research Paper is submitted in partial fulfillment of the requirements for the degree of Master of Professional Communication

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September 8<sup>th</sup>, 2011

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#### **ABSTRACT**

Computer mediated communication (CMC) is becoming increasingly prevalent and relied upon as the Internet facilitates the rapid growth of global networks and expands communication boarders. Today, many individuals rely on CMC for professional purposes, such as connecting long distance with co-workers to collaborate and advance workplace tasks. These individuals often rely on professional online collaborative programs that allow them to connect with colleagues across cities, provinces, and around the world. Relying on CMC for the transmittal of important electronic messages places it at the forefront for understanding how technical communication devices and networks function. This also requires an understanding of how ambiguity with online conversations can be decreased through the use of the Internet. However, what professional collaborative programs currently lack is a singular professional software that integrates both collaborative on-screen practices and online chatting capabilities with visual icons; or professional emoticons. The following research aims to investigate the communicative value of emoticons within a structured sentence via a study involving professional communication graduate students from Ryerson University and senior marketing communication professionals from a marketing agency in Toronto, Canada. Using concepts from critical visual methodology and a theoretical framework of visual semiotics, emoticons will be examined to see whether or not these pictorial symbols act in a similar fashion to punctuation symbols within a given sentence structure. The goal of this research was to investigate the use and meaning derived from emoticons in relation to grammatical punctuation for sentence structures in online communication environments. Specific emoticons were selected and used to measure participants' interpretation of each symbol within the particular context of a given sentence.

#### **ACKNOWLEDGMENTS**

Most of all I want to thank my supervisor, Dr. Janice Fung, for her advice, wisdom and wonderful mentorship throughout the duration of this research project. I could not have completed this paper without her.

To my second reader, Gillian Mothersill, many thanks.

I am also grateful to the students of Ryerson University's Professional Communication graduate program, class of 2011 and Groundzero Marketing Communication Inc. for providing the data used in this research paper.

## DEDICATION

I dedicate this Major Research Paper to my mother, to whom I owe everything I have accomplished.

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#### **Chapter 1. Introduction**

Computer-Mediated-Communication (CMC) is becoming increasingly prevalent and relied upon as the Internet facilitates the rapid growth of global networks and expands communication borders. Today, many individuals rely on CMC for professional purposes, such as connecting long distance with co-workers to collaborate and advance workplace tasks. These individuals often rely on professional online collaborative programs that allow them to connect with colleagues across cities, provinces and often around the world. Relying on CMC for the transmittal of important electronic messages places it at the forefront for understanding how technical communication devices and networks function, and requires an understanding of how ambiguity in online conversations can be decreased through the use of the Internet. However, what professional collaborative programs currently lack is a singular professional software that integrates both collaborative on-screen practices and online chatting capabilities with visual icons; or professional emoticons. Since online collaboration in virtual teams via CMC is relatively new, some argue that the social functions normally communicated by nonverbal cues in face-to-face (FtF) encounters do not occur in CMC. Kiesler, Siegel and McGuire (1984) observed that,

Traditional forms of communication, head nods, smiles, eye contact, distance, tone of voice, and other nonverbal behavior give speakers and listeners information they can use to regulate, modify, and control exchanges. Electronic communication may be inefficient for resolving such problems (p. 1125).

Authors Rice and Love (1987) echo this point by suggesting that, "as bandwidth narrows, media allows for less 'social presence'; communication is likely to be described as less friendly, emotional, or personal and more serious, or businesslike" (Rice & Love, 1987, p. 88). The role that emoticons play within chat programs has not been widely researched at present and may be

unclear to the academic community, but shows great potential to serve as a visual substitute for non-verbal cues that are lacking in CMC. Authors Rice and Love (1987) and Sproull and Kiesler (1985) expressed that emoticons are an obvious effort to compensate for the lack of visual and auditory information when communication is reduced to the written text on websites, emails and other forms of CMC. These views supported that over time CMC environments could actually offer a more intimate atmosphere between individuals than FtF communication and that the use of emoticons could further facilitate such personal experiences.

Today we have a multitude of chat interfaces, such as MSN Chat, BlackBerry Messenger, Gmail Chat, Yahoo Messenger and Facebook Chat that use tailored emoticon legends to help users compensate for the lack of social presence and non-verbal communicative cues online. Keeping business audiences in mind, a singular professional software program that integrates an emoticon legend with a chat interface has yet to be developed. Research on emoticon use in a professional context still remains largely unexplored by researchers, which leaves a gap in this area of academic study.

The following research aims to investigate the communicative value of emoticons within a structured sentence via a study involving professional communication graduate students from Ryerson University and senior marketing communication professionals from a marketing agency in Toronto, Canada. Using concepts from critical visual methodology and a theoretical framework of visual semiotics, the use of emoticons will be examined to see whether or not these pictorial symbols act in a similar fashion to punctuation symbols within a given sentence structure. The goal of this research was to see if the selected emoticons conveyed the intended emotional meaning for participants within the sentence to see if emoticons followed similar grammatical functions as punctuation symbols.

In addition, theories from critical visual methodology and visual semiotics are used to analyze existing emoticons from the chat interfaces of BlackBerry Messenger, MSN Chat and Gmail Chat in an effort to suggest how models of emoticon legends can be improved upon and better geared toward the business community.

#### **Chapter 2. Literature Review**

#### 2.1 Computer-Mediated-Communication (CMC): In the Virtual Organizational Realm

The term 'virtual organization' is an exceptionally loose web of individuals who work in consolidation to achieve common (workplace) goals. The merger of individual, capital and technologies (which operates in a flexible form) has become a popular response to the still recovering economies in the West within the business sector. CMC is the communicative backbone for those working within a virtual organization. It allows co-workers to collaborate and share information for work-based projects, and provides a dynamic and loose working environment where free agent individuals can also share information, work independently and essentially 'come and go' as they please from the virtual 'office'.

Emoticons, or 'emotional icons' are visual representations of facial expressions and are symbols used in CMC to indicate the current mood or response of the user. These visual representations are often used within the medium as a substitute for nonverbal cues that cannot be transmitted through CMC channels. As the Internet continues to facilitate the rapid growth of global networks and expand communication borders, CMC is becoming increasingly prevalent and relied upon as a means of virtual connectivity among users. Today, interactivity within CMC media has grown to include advances that transmit both images and sound. However, Hiltz and Turoff (1978) emphasize that CMC is still largely text-based, and although technological advances have enabled these new transmissions, this type of communication still largely lacks

the variety and interactive value that is offered in a FtF encounter. Research in this area of communications requires further investigation into how the virtual world can effectively simulate essential communicative elements, such as body language and nonverbal behavioral cues, into CMC media.

A working definition of CMC is, "the process by which people create, exchange and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages" (December, 1996). Being primarily text-based in nature CMC is limited by the technology's inability to transmit the nonverbal cues inherent in FtF encounters. A lack in transmitting these social sentiments through CMC channels seems to discredit the capabilities of the technology as an equivalent communicative tool to FtF encounters, since social interactions are dependent on both visual and audible components. The ability for CMC to transmit non-verbal cues is an essential component for a technology that functions within the wide-reaching social environment of the Internet. CMC lacks the communicative variety that is offered through FtF interactions. According to Hiltz and Turoff (1978):

In FtF communication, a person simultaneously receives information through many channels, which may be broken down into both audible channels and visual channels. In turn, the audio channels contain both the actual words used and their arrangement, as well as what might be called vocalization. The visual channels may be broken down into facial expressions, clothes, and other aspects of general appearance that gives status cues, body movements, and psychophysiological responses (p.77-78).

As previously mentioned, emoticons were developed as a substitute for non-verbal cues lacking in CMC. This need for substitution is understandable given that, "up to two thirds of our behaviour in dyadic interaction is nonverbal" (Segestrale and Molnar, 1997, p. 4). Authors

Segestrale and Molnar (1997) also noted that, "our understanding for one another and of total strangers is rooted in our nonverbal abilities" (p.4) and that, "the most important clue to human communication may well be in the face" (p.8). Furthermore, the inability for online users to express non-verbal cues in CMC media becomes increasingly concerning when 80% of Canadians, ages 16 and older, use the Internet (Statistics Canada, 2009). Internet usage by Canadians circulates primarily around numerous types of online social interactions, such as business collaboration, email, blogging and social networking activity. In fact, an online *Globe and Mail* article posted in December 2010 mentioned that, "Canadians rank among the most enthusiastic users of the web and all its various offshoots" (Globe and Mail, 2010), which include the renowned social networking sites Facebook, Twitter, and YouTube. Thus, the restraints that CMC has, such as the inability to transmit non-verbal cues, should be carefully considered in order to assess the capacity CMC has to shape and affect communication and message transmission to global online users.

#### 2.2 The Role of Emoticons in Computer-Mediated-Communication

Considering the implications of careful non-verbal cues and formulating clear message transmission through CMC, the role that emoticons play in online use has still not been widely researched and may be unclear to the academic community. Yet emoticons show great potential to serve as a visual substitute for non-verbal cues lacking in current CMC media. To compensate for this lack of social presence and non-verbal communicative cues many existing chat interfaces, such as MSN Chat, BlackBerry Messenger, and Gmail Chat, currently use tailored emoticon legends that target specific audiences and help users to supplement online communication with graphical components compensating for the absent non-verbal cues in written statements. However, a singular professional software program that integrates an

emoticon legend with a chat interface for business audiences has yet to be developed with the virtual organization in mind. Discussion with communication professionals who rely on virtual collaborative programs has indicated that this absence has forced online professional collaborations to use alternative chat programs that incorporate emoticons designed for more social communication purposes.

According to Rozsika Parker's *The Subversive Stitch* (1984), the origin of the term 'professionalism' became understood around the 16<sup>th</sup> century as the differentiation between art works that were created by accredited or 'professional' artists versus those that were created by common craftsmen; the notion of 'professionalism' being a subjective term. What may seem professional in one office setting might be deemed inappropriate in another. However, in the realm of graphic design, Donald Norman (2004) suggests that 'professionalism' can be judged in terms of aesthetics; how something looks or makes a person feel. According to Norman (2004), colour, shape and size of an object can affect not only object perception, but also an individual's response to that object. He specifically states that an object's colour and form can intensify its experience and emotional impact on the individual. Currently, the online emoticons being used by professionals on MSN Chat, BlackBerry Messenger, and Gmail Chat incorporate bright, stimulating colours accompanied by cartoon-like graphics. This pairing of colour and form with emoticon has yet to be explicitly linked to attitudes of 'non-professionalism' within the workforce. However, it is believed by many communication professionals that the use of comedic-like smiley faces and other cartoon-like symbols denote a lack of seriousness and business-like conduct between sender and receiver. Thus, it is suggested that the use of currently existing emoticons within the interfaces of MSN Chat, BlackBerry Messenger, and Gmail Chat may semiotically introduce a level of 'non-professionalism' by the chosen visual design elements and compositional layout is used in professional communication environments. The power of visual representation has been asserted by Kress and Van Leeuwen (2008) suggesting that images have always been a significant vehicle to represent content. Kress and Van Leeuwen (2008) state, "Today most texts now involve a complex interplay of written text, images and other graphic elements" (p. 17) to amplify the inherent meaning of sentences. To support the power of visual representations and our natural visual acuity as human beings, Kress and Van Leeuwen (2008) suggest that the visual can stand as a full embodied representation of linguistic forms and act as an alternative to writing.

#### 2.3 The History and Background of Emoticons

Emoticons, or *emotional icons*, are visual representations of facial expressions used in CMC to indicate the mood or emotion of a user within a CMC environment. Adrian Frutiger (1989) discusses a particular script invented by members of the Sumerian tribe around 4000 B.C., which is recorded as one of the oldest examples of 'writing'. The recorded scripts are incomplete sentences using the first three-dimensional pictograms made out of clay. Pictograms are iconic signs or symbols that represent complex facts, which are represented through visual carriers of meaning. During this Neolithic period, simplistic pictographic forms, or pictography was most evident. Pictography is a form of proto-writing where ideas and events are translated through drawings. In this way, pictograms are drawings used to help tell a story and can be put in chronological order (Frutiger, 1989). A tribe was able to communicate and share mutual understanding of their surrounding peoples, places, and things through the use of simplified basic shapes and forms (Frutiger, 1989). Around 3000 B.C., Egyptian hieroglyphics served the same informative function. These pictograms evolved over the course of the first millennium B.C. and representational drawings of objects or ideas became further simplified as community members

became increasingly familiar with the community's visual language. According to Frutiger (1989), the punctuation mark is also considered a visual sign that was used (in some form or another) in early ancient visual languages.

According to Robert Dale (1992) punctuation symbols can be divided into three groupings: i) sentence-structuring signs, ii) expression signs, and iii) reference signs. A sentence-structuring sign regulates the process of thought with a linear flow; an expression sign gives a specific expression to the text or emphasis; and a reference sign is any marking within the text (outside of sentence-building punctuation) that guides the reader to explanations without interrupting the flow of the main text, such as footnotes.

With time the written word became increasingly common for written expression; icons began to serve a different use as informative signs, such as those used to direct traffic or human circulation. Abdullah and Hübner (2006) suggest that in order for these types of signs to be successful, as they were in earlier scripts, it is necessary that the icon used on the sign be easily read and immediately identifiable to all users. In an attempt to create traffic signs that would be instantaneously recognizable, Abdullah and Hübner (2006) mention that, "the UN set up a special commission to look at existing traffic systems all over the world, and also to carry out tests on people's perception of form and colour" (p.35) in order to maximize image comprehension.

The informative success of icons used as traffic signs has been widely recognized by commercial companies. In 1875, Esso decided to use pictograms to draw attention to the special services offered at their petrol stations. Unlike the written sign that had been previously used, the graphical versions made a stronger impact on users because these signs echoed designs that were already familiar through traffic signage and easier to comprehend at a glance (Abdullah and

Hübner, 2006). Furthermore, "during the initial phase the pictograms were accompanied by explanatory words, in order to make the images more easily comprehendible, but these were later dispensed with altogether" (Abdullah & Hübner, 2006, p.92). This progression displays the power of visual language and exemplifies that images have enough linguistic meaning for audience comprehension in order to stand on their own without being accompanied by words. Despite the large number and sophisticated design of icons over the years, Abdullah and Hübner (2006) state that icons, "are still only approaching the first hurdle on the track towards a new pictorial pidgin" (p.228). The exception to this observation is, of course, current development in pictorial communication via mobile technologies and some chat interfaces, which attempt to string images together to form short sentences. Today, CMC users are most likely familiar with emoticon legends that are accessible online. These include emoticons from Facebook Chat, BlackBerry Messenger, Gmail Chat, and MSN Chat. Although emotions are used daily by the individuals using these interfaces, there is a lack of academic research in this area regarding specifically how, why and under what circumstances emoticons are used by CMC users remains largely unexplored.

#### 2.4 History-Usage and Meaning of Punctuation

The history of punctuation is bound by the phenomena of written language. According to Parkes (1993), the ancient written word was used as a record of the spoken word and most written texts were read aloud. Parkes (1993) mentions that until, the 6<sup>th</sup> century, attitudes surrounding the differentiation of spoken and written words as separate entities were not fully recognized and, "writing came to be regarded as conveying information directly to the mind through the eye" (p. 1). Due to this new regard for the written word, layout features and punctuation shortly followed as new conventions. These features were developed for the reader's

convenience making it easier to extract and comprehend information conveyed through the written medium. The primary function for punctuation within a sentence is to, "resolve structural uncertainties in a text, and to signal nuances of semantic significance which might otherwise not be conveyed at all, or would at best be much more difficult for a reader to figure out" (Parkes, 1993, p. 1). Thus, there seems to be a similarity between the mechanisms governing punctuation in the printed sentence and the assumed mechanisms that govern text by emoticons. The relationship lies in the 'semantic significance' that helps each icon relay meaning specific to a particular context.

#### 2.5 The Synchronous and Asynchronous Nature of Written and Spoken Communication

Communication can be furthered classified into *synchronous* and *asynchronous* forms of activities. Synchronous, or real-time communication, occurs between two people in a FtF discussion, while asynchronous, or delayed-time communications consists of letter writing or sending a fax; and is inherently characterized by a delayed reception. The technological nature of CMC allows for complex interactions between its participants. These methods of complex interaction can simultaneously consist of both synchronous and asynchronous forms of communication activities or spoken and written communication. Respectively, CMC uses different forms of existing software to mediate and facilitate the two types of communication, both separately and together. For example, written communication can be expressed through the use of text messaging, or Short Message Service (SMS) and chat room capabilities, while the spoken word can be transmitted through cellular and computer technologies.

#### 2.6 The Synchronous and Asynchronous Nature of CMC

Past research on CMC discussed whether or not this type of communication has more in common with an oral discourse, written text, or if it is a completely different discourse altogether

(Yates, 1994). CMC has been compared to both speech and to writing, and is considered to be both and neither of these forms simultaneously. This oral/literate dichotomy has sparked some debate among researchers as it, "Obscures the uniqueness of electronic language by subsuming it under the category of writing" (Poster, 1990). This idea suggests that punctuation rules governing written text in online environments are unique and not comparable to the rules of speech that govern the written word in offline environments. However, if offline oral and written discourses are governed by traditional rules of punctuation within a sentence structure, what then governs the oral and written discourses of texts in online environments? In addition, what distinct signs, symbols or gestures govern and punctuate an oral discourse versus textual discourse?

#### 2.7 Critical Visual Methodology and Visual Semiotics

Semiology concerns itself with how images convey meaning. Rose (2007) states that semiology, "Offers a very full box of analytical tools for taking an image apart, and tracing how it works in relation to broader systems of meaning" (p. 74). She elaborates on the concept of critical visual methodology within a visual semiotic framework and notes that in contemporary Western societies, visual materials have become significantly important since our thought processes have become increasingly visually constructed. Rose (2007) distinguishes the important differences between the terms *vision* and *visuality*. She explains that *vision* refers to the human eye's physiological capability of seeing, and *visuality* refers to, "how we see, how we are able, allowed, or made to see, and how we see this seeing and the unseeing therein" (p. 6). *Visuality* provides the foundation for critical visual methodology, a term Rose describes as, "an approach that thinks about the visual in terms of the cultural significance, social practices and

power relations in which it is embedded; and that means thinking about the power relations that produce, are articulated through, and can be challenged by, ways of seeing and imagining" (p. 3).

According to Rose (2007) there are three steps to follow when conducting a critical visual methodology. These include: 1) taking images seriously and looking at them carefully, rather than interpreting them automatically as a reflection of the social context; 2) thinking about the social conditions and effects of visual objects; and 3) consider your own way of looking at images and understanding your own patterns of *visuality* (p. 12-13).

Kress and van Leeuwen's (2006) study *Reading Images: The Grammar of Visual Design*, provides an excellent semiotic platform for analyzing visual material using a traditional approach in semiology. According to the authors, the sign is one of the most important tools within the semiotic framework since human culture is made up of millions of signs and the people within a culture are those who make meaning for those particular signs. The authors consider visual semiotics the best method for understanding visual grammar. Kress and van Leeuwen (2006) interpret images by analyzing forms and techniques such as colour, size of imagery, and perspective. More importantly, they investigated how these forms are used as signifiers to create and realize the meaning of an image. In addition, the authors established a creative use of linguistic perspectives from Michael Halliday's *Lanuage as Social Semiotic* (1978), to describe the process of creating visual statements; suggesting that every semiotic fulfills both an ideational function, a function representing the world around us and our perceptions if it and an interpersonal function- a function that enacts social interactions as social relations (Halliday, 1978).

#### 2.8 Emoticon Case Study

Rivera, Cooke, and Bauhs (1996) analyzed the effects of emoticons on remote communication and decision making, and found that their use increased the level of users' satisfaction within a CMC environment. A more extensive study by Provine, Spencer and Mandell (2007) titled, *Emotional Expression Online: Emoticons Punctuate Website Text Messages*, examined whether or not governing punctuation rules extended to emoticon placement in typed English text that was posted on website message boards in several online forums. The authors hypothesized that since punctuation is not randomly distributed in speech that emoticons might follow a similar set of linguistic rules within the structure of a sentence. They also noted that punctuation and laughter occurs in places of speech stream associated with pauses, phrase boundaries, and the beginning and end of statements and questions. For example, the authors noted that a speaker might say, "You are going where?—ha-ha," but rarely would a speaker say "You are going—ha-ha—where?" Based on this insight into human speech activities, the authors predicted that emoticons would be used in a similar way as punctuation and laughter; directing the natural flow of the sentence.

Participants in this study included 226 anonymous users who posted messages containing emoticons on one of four English website message boards. The websites were selected to represent a diversity of interest and gender participation, which included gardening (<a href="http://www.blossomswap.com/garden-forums">http://www.blossomswap.com/garden-forums</a>), photography (<a href="http://www.thephotoforum.com/forum">http://www.thephotoforum.com/forum</a>), parenting (<a href="http://www.mainstreetmom.com/forums">http://www.mainstreetmom.com/forums</a>), and boxing (<a href="http://www.boxrec.com/forum">http://www.boxrec.com/forum</a>). The 226 participants used a total of 1,000 emoticons (250 emoticons from each of the 4 websites) that appeared in 849 statements

concerning 102 topics or online *threads*<sup>1</sup>. To protect anonymity, each user was assigned a number. Statements and associated emoticons were printed for offline analysis. Only statements containing at least one emoticon were examined. A "statement" consisted of any sentence containing an emoticon, although some statements contained "naked" emoticons with no accompanying text. For instance, emoticons were categorized as 'smiles', where smile-like faces where mouths up-turned with corners were grouped together, despite subtle differences in form or color. Emoticons for laughter (e.g., Laugh, Laugh 2, Big Laugh, LOL (laughing out loud), LMAO (laughing my ass off) had open mouths with up-turned corners that opened and closed in an animated imitation of laughter. The laughing faces often varied in color and sometimes included additional features, such as rotating 360 degrees around their vertical axis. Most emoticons resembled their assigned names (e.g., "rolling eyes," "tongue"), while a few had names of less obvious heritage (e.g., "wub," presumably being a childlike, lisping pronunciation of "love," symbolized by a grinning face with little hearts overhead).

It was found that the most common emoticons out of the 1,000 used were "smile" (32%) and "laugh" (20%), with the remainder including 35 other, lower frequency emoticons.

Emoticons having frequencies greater than (2%) were "wink" (10%), "thumbs-up" (8%), "rolleyes" (5%), "confused" (3%), "wub" (3%), "eek" (2%), and "boxing", an animated boxing figure, exclusive to the boxing website, (2%).

Three types of emoticon placements were also analyzed in this study. These included (1) *alone emoticon*, without accompanying text—a "naked" emoticon; (2) *before* or *after emoticon* a complete textual statement or question, or *at* a phrase break; and (3) *during a phrase emoticon*. An interesting observation from this study was the contrast between the frequency of emoticon

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<sup>&</sup>lt;sup>1</sup> A *thread* also known as a 'topic' is a collection of posts from users in an online Internet forum. These posts are usually displayed in sequence from oldest to newest and usually consist of a title and theme, which summarizes the discussion.

placements that disrupted the phrase structure of speech (occurring during a phrase) and those that did not occur before or after statements or at phrase breaks.

Examples of such an emoticon placement in written messages are as follows:

Before a statement: " • I think you need to make a couple of alterations."

After a statement: "Those kids at the park are so cool ②."

At a phrase break in mid-statement: "I know that your son is too little for that yet,  $\odot$  but you get the idea."

**Mid-phrase in mid-statement:** "Just because the car broke down ⊕ doesn't mean we won't have a good vacation."

The sample of 1,000 emoticons included 24 naked emoticons, some multiple (e.g. © ®), that were posted without accompanying text and appeared in 13 of the 849 emoticon-containing statements. Emoticons were not randomly distributed throughout the text statements, but occurred at highly predictable and linguistically significant positions. They usually occurred before or after complete statements, questions or appeared before, after or within-sentence phrase breaks 829 times (99%). Emoticons appeared in mid-phrase in only 7 (1%) of 836 cases. The rarity of emoticons occurring in mid-phrase was particularly significant and suggested that there are many more opportunities for such placements than at phrase breaks.

This research shows us that an interesting connection exists between the role of the punctuation mark and the role of the emotion. It appears that both attempt to enhance the intentional meaning of the sentence by way of structuring the sentence and supplying it with a desired expressive connotation. According to Provine, Spencer and Mandell (2007):

The punctuation of text by emoticons, whatever its mechanism, establishes a previously unrecognized similarity between computer-mediated and face-to-face communication.

Understanding the dynamics of such online expression may facilitate the development of affective communication between humans, computers and robots. Knowing when to laugh and smile is essential to social acceptance [...] as machines better emulate human

conversation, they will increasingly be held to the higher standards expected of Homo sapiens, including socially and linguistically appropriate emotional expression (p. 304).

Furthermore, emoticons that were used to punctuate text seem to indicate that typed text, like the spoken word, is governed by its own set of linguistic rules that segregate language and visual elements while preserving phrase structure within the sentence.

In the following section of this major research paper, critical visual methodology and visual semiotic theory will be used to analyze the use of emoticons for online professional and social communication purposes. This will include an investigation of whether or not visual icons or emoticons add any value to a written statement or if they increase or decrease message comprehension within the sentence in the context of CMC media.

#### **Chapter 3. Research Methodology**

#### 3.1 Context and Research Questions

The aim of this research study is to analyze emoticons under the assumption that they can act as a form of punctuation within the architecture of a sentence, and also perform as a standalone graphical representation denoting their own set of linguistic meaning(s) for the community of professional communicators.

A mixed methods approach was used consisting of a structured interview and survey style questionnaire (Bryman & Teevan, 2005). Mixed methods allowed for both qualitative and quantitative data researching. The research hypothesis was based under two assumptions: 1) both emoticons and punctuation signs are visual symbols that govern and regulate speech; and 2) punctuation signs govern the framework of the sentence and seek to represent an emotive stance, such as excitement, seriousness, inquisitiveness, etc. Therefore, the pictorial imagery of emoticons has potential to convey an even larger sublet of emotions within a sentence structure. Research questions within this study include:

- I. Does the emoticon increase or decrease message comprehension within the written statement when used as a form of punctuation or as a solo visual linguistic representation?
- II. Do age and career experience influence the interpretation of certain emoticons within a sentence structure?
- III. How does the aesthetic value of the emoticon affect the user's comprehension of choice topic within the sentence?

It is of particular interest to first investigate if certain emotions do in fact illustrate their intended emotions and help to clarify meaning or ambiguous statements or if they further confuse the reader.

#### 3.2 Research Design

A structured interview schedule with a questionnaire-style format was administered to participants. This style of data collection followed the guidelines of both the structured interview and the questionnaire. According to authors Bryman and Teevan (2005), *Social Research Methods*, in qualitative research both approaches to data collection are very similar minus some small differences, and in some cases one is preferred over the other. They discuss that self-administered questionnaires are similar to the structured interview, but that they are without the presence of an interviewer. The research design of a structured interview schedule with a questionnaire-style format was chosen because the structured interview side of the research design promotes standardization of both the asking of questions and the recording of responses. In addition, having the interviewer present allows for clarification of any ambiguous or confusing questions the participant might have regarding the research. The questionnaire-style format allows for an easier short (closed) question schedule that is directly applicable to the

research, as well as, providing an easy-to-follow question and answer design that reduces 'respondent fatigue' (Bryman and Teevan, 2005). Therefore, it was decided that in order to be completely effective as a means of collecting data with minimal risk a combination of both the structured interview schedule and questionnaire was administered to participants.

#### 3.3 Procedure and Interview Protocol

A structured interview schedule with a questionnaire-style format was administered to 14 participants; 6 experienced communication professionals and 8 professional communication graduate students. Respectively, the survey consisted of a situational context<sup>2</sup> (see Appendix 2) followed by Section 1, consisting of sentences that included punctuation symbols and Section 2a and 2b (see Appendices 4 and 5, respectively), consisting of sentences that included emoticons from online chat interfaces of MSN Chat, BlackBerry Messenger and Gmail Chat (see Appendix 6). The questionnaire-survey portion of the structured interview consisted of 5 structured questions (see Appendix 7) that were read to participants in both Sections 1 and 2(a and b) where participants gave a rating between 1 and 3. Interviews were recorded by the interviewer for documentation purposes.

The interview protocol used in this research study asked participants to imagine themselves in a specific situational context, and then required them to answer specific questions pertaining to that imagined experience. First, the participant was asked to read a situational context that outlined specific circumstances that had occurred at their fictional place of work. The participant was then told that they were waiting to hear back from a superior regarding an email that they had sent the previous week. Next, the participant was given a set of 5 potential responses from their boss and it was explained that the participant could have received any one of these options

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<sup>&</sup>lt;sup>2</sup> A situational context was first read to participants before conducting the survey. This was done so the participant could put themselves (and their frame of mind) into a particular environment before responding to the following questions.

as a potential response. The first 5 responses in the interview-questionnaire were labeled as 'Section 1' (see Appendix 3) and were ambiguous statements that contained punctuation symbols to denote the intended meaning of the speaker. In addition to having the 'Section 1' responses read to the participant by the interviewer the research participant was also handed a copy of responses for better comprehension of the statements.

After being read (and following along) the responses in Section 1, participants were asked to respond to the corresponding questions on the next page. Each response in 'Section 1' was coordinated with a question on the following page. Participants were asked to scale their responses in order from 1 to 3; with the respondent's top choice being '1' and their least likely choice being '3'. A sample of one of the questions is as shown:

- Based on this sentence, do you feel your boss is:
  - a) Extremely upset with you. \_\_\_\_
  - b) Giving a pleasant, but cautionary warning for next time. \_\_\_\_
  - c) Confused by your actions. \_\_\_\_
  - d) Other:

The second phase of the interview-questionnaires (Section 2) consisted of the same questions posed in Section 1, but instead lacked the appearance of punctuation symbols and were supplemented with the aid of emoticon symbols. Again the participants were asked 5 corresponding questions on what they felt the intended statement was trying to convey but now with the use of an emoticon.

The final section of the interview consisted of clarifying questions such as: 1) Did the use of the emoticons within the sentence help you to understand the intended meaning of the

sentence in a clearer way? Why or why not? 2) What did the emotion add or take away from the sentence once they were added in section two, if anything?

#### 3.4 Emoticons in Section 2 (Interview Protocol continued)

The primary goal of this research study is to investigate the communicative value of emoticons within a structured sentence and to see if emoticons and punctuation symbols share equivalent rules of grammar within the architecture of the sentence. In addition, an overarching goal of this research's finding will be to make a case for the standardization of a 'professional' set of emoticons tailored to fit the visual grammar of a work environment or particular company. In order to make this recommendation toward the end of the research, it was necessary to look at previously existing emoticons within popular chat interfaces that are commonly used today.

The emoticons being examined are from the chat interfaces of MSN Chat, BlackBerry Messenger and Gmail Chat. These three chat interfaces were chosen because they are interfaces that have been available to users for a much longer period than Facebook chat, for example, and therefore it is more likely that all participants involved in the study would have some level of experience using and interacting with these emoticons. Upon analysis of all three emoticon legends it was realized that not all are completely alike. Some emoticon symbols from the three legends mentioned above vary in size, shape, colour, and selection available to users. Keeping this insight in mind when designing Section 2 of the structured interview-questionnaire, it was decided to split up Section 2 into two respective subsections that included, Section 2a and Section 2b and evenly distribute these subsections of the structured interview-questionnaire to both the young professional (graduate students) and experienced marketing professionals. The same number of emoticons from all 3 emoticon legends were selected for the study and the

intended meaning in both the sentences in '2a' and '2b' are identical. The variation of semi-similar emoticons that denote the same intended meaning will be better measured with both options available for contrast. Furthermore, results from both options were easier to compare and offered insight into potential visual semiotic theories in emoticon use. See *Appendix 1* for what punctuation symbols and equivalent emoticons were used in the 5 sentences highlighted above.

#### 3.5 Sampling

After receiving ethics approval for the study, 14 participants were recruited from two categories: 1) 6 professionals from a marketing and communications agency; and 2) 8 students from the Master of Professional Communication program at Ryerson University in Toronto, Ontario, Canada. Interviews took place over a three week period during the months of June and July 2011. Participant confidentiality was maintained throughout the course of the study.

#### 3.6 Participants

Two key aspects were addressed concerning participant selection. Firstly, although CMC is not a new term, the use of emoticons via email and chat room communications is perceived and utilized differently by various generations. Secondly, the level of daily professionalism an individual upholds in the academic community or workplace also affects how they interpret emoticon use within a sentence. Therefore, the location as to where an individual conducted their professional career was also deemed important to this study. Keeping this in mind, the selection process for data collection fell within a two-tiered framework that included interviews with young professionals (graduate students) and experienced marketing and communication professionals all located in downtown Toronto, Canada.

#### 3.7 Stage 1: Structured Interviews via Experienced Communication Professionals

The first stage of data collection consisted of structured interview schedules with communication students who were familiar with the emoticon legends of BlackBerry Messenger, MSN Chat and Gmail Chat. Individual structured interviews with a questionnaire-style format were conducted on 6 individuals within the marketing-communications agency, which included 1 individual from lower level management, 3 from middle management and 2 from executive personnel. The age range for participants was between 30 and 60 with the goal of including a variety of office employees to gain varied perspectives for the use of emoticons, in particular within the context of a sentence from different management levels in the marketing firm. This was important since all positions within an organization require a unique skill set and results should reflect these aspects as close as possible.

#### 3.8 Stage 2: Structured Interviews via Professional Communication Graduate Students

The second stage of data collection consisted of the same structured interview schedule with young communication professionals who were also familiar with the emoticon legends of BlackBerry Messenger, MSN Chat and Gmail Chat will. Interviews were held with 8 individuals in the graduate program with participants between who fall between the ages of 20 and 30. Possible discrepancies between the varied demographic among experienced marketing professionals and the young communication professionals were noted throughout the course of the study.

#### 3.9 Participant Bias

For the purposes of the study it is important to note that there may be a participant bias with those individuals involved within this research study. It should also be noted that all the participants involved have some form of relationship with the interviewer. These relationships

range from academic colleagues to co-workers. In the best interest of time and for the collection of data representative of the desired research sample, it was necessary to use such selected participants.

#### Chapter 4. Analysis

## 4.1 Analysis of Punctuation Symbols (Section 1) Experienced Communication Professionals and Professional Communication Graduate Students

Section 1 looked at message comprehension of an intended emotional tone with the use of 5 statements that used punctuation symbols. The following charts summarize the analysis of all five questions containing punctuation symbols that were looked at by both experienced communication professionals and professional communication graduate students. *Table 3.1* highlights the results from Section 1- Question 1 for both groups of respondents.

Analysis of Punctuation Symbols									
Section 1 – Question	1	Responses							
Why didn't you come to work before you left on	vacation? I	Communication Professionals Professional Communica Graduate Students							
would have been more prepared to present to the client!		1 <sup>st</sup> choice	2 <sup>nd</sup> choice	3 <sup>rd</sup> choice	1 <sup>st</sup> choice	2 <sup>nd</sup> choice	3 <sup>rd</sup> choice		
Punctuation	Option A	0%	16.6%	83.3%	62.5%	25%	0%		
symbols used:	Option B	50%	50%	0%	12.5%	25%	75%		
<ul><li>Question Mark (?)</li><li>Period (.)</li></ul>	Option C	50%	33.3%	16.6%	12.5%	37.5%	25%		
	Option D	0%	0%	0%	12.5%	12.5%	0%		

*Table 3.1: Summary of responses from Section 1- Question 1* 

Option A: Extremely upset with you.

Option B: Giving a pleasant but cautionary warning for next time.

Option C: Confused by your actions.

Option D: Other.

The intended emotional tone by the speaker in Section 1- Question 1 was 'Option A'.

'Option D' was never chosen by the communication professionals and was chosen twice by the professional communication graduate students. The instances where 'Option D' was chosen

included written responses of: 1) Annoyed with you but not really a serious issue and 2) Generally displeased but not extremely upset.

Analysis of Punctuation Symbols										
Section 1 – Question 2 Responses										
Oh yeah really great job	on the	Commun	ication Prof	fessionals	Professio	nal Commi	unication			
proposal John!					Graduate Students					
		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>			
		choice	choice	choice	choice	choice	choice			
Punctuation	Option A	50%	0%	50%	100%	0%	0%			
symbol used:	Option B	50%	50%	0%	0%	100%	0%			
<ul><li>Exclamation mark Option C</li></ul>		0%	50%	50%	0%	0%	100%			
(!)	Option D	0%	0%	0%	0%	0%	0%			

Table 3.2: Summary of responses from Section 1- Question 2

Option A: Happy with your work on the proposal.

Option B: Being sarcastic toward you.

Option C: Unhappy with you.

Option D: Other.

The intended emotional tone by the speaker in Section 1- Question 2 (*Table 3.2*) was 'Option A'.

Analysis of Punctuation Symbols									
Section 1 – Question	3	Responses							
REALLY GREAT WORK O	N THE	Commun	ication Prof	fessionals	Profession	onal Commu	unication		
PROPOSAL! YOU SHOUL	D BE HERE TO				Gra	duate Stude	ents		
GO OVER YOUR WORK V	GO OVER YOUR WORK WITH ME BUT		2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>		
ENJOY YOUR TIME OFF	ANYWAY!	choice	choice	choice	choice	choice	choice		
Punctuation	Option A	66.6%	0%	16.7%	87.5%	12.5%	0%		
symbols used:	Option B	16.7%	16.7%	66.6%	0%	0%	100%		
<ul><li>Ellipsis ()</li></ul>	Option C	0%	83.3%	16.7%	12.5%	75%	0%		
<ul><li>Exclamation Mark</li></ul>	Option D	16.7%	0%	0%	0%	12.5%	0%		
x2 (!)									

Table 3.3: Summary of responses from Section 1- Question 3

Option A: Happy with your work and expressing himself in an excitable manner.

Option B: Unhappy and yelling at you.

Option C: Being sarcastic toward you.

Option D: Other.

The intended emotional tone by the speaker in Section 1- Question 3 (*Table 3.3*) was

'Option A'. 'Option D' was chosen once by the communication professionals and once by the professional communication graduate students. The instances where 'Option D' was chosen

included written responses of: 1) Happy with the work but being rude to John by not speaking to him in person and 2) Speaker must be using a BlackBerry.

Analysis of Punctuation Symbols								
Section 1 – Question	4	Responses						
Your proposal was well	researched	Commun	ication Prof	fessionals	Profession	onal Commu	unication	
John. Next time please o	onfirm with me				Gra	duate Stude	ents	
before you decide to ma	ike any creative	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
changes to content on y	our own. Enjoy	choice	choice	choice	choice	choice	choice	
your vacation.								
Punctuation	Option A	100%	0%	0%	100%	0%	0%	
symbols used:	Option B	0%	83.3%	16.7%	0%	87.5%	12.5%	
<ul><li>Period x2 (.)</li></ul>	Option C	0%	16.7%	83.3%	0%	12.5%	87.5%	
	Option D	0%	0%	0%	0%	0%	0%	

Table 3.4: Summary of responses from Section 1- Question 4

Option A: Giving a pleasant but cautionary warning for next time.

Option B: Giving an unpleasant but cautionary warning for next time.

Option C: Being sarcastic toward you.

Option D: Other.

'Option A'.

The intended emotional tone by the speaker in Section 1- Question 4 (*Table 3.4*) was

Analysis of Punctuation Symbols								
Section 1 – Question	5	Responses						
	Sure, leave the office before coming to see me about the proposal. Enjoy your		Communication Professionals			Professional Communication Graduate Students		
weeks' vacation		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
		choice	choice	choice	choice	choice	choice	
Punctuation	Option A	0%	50%	50%	50%	0%	50%	
symbols used:	Option B	83.3%	16.7%	0%	50%	25%	25%	
<ul> <li>Comma (,)</li> </ul>	Option C	16.7%	33.3%	50%	0%	75%	25%	
<ul><li>Period (.)</li><li>Ellipsis ()</li></ul>	Option D	0%	0%	0%	0%	0%	0%	

Table 3.5: Summary of responses from Section 1- Question 5

Option A: Pleased with your work on the proposal.

Option B: Being sarcastic toward you.

Option C: Unhappy with you.

Option D: Other.

The intended emotional tone by the speaker in Section 1- Question 5 (*Table 3.5*) was 'Option B'.

## 4.2 Combined Analysis of Punctuation Symbols (Section 1) Experienced Communication Professionals and Professional Communication Graduate Students

Out of all 5 questions asked to participants; all respondents (14 out of 14) answered 'Option A' as their primary choice for Question 4. The intended emotion being conveyed by the speaker in Question 4 was that of a cautionary but pleasant tone, which was conveyed through the use of sentence structure and the use of two periods (.) placed in the middle and end of the statement. Out of all the 5 statements asked to participants, Question 4 was the only statement that contained the single use of periods. Other statements containing periods consisted of combinations with other punctuation symbols. The second highest correctly answered question for the experienced communication professionals was Question 5, where 5 out of 6 (83.3 %) participants answered the intended 'Option B'. Question 5 was designed to measure sarcasm; one of the hardest emotions to convey through written text and included the use of a comma (,), period (.) and an ellipsis (...) at the beginning, middle and end of the statement. However, the highest correctly answered question for the professional communication graduate students respectively, were Questions 2 and 4 with all participants correctly choosing the intended responses. In fact, although Question 5 was the second highest correctly answered question for the experienced communication professionals it was among the lowest correctly answered questions for professional communication graduate students, with only (50 %) of participants choosing the correct 'Option B' as their first response. The lowest result was found for experienced communication professionals in Question 1, which measured an aggressive and

angry tone through written text and the use of a question mark (?) and a period (.). In Question 1, 0 out of 6 (0 %) participants chose the correct 'Option A' response, and it was the second lowest correct response chosen by the professional communication graduate students; 5 out of 8 (62.5 %).

#### 4.3 Analysis of Emoticons: Section 2

Section 2 looked at message comprehension of the same intended emotional tone in Section 1 with the use of the same 5 statements that used emoticons. The intended emotional tones by the speaker in all Section 2 questions were identical to all questions previously asked in Section 1. As previously mentioned, in order to equally test emoticons (from all the chat legends) for graphical and emotional accuracy, Section 2 was divided into two subsections; (2a and 2b). Each subsection reflects the same intended emotional tone of the speaker and uses similar to identical emoticon pairings from MSN Chat, BlackBerry Messenger and Gmail Chat. Of the 6 experienced communication professionals who were surveyed 3 participants responded to emoticon statements in Section 2a and 3 participants responded to 2b. Out of the 8 professional communication graduate students who were surveyed 4 participants responded to emoticon statements in Section 2a and 4 responded to 2b.

4.4 Analysis of Emoticons (Section 2a)
Experienced Communication Professionals and Professional Communication Graduate
Students

Analysis of Emoticons									
Section 2a – Question 1 Responses				onses					
Why didn't you come to	discuss your	Commun	ication Prof	fessionals	Professio	onal Commi	unication		
work before you left on	vacation <sup>🥯</sup> I				Gra	duate Stude	ents		
	would have been more prepared to the		2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>		
present to the client	•	choice	choice	choice	choice	choice	choice		
Emoticons used	Option A	33.3%	0%	66.7%	75%	25%	0%		
(MSN Chat):	Option B	33.3%	33.3%	33.3%	0%	0%	75%		
60	Option C	33.3%	66.7%	0%	0%	75%	25%		
	Option D	0%	0%	0%	25%	0%	0%		

Table 4.1: Summary of responses from Section 2a- Question 1

Option A: Extremely upset with you.

Option B: Giving a pleasant but cautionary warning for next time.

Option C: Confused by your actions.

Option D: Other.

The intended emotional tone by the speaker in Section 2a- Question 1 (*Table 4.1*) was again 'Option A'. 'Option D' was never chosen by the communication professionals and was chosen once by the professional communication graduate students. The instance where 'Option D' was chosen included written responses of: 1) He might be a bit angry, but he is just being playful and joking around.

Analysis of Emoticons									
Section 2a – Question		Responses							
Oh yeah really great job on the		Communication Professionals			Professional Communication Graduate Students				
proposal John 🚇		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>		
			choice	choice	choice	choice	choice		
Emoticons used	Option A	66.7%	0%	33.3%	100%	0%	0%		
(BlackBerry	Option B	0%	100%	0%	0%	100%	0%		
Messenger):	Option C	33.3%	0%	66.7%	0%	0%	100%		
	Option D	0%	0%	0%	0%	0%	0%		

Table 4.2: Summary of responses from Section 2a- Question 2

Option A: Happy with your work on the proposal.

Option B: Being sarcastic toward you.

Option C: Unhappy with you.

Option D: Other.

The intended emotional tone by the speaker in Section 2a- Question 2 (*Table 4.2*) was again 'Option A'.

	Analysis of Emoticons							
Section 2a – Question	1 <b>3</b>	Responses						
REALLY GREAT WORK OF		Commun	ication Prof	fessionals		onal Commu duate Stude		
TO GO OVER YOUR WORK WITH ME  BUT ENJOY YOUR TIME OFF  ANYWAY		1 <sup>st</sup> choice	2 <sup>nd</sup> choice	3 <sup>rd</sup> choice	1 <sup>st</sup> choice	2 <sup>nd</sup> choice	3 <sup>rd</sup> choice	
Emoticons used	Option A	66.7%	33.3%	0%	100%	0%	0%	
(Gmail Chat):	Option B	0%	0%	100%	0%	0%	100%	
<u>@</u>	Option C	33.3%	66.7%	0%	0%	100%	0%	
. 0	Option D	0%	0%	0%	0%	0%	0%	

Table 4.3: Summary of responses from Section 2a- Question 3

Option A: Happy with your work and expressing himself in an excitable manner.

 ${\it Option B: Unhappy and yelling at you.}$ 

 ${\it Option C: Being \ sarcastic \ toward \ you.}$ 

Option D: Other.

The intended emotional tone by the speaker in Section 2a- Question 3 (*Table 4.3*) was 'Option A'.

	Analysis of Emoticons						
Section 2a – Question	n 4			Resp	onses		
Your <u>pro</u> posal was well i	researched	Commun	ication Prof	fessionals	Professio	onal Commu	unication
John 😉 Next time pleas	se confirm with				Gra	duate Stude	ents
me before you decide to		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
creative changes to con	•	choice	choice	choice	choice	choice	choice
	own Enjoy your vacation						
Emoticons used	Option A	100%	0%	0%	75%	25%	0%
(BlackBerry	Option B	0%	66.7%	33.3%	25%	0%	75%
Messenger):	Option C	0%	33.3%	66.7%	0%	75%	25%
. 🖨	Option D	0%	0%	0%	0%	0%	0%

Table 4.4: Summary of responses from Section 2a- Question 4

Option A: Giving a pleasant but cautionary warning for next time.

Option B: Giving an unpleasant but cautionary warning for next time.

Option C: Being sarcastic toward you.

Option D: Other.

The intended emotional tone by the speaker in Section 1- Question 4 (*Table 4.4*) was 'Option A'.

Analysis of Emoticons						
5			Resp	onses		
	Commun	ication Prof	fessionals			
to see me about the proposal Enjoy your week vacation		2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
Ontion A						choice 100%
Option B	33.3%	66.7%	0%	0%	100%	0%
Option C	66.7%	0%	33.3%	100%	0%	0%
Option D	0%	0%	0%	0%	0%	0%
	Option A Option B Option C	Defore coming posal Enjoy  Total Commun  1st choice  Option A 0%  Option B 33.3%  Option C 66.7%	Defore coming posal Enjoy  Tommunication Profit Communication Profit Com	Communication Professionals  posal Fnjoy  1st 2nd 3rd choice choice choice Option A 0% 33.3% 66.7% Option B 33.3% 66.7% 0% Option C 66.7% 0% 33.3%	Responses  Communication Professionals  Frofessionals  Frofessionals  Communication Professionals  Frofessionals  Frofessionals  Gra  1st  Choice Choice Choice Choice  Option A  Option B  33.3%  66.7%  Option C  66.7%  O%  33.3%  100%	Responses  Communication Professionals  Frofessional Communication Professional Communication Professionals  Frofessional Communication Professional Communication Profession Profession Profession Profession Pro

Table 4.5: Summary of responses from Section 2a- Question 5

Option A: Pleased with your work on the proposal.

Option B: Being sarcastic toward you.

Option C: Unhappy with you.

Option D: Other.

The intended emotional tone by the speaker in Section 1- Question 5 (*Table 4.5*) was 'Option B'.

# 4.5 Analysis of Emoticons (Section 2b) Experienced Communication Professionals and Professional Communication Graduate Students

Analysis of Emoticons							
Section 2b – Question	n 1			Resp	onses		
Why didn't you come to	discuss your	Commun	ication Pro	fessionals	Profession	onal Commi	unication
work before you left on	vacation 🥌 I				Gra	duate Stude	ents
would have been more		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
present to the client	1 1		choice	choice	choice	choice	choice
Emoticons used	Option A	66.7%	0%	33.3%	100%	0%	0%
(BlackBerry	Option B	33.3%	0%	66.7%	0%	25%	75%
Messenger):	Option C	0%	100%	0%	0%	75%	25%
. 49	Option D	0%	0%	0%	0%	0%	0%

Table 4.6: Summary of responses from Section 2b- Question 1

Option A: Extremely upset with you.

Option B: Giving a pleasant but cautionary warning for next time.

Option C: Confused by your actions.

Option D: Other.

The intended emotional tone by the speaker in Section 2b- Question 1 (*Table 4.6*) was again 'Option A'.

Analysis of Emoticons							
Section 2b – Question	n 2			Resp	onses		
Oh yeah really great job	on the	Commun	ication Prof	essionals	Professio	nal Commu	unication
proposal John 🖰					Gra	duate Stude	ents
proposarsonn		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
		choice	choice	choice	choice	choice	choice
Emoticons used	Option A	66.7%	0%	33.3%	100%	0%	0%
(Gmail Chat):	Option B	33.3%	66.7%	0%	0%	100%	0%
·	Option C	0%	33.3%	66.7%	0%	0%	100%
. 0	Option D	0%	0%	0%	0%	0%	0%

Table 4.7: Summary of responses from Section 2b- Question 2

Option A: Happy with your work on the proposal.

Option B: Being sarcastic toward you.

Option C: Unhappy with you.

Option D: Other.

The intended emotional tone by the speaker in Section 2a- Question 2 (*Table 4.7*) was again 'Option A'.

	Analysis of Emoticons						
Section 2b – Question	າ 3			Resp	onses		
REALLY GREAT WORK O	—	Commun	ication Prof	fessionals	Professio	nal Commu	unication
PROPOSAL <sup>®</sup> YOU SHOU	ILD BE HERE TO				Gra	duate Stude	ents
GO OVER YOUR WORK V	VITH ME 🥮	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
BUT ENJOY YOUR TIME	OFF ANYWAY	choice	choice	choice	choice	choice	choice
<b>@</b>							
Emoticons used	Option A	100%	0%	0%	100%	0%	0%
(Blackberry	Option B	0%	0%	100%	0%	0%	100%
Messenger):	Option C	0%	100%	0%	0%	100%	0%
. 👄	Option D	0%	0%	0%	0%	0%	0%
. 😕							

Table 4.8: Summary of responses from Section 2b- Question 3

Option A: Happy with your work and expressing himself in an excitable manner.

Option B: Unhappy and yelling at you. Option C: Being sarcastic toward you.

Option D: Other.

The intended emotional tone by the speaker in Section 2b- Question 3 (*Table 4.8*) was Option 'A'.

Analysis of Emoticons							
Section 2b – Question	n 4			Resp	onses		
Your proposal was well i	researched	Commun	ication Prof	fessionals	Professio	nal Commi	unication
John <sup>19</sup> Next time please	e confirm with				Gra	duate Stude	ents
me before you decide to	make any	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
creative changes to content on your		choice	choice	choice	choice	choice	choice
own 🤔 Enjoy your vaca	tion <sup>3</sup>						
Emoticons used	Option A	66.7%	33.3%	0%	100%	0%	0%
(MSN Chat):	Option B	0%	0%	100%	0%	50%	50%
_ 🙂	Option C	33.3%	66.7%	0%	0%	50%	50%
36	Option D	0%	0%	0%	0%	0%	0%
- 0							
_ 3							

Table 4.9: Summary of responses from Section 2b- Question 4

Option A: Giving a pleasant but cautionary warning for next time.

Option B: Giving an unpleasant but cautionary warning for next time.

Option C: Being sarcastic toward you.

Option D: Other.

The intended emotional tone by the speaker in Section 2b- Question 4 ( $Table\ 4.9$ ) was 'Option A'.

	Analysis of Emoticons							
Section 2b – Question	າ 5			Resp	onses			
Sure leave the office to see me about the pro	-	Commun	ication Prof	fessionals		onal Commu duate Stude		
	posai – Enjoy	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	
your week vacation <sup>©</sup>		choice	choice	choice	choice	choice	choice	
Emoticons used	Option A	0%	33.3%	66.7%	0%	0%	100%	
(Gmail Chat):	Option B	100%	0%	0%	75%	25%	0%	
27	Option C	0%	66.7%	33.3%	25%	75%	0%	
	Option D	0%	0%	0%	0%	0%	0%	

Table 4.11: Summary of responses from Section 2b- Question 5

Option A: Pleased with your work on the proposal.

Option B: Being sarcastic toward you.

Option C: Unhappy with you.

Option D: Other.

The intended emotional tone by the speaker in Section 1- Question 5 (See Table 4.11) was 'Option B'.

# 4.6 Combined Analysis of Emoticons (Section 2a &2b) Experienced Communication Professionals and Professional Communication Graduate Students

An analysis of all sections showed that the total number of emoticons used from the emoticon legends of MSN Chat, BlackBerry Messenger and Gmail Chat included: 7 Gmail emoticons, 8 MSN emoticons and 9 BlackBerry Messenger emoticons. A cross analysis of surveys from both groups showed that in on average, in Sections 2a and 2b, professional communication graduate students answered more questions correctly than the experienced communication professionals. In total the students' responses totaled 100 % (perfect score) 6 times out of a possible 10, whereas the experienced professionals only totaled perfect scores of 100 % 3 times out of a possible 10.

It was noted that Question 3 received a perfect score of 100 % by experienced professionals in Section 2a, but not in Section 2b. Ironically, in Question 3 a perfect score of 100 % was received by graduate students in Section 2b, but not in Section 2a. However, in Section 2a and 2b Question 4, all groups received a perfect score of 100 %, except for Section 2b by the experienced communication professionals where only 2 out of the 3 (66.7 %) respondents chose the correct answer.

## 4.7 Combined Analysis of Punctuation Symbols (Section 1) & Emoticons (Section 2a &2b)

A combined analysis of responses from both the experienced communication professionals and the professional communication graduate students showed that in Section 1 Question 1, 0 respondents from the experienced communication professionals answered correctly. However, when emoticons were added in Sections 2a and 2b the percentage of correct responses grew by 50 %. Similarly, only 62.5 % of respondents from the professional communication graduate students answered Section 1 question 1 correctly. After emoticons were added to the statement this percentage grew to 87.5 %.

In Section 1- Question 4, respondents from both groups answer 100 % to the question with the use of punctuation symbols. However, there were mixed results in Sections 2a and 2b from respondents. Section 2a results for Question 4 from the experienced communication professionals remained constant, but dropped 33.3 % in Section 2b once emoticons were introduced. A similar occurrence took place for graduate student responses as 25 % in correct responses dropped in Section 2a after emoticons were introduced into the statement.

Question 5, measured for an emotional tone of sarcasm; however, percentages in both Section 1 and Sections 2a and 2b remained relatively consistent. There was a slight decrease in both group's responses; where experienced professionals moved from a correct response

percentage of 83.3 % in Section 1, to a 66.7 % in Sections 2a and 2b, and graduate students moved from a correct response percentage of 50 % in Section 1, to a 37.5 % in Sections 2a and 2b.

However, once the emoticons were introduced into the 5 statements in Sections 2a and 2b preceding the punctuation symbols in Section 1, there was an overall increase in participant's correct responses. *Table 4.12* shows which questions benefited from the instillation of emoticons into the statements.

	<b>Experienced Professionals</b>	Graduate Students
	(6 in total)	(8 in total)
Question 1	Increased by 50 %	Increase by 25 %
(Sections 1 & 2a/b)	(Up 3 correct responses	(Up 2 correct responses
	from 0)	from 6)
Question 2	function Increased by 16.7 %	Stayed consistent
(Sections 1 & 2a/b)	■ (Up 1 correct response	(Stayed constant at 100 %)
	from 3)	
Question 3	Increased by 16.7 %	▲ Increased by 12.5 %
(Sections 1 & 2a/b)	(Up 1 correct response from	(Up 1 correct answer
	4)	from 7)
Question 4	■ Decreased by 16.7 %	■ Decreased by 12.5 %
(Sections 1 & 2a/b)	(Down 1 correct response	(Down 1 correct answer
	from 6)	from 8)
Question 5	Decreased by 16. 7 %	Decreased by 12.5 %
(Sections 1 & 2a/b)	(Down 1 correct response	(Down 1 correct response
	from 5)	from 4)

Table 4.12: Shows an increase or decrease in participant's correct responses after emoticons were introduced into the statement.

# 4.8 Analysis of Emoticons: Section 2a versus 2b

An analysis of responses in Section 2a and 2b from both the experienced communication professionals and the professional communication graduate students showed that Section 2b had a higher percentage of correctly answered questions than Section 2a in both cases (*Table 4.13*).

		<b>Experienced Professionals</b>	Graduate Students
		(6 in total)	(8 in total)
Section 2a	# of questions with 100 %	1 out of 5	2 out of 5
Section 2b	# of questions with 100 %	2 out of 5	4 out of 5

Table 4.13: Shows that emoticons used in Section 2b had a higher intended response percentage in both groups surveyed than those who given Section 2a emoticons.

# **Chapter 5. Findings**

The analysis has shown that emoticons from MSN Chat, BlackBerry Messenger and Gmail Chat gave mixed results for an increase or decrease in message comprehension within written statements when used as a form of punctuation. Overall analysis has shown that emoticons were effective in increasing participant's message comprehension of the speaker's intended message. The average of increased message comprehension from both groups of participants when text was punctuated using emoticons was a 50% success rate. However, the average of decreased message comprehension after emoticons were added to the sentence was a close 40% failure rate. In addition, the response rate of emoticons being neither successful nor unsuccessful (results staying consistent throughout) accounted for 10% of the overall sample.

Findings from this study displayed that age may affect the interpretation of certain emoticons within a given sentence, given that the professional communication graduate students doubled the success rate of the experienced communication professionals. However, the sample set of each group's participants was unevenly distributed, which may have resulted in disproportioned total in percentages. Given these results, is it still undetermined if career experience is an influential factor in how participants interpreted emoticons. However, the assumption might be made within this sample set that the more career experience a participant has the more likely they are to be above the age of 30, and the less career experience a

participant has the more likely they are to be below the age of 30. Therefore, it seems that there is a correlation between a participant's age and their career experience.

Furthermore, it should be noted that the survey-questionnaire was designed by an individual less than 30 years of age, which might have also affected how it was interpreted and received by the different participant audiences who participated in this study.

Findings showed that out of all 5 participant questions, Question 1 benefitted the most from the added emotions in Sections 2a and 2b. Before emotions were added to the sentence, Question 1 received some of the lowest correct responses from participants. However, this drastically improved in the second section of the survey-questionnaire.

The goal of Question 1 was to measure participant's interpretation of the emotion: anger. Initially in Section 1 this was conveyed through the punctuation of an exclamation mark (!) and a period (.), which was not well interpreted by participants. One observation why this question had a more successful response in Section 2 of the survey could have been the illustrated facial representations and the emoticon's use of the colour red to covey anger to the participants. Emoticons used in this sentence were from the BlackBerry Messenger and MSN Chat emoticon legends and made use of highly abstract graphic representations of the human face. (*Table 5.1*).

Emoticon: Anger	
Section 2a	Section 2b
(MSN Chat)	(BlackBerry Messenger)
<b>3</b>	

Table 5.1: Visual representation of angry emoticons

Gillian Rose's instructions for conducting critical visual methodology was used to analyze this emoticon (see pervious section 'Analysis of Emoticons'). The research technique known as "the good eye" was used to imply careful observation and determined a detailed

description of an image for better understanding of its meaning to participants. Therefore, visual elements of shape, colour, direction, and the use of metaphor (cultural significance) need to be considered when determining why this emoticon resonated the most with participants in Section 2.

The most common colour to denote the smiley faces (or 'happiness' and 'approval') used in all the emoticon legends examined in this study was yellow, while 'anger' used the colour red and differed from 'feeling sick', which used the colour green. In the above example of anger it was noted that both emoticons made use of a vibrant red colours to denote the emotion of annoyance or unpleasantness. According to authors Kaya and Epps (2004) red is, "symbolically known as a dominant and dynamic colour [...] and has both positive and negative impressions such as strong, passionate, warm, but on the other hand aggressive, bloody, raging and intense (Kaya & Epps, 2004, p. 396). The particular context in Question 1 was designed to denote a displeased or angry tone to the reader, thus readers identified most with the emoticon that showed an angry visual expression in red hues.

However, colour is not the only signifier in the above emoticons that denotes an angry emotion. The placement and expression of eyebrows, eyes and mouth are also important for conveying emotion. Authors Ekman and Friesen (1975) noted that six emotions (anger, disgust, happiness, fear, surprise and sadness) were found to have associated facial expressions that are universally recognized. There are also three main areas in the face where emotional changes can be detected: the upper part of the face with eyebrows and forehead, the eyes and the lower portion of the face around the mouth (Ekman & Friesen, 1975). The above emoticons are clearly recognizable as both representations of anger since they depict the emoticon's eyebrows either raised in anger or pointing down toward the ground in rage. In addition, one of the emoticon's

mouths seemed harsh and straight, while the other appeared to be clinching its teeth with rage; regardless both of these expressions depicted a recognizable unpleasant feeling.

According to Dondis (1973) shape and direction also play a significant role in how an image is perceived by its viewers. She states that, "the square has been associated to dullness, straightness and workmanlike meaning and the circle, endless, warmth, protection" (Dondis, 1973, p. 44). Although both emoticons are circular in shape, the emoticon belonging to the BlackBerry Messenger legend resides on a black background and when pasted into the survey-questionnaire took the form of a square. Thus, one emoticon appeared circular and the other somewhat square-like.

Out of the two emoticon sections (2a and 2b) that were used to measure participant's message interpretation Section 2b had an overall higher percentage of correct responses than Section 2a. In Question 1, the emoticon from BlackBerry Messenger seemed to be better recognized as anger than the emoticon from MSN Chat. An assumption explaining this outcome could be due to the circular shape of the MSN emoticon versus the BlackBerry emoticon (Square form: versus circular form: According to Dondis (1973), circular shapes denote protection and warmth. Perhaps subconsciously the circular shape of the MSN emoticon in conjunction with the additional emoticon in Question 1 provided mixed feelings for participants and confused them toward the intended meaning of the sentence in Section 2a rather than 2b. In addition, Dondis (1973) notes the significance of shapes expressing visual direction and states that, "Each of the visual directions has a strong associative meaning and is a valuable tool in making visual messages" (Dondis, 1973, p. 46). If this is the case, the MSN emoticon's facial features within the circular shape are looking toward the left-hand side of the red circle, which might express feeling of disconnect or a lack of eye contact, suggesting a sense of fickleness.

The BlackBerry emoticon's features look directly toward the viewer, which might indirectly create a stronger sense of presence for intended emotional messages to a viewer. Kress and Van Leeuwen (2008) note that, "whether they are human or not, by being represented as looking at the viewer, they are represented as human" (p. 118), which perhaps explains why more participants responded to the angry emoticon. Furthermore, it is the cultural understanding of all the combined elements mentioned above that allowed participants to draw a correlation between colour, shape, and direction of the emoticon to the intended emotion of anger in Question 1.

Additional comments from the participants were positive toward the use of the angry emoticons in helping to convey the intended tone of the speaker. One experienced communication professional said that, "The angry emoticons added to the 'sting' of the words in the statements and made the message clearer." While a professional communication graduate student commented, "The presence of emoticons in the sentence did help a little. The emoticons that are very extreme in emotion ('very happy' or 'very angry') are the most explicit and helpful because you don't have to make assumptions about the intended tone of the speaker."

Question 3 had the second highest overall success rate (of all participant responses) by 14.3% after the addition of emoticons in Sections 2a and 2b. The entire statement was written in capital letters and was meant to convey a happy and excited speaking tone. Insightful comments received by participants proved significant for this particular question. One professional communications graduate student said, "The use of emoticons really helped, especially on the caps lock question. Sometimes when this happens in an email it can be mistaken for yelling; it helped me realize that is was a pleasant tone instead." The emoticon also seemed to help comprehension for communication professionals, as one participant stated, "Response #3 was where I benefitted the most from the emoticon. The phrase 'Enjoy your time off anyway' can be

interpreted as being dismissive, but the use of the emoticon (smiley face) affirms that the response is being made in an amicable tone."

In addition to Questions 1 and 3, findings from Question 4 were also intriguing. In Section, Question 4 used periods (.) to punctuate the statement whose intended emotional meaning was written to convey a pleasant but cautionary warning to an office employee from a superior. When punctuated with the periods in Section 1, 100% of all participants answered correctly to the question. However, when punctuated with emotions in Sections 2a and 2b, the success rate fell 14.3%. According to Nunberg (1990) periods are also referred to as 'sentencefinal dots' or 'full stops' as they signify the ending of a complete thought or idea (Nunberg, 1990). He also stated that periods fell under a category called, 'point absorption', where strong point symbols absorb weaker adjacent ones. Therefore, it seems that the period is the least ambiguous form of all the punctuation marks because it ends a complete thought and does not leave room in the sentence for unintentional uncertainty. Perhaps this is why the success rate of correct responses resulted in Section 1. A hypothesis for why the emoticons did not convey the same meaning as the period is that the emoticons chosen from Gmail Chat and BlackBerry Messenger were ambiguous in their visual construction for participants to fully understand the intended meaning of the sentence. Yet, it should be noted that only 2 participants changed their original responses in Section 2a and 2b to the response, 'Being sarcastic toward you.' Given the understanding that the emoticons chosen might have caused confusion for some participants, it provides an explanation as to why some may have chosen this additional response.

Finally, Question 5, which measured for sarcasm, had some note worthy points to discuss. In Section 1, it was the second lowest successful response rate (behind Question1) and fell an additional 14.2% in correct responses in Section 2a and 2b. Not selecting the correct

response in this instance can be possibly explained by the principle of relevance, which suggests that listeners attempted to extract the most relevant meaning of an utterance with the least processing effort, and speakers' efforts should accommodate this (Sperber & Wilson, 1986). Furthermore, Wilson and Sperber (1992) argued that verbal irony is a form of echoic interpretation; that is, speakers communicate an attitude toward an attributed proposition by echoing that proposition explicitly or implicitly, and simultaneously commenting on it. In Question 5, "Sure, leave before coming to see me [...] enjoy your vacation!" the speaker echoed the proposition that some idea in the sentence was good, but simultaneously separated himself from the proposition and communicated his negative attitude toward it. This gave an expression of disapproval for the idea itself- roughly suggesting the opposite of what the speaker meant. Given this explanation of how verbal irony or sarcasm is used within the sentence it is easily understood why there are discrepancies in results. In addition, the only sarcastic emoticon that was deemed as such was from MSN Chat. Other emoticons that were selected to represent sarcasm in Question 5 had exposed tongues, zigzag mouths and were confusing at best, (Table 5.2). In effect, sarcasm is not only difficult to convey in FtF communication but even more so in CMC. The selection of emoticons to convey this emotion is also very limited, which causes chat users to become inventive and selective in how they denote sarcasm; an already ambiguous emotion.

Emoticon: Sarcasm	
Section 2a (MSN Chat)	Section 2b (Gmail Chat)
83	7:
63	

Table 5.2: Visual representation of sarcastic emoticons

# **Chapter 6. Conclusions**

Online visuals have become one of the most important elements of computer-mediated social interactions. Therefore, it is important to understand how the communication value of these visuals can help to bridge the gap between CMC and FtF media. Findings showed that the placement of emoticons as punctuation helped to increase the overall effectiveness of the sentence's intended meaning. Although the outcome was positive, the mechanism governing the punctuation of text by emoticons is less clear than that involved in the placement of traditional punctuation symbols. In addition, there are no rules governing such placement of emoticons, as there are rules governing the placement of punctuation. Therefore interpretation of each sentence with emoticons will always be diverse for different individuals. This was reflected in commentary received from the survey-questionnaire where one participant stated, "I wouldn't have used some of the emoticons in the way they were used in some of the sentences." In contrast some participants identified with the emoticons that were selected within the sentence and stated that, "The emoticon added a level of familiarity and casualness to the sentence- this is more than what the punctuation did for the sentences in Section 1."

The correlation between age and the identification of correct responses with emoticons was evident. The professional communication graduate students had a higher successful response rate than those from the experienced communication professionals. Although it is important to note that the sample set for the experienced communication professionals was smaller than the professional communication graduate students, which might have affected results slightly.

In general, participants had more successful response rates with questions that contained simple and universally recognized emotions such as, anger and happiness (smiling). It seemed that the simpler the image the higher the successful response rate. In addition, the most successful questions were those whose emoticons followed culturally obvious indications of facial tendencies. For example, when you feel angry your face will turn red and when you are happy you smile with your teeth. Therefore, the aesthetics of the emoticon in relation to identifiable human physical reactions played a significant role in how emoticons were interpreted by participants. Aspects missing in the use of emoticons were uniform within the online community. Emoticons are used to punctuate speech through a multitude of different online interfaces, yet there are no rules governing them and no singular set of emoticon legends to follow, causing more difficulty in comprehension.

In order for emoticons to be introduced at a professional marketing level as a means to communicate to colleagues, it seems that standardization of an emoticon legend must take effect within the organization. Another issue discouraging the professional world from using emoticons as a means to decrease ambiguity in CMC is that the use of cartoon-like smiley faces still have negative connotations of non-professional conduct. As stated by one of the experienced communication professionals:

Emoticons can help sentence comprehension somewhat, yes. Words alone in an email can be interpreted in different ways and I can see how emoticons can help

to bring a human element to the medium. Having said that, I don't like using them too often- they seem undignified to me.

To move past this sigma, tailored emoticon legends could be created for each organization that requires their use, which would decrease the negative connotations of the images being child-like or undignified.

The following chart summarizes the positives and negative of both CMC and FtF communication, (*Table 6.1*).

Computer-Mediated-Communication	Face-to-Face Communication
<u>Positives</u>	<u>Positives</u>
The Internet is wide reaching and can connect to many individuals at once.	Interaction involves physical cues.
Synchronous and Asynchronous communication.	Synchronous communication.
Can be more cost effective than travelling to collaborate with colleagues.	Ambiguity in non-verbal cues is reduced.
<u>Negatives</u>	<u>Negatives</u>
Interaction removes physical cues-creating more ambiguity of non-verbal cues.	Physical and geographical proximity is mandatory.
Emoticons are not uniform and interpreted different by everyone.	More time consuming than CMC (takes time to schedule meeting in person).

Table 6.1: Pros and Cons of FtF communication versus CMC.

Further research should focus on measuring participant's response to real-time conversation using different chat interfaces such as computers and mobile devices. An observational study into how individuals act and react to emoticons in a professional environment using these devices might be capable of generating insight unachievable by traditional or mixed-methods for data collection. Additional research questions should investigate how non-native English speakers interpret and use emoticons in their online environments, and whether or not this differs significantly from English speaking users. In

addition, questions concerning how business professionals accept and adopt professionally tailored emoticons in their use for daily chat with colleagues should be further explored. Perhaps including corporate logos into a unified emoticon design would help to engage more audience identification within the business sector, making the adoption of emoticons a more acceptable and less improper activity in the workplace. The standardization of emoticons in the business community will most certainly help to decrease ambiguity and increase message comprehension in professional online environments if they are successful in catering design objectives to meet the individual needs of employees.

In summary, CMC media seem to have more benefits than drawbacks for professional communicators, as it is cost effective and allows individuals to connect one to one with coworkers without geographical limitations. The attempt to utilize emoticons to decrease ambiguity in online environments is ambitious, but needs to be further refined for a wider professional audience. As results in this study have showed, emoticons do have the ability to punctuate text and clarify messaging; however not in consistent patterns. Regardless, the punctuation of text by emoticons whatever the mechanism, is effective in establishing a communication dynamic similar to that in face-to-face communication, and in today's Internet-savvy culture it is only a matter of time before the development of effective and clear communication on CMC devices becomes a more perfected reality.

Appendix 1

# **Equivalent Punctuation Symbols and Emoticons in Sentence Structure**

Punctuation Symbol	Equivalent Emoticon (Section 2a)	Equivalent Emoticon (Section 2b)
•		<u>@</u>
	<b>(</b> =	9
		<b>9</b>
	•	<b>3</b>
	<u>@</u>	<b>©</b>
	69	<b>(3)</b>
!	8	•
	<u> </u>	<b>e</b>
	•	
		:D
?	69	<b></b>
,	83	<i>k</i> :
Table 3: Punctuation Symbol and	nd Equivalent Emoticons	

# **Situational Context**

Your boss has asked you to write a draft proposal to secure a 3 year business contract with a new client at your firm.

You know acquiring this account for the company will offer significant pay increases to you and your fellow colleagues. You not only want to impress your boss but you also want to do a superior job writing the proposal since you are trying to secure the new contract for the firm.

However, your boss's mood and temperament can be hard to read at times and she can become stressed and sarcastic when under pressure.

In the following weeks, you research the company your boss will be pitching to and you write the proposal.

Shortly after, you hand in the proposal to your boss and leave for vacation. You are away from the office for one week.

During your absence you wonder about your boss's reaction toward the proposal and decide to send her a friendly email.

In your email you write:

Hi Jane,

Just wondering if you finally got a chance to read over that lengthy proposal.

I know it isn't exactly what we had previously discussed. I decided to include new information that I felt was relevant to pitch. I hope you don't mind.

Let me know what you think and I can make changes as needed.

Cheers,

John Smith

In response to your email, your boss could have written any one of the following statements.

Please read the statement and respond to its corresponding question below to determine how you interpreted your boss's email response.

# **Question Section 1**

# Response #1

Why didn't you come to discuss your work before you left on vacation? I would have been more prepared to present to the client!

# Response #2

Oh yeah really great job on the proposal John!

## Response #3

REALLY GREAT WORK ON THE PROPOSAL! YOU SHOULD BE HERE TO GO OVER YOUR WORK WITH ME... BUT ENJOY YOUR TIME OFF ANYWAY!

# Response #4

Your proposal was well researched John. Next time please confirm with me before you decide to make any creative changes to content on your own. Enjoy your vacation.

## Response #5

Sure, leave the office before coming to see me about the proposal. Enjoy your week vacation...

# **Question Section 2a**

Please answer the following questions. All questions below are the same as above but are now supplemented with an emoticon.

# Response #1

Why didn't you come to discuss your work before you left on vacation is I would have been more prepared to present to the client

# Response #2

Oh yeah way to go on the proposal John

# Response #3

REALLY GREAT WORK ON THE PROPOSAL OVER YOUR WORK WITH ME BUT ENJOY YOUR TIME OFF ANYWAY

## Response #4

Your proposal was well researched John Next time please confirm with me before you decide to make any creative changes to content on your own Enjoy your vacation

# Response #5

Sure leave the office before coming to see me about the proposal Enjoy your week vacation

## **Question Section 2b**

Please answer the following questions. All questions below are the same as above but are now supplemented with an emoticon.

# Response #1

Why didn't you come to discuss your work before you left on vacation I would have been more prepared to present to the client

# Response #2

Oh yeah, way to go on the proposal John

# Response #3

REALLY GREAT WORK ON THE PROPOSAL YOU SHOULD BE HERE TO GO
OVER YOUR WORK WITH ME BUT ENJOY YOUR TIME OFF ANYWAY

# Response #4

Your proposal was well researched John Next time please confirm with me before you decide to make any creative changes to content on your own Enjoy your weeks' vacation

## Response #5

Sure leave the office before coming to see me about the proposal

# **Emoticon Legends**

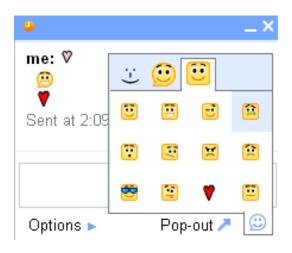


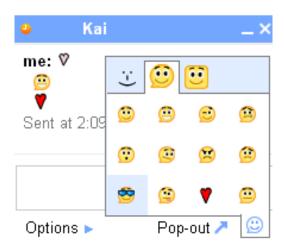
Figure 1: BlackBerry Messenger Emoticon legend



Figure 2: MSN Chat Emoticon Legend

# Appendix 6 (continued)





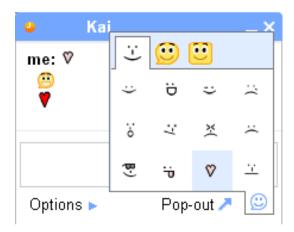


Figure 3: Gmail Chat Emoticon Legend

# **Participant Response Form**

# Response #1

•	Based on this sentence, do you feel your boss is:
	a) Extremely upset with you b) Giving a pleasant, but cautionary warning for next time c) Confused by your actions d) Other:
Respon	nse #2
•	Based on this sentence, do you feel your boss is:
	a) Happy with your work on the proposal b) Being sarcastic toward you c) Unhappy with you d) Other:
Respo	nse #3
•	Based on this sentence, do you feel your boss is:
	<ul> <li>a) Happy with your work and expressing himself in an excitable manner</li> <li>b) Unhappy and yelling at you</li> <li>c) Being sarcastic toward you</li> <li>d) Other:</li> </ul>
Respon	nse #4
•	Based on this sentence, do you feel your boss is:
	<ul> <li>a) Giving a pleasant, but cautionary warning for next time</li> <li>b) Giving an unpleasant, but cautionary warning for next time</li> <li>c) Being sarcastic toward you</li> <li>d) Other:</li> </ul>
Respo	nse #5
•	Based on this sentence, do you feel your boss is:
	<ul> <li>a) Pleased with your work on the proposal</li> <li>b) Being sarcastic toward you</li> <li>c) Unhappy with you</li> <li>d) Other:</li> </ul>

#### References

Abdullah, R., & Hübner, R. (2006). *Pictograms- Icons & Signs: A Guide to information graphics*. New York, NY: Thames & Hudson.

Bryman, A., & Teevan, J. (2005). Social Research Methods, Canadian Edition. Oxford University Press.

Dale., R. (1992). Exploring the Role of Punctuation in the Signaling of Discourse Structure. In Proceedings of a Workshop on Text Representation and Domain Modeling, Technical University of Berlin.

December, J. (1996). What is Computer-mediated Communication? From <a href="http://www.december.com/john/study/cmc/what.html">http://www.december.com/john/study/cmc/what.html</a>.

Dondis, D. A. (1973). A primer of visual literacy. Cambridge, MA: MIT Press.

Ekman, P., & Friesen, W. (1975). Unmasking the Face: A Guide to recognizing emotions from facial clues. Oxford, England: Prentice-Hall.

Frutiger, A. (1989). Sign and Symbols, Their Design and Meaning. van Nostrand Reinholt: New York.

Globe and Mail. (2010). *Canadians spend more time online than any others*. Available at: <a href="http://www.theglobeandmail.com/news/technology/canadians-spend-more-time-online-than-any-other-country/article1850700/">http://www.theglobeandmail.com/news/technology/canadians-spend-more-time-online-than-any-other-country/article1850700/</a>.

Halliday, M.A.K. (1978) Language as Social Semiotic, London, Edward Arnold.

Hiltz, S.R. & M. Turoff (1978). *The Network Nation: Human Communication via Computer*. Cambridge and London: MIT Press

Kaya, N., & Epps, H. H. (2004). Relationship between color and emotion: A study of college students. *College Student Journal*, *38*, 396–405.

Kiesler, S., Siegel, J., & McGuire, T.W. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist*, *39*, 1123-1134.

Kress, G. & Van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design*. London: Routledge.

Norman, D. (2004). *Emotional Design: Why We Love or Hate Everyday Things*. New York, NY: Perseus Books Group.

Nunberg, O. (1990). The Linguistics of Punctuation, CSLI Leetnre Notes 18, Star, ford, CA.

Parker, R. (1984). The Subversive Stitch. Women's Press, 80-1.

Parkes, M. B. (1993). *Pause and Effect: An Introduction to the History of Punctuation in the West*. Berkeley: University of California Press.

Poster, M. (1990). *The mode of information: Post-structuralism and social context.* Cambridge: Polity Press.

Provine, R., Spencer, R. & Mandell, D. (2007). *Emotional Expression Online: Emoticons Punctuate Website Text Messages*. Journal of Language and Social Psychology, 26, 299-307.

Rice, R. E., & Love, G. (1987). Electronic emotion: Socio-emotional content in a computer-mediated network. *Communication Research*, *14*, 85-108.

Rivera, K., Cooke, J. N. & Bauhs, A. J. (1996). "The effects of emotional icons on remote communication". Proceedings of the CHI '96 conference companion on Human factors in computing systems: Vancouver, British Columbia, Canada.

Rose, G. (2007). *Visual Methodologies-An introduction to the Interpretation of Visual Materials*. Thousand Oaks, CA: Sage.

Segerstrale, U. & Molnar, P. (1997). *Nonverbal Communication: Where Nature Meets Culture*. New Jersey: Lawrence Erlbaum Associates.

Sperber, D., & Wilson, D. (1986). Relevance: Communication and cognition. Cambridge, MA: Harvard University Press.

Sproull, L., & Kiesler, S. (1985). Reducing social context cues: Electronic mail in organizational communications. *Management Science*, 11, 1492-1512.

Statistics Canada. (2009). *Canadian Internet Use Survey*. Available at: http://www.statcan.gc.ca/daily-quotidien/100510/dq100510a-eng.htm.

Wilson, D., & Sperber, D. (1992). On verbal irony. *Lingua*, 87, 53–76.

Yates, S. J. (1994). *The textuality of computer-mediated communication: Speech, writing and genre in CMC discourse*. PhD thesis (unpublished), The Open University, Milton Keynes, UK.