Coaches’ use of and impressions of computer-mediated communication (CMC) media

Kevin Lawrie, BA

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Supervisor: Dr. Philip Sullivan

Faculty of Applied Health Sciences
Brock University
St. Catharines, ON

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Abstract

The study examined coaches’ usage of text-based computer-mediated communication (CMC) media (e.g., text-messaging, email) in the coach-player relationship.

Data were collected by surveying Ontario-based male baseball coaches \((n = 86)\) who coached players between 15 and 18 years old. Predictions were made regarding how demographic factors such as age and coaching experience affected coaches’ CMC use and opinions.

Results indicated that over 76% of respondents never used any CMC media other than email and team websites in their interactions with players. Results also revealed that coaches’ usage rates contrasted with their opinion of the usefulness of the media, and their perception of players’ use of the media.

Coaches characterized most CMC media as limited, unnecessary, and sometimes inappropriate. Additional research should explore players’ CMC usage rates and possible guidelines for use of the new media in authority relationships. Academia needs to keep pace with the developments in this area.
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Chapter 1: Introduction

Introduction

New text-based methods of communication (or communication 'media'), such as email, instant messaging, and text messaging may affect amateur youth coaches’ relationships with their young athletes. Young people frequently use these new media in their daily interactions (Pew Internet and American Life Project, 2005). Coaches may also be using these media to foster stronger relationships with their athletes, but they may be overlooking the inherent dangers of using these impersonal yet hypersocial methods of communication. This study determined coaches’ usage rates of these new communication media, and explored coaches’ opinions of the effects of these new media on the coach-player relationship.

Communication Media

Forms of Communication

Studies involving traditional communication are large in number and wide in scope, yet despite the rapidly progressing technology; research that investigates new and evolving communication media is not nearly as broad. Caplan (2003) suggested:

An important task involves extending prior research on face-to-face (FtF) communication to the new forms of computer-mediated communication [CMC]. Such research can illuminate not only CMC research but also shed light... on more basic questions about interpersonal communication that are now more complex and interesting due to new communication technology. (p. 625-626)
Research involving youth and their use of computer-mediated communication (CMC) may be more attractive and common, but researchers should not ignore other users of CMC media. Baym, Zhang, and Lin (2004) stated: “we need to explore different populations of users as well as different kinds of internet uses” (p. 316). This research builds on existing research in computer-mediated communication by connecting CMC theory to coaches’ use of and impressions of CMC media within the coach-player relationship.

**Traditional Media**

Traditionally, coaches have used face-to-face (FtF) interactions when dealing with their players. This method of communication allows coaches to use, for example, verbal messages, facial expressions, tone of voice, hand gestures and other identifiable communication cues in their interactions with their players (Gossage & Gunton, 1976; Pyke, 2001). In his guide for player management, professional baseball coach Joe Torre explained the necessity of gauging the player’s mood, expression, and other nonverbal cues before communicating with them (Torre & Dreher, 1999). Professional coaches have the benefit of almost daily face-to-face contact with their players. Amateur coaches also communicate face-to-face, but they also communicate with their young players by telephone, which still allows for a number of the personal communication cues to be included in the interpersonal interaction. But even face-to-face communication has drawbacks. For example, amateur coaches are only able to speak face-to-face with their players when both the coach and player are physically present. Other traditional media, such as communicating by pencil-and-paper letter writing, also have drawbacks such as a time delay between the message being sent and the message being received. New
communication media address the drawbacks of traditional media but appear to lose many of the communication cues that exist in FtF interactions.

New Media

The advent of the internet and email has provided coaches with new methods of interacting with their players. Just as in FtF interactions, coaches can communicate with the group (with a mass team email) or individually (with a personalized email). Progressive coaches can also use even more modern methods of communication, such as text-messaging and social networking websites such as Facebook or Myspace. Instant messaging (or IM) is another new and popular communication medium that could be used by coaches. Unlike the asynchronous (time-delay) nature of email and text-messaging, instant messaging is a synchronous (simultaneous) method of communication similar to face-to-face interaction.

Young people are using these new text-based communication media with alacrity. The Pew Internet and American Life Project (2005) found that 87% of youths used a cellphone to communicate, with over 63% using the text-message function. The social networking website Facebook was initially created for young university students, who are typically between the ages of 18 and 24. Facebook then expanded its service to students in high school and to the general public. In September 2007, Facebook boasted over 42 million registered users across over 55,000 regional, work-related, collegiate and high school networks (Facebook statistics, 2007). By August 2008, Facebook claimed over 90 million registered users and declared that it was the fourth most trafficked website on the internet (Facebook statistics, 2008). Though new communication media are highly used
by young people, questions exist as to whether CMC is as effective or as desirable as FtF
communication or other traditional communication media such as the telephone.

Effect on the Coach-Player Relationship

Benefits of the New Media

Due to the frequency of use of these new media by young athletes, the main
benefit of coaches communicating in this manner is the heightened contact between the
player and coach. It has been speculated that “computer-mediated communication and
online social networks foster connections between participants, supporting a wide array
of relationships” (Lampe, Ellison, & Steinfield, 2006, p. 167). Methods by which a
coach is able to passively make more connections with their athletes and know players
more intimately include viewing their social network profile websites, and seeing their
personalized instant messenger names or pictures. To communicate actively with their
players, a coach can engage in frequent email or text-message exchanges, or instant
message conversations.

It is generally understood that effective coaches are ones who know and
understand their athletes. Lawther (1951) explained that “the first principle of handling
[boys] in athletics is to know each one, personally and completely” (p. 180). Vealy
(2005) stated that “[there is nothing] more important for coaches than to understand their
athletes” (p. 52). By knowing players more intimately through the use of CMC, coaches
can increase their coaching effectiveness.

Since young players frequently use CMC media to communicate, a coach would
therefore have easier and quicker access to players, even during non-traditional hours
when players were previously unavailable (such as late night or in-school hours).
Further, in the case of text-based contact (e.g., email, instant-messaging, text-messaging) between the coach and player, the player would be able to save items of praise or instruction which could be reviewed and/or analyzed.

*Dangers of the New Media*

The heightened contact between coaches and their players can cause problems within the coach-player relationship that would not usually occur with entirely FtF interactions. Players are accustomed to talking informally with their peers via CMC media and may not make the necessary adjustments when formally interacting with a coach. Contact with an authority figure in these informal media may result in inappropriate messages, incomplete or incorrect messages, or even the misunderstanding of messages. Sarcastic comments may be taken at face-value, or an important message may be lost because of a coach's misuse of the technology. Coaches may form unwarranted or unfair opinions about players based on the information in their online profiles, or even based on the players' grammar, diction, and ability to communicate. Although many positive benefits exist for coaches who communicate with their players via CMC media, there exist an equal yet understudied number of negative drawbacks.

*Gaps in the Research*

Initial studies in computer-mediated communication focused on entirely-online relationships and not on interactions that simultaneously consisted of face-to-face contact. Researchers have since come to the understanding that CMC contact is often connected to face-to-face contact and current theories and perspectives of CMC have developed out of that idea (Walther & Parks, 2002). Recently, connections have been
drawn between the nature of CMC as hyperpersonal communication (i.e., increased yet indiscriminate social contact between individuals) and the impact of this dynamic on certain interpersonal interactions (Nellis, 2004).

Although there is growing CMC theoretical literature, the practical implications of CMC have not been investigated in any depth. Given the nature of the coach-player relationship as a close, personal interaction between (typically) an older coach and a younger athlete, it is surprising that there has not been more research in this area. Whereas there is a lot of academic discussion on the coach-player relationship itself, including the meaning of the coach-player relationship (Poczwardowski, Barott, & Henschen, 2002; Jowett, Paull, & Pensgaard, 2005), the role of the coach (Gilbert & Trudel, 2004; Clifford & Feezel, 2002; Burke, 2001), and the closeness of the player and coach (Philippe & Seiler, 2006; Bergmann Drewe, 2002, Jowett & Meek, 2000), there have been no studies that explore the impact of CMC on this relationship.

Even outside the coach-player relationship literature, very few studies have investigated the use of CMC in similar dyadic relationships. Employer-employee relationship studies relating to CMC have been limited to the perceived effectiveness and appropriateness of CMC media such as email (Dawley & Anthony, 2003). Only very recent research has attempted to understand the impact of CMC on the professor-student relationship, and studies in this area have immediate impact and practical relevance (Mazer, Murphy, & Simonds, 2007).

Definition of Key Terms

Communication
Andersen (as cited in Cartier, 1959) defined communication as “the process by which we understand others, and in turn, endeavour to be understood by them” (p. 5).

**Interpersonal Communication**

Canary, Cody, and Manusov (2003) defined interpersonal communication as “the [strategic] exchange of symbols used, at least in part, to achieve interpersonal goals” (p. 4).

**Computer-Mediated Communication (CMC)**

December (1996, ¶2) defined computer-mediated communication as “the process by which people create, exchange, and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages”.

**Communication Tools**

Communication tools are devices used to aid in the understanding or presentation of material. Coaches can, for example, use statistical software programs to distribute scouting reports on opposing teams or they can use a video projector to demonstrate skills to their athletes.

**Communication Media**

Communication media (plural of medium) are channels used to facilitate interpersonal communication. Coaches can, for example, use a telephone to speak to a player or they can send a player an email.

**Synchronous and Asynchronous Media**
A synchronous medium is one in which messages are exchanged simultaneously with no (or very little) time delay between the message being sent and it being received. An asynchronous medium is one in which there a time delay between the message being sent and the message being received.

**Social Networking Websites**

On social networking websites, users can create and design a personal profile that reflects their interests. Profiles typically include photos, music, blogs, and a personal message board. To view a user’s profile and post messages on their message board, it is usually required that users designate each other as ‘friends’. Common websites for this asynchronous medium include MySpace.com and Facebook.com.

**Blogs**

A blog (formally ‘web-log’) is a website that allows users to post opinions or diary entries that can be read by other users. In many cases, blogs are considered an asynchronous medium because they provide a mechanism for readers to comment on the user’s blog entry. Common blog websites are Spaces.MSN.com, Blogspot.com, and Typepad.com.

**Instant Messaging (IM)**

Instant messaging is the synchronous exchange of messages through a software program on the internet. In some cases, users can see the text of the message being revealed as it is typed. In most cases, users must ‘send’ the instant message to another user who is a part of their list of contacts. A user’s contact list typically indicates which of the user’s friends is currently ‘online’ or ‘offline’. Sending a message to an ‘online’
user gives the expectation of an immediate reply. Common instant messaging software programs include Microsoft Service Network Messenger (MSN), America Online Instant Messenger (AIM), and Yahoo Messenger.

Text-Messaging

Text-messaging (or ‘texting’) is the asynchronous exchange of messages typically through cellphones. Users enter the text of the message on their cellphone and send the message to another user’s cellphone.

Email

Email (formally ‘e-mail’ or ‘electronic-mail’) is the asynchronous exchange of messages through a software program (such as Outlook) or a web-based account (such as Hotmail, Gmail or Yahoo) on the internet. Unlike most text-messaging and instant messaging services, emails can be sent to multiple users at once (called a ‘mass email’).

Purpose of the Study

The purpose of the present study was to understand how and how often coaches use new communication media such as instant messaging, social networking websites, text messaging, and email in their interactions with their players. Further, the study explored coaches’ opinions of these new communication media within the coach-player relationship.

Hypotheses

Hypothesis 1
Excluding their use of email, coaches’ use of new communication media is infrequent.

_Hypothesis 2_

Younger coaches use new communication media more frequently than older coaches.

_Hypothesis 3_

Coaches with little coaching experience use new communication media more frequently than coaches with more coaching experience.

_Hypothesis 4_

Younger coaches are more comfortable than older coaches when they use email and other new communication media.

_Hypothesis 5_

Coaches use new communication media only for impersonal interactions such as explaining schedule changes.

_Hypothesis 6_

Coaches are unaware of the potential dangers or problems that may result from using the new media.

_Implications of the Study_

The increased frequency of use of the new media for interpersonal interaction places additional stress on coaches. A number of problematic areas arise should a coach
choose to communicate with players via text-based CMC. Coaches need to be aware of the many issues associated with CMC; one example being the breakdown in role-related social boundaries. Postmes, Spears, and Lea (1998) wrote:

It has been proposed that the breakdown of physical boundaries is accompanied by a breakdown of social boundaries imposed by traditional norms and social roles, presumably because electronic interaction gives the individual greater freedom from social strictures. (p. 693)

It is also understood that power differences can be removed or decreased because of the nature of CMC (Postmes et al., 1998). The moderation of power and authority in the coach-player relationship could potentially lead to the coach and player becoming friends, which is a likely occurrence due to a shared interest in the particular sport.

Friendship between athletes and coaches is sometimes expected and/or beneficial. For example, Philippe and Seiler (2006) found that “closeness allowed the [athletes] to feel a sense of bond and a sense of familiarity with the [coach] and led to a better development of the athlete” (p.163). Despite the potential positives, convention tends to discourage a relationship of this manner for reasons such as favouritism and conflict of interest, as well as the possibility of exploitation due to the power a coach holds over an athlete (Bergmann Drewe, 2002; Indig, 2005).

In addition, the text-based and documented nature of most forms of CMC merits greater consideration. A coach who uses casual expletives while speaking in front of a group of players would be perceived differently than a coach who uses casual expletives in a team-wide mass email. Further, a personal comment directed toward a player during face-to-face contact may be taken out of context if written textually. A simple
performance-related compliment such as “You looked really good today” can have its meaning changed if it were sent via email and subsequently analyzed by that player’s parents or lawyers.

Clearly, an ethical standard is required to govern coaches’ use of CMC in their interpersonal communication with their players. The present study aimed to update research in the coach-player relationship literature in the context of computer-mediated communication. Future research can build upon the findings of this study and work toward developing a guiding standard for coaches’ use of CMC in their interpersonal communication with their players.

**Delimitations**

The study focused on coaches who coach amateur players between 15 and 18 years of age, as this is the age group that most frequently uses CMC in their interpersonal interactions (Pew Internet and American Life Project, 2005). The study was further delimited in that only amateur baseball coaches were studied. Poczwardowski, Barott, and Jowett (2006) indicated that coach-player relationship researchers should consider becoming more sport-specific. A sport-specific study allows not only for greater in-depth understanding of the issues, but also for more practical uses and applications of the research.

In one-on-one coach-player relationships, such as in amateur swimming or gymnastics, a player and coach may have infrequent CMC interactions due to the heightened amount of face-to-face contact. Further, due to the indoor nature of some sports, the frequent interactions can occur throughout the entire year. In the case of a team sport such as amateur baseball, face-to-face contact is potentially less frequent
overall and even more infrequent during the winter months. The many variable
differences between sports would negatively affect a study that attempted to ascertain any
variable differences about coaches’ use of CMC media.

The present study was also delimited to include only current amateur baseball
coaches in Ontario. Time and access constraints were considered when delimiting the
study in this manner. Further, in addition to sport specificity and location, the present
study did not attempt to survey an equal number of male and female amateur coaches.
 Due to the nature of baseball as a predominately male sport, especially in southern
Ontario, male coaches vastly outnumber their female counterparts.

Limitations

The present study was limited to two groups of coaches who fit the delimited
criteria. These two groups included coaches who had the technological capacity to
complete an online survey about their use of and opinions of CMC, and coaches who
were physically given or mailed a copy of the same survey. The study was further
limited by the number of survey responses, as well as the size of the population sample.

Assumptions

The main assumption of this study is that coaches will understand the survey and
answer it honestly. A brief explanation of each of the CMC media was presented at the
beginning of the survey, and respondents were instructed to answer each question
anonymously so that they would not feel pressure to respond in a certain way. The
researcher also attempted to limit his personal opinions and biases when the survey was
designed and when the results were compiled.
Significance of the Study

The proliferation of new communication media brings a host of unseen potential dangers. Text-based communication allows an anonymity and depersonalization that can empower adults in their interaction with teenagers. The effects of text-based communication are seen in the ease by which strangers gain the trust of minors for the purposes of sexual luring. Authority relationships become blurred and teenagers begin to trust adults on a level that could not have previously been attained by entirely face-to-face interactions. The example of Republican Congressmen Mark Foley making sexual advances to impressionable teenage ex-pages through both emails and instant messages is one of the more public occurrences of this phenomenon (Bluestein, 2006; Thomas, 2006).

The danger of the coach-player relationship descending into ethical degeneration is high (Bergmann Drewe, 2002; Indig, 2005). The new communication media may expedite this process unless coaches are vigilante in their use of these media.

The present study provided an understanding of coaches’ usage rates and their opinions of the effects of the new communication media on the coach-player relationship. Future research should determine methods of educating coaches not only on how best to utilize the benefits of the new communication media, but also on how to avoid the pitfalls of their potential negative effects on the coach-player relationship.

Chapter II: Literature Review

Introduction

Amateur coaches wear many hats. Amateur coaches can be both teachers and parents. They can be skilled instructors or they can be babysitters. They can have a
compelling reason for coaching an amateur team or they can coach the team for fun. They must encourage and compliment their players, but they must also critique and evaluate them at the same time. Regardless of whether the coach is motivating, critiquing, complimenting or evaluating, he or she must still get his or her message across to the players on the team. Above all, coaches must be effective communicators.

To be effective communicators, coaches must know their players (Lawther, 1951). Coaches must understand each player’s personality and motivation, and their reasons for playing the particular sport. Traditionally, a coach could take time to have an in-depth personal conversation with a player. This face-to-face (FtF) contact can still take place today, but the increased use of computer-mediated communication (CMC) by young people gives coaches other options they can use to best communicate with and understand their players.

_Theoretical Basis_

_Comunication_

Communication has been defined in several ways by numerous researchers. Multiple definitions can cloud understanding of a concept, but similar themes in the definitions of communication have emerged despite the fog. Generally, communication is viewed as a process. Clevenger (as cited in Cartier, 1959) wrote: “communication is a term used to refer to any dynamic, information-sharing process” (p. 5). Similarly, Andersen (as cited in Cartier, 1959) defined communication as “the process by which we understand others and in turn endeavour to be understood by them. It is dynamic, constantly changing and shifting in response to the total situation” (p. 5). Patton and Giffin (1977) agreed with the above definitions, saying that “communication is a process,
not a thing” (p. 4). Communication never begins and it never ends; it is always happening and always evolving (Patton & Giffin, 1977).

Smith and Williamson (1985) encode meaning and role relationships into communication, but continue to maintain that communication is an overall process. The inclusion of these facets into communication is the nature of interpersonal communication:

The search for competence and meaning in interpersonal relationships leads us to... interpersonal communication – for in the broadest sense, communication is not only the study of roles, rules, strategies and games; it is the process of creating meaning in everyday life. (Smith & Williamson, 1985, p. 4)

Applied to a coaching perspective, LaVoi (2007) defined communication as “an interpersonal exchange, shaped by various factors, including value systems, personal characteristics, tensions, and situational dimensions (e.g., type and level of sport culture, gender) (p. 30).” The interpersonal communication exchange is never at an end, and it is never completed. When a player masters a skill or wins a competition, communication between the coach and athlete does not stop; it simply changes to focus on a new skill or the next competition. As long as the coach-player relationship exists, the coach and the athlete are in a state of constantly evolving interpersonal communication.

Interpersonal Communication

Interpersonal communication is defined briefly by Canary, Cody, and Manusov (2003) as “the exchange of symbols used, at least in part, to achieve interpersonal goals” (p.4). This definition is particularly relevant to coach-player communication research as the coach-player relationship typically exists to achieve definable goals, such as learning
new skills or winning games or competitions. Defined at length by Canary et al. (2003), interpersonal communication is based on six assumptions:

1) Interpersonal communication requires an exchange between people

2) Interpersonal communication occurs between people who are themselves developing

3) Interpersonal communication involves the use of symbols

4) Interpersonal communication is strategic

5) Communicators must be competent in using interpersonal communication in order to achieve their goals

6) People should consider how their communication affects others (Canary et al., 2003, p. 4-8).

Each assumption is outlined below and applied to the coach-player relationship.

Canary et al. (2003) explained the first assumption as the act of one person sending a message to another person. The communication exchange can be further explained as the “simultaneous sending and receiving of messages” (Canary et al., 2003, p. 4). In the coach-player relationship, the communication exchange typically takes place face-to-face but can also be accomplished via the use of technology (such as through email or over the telephone). In the case of email (and other CMC media) the communication exchange is not simultaneous (but rather asynchronous or synchronous) yet still presupposes eventual replies to the sending of messages.

The coach-player relationship is an excellent example of a continually developing interaction. As a coach becomes more experienced with coaching players, that coach's communication style will change to reflect his or her preferred method of delivering
messages. Similarly, the coach must adapt his or her communication style to the particular athlete in order to have as much influence as possible (Gossage & Gunton, 1976).

As an athlete develops, his or her method of receiving the message and providing feedback will also evolve. If an athlete has mastered a particular skill it is natural to assume that the athlete will not respond to messages relating to the basic teaching of that skill. Further, as an athlete ages and matures (not simply improves as an athlete) his or her goals and motivations will change; necessitating a change in the type and content of the interpersonal communication with his or her coach.

Canary et al. (2003) explained that symbols include “verbal and nonverbal representations of ideas, emotions, objects, or events” (p. 5). Connected to meaning, Canary et al. (2003) claimed that symbols “reflect the messages people choose as part of communication, whether reflected in a facial expression or in words” (p. 6). In the context of face-to-face interaction in the coach-player relationship, symbols include tone and volume of voice, gestures, word choice, touch, and other communication cues. A coach may take a player aside, touch him or her on the shoulder, and softly yet directly chastise the player for insulting a teammate. The emotional symbols (e.g., touch, tone of voice) allow the coach to mitigate the gravity of the situation (e.g., individual attention, content of message, direct delivery).

However, this facet of interpersonal communication does not completely account for non-FtF interactions. A coach cannot use touch, tone of voice, or facial expressions to mitigate a chastising email. The coach must instead find other methods of delivering meaning through computer-mediated communication.
Canary et al. (2003) admittedly used the term ‘strategic’ to “refer to all goal-relevant communication behavior” (p. 7). That is to say, coaches communicate with an athlete in order to get the athlete to do or feel something, such as practice a skill or build self-confidence. Similarly, the athlete communicates with the coach in order to get the coach to do or feel something, such as elaborate on certain instruction or feel a sense of accomplishment.

Coaches must be effective communicators (Vealy, 2005). Coaches must be able to understand athletes, even when the athlete is not an accomplished communicator. In FtF communication, coaches are equipped with many symbols (cues) to help them effectively communicate with the athlete. Therefore, interpersonal communication via technology (e.g., email, instant messaging) may be more difficult for coaches because of the lack of personal cues. Unfortunately for coaches, young people are communicating more and more frequently via technology (Pew Internet and American Life Project, 2005). The current research aims to explore coaches’ competencies with and frequency of use of the new communication media.

Canary et al. (2003) stated that, in terms of interpersonal communication, communicators are ethically obligated to “treat each other with good intentions” (p. 8). This assumption is especially relevant to the coach-player relationship, as the coach is not only expected to treat the athlete with good intentions, but also to fill a variety of other roles such as mentor and teacher (Short & Short, 2005). In communicating with individual athletes, coaches should also be cognizant of how their interpersonal communication affects other athletes on the team. For example, a coach should not exclusively teach a certain player new skills while neglecting the other players on the
team. Similarly, a coach should not use soft language and positive words for one player while using negative language and harsh words for other players.

The importance of this assumption in this theory of interpersonal communication cannot be more boldly highlighted. A coach who ignores the effect of his or her communication on others may quickly become an ineffective coach. If players realize that a coach tends to interact differently or more frequently with certain athletes, then the players may quickly lose respect for the coach's authority. In F2F interactions, favouritism and different styles of interpersonal communication would be more obvious and thus less likely to occur. However, in interpersonal interactions via technology (such as email) it is more difficult for players to ascertain whether the coach interacts differently with certain players. Current theories of interpersonal communication do not account for non-F2F interactions, the increased opportunity for obscuring communication (by moving it to an online environment rather than face-to-face), or the decrease in awareness of how interpersonal communication via technology can affect others.

*Communication and Interpersonal Communication Theoretical Gaps*

Despite limitations, it is apparent that any study on communication in the coach-player relationship be situated within not simply communication theory, but rather interpersonal communication theory. All of the six assumptions from this particular theory were met and they can all be effectively applied to the communication process between the athlete and coach. However, there were some evident gaps in the theory. Canary et al. (2003) did not distinguish between face-to-face and computer-mediated communication. Consideration was mostly given to the purpose of communication (i.e., goal-directed) rather than how the communication process is accomplished.
Other interpersonal communication theorists, such as Goffman (1963), also focus almost exclusively on face-to-face and identification aspects of communication. Goffman (1963) believed that people could become stigmatized based mostly on their physical or facial characteristics, but also on word choice, style, and communicable verbal or nonverbal 'tics'. Similar theories are based on 'face management' or 'facework', using the face as the primary determinant for interaction (Hallsten, 2004). Mehrabian (1968) investigated the total content of the message, coming to the conclusion that only 7% of the message impact was verbal, with 38% being vocal and 55% being facial. Again, the importance of cues such as tone of voice and facial expressions are highlighted by researchers.

The few existing sport-related interpersonal communication studies have focused on nonverbal communication as well as on conflicting nonverbal and verbal cues (Crocker, 1990; DeVito, 1996). LaVoi (2007) outlined the existing areas of communication research in a sport context: "most communication research in sport contexts assumes that (a) athletes are passive recipients of coach communication, (b) the coach's intended message is successfully received by the athlete, and (c) the coach is unaffected by the interaction" (p. 33). LaVoi (2007) stated simply: "very little information specific to coach-athlete interpersonal communication exists" (p. 33). The limited amount of research in this area leaves gaps that can be filled by "empirical studies... which [can] serve as a platform for future investigation of interpersonal communication in the coach-athlete relationship" (LaVoi, 2007, p. 33). The present exploratory study aims to contribute research in this area.
In his widely-used textbook on successful coaching, Martens (1997) explained the six steps of coaches communicating with athletes. The steps consist of:

1. You have thoughts (ideas, feelings, intentions) that you wish to convey
2. You translate these thoughts into a message appropriate for transmission
3. Your message is transmitted through some channel (verbal or nonverbal)
4. The athlete receives your message
5. The athlete interprets the message’s meaning. The interpretation depends upon the athlete’s comprehension of the message’s content and your intentions
6. The athlete responds internally to his or his interpretation of the message (Martens, 1997, p. 20)

These steps are accompanied by a diagram of two giant heads speaking to each other; apparently illustrating the communication process. Telephone and email were widely used as communication media in 1997, but Martens does not take into account any type of non-face-to-face interaction. Even though the above six steps can be easily adapted to a channel other than face-to-face, the assumptions by Martens (and in similar coaching manuals c.f. Cassidy, Jones, & Potrac, 2004; Martens, 1987; Vealy, 2005; Weinberg & Gould, 2003) do not address non-face-to-face interactions.

Though interpersonal communication theories serve as useful guidelines for the communication process, they do not adequately relate to modern communication processes that can occur between an athlete and coach. However, there is a push from some progressive researchers to, in effect, modernize the theory of interpersonal communication. Building on the solid base of interpersonal communication theory, researchers have developed theories of computer-mediated communication (Walther,
1996). These new theories (though they do not address the coach-player relationship specifically) can be more easily and relevantly applied to the new methods of communication (e.g., email, instant messaging, text-messaging) used by the athlete and coach than can the dated theories of interpersonal communication which exclude non-face-to-face contact.

**Computer-Mediated Communication**

Computer-mediated communication (CMC) is still the process of interpersonal communication, but with the added element of technology. December (1996) defined CMC as “the process by which people create, exchange, and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages” (p. 2). Although similar to face-to-face interaction, CMC is “somehow different than any other form of communication” (Wood & Smith, 2001, p. 3).

As technology has evolved, so too has the definition of computer-mediated communication. Williams (1982) explained that computers interacted with humans by acting upon orders from human input. The ability for computers to act upon these orders meant that computers were an integral part of the communication process; the intermediary between human communicators (Williams, 1982). Instead of humans interacting with each other via computers, researchers explained that humans interacted with the computer and the computer in turn interacted with the other human. At the time, researchers elaborated on the predicted purpose of the computer in communication:

> Computers may become symbol-processing systems, capable of comprehending human language and therefore functioning, by most definitions of the phrase, as intelligent agents... the computer of the 1990s will... not only process
information but also function as an intelligent knowledge specialist, engaging in symbolic manipulation and symbolic inference. (Chesebro & Bonsall, 1989, p. 27)

Though this predicted purpose for computers in communication does have merits and current uses, the common current role of computers in communication is not so much an intermediary between communicators, but rather a channel by which two communicators can directly interact.

Walther (1992) developed a new theory of CMC that situated technology as the medium through which communicators interact. Walter (1992) defined CMC as “synchronous or asynchronous electronic mail and computer conferencing, by which senders encode in-text messages that are relayed from senders’ computers to receivers’ [computers]” (p.52). It was evident that face-to-face communication was not the same as computer-mediated communication. Walther (1992) stated:

The differences between CMC and face-to-face communication hold that electronic mail (e-mail) and computer-based conferencing systems eliminate nonverbal codes that are generally rich in relational information. The absence of such codes affects users' perceptions of the communication context and other participants and constrains users' interpretation of messages. Such characteristics may render CMC less suitable for certain communication purposes. (p. 53)

Dubrovsky, Kiesler and Sethna (1991) concurred with Walther, stating that CMC may cause users to “forget that messages are communications, not just soliloquies to a computer. People can forget the nature and size of their audience or even that their communications will be read” (p. 124).
Initially, CMC was only used for email and for computer-based conferencing (i.e., business chatrooms). As technology advanced, CMC saturated the homes of the general public and became more than a medium used exclusively in business. Walther and Parks (2002) examined the existing literature on both interpersonal communication and social internet research (which is research combining social interactions and internet use) in an effort to determine or create the most applicable academic theory for CMC research.

Social internet research shares factors similar to interpersonal communication theory. Walter and Parks (2002) explained:

Social internet research has drawn heavily on interpersonal constructs such as self-presentation, impression formation and management, socioemotional orientation, hierarchical role awareness and performance, deference, cooperation, intimacy, attraction, affection, and relational development. (p. 530)

The interpersonal constructs listed by Walther and Parks as being present in social internet research are also evident in coach-player CMC interactions. Therefore, combining internet research with interpersonal communication theory ought to provide a basis for a rotund theory of computer-mediated communication. Walther and Parks (2002) considered five approaches to CMC theory, all of which are outlined below and addressed in the context of the coach-player relationship.

*Cues filtered out*

Each approach to the study of CMC includes a strong consideration of nonverbal communicative cues in face-to-face settings. Nonverbal communicative cues can include tone and volume of voice, touch, and facial expressions. The 'cues filtered out' approach is a result of the earlier (pre-1996) theories of CMC. The approach states that nonverbal
communicative cues do not exist in online settings as they exist in face-to-face interactions. Walther and Parks (2002) explain that proponents of this approach “assume that the functions served by nonverbal cues in FtF interaction go unmet in computer-mediated interaction” (p. 532). CMC, then, must always be impersonal (Culnan & Markus, 1987).

The ‘cues filtered out’ approach has slowly been rejected by the expanding CMC academic community (Hancock & Durham, 2001; Hian, Chuan, Trevor, & Detenber, 2004; Parks & Floyd, 1996; Walther & Parks, 2002). As technology has advanced, so too has the means of replacing these nonverbal cues. The basic text is no longer the entire message. Soukup (2000) wrote: “the reduced cues approach is clearly unable to account for intimate or multi-media CMC” (p. 412). Writing style has replaced tone of voice, capitalization has replaced volume of voice, emoticons (i.e., smiles or frowns created with alphanumeric characters) have replaced facial expressions, and although touch cannot be replaced, the intimacy of the content of a message can simulate emotional attachment. Though FtF nonverbal cues cannot be perfectly replicated, the use of newly developed CMC cues illustrates that communicative cues have not been filtered out in CMC interactions.

Cues to choose by

Stemming from theories of media richness, the ‘cues to choose by’ approach assumes that “some types of messages might be conveyed more efficiently in one medium than in another” (Walther & Parks, 2002, p. 532). Simply put, if a medium allows for more cues to be exchanged between communicators, then the medium is more effective for complex messages (e.g., emotional matters). The approach claims that
‘lean’ media, such as instant messaging, are therefore more effective for efficient communication (e.g., relaying the time of a meeting) because they do not allow for the exchange of many communicative cues (Walther & Parks, 2002). Putting aside the incorrect assumption that media such as instant messaging are ‘lean’, this approach still cannot be applied to all interpersonal relationships.

In many cases, the best medium for communication (i.e., face-to-face) is not always available, such as for communicators in different parts of the world. In these instances a leaner medium (e.g., email) is an unavoidable substitute. An experimental setting determined that people are in fact able to use lean media (specifically email) to accomplish complex tasks and exchange information, which appears to contradict the ‘cues to choose by’ approach (Dennis & Kinney, 1998).

Coaches and athletes typically communicate face-to-face, but time-specific information (such as the canceling of a rained-out game) must be communicated as quickly as possible and face-to-face interaction is not an option. In these cases, CMC is not only an available option but likely the preferred option (Kaynay, Wotring, & Forrest, 1996). Walter and Parks (2002) explained that “an asynchronous medium wins the day when synchronous choices are not available” (p. 533).

Although the ‘cues to choose by’ approach indicates that coaches should communicate rich complex matters face-to-face, Walther and Parks (2002) noted that FtF may not always be the most appropriate choice: “it may be more efficient, for example, to raise discussion of a difficult, emotionally charged topic in email in advance of a FtF conversation than to raise the topic out of the blue in conversation” (p. 534). In one study, 37% of teenagers responded that they preferred to raise sensitive issues online
rather than face-to-face (Pew Internet and American Life Project, 2001). For many coaches, email (or other CMC media) may be the preferred medium to discuss certain topics with their athletes even when richer media are available, and therefore 'cues to choose by' is not the most applicable approach to CMC theory for a study on coaches' communication.

*Cues about us, not you or me*

This approach to CMC theory utilizes the SIDE (Social Identity Model of Deindividuation Effects) model which, like both previous approaches, also assumes that communicative cues are filtered out in CMC communication (Postmes, Spears, & Lea, 1998). The model explains that "the characteristics of a communication medium interact with characteristics of the social context and with the particular social definition of self to produce media effects" (Postmes, Spears, & Lea, 1998, p. 691). However, this approach also posits that communicators assume their social definition of self (via identification cues) based upon the groups in which they are communicating. Walther and Parks (2002) viewed the model as follows: "when context makes group identity salient, CMC users overattribute similarity and common norms, resulting in social attraction to the group and thereby its members" (p. 539). In the context of a sports team, all members of the group share an interest in sport and this approach assumes that they will therefore use their shared interest to further define themselves as members of that group by taking on salient group characteristics.

The core of the 'cues about us, not you or me' approach is the assumption that communicators first and foremost identify themselves as members of the group. Connected to CMC, this approach has many applications in chatrooms, newsgroups, and
user forums. In the online video game Second Life (a game in which the user controls an individual self-representative character (or 'avatar') in entirely-online social interactions) users share the common identifying characteristic of being a member of the Second Life community (Second Life, 2007). On team-specific websites, (such as this fan forum for the Tampa Bay Rays baseball club: http://www.forums.mlb.com/ml-rays) any user who would be posting messages to the website is immediately identifiable as a fan of that team. However, when communicators begin identifying themselves as individuals, the 'cues about us, not you or me' approach loses its relevance.

In the coach-player relationship, the personal interactions exist not exclusively in an online (CMC) setting (as in the Second Life game or on the Tampa Bay Rays fan forum), but primarily face-to-face. Therefore, there are ample communicative and role-related cues that can be transferred from the face-to-face interactions to the CMC interactions. Walther and Parks (2002) explained the approach's limitations:

Although SIDE theory offers a powerful lens through which to view certain CMC relationships, its application to interpersonal relations (in the sense of dyadic or close personal relationships) is less clear. The implication that all online interaction stays fixed at the social or group level, never reaching the personal level, is particularly troubling. (p. 540)

Because the coach-player relationship is a close personal relationship which includes both online and offline interpersonal interactions, the 'cues about us, not you or me' CMC perspective is not the most relevant or applicable approach to research in this area.

*Cues bent and twisted*
The 'cues bent and twisted' approach is derived from an examination of online-only relationships. The approach posits that communicators reveal too much information about themselves in an effort to connect more closely with each other. Walther and Parks (2002) stated that because of the increase in internet use "people were achieving levels of sociality and intimacy in online settings that they would never have achieved as rapidly, if at all, in FtF settings" (p. 540). Walther and Parks (2002) defined this phenomenon as "hyperpersonal communication" that "goes beyond the interpersonal levels typically achieved in FtF associations" (p. 540).

A main tenet of the 'cues bent and twisted' approach is again the belief that nonverbal communicative cues are absent in CMC interactions. Communicators use the absence of these cues to present themselves in a certain positive light (Walther & Parks, 2002). Similarly, hyperpersonal communication can be negative:

When coupled with time restrictions and no expectation of future interaction, the... nature of CMC may trigger overly negative interpretations on the part of receivers, ill regard and hostile message construction by sources, failure to use the channel's positive capabilities, and amplifying cycles of disaffiliation. (Walther & Parks, 2002, p. 541)

When interacting via a CMC medium (such as instant messaging), there are many opportunities for the player and coach to be subject to the positives and negatives of hyperpersonal communication. The player and coach already share similar social cues (interest in the same sport and member of the same group) and they may easily begin to reveal (knowingly or unknowingly) more information about themselves. This
hyperpersonal interaction may lead to a breakdown of the barriers between the player and coach.

Most coach-player interactions are face-to-face, which means there are existing roles and social cues. A coach and an athlete would be less likely to enter into a hyperpersonal revelatory CMC interaction than two communicators who had never met. Still, Walther and Parks (2002) claimed that the hyperpersonal approach is worth pursuing and it may be relevant to the results of the current research on the coach-player relationship.

**Cues filtered in**

The most appropriate approach for a study on the coach-player relationship in the context of computer-mediated communication theory is the ‘cues filtered in’ approach. This is the most appropriate approach because it incorporates offline interactions along with online cues. As the basis for this approach, Walther (1992) developed a theory of Social Information Processing (SIP) which is “used to describe the individual cognitive processing of socially revelatory information and subsequent communication based on that information” (p. 68). SIP posits that communicators are motivated to “reduce interpersonal uncertainty, form impressions, and develop affinity in online settings as they are in other settings” (Walther & Parks, 2002, p. 535). Instead of simply accepting the online cues as the entirety of the communication process, communicators use all available cues in their interpersonal interactions.

In opposition to the previous four approaches, this approach allows both role-related and nonverbal communicative cues to be ‘read in’ to interpersonal interactions. Instead of assuming that communicators are interacting exclusively online, this approach
allows for the parallel inclusion of face-to-face interaction. Instead of assuming that communicators have few nonverbal cues to choose from, this approach expects that nonverbal CMC communicative cues have replaced the nonverbal FtF communicative cues which have been lost. Walther and Parks (2002) stated:

When denied the nonverbal cues available in FtF interaction, communicators substitute the expression of impression-bearing and relational messages into the cues available through the CMC. Thus SIP theory posits that communicators exchange social information through the content, style, and timing of messages online. (p. 535)

An experimental setting contrasting cues exchanged in FtF interactions with cues exchanged in CMC interactions found that the social orientation exchange was actually greater in CMC than in FtF settings (Walther & Parks, 2002). Connecting to the concept of hyperpersonal communication, Walther and Parks (2002) believed that “these results suggest that people who communicate using computers must either place greater weight on the cues that remain in text-based CMC or use alternative cues as substitutes for those they would typically use in FtF interaction” (p. 536). Even the possibility that social exchange is greater in CMC interactions than in FtF interactions would have an immediate effect on a coaches’ approach to the coach-player relationship.

The ‘cues filtered in’ approach has been so far limited to role-related cues (such as the authority dynamic) and nonverbal communicative cues such as emoticons. Walther and Parks (2002) briefly describe emoticons as “graphical smiles, frowns, and other facial expression simulations created with various keyboard symbols” (p. 536).

Walther and D’Addario (2001) attempted to study the use of emoticons in a controlled
setting that asked users to communicate their feelings, both positive and negative, about a college course with (and without) the aid of emoticons. In opposition to their hypothesis, they found that emoticons had minimal effect on the interpretation of verbal messages (Walther & D’Addario, 2001). Unfortunately, the authors ignored or were not aware of the effect of their context. Describing a college course is not the type of conversation that merits the use of emoticons between communicators. The target audience (educated college students) is an audience whose use of emoticons would be low, and they would likely not be describing something as important as an academic course by using graphical smiley faces and frowns.

In another study of CMC, Tidwell and Walther (2002) believed that online settings provided little opportunity for “unobtrusive observation of a target person in a situation in which the target interacts with, and reacts to others” (p. 321). Email, the authors believed, is the predominant form of CMC interaction and since email is primarily exchanged between two communicators, “passive strategies [for observation] are largely unavailable” (p. 322). However, since the publication of the study in 2002, social networking websites such as Facebook and MySpace have been created and become more widely used. These websites can provide users with almost unlimited access to unobtrusively observe (or ‘creep’) other people. Despite being dated, Tidwell and Walther (2002) found some interesting and relevant results: “CMC users employed a greater proportion of self-disclosures and questions than did FtF partners. Additionally, the personal questions employed by CMC users showed greater depth than those used by their FtF counterparts” (p. 538). The coach-player relationship is directly affected by this developing theory. By communicating with their athletes via CMC, coaches would be
able to learn more about them and therefore become better coaches. But the possibility of the coach becoming too close to the athlete, which may adversely affect the coach-player relationship, is also extremely likely.

Coach-Player Relationship

Role of the Coach

Coaches fulfill a unique role in the lives of their players. They do not have the same responsibilities as parents but they also do not share the same equality with their players as in a friendship. The coach is "more than a teacher; he is a character builder; he molds personalities" (Griffith, 1926, p. 2). The role of the coach has continued to evolve but the purpose of a coach in a young person's life has remained fairly static. Griffith (1926) wrote:

The coach is more than an instructor. He is a teacher [italics added] in the ancient sense of the word. He holds the power to impress himself upon the growing personalities of boys and girls. He gives them instruction and facts, he tells them how to develop skill; but he may also mold their character and lead them into those traits and virtues which will make them men and women of parts instead of men and women having thin minds, lean characters and weak wills. (p. 2-3)

Developing the characters of young people is an important yet sometimes overlooked responsibility for coaches. A coach who concentrates exclusively on winning the match or the competition is not a true coach. In the past, a coach could be an authoritative dictator and not attract much attention. Society has changed insomuch that these coaches are fading fast. Stahura and Greenwood (2002) states:
The dynamic between coach and athlete has changed as much in the last two decades as the athletes themselves. Those insisting upon embracing the "its (sic) my way or the highway" mentality will finding (sic) many athletes choosing the "highway". (p. 117)

Coaches can no longer be ignorant of individual players' personalities, wants, and feelings. In a study that analyzed athlete dropout rates, Gould, Tuffy, Udry and Loehr (as cited in Stahura & Greenwood, 2002) found that burned out athletes had advice for coaches that centred on four general themes of importance. The identified themes consisted of "coaches displaying personal involvement with the players, having two-way communication with players, utilizing player input, and understanding player's feelings" (Stahura & Greenwood, 2002, p. 116). Coaches who ignore athletes' needs will experience limited effectiveness and may find themselves losing their athletes.

The Coaching Association of Canada defines three streams and eight contexts for the role of the coach, ranging from the instruction of beginners in a community setting to the development of high performance athletes for international competition (NCCP, 2006). The present study investigated coaches operating within the 'Competition Stream' and under the 'Development Context'. The Development Context is defined as: "Adolescents and young adults are coached to refine basic sport skills, to develop more advanced skills and tactics, and are generally prepared for performance at provincial and/or national level competitions" (NCCP, 2006, p. 1)

*Influence, Authority, and Closeness*

With the position of coach comes an immediate and perhaps occasionally unwarranted amount of influence on the lives of young athletes. Sophia Jowett, a noted
researcher in the area of coach-player relationships, has briefly defined the coach-player relationship as “a situation in which a coach’s and an athlete’s cognitions, feelings, and behaviours are mutually and causally interrelated” (Jowett & Poczwardowski, 2007, p.4).

Short and Short (2005) explained Jowett’s definition in greater detail and included helpful examples to aid understanding of the complicated arrangement. Using an earlier version of Jowett’s definition, they explained that the coach-player relationship is

a state reached when coaches’ and athletes’ closeness (e.g., interpersonal feelings of trust, respect, and appreciation), commitment (e.g., interpersonal thoughts and intentions that aim to maintain the relationship over time), and complementarity (i.e., interpersonal behaviors of cooperation such as responsiveness, easiness, and friendliness) are mutually and causally interconnected. (Short & Short, 2005, p. 29)

Each aspect of Jowett’s definition is clearly connected to the other aspects in a manner that reveals their importance to the overall relationship. A coach who gets close to an athlete for the purposes of developing a social or sexual relationship is not involved in a positive coach-player relationship. However, it is clear that increased closeness between the athlete and coach can lead to a stronger relationship. For example, Lawther (1951) said that getting to know an athlete will assist in improving the coach-player relationship. Jowett and Poczwardowski (2007) agreed, saying that “high levels of closeness (e.g., like, trust, respect) tend to promote exchanges of information, open channels of communication and disclosure” (p. 21). It is generally understood that if a coach knows more details about a player’s personality and interests, then the coach will be able to appeal to the player individually while teaching skills or giving instruction. Although
Jowett and Poczwardowski (2007) did not address even the possibility of the negatives of closeness in the coach-player relationship, Lawther (1951) wisely cautioned that the coach “must never reduce the social distance between himself and the boys so that they consider him ‘one of the boys’. It is much more important to the coach that he be respected [rather] than liked” (p. 27). How can a coach know when and where to draw the line?

The nature of the coach-player relationship is such that one person (the coach) has a measure of authority over the other (the player). Can the coach and the athlete become friends? Thomas (1987) said that for friendship to exist “neither party to the relationship is under the authority of the other” (p. 217). Further, social convention dictates that coaches and athletes are typically not friends. Bergmann Drewe (2002) compared the coach-player relationship to that of the relationship between the professor and the student, especially in terms of a coach who coaches a team of athletes (analogous to a professor who teaches a group of students). She claims that expecting the professor (and coach) to have the ability to remove personal bias and preferential treatment from his or her interactions with his or her charges is unrealistic and not expected of other professionals (Bergmann Drewe, 2002). Markie (as cited in Bergmann Drewe, 2002) claimed:

Establishing and maintaining a friendship with one or more students is likely to limit severely a professor’s ability to honour his or her moral obligations. Hence, each professor has a prima facie moral obligation not to engage in such friendships. (p. 177)
Preferential treatment and potential moral violations are not the only concerns for the coach who becomes friends with the athlete. There are a number of case examples where a coach becomes sexually involved with a player leading to legal implications. Indig (2005) stated that “any coach who has intimate involvement with an athlete in their charge of any age is... morally impaired” (p. 17). Oftentimes the coach can be held criminally responsible when the athlete is a minor. The potential for sexual relationships is greater when the coach-player relationship is dyadic (existing between a coach and individual athlete – such as in swimming, tennis, or golf). Studies examining closeness in the dyadic coach-athlete relationship are prevalent (Jowett, 2003; Philppe & Seiler, 2006; Wylleman, 2000). But besides intermittent studies connecting coaches with group (team) dynamics (see Hovelynck & Vanden Auweele, 1999; Vanden Auweele & Rzewnicki, 2000) there is a significant and disturbing lack of any practical studies involving adult coaches and young athletes who are members of a team.

Although there are possibilities for negative interaction between the coach and athlete, it has been suggested that an impersonal coach is as ineffective as a coach who is too personal. Bergmann Drewe (2002) stated: “The perceived dangers of a ‘non-friendship’ coach-athlete relationship is that it would be so cold and formal that coaches would not be able to coach effectively” (p. 178). If young people are becoming more and more dependant on using CMC media to communicate (as claimed by McMillan & Morrison, 2006)), are coaches required to adapt their interpersonal communication habits when communicating with their players? For example, will the coach be perceived negatively by the athlete if he or she receives a text-message from the player but does not respond via the same medium? It may be difficult for some coaches to walk such a tight
rope between overly personal and impersonal. Griffith (1926) suggested “Becoming too familiar is not the same as being a comrade. There is a way of being friendly and sympathetic while being distant or reserved enough to command respect” (p. 196). Coaches are stuck with making the determinations between how close they can get to an athlete and how close they should get to an athlete. Clearly, making these decisions places an additional burden on coaches. With the advent of new media of technological interaction, coaches are required to make these decisions more rapidly and more definitively. Unfortunately there is no standard path for adult coaches to follow in deciding how close they can get (and should get) with their young players.

Gaps in the Research

There have been many research advances in the area of coach-player relationship issues, but few studies are applicable to coach-player closeness, and even fewer relate to coaches’ use of text-based computer-mediated communication media in their interaction with their players. Bergmann Drewe (2000) studied ethical dilemmas faced by coaches, but focused on dilemmas that occurred throughout the course of the game or match. Jowett and Timson-Katchis (2005) and Wiersma and Sherman (2005) investigated the parent’s role in the coach-player relationship, both coming to the conclusion that parental involvement can be useful depending on the age of the athlete and also if the role of the parent is clarified from the beginning of the relationship. Other studies considered the coach’s behaviour and its impact on team cohesion (Gardner, Light Shields, Light Bredemeier, and Bostrom, 1996), as well as the coach’s role frame (Gilbert & Trudel, 2004). There is a severe lack of research studies relating to adult coaches’ interactions with young athletes. There are also very few studies that address the dangers, as well as
the positives and negatives, of the closeness of this relationship. The current study aims to, at the very least, understand how coaches are interacting with athletes through the coaches’ use of computer-mediated communication.

*Communication in Coaching*

Coaches use many technological tools to communicate skills and instruction to their athletes. These communication tools (e.g., videotape, blackboard) are different from communication media (e.g., email, text messages). Communication media are used by coaches to interact with their athlete on a more personal, individual, and even social level. Jones (1995) noted “CMC, of course, is not just a tool; it is at once technology, medium, and engine of social relations” (p. 16). Although the differences between tools and media may appear to be dictional (related to word choice), they are actually semantical (related to meaning).

*Communication Tools*

Though not the main focus of the current research, it is important to understand how coaches are including different aspects of technology into their role as a coach. Siler (1947) illustrated how coaches used blackboards and chalk to demonstrate plays and positions for their athletes. Major League Baseball (MLB) coach Phil Garner explained that he still uses the chalkboard when instructing his athletes (Murphy, 2003). Diagrams and models are still in regular use by coaches (Pyke, 2001). Other coaches may prefer to use more recent technology such as video and gametape. Former National Hockey League (NHL) coach Roger Neilson was nicknamed “Captain Video” because he is credited with introducing videotape to show athletes their strengths and weaknesses.
Neilson was interviewed in 2003 and explained “These video technicians put everything on the hard drive now. I haven’t got a clue how to work the machines. I might have been "Captain Video" at one time but it passed me by long ago” (Raible, 2003). The St. Louis Cardinals baseball team makes use of an extensive ‘video room’ that allows players to watch DVDs of pitchers, hitters, and even umpires’ strike zones (Bissenger, 2005). Coaches also have a number of useful computer software programs at their disposal. Industrious coaches can keep track of statistics, schedules and even create plays with current software (Monteith, 2003). Digital video and photography, video projection, motion analysis, personal data assistants, and interactive whiteboards are all demonstrative tools for coaches in their communication with their athletes (Davis, 2003; Monteith, 2003; Sibillin, 2005).

Communication tools are passive and do not require personal exchange of interpretable symbols between coaches and athletes. A coach does not communicate through videotape, he or she instead communicates with videotape. A coach simply turns on a videotape and an athlete watches it. A coach enters statistics into a computer program and the athlete views the result. Communication media, however, require a personal interactive process between the coach and athlete.

*Communication Media*

The most common medium of personal interaction is face-to-face. However there are many occasions when face-to-face interaction is not possible. Fortunately, there are a number of communication media at the coaches’ disposal so that they can communicate with their athletes when face-to-face interaction is not available. A coach may use a telephone to contact his or her athlete; but the use of text-based media is becoming more
frequent and is the preferred means of communication by young people. Coaches’ use of these text-based communication media is the focus of the current research. Potential media for computer-mediated communication are outlined below.

**Email**

Email (formally ‘e-mail’ or ‘electronic mail’) has existed longer than many people may be aware. Vallee (1984) explained the original definition of email:

The terms “electronic email” or “computer mail” are used to describe the use of a computer-based message system to compose, edit, send, and file person-to-person messages. In many networks the simplest version of such message exchanges takes the form of real-time links between two terminals. (p. 52)

In the early 1970s, email exchange was considered to be illegal as it appeared to infringe upon the role of the post office (Vallee, 1984). Further, original emails cost upward of fifty cents per message, which is not unlike the cost of cellphone text messages today (Vallee, 1984).

Today, almost everyone has at least one email address. Email accounts can be set up through free service websites (such as www.hotmail.com or www.yahoo.com) or through paid subscriptions (in Canada) to sympatico.ca or rogers.com. Accounts are often provided by an employer’s internal email server or for students through their university or college. The accounts set up through a business or through a paid service are usually considered more professional than free accounts. Users are free to choose the name of their email address if their choice has not yet been selected by another user. Another aspect of email personalization (besides the username) is the email ‘signature’. The email signature is a message (sometimes the users’ initials or a favourite quote) that
is sent along with every outgoing message. In a coaching context, coaches are able to
learn more about a player simply by knowing their choice for email address username or
by reading their email signature.

Emails can be sent individually or to a grouping of people at the same team.
Emails sent to groups of recipients are called ‘mass’, ‘group’ or ‘blast’ emails. Senders
can also choose to ‘CC’ (carbon-copy) other recipients besides the primary receiver or to
‘BCC’ (blind carbon-copy) other recipients without the original receivers’ knowledge.

Coaches may use email to communicate with parents of young players. Ripkin,
Ripkin, and Burke (2004) wrote: “Email is a great way to communicate with parents for
scheduling practices and game times” (p. 223). However, coaches’ use of email when
communicating directly with teenage players is significantly understudied. The volume,
frequency, or type of emails sent by coaches to athletes has not been broached in any area
of coach-player research. One of the goals of the current study is to understand how
often coaches communicate through CMC media (of which email is one) and also what
type of communicative messages are being sent (if they relate personally to the individual
player or if they simply inform the team of factual changes such as game times or
locations).

Text-Messaging

Text-messaging (or ‘texting’) requires each user to have a cellphone capable of
sending and receiving text messages. This technology has grown and developed into
more frequent use only in recent years. Muman (2006) said that “[Cell phones]… and
text-messaging has now become [young people’s] main communication mechanism with
family and friends” (p. 267). Though text-messaging is available to any user with the
appropriate cellphone, texting seems to be a communication medium most often used by youths rather than adults. The Pew Internet and American Life Project (2005) found that “The most likely cell phone texters are in Generation Y (ages 18-27). Fully 63% of those with cellphones in that cohort are texters, compared to 31% of cellphone owners in Generation X (ages 28-39).” Still, even professional athletes use text messages evidenced by Toronto Blue Jays pitcher A.J. Burnett’s statement: “I sent him a text before the game and said ‘This one’s for you, Harry’” (Toronto 5, Tampa Bay 1, 2007).

To text another person, users input the message on their cellphone and send the message to the other user’s phone (using the cellphone number as the destination address). The number buttons on the keypad double as letters. The number ‘2’, for example, also doubles as the letters ‘A’ ‘B’ and ‘C’. Due to the nature of text-messaging (inputting letters via tiny buttons that have multiple assigned letters) users have developed an extensive shorthand language to maximize understanding but minimize time spent inputting messages. For example, the letters ‘ic’ mean ‘I see’. The letters ‘18r’ refers to ‘later’. The letter ‘u’ refers to the word ‘you’. This shorthand is also used in instant messaging. Though the shorthand language of texting is continually developing new forms, the development of the ‘T9Word’ system of input has allowed users to specify frequently used words to be displayed in their messages. A user can type ‘al’ and the word ‘allowed’ will be presented as a choice for input – saving the user time spent entering additional letters but also making their text message more legible and less ambiguous.

Text-messaging is different from messages sent using a blackberry or handheld electronic device. Many of these devices have extensive storage and additional features
which make them more expensive than cellphones. The devices also have a complete letter-keypad and occasionally a stylus with which to enter the letters. Devices such as the blackberry tend to be more frequently used by adults and professional business types than by teens or young adults. Coaches, who are typically adults, may own a blackberry and likely own a cellphone. However, their level of use of these items in communication with their players is unknown.

**Instant-Messaging**

Similar to text messaging, instant messaging involves inputting a message and sending it to another user. However, instant messaging requires the use of a computer program and a confirmed friendship with a number of other users. Programs that can be used for instant messaging include MSN, Yahoo IM, and AOL IM. The list of confirmed friends is referred to as a ‘buddy list’ or an ‘MSN list’. Users add one another to their list by entering an email addresses into an ‘add friend’ option. Only users who are friends may send instant messages to each other, and users can control their list by blocking, deleting, or ignoring other users. One issue for coaches in this area is to choose a course of action should the player add him or her as a friend. Should the coach accept or block the player? Can or should the coach add the player as a friend?

There are more personalization options with instant messaging than with text messaging or email. Instant messaging is a rich medium. Users can change the font, style and colour of their text. They can modify their word choice and use capitalization with greater propensity than with text messaging or email. Instant messaging programs typically give users the option of selecting one or two names (a user’s ‘MSN name’) that may be a nickname or may relate to their current activity or state of mind. Further, users
are given the option of having a display picture (or 'avatar') that is displayed in the conversation window. Users are able to represent their personalities through these cues. Partially due to these personal cues and partially due to the private one-on-one environment in which most IM conversations take place, previous research has determined that instant-messaging fosters greater intimacy between communicators (Hu, Wood, Smith, & Westbrook, 2004).

Collectively, email, instant messaging and text-messaging are sometimes referred to as social interactive technologies (SITs). Bryant, Sanders-Jackson, and Smallwood (2006) condensed previous SIT research and succinctly outlined the main conclusions:

First, youth are using SITs to enhance communication among friends and family, to make plans with one another, and to maintain social contact outside of their day-to-day face-to-face conversations. Second, these technologies have been adopted by teens relatively quickly because IMing and text messaging are more convenient, less expensive, and faster than traditional technologies. The ability to time-shift and talk at nontraditional times are added incentives. Finally, research in this arena has shown that although preference for using SITs to communicate is definitely on the rise, and the use of SITs has surpassed that of email in the past year, youth still tend to hold in-depth important conversations offline. (p. 578)

The Pew Internet and American Life Project (as cited in Bryant, Sanders-Jackson, & Smallwood, 2006) "identified text messaging as an important future direction for research" (p. 579). Whether coaches use instant messaging or are even aware of this medium (or how to use it) is unknown.

Blogs
Websites such as Wordpad.com and Blogspot.com allow users to create an account and begin writing diary entries that are published online. Users can link to each other’s blogs and in this way a blogging network (or ‘community’) is created amongst a social group of people. Users may choose to reveal as much or as little of themselves as they want, and they may decide to exclusively write about current events or other interests. Typically, anyone is able to view blogs unless the writer has specified privacy settings that limit access to members of the same community.

The nature of blogs has progressed to being more than simply a personal diary entry on different subjects. Some professors and teachers promote blogs as a useful teaching tool (Nolan, 2006). In the area of coaching communication, Hirst (2004) claimed that blogs “can allow members of a team to post related links, files, quotes or commentary. A blog can help keep everyone in the loop and promote cohesiveness and group culture” (p. 36). Potentially, a coach could use a blog to post a schedule or a game strategy and invite comments from team members. It is unknown if or exactly how coaches use blogs when communicating with their players.

Social Networking Websites

The Pew Internet and American Life Project (2007) found that over half of American youths aged 12-17 use social networking websites. These websites can include MySpace, Friendster, and Facebook. They are defined as “websites where users can create a profile and connect that profile to other profiles for the purposes of making an explicit personal network” (Pew Internet and American Life Project, 2007, p. 1). Profiles on social networking websites are extremely personal. Users can list their interests and
goals, favourite movies and books, and even add music, images, blogs, relationship status updates, links, and videos to their individual profiles.

Social networking websites are designed primarily for communication. The Pew Internet and American Life Project (2007) explained why teens use social networking websites:

[They] offer a variety of ways to communicate with people both in and out of one’s personal network. There are private messages that can be sent from user to user, but there are also more public means of communicating within the social networking space. A user can post messages to a friend’s page or wall, send a bulletin or group message to a user’s network, post comments to a friend’s blog, or give e-props, “pokes” or kudos by posting small icons to a friend’s page. (p. 6)

A coach could potentially add all the members of the team to his or her social network and post team-related updates on his or her profile. If individual players need to be informed of something important, or if a coach wishes to compliment a player on a strong match or game, he or she could post a public message on that player’s wall. Despite the possible positives of using this medium for communication with players, coaches’ use of social networking websites is unknown.

Social networking websites such as Facebook have attracted the attention of the news media and popular press. In May 2007, it was reported that Prince William of England had joined Facebook and had posted a personal profile, though this report was later proven to be false (Bansal, 2007). In November 2006, a university student at a catholic school in Kentucky was expelled for declaring his homosexuality on MySpace (Lindenberger, 2006). In May 2007, the Ontario Government banned Facebook (along
with gambling and pornographic websites) from staff computer terminals (Benzie, 2007). Students at a Grade 8 public school in Thornhill, Ontario were suspended in April 2007 for making negative comments about their teachers on Facebook (Boyle, 2007). In March 2007, high school students in Toronto were arrested by police for protesting the suspension of another student for his remarks on Facebook (Girard & Nguyen, 2007). Even controversial issues such as the Palestine-Israel conflict (because of Facebook’s decision to list Palestine as a possible country of residence for users) and public breastfeeding (because of Facebook’s decision to censor these “obscene” photos) have spilled onto Facebook (Gordon, 2007; Zerbisias, 2007). Facebook profiles have also been used by employers to learn more about an applicant’s character and personality (Lupsa, 2006). With all of the practical issues surrounding Facebook and social networking websites it is surprising that academics in the area of coach-player relationships have not directed their attention to this medium.

**Issues Created by CMC**

Facebook has been blamed for interrupting classes (Bugeja, 2006) and text messaging has been blamed for youths’ short attention spans (Brown & Kalinowski, 2007). These two issues are part of a growing focus on computer-mediated communication by researchers. Unfortunately, there has been no research connected to coaches’ usage rates or opinions of these new media. However, since the teacher-student relationship is similar to the coach-player relationship, research related to teachers’ use of CMC media may be loosely applied to the present study on coaches.

Increased use of CMC in a classroom setting has been advocated by government institutions as well as by academics (Monroe, 2006; Nolan, 2006; U.S. Department of
Education, 2004). In a study about teachers, students and Facebook, Mazer, Murphy, and Simonds (2007) suspected that

while time constraints can often limit the amount of face-to-face student socialization, students who use forms of computer-mediated communication may experience more opportunities to develop personal relationships than their face-to-face counterparts. ... Thus, the use of CMC in the instructional context could ultimately have a positive effect on the student-teacher relationship, which can lead to more positive outcomes. (p. 2)

It is also suspected that students visiting a teacher’s website or profile feel a closer connection to the teacher, including higher levels of intimacy, closeness, and positive attitudes (O’Sullivan, Hunt, & Lippert, 2004). Despite the positives, there are many issues that teachers face if they wish to communicate with students via CMC.

**Credibility**

Teachers may suffer credibility problems if they interact with students online. Waldeck, Kearney, and Plax (2001) found that students are more likely to communicate with teachers online if teachers interact with students using the same behaviour as a student; that is, by using emoticons, first names, and little capitalization. However, Mazer et al. (2007) claimed:

Students may perceive a teacher’s use of Facebook as an attempt to foster positive relationships with his or her students, which may have positive effects on important student outcomes. Teachers may violate student expectations of proper behaviors and run the risk of harming their credibility if they utilize Facebook. (p. 3)
Mazer et al. termed this possibility a "hazard" but the negatives of a loss of credibility are more than just hazardous for a teacher or for a coach.

Mazer et al. explained that "teachers can strategically reveal pictures, quotes, and personal information that present them as competent and trustworthy instructors with the students' best interests in mind" (p.13). However, Mazer et al. failed to realize that students are more proficient with CMC media than teachers. Students would likely easily see beyond any attempts at strategy and may see the teacher's Facebook scheme as an opportunity to spy on students. The authors attempted a study on a teacher's use of Facebook and its impact on students. Unfortunately, Mazer et al. chose to use the profile of a teaching assistant rather than a teacher and then attempted to apply the results to the teacher-student relationship. The credibility of a teacher and teaching assistant are not expected to be the same. In a coaching context, the relationship would be akin to comparing a team's part-time helper (perhaps a player from an older team) to the team's manager. Still, Mazer et al. (2007) presented an applicable caution:

All teachers will enter the face-to-face classroom and talk to their students, but only some teachers may choose to enter a virtual social network. Once teachers enter the network, they must make decisions about how much information to disclose. (p. 4)

In sum, the teacher is required to strategically self-disclose information so much so that the students respect the teacher, but not so much so that the teacher loses credibility with the students. Using the medium presents countless opportunities for mistakes and missteps, especially when students are more familiar with the process and the medium than the teacher.
Role Ambiguity

Besides credibility issues, there are role ambiguity issues. Spears and Lea (1992) explained simply that "CMC tends to equalize status" (p. 427). The authors also outlined that CMC potentially undermines power relations and the communicators are less aware of the existing cues in the relationship when interacting via CMC (Spears & Lea, 1992). For example, if a coach and player began interacting over MSN the conversation may become hyperpersonal due to the intimate nature of instant-messaging, and the player and coach may unthinkingly reveal too much information about themselves. Forgetting their roles, they may agree to attend a sporting contest together to watch a particular professional athlete. Under normal circumstances (i.e., face-to-face interactions) it would be expected that a coach would recognize the dangers of attending a social activity with an individual athlete. But when interacting via CMC those dangers (i.e., favouritism, social/sexual contact, reduction of boundaries and authority) are not as immediately visible.

Also invisible are issues relating to clarity. A coach sending an email may believe that he or she has outlined all the necessary information with no possible misinterpretation. However, because of the nature of the text-based communication, misinterpretation is common and sarcasm may be treated as fact, humour may be considered criticism, and capital letters may be considered shouting or anger.

Self-Representation

CMC also creates issues relating to presentation of self. Building on a study by Walther (1996) that introduced the concept of selective self-presentation, Hancock and Dunham (2001) claimed that
because CMC provides only textual information, participants can intentionally select positive and desirable cues (e.g. witty rapport) to present to their partners while masking or minimizing physical and behavioral cues not normally under the participants’ control (e.g. physical appearance). (p. 329)

A study by Lampe, Ellison and Steinfield (2006) asked university students how accurately their Facebook profile represented themselves by using a 1-5 Likert scale with ‘5’ indicating high agreement. The mean score was 4.16. Students also believed that the representation was positive, with a mean score of 4.19. In the same study, Lampe et al. (2006) asked students which groups they thought were viewing their Facebook profiles. At the top of the list were ‘Friends from high school’ at 93% and ‘Classmates’ at 86%. At the bottom of the list were ‘Professors’ at 5% and ‘Law Enforcement’ at 3%. Students may have a different opinion about what is a ‘positive’ representation of themselves if they knew that professors were viewing their Facebook profile.

In a coaching context, if a coach and a player were Facebook friends, how much regard should a coach give to that player’s Facebook activity? If an underage player posted pictures of himself or herself partying the night before an important contest, should these images affect the coach’s strategy or lineup for the big game? A student responded to a question in the study by Mazer et al. (2007) with an appeal to teachers: “Don’t lecture the students about things you may come across on their profile” (p. 12). Teens appear to regard what is written or posted online as less important than what is said or done in person. Is there an onus on teachers and coaches to agree with students and players that what happens on Facebook, stays on Facebook?
Chapter III: Methodology

Participants

In 2007, there were 182 public amateur baseball teams in Ontario that consisted of male players between the ages of 15-18 years old (Ontario Baseball Association, 2007). The population, therefore, consisted of 182 Ontario-based adult head coaches who coach young males between 15-18 years old. Creswell (2003) stated that “in many experiments, only a convenience sample is possible because the investigator must use naturally formed groups... as participants in the study” (p. 164). For studies with populations under 1,000, Neuman (2003) suggested that a large sampling ratio of 30% is necessary. Therefore, with 182 head coaches as the population, the convenience sample size is approximately 55 participants. Results of the study can be applied to the population of coaches in Ontario who coach 15-18 year old players, and can be possibly inferred to similar populations.

Participants were of varying ages and had different amounts of coaching experience. Over half (55.8%) of the respondents listed that they were between the ages of 40 and 49, while only 16.3% of respondents indicated that they were under the age of 39. The mean age of the coaches was 48.5 years old. The full breakdown of the coaches’ ages is detailed in Table 1. Most (74.4%) of the respondents indicated that they had been coaching the 15-18 year-old age group for between one and five years. However, the majority of the sample (62.8%) responded that they had been coaching baseball for between 6 and 15 years. Table 2 is a complete breakdown of the respondents’ baseball coaching experience. Additionally, 59 respondents (68.6%) indicated that they were a parent or primary guardian of a player currently playing on their team.
**Instrumentation**

The survey in the present study was designed to explore coaches’ usage rates of and opinions of text-based computer-mediated communication in their interpersonal interactions with their players. Frequency of use of CMC by young people is well documented. However, frequency of use of CMC by adults who interact with young people is undocumented. One of the main issues that guided the development of this survey was filling this documentation divide. Given the nature of CMC media as potentially prone to abuse, questions addressing impressions of the appropriateness of contact via CMC were included. Distribution and return of the survey took place over a two-month period.

The first section of the survey asked participants for demographic information. The demographic details (such as age and experience) are key variables which were used in the investigation of the hypotheses. The second section of the survey asked participants for their usage rates of the new CMC media. The third section of the survey asked participants to rate their level of comfort with the media. The final section of the survey asked participants to rate the appropriateness of communicating with players via the new media, and also their general impressions of each medium. See Appendix A for the complete survey.

**Validity**

The survey instrument supports both face and content validity. Face validity refers to whether the indicator (the survey) really measures the construct (the phenomenon being studied), while content validity addresses whether the full definition of the construct is being measured (Neuman, 2003). The purpose of the study was to
investigate coaches' use of and opinions of computer-mediated communication when interacting with their players. The survey did not request that coaches outline their personal usage rates of CMC, but specifically directed coaches to respond to the questions in the context of communicating with their players. Survey questions were typically introduced with the phrase ‘when you communicate with your players...’ Questions in the survey related to the goal of the study and they did not attempt to exceed the scope of the study. For example, players were not surveyed because their usage rate and opinions of CMC when they communicate with coaches were not of interest to the researcher at this time. Each of the questions contained in the survey was relevant to the main purpose of this exploratory study.

To increase support for face validity of the instrument, a pilot study was distributed. Two coaches were given a special version of the survey instrument (one online, one offline). The pilot survey asked the two participants to provide an explanation as to what they thought each question was asking them. Their responses were analyzed by the researcher in order to confirm whether the participants understood the question and if the question read as the researcher wanted it to read. In instances of discrepancy, the questions were redrawn and retested.

Unfortunately, since this study was exploratory, there were no preexisting indicators to which concurrent or predictive validity could be measured. Similarly, the lack of existing research on coaching communication in the context of CMC meant that construct validity (both convergent and divergent) was also difficult to measure.

*Procedures*
The study proceeded after ethics approval was obtained from Brock University’s Research Ethics Board. Once approval was obtained, the survey was input into www.surveymonkey.com and tested for errors. Woong Yun and Trombo (2000) outlined the advantages of web surveys over mail surveys, explaining that web surveys helped respondents’ cognition and allowed participants to answer in more detail. Schaefer & Dillman (1998) found that the length of open-ended questions increased four-fold if the survey was distributed electronically. Further, Kisesler and Sproull (1986) found that respondents concentrate more on the questionnaire when it is completed via a computer. The survey was also distributed in hardcopy form to some members of the sample (those who do not regularly use email). In their study of multimode survey distribution, Woong Yun and Trumbo (2000) concluded that “using multimode survey techniques improved the representativeness of the sample, without biasing results” (p. 6).

Contact information for head coaches within the population was sporadically available on team websites. In other instances, the coach was personally known to the researcher. Combining familiarity and public information, the researcher personally contacted as many head coaches as possible. Krishnamurthy (2004) suggested that unsolicited email from unknown senders, no matter how small the volume, is considered spam and is therefore unethical. Krishnamurthy (2004) recommended that all unknown potential participants first be asked for their permission before a survey is emailed. This tactic would require an initial email asking permission, a second email containing the survey link, and a third email to follow-up with the participant. Chesney (2006) outlined that approaching a potential participant in person (i.e., face-to-face) and asking permission to email a survey yielded a greater response rate than when permission was
asked via email. Chesney (2006) also found that response rate was lower when participants were emailed a general impersonal email.

Potential participants were emailed a general note of recruitment outlining the research and offering to send a link to the survey. If participants respond positively, they were sent a link to the survey. All emails were limited in personal interaction so as to avoid pressuring the potential participant. Potential participants who did not have a listed email address, and who instead had a listed telephone number, were mailed a survey hardcopy along with a self-addressed stamped return envelope. All participants were reminded that participation in the study was entirely optional and that completing the survey implied consent for the researcher to include the responses in the research. See Appendix B for the letter of informed consent.

Email reminders were sent two weeks after the original email. Kittleson (1997) found that follow-up emails doubled the response rate, but third and fourth emails returned few additional responses. Dillman (1991) reported the increased likelihood of response if the follow-up email contained more personal details and reinforced the participants’ importance to the study.

_Timing_

The distribution and collection of surveys took place during the month of October, which is after the amateur baseball season had concluded. Turner, Jordan, and Sagas (2006) asked NCAA coaches when they would prefer to be sent surveys:

Results showed that coaches prefer questionnaires to be sent during the post-season (68%), followed by pre-season (33.3%), and during the season (2.9%). Sports at the end of the academic year (i.e., baseball and softball) preferred
receiving questionnaires during the pre-season rather than the post-season. (p. 224)

For responses specific to NCAA baseball coaches, Turner et. al. (2006) found that there was only a moderate (13%) difference in opinion favouring pre-season surveys. In a study on coaching communication, distributing the survey post-season is preferable to pre-season because coaches will have their CMC usage rates and opinions fresh in their minds rather than having to remember the information across a winter.

Data Analysis

The quantitative data were entered into SPSS v. 13.0 and analyzed via descriptive statistics. Correlations were chosen to analyze the data because three of the hypotheses refer to relationships between variables. Correlations measure whether the demographic variables in the sample of coaches, such as age and coaching experience, were related to other variables, such as coaches’ usage rate, comfort level, and feeling of appropriateness for the media. Another statistic for data analysis, the T-test, was not used to analyze the data because it checks for differences in one variable between two or more groups. If the hypotheses referred to CMC usage rate differences between baseball coaches and hockey coaches, then T-tests would be the most appropriate statistical measure rather than correlations.

Significant correlations would indicate that there were relationships between the demographic and other variables, which would support or reject the hypotheses. The qualitative data were tagged and clustered into categories (Côté, Salmela, Baria, & Russell, 1993). In the present study, qualitative data was secondary to quantitative data and only emergent primary themes were explored in great detail.
Chapter IV: Results and Discussion

*Return Rate*

In 2007, there were 182 amateur baseball head coaches in Ontario who coached a team of players who were between the ages of 15 and 18 (Ontario Baseball Association, 2007). Within this population, 132 coaches were contacted via email and 7 coaches were contacted via regular mail. In total, 139 invitations to complete the survey were sent out (76.4% of the population). On the recommendation of Krishnamurthy (2004), coaches contacted via email were first asked whether or not they were interested in being sent a survey. Of the 132 coaches contacted via email, 94 indicated they would like to be sent a survey but there was no response from 38 coaches. The coaches who responded were sent a link to the online survey. After one week had elapsed from the sending of the first email, these coaches were sent a second email reminding them to complete the survey if they had not already done so. The coaches who did not respond to the first email were sent an email containing the link to the online survey two weeks after the original email contact. Krishnamurthy’s (2004) recommended procedure of introductory personal emails was followed, and all eligible coaches in the sample were sent two emails from the researcher.

There were 82 usable surveys completed online and 4 usable surveys were returned through regular mail. Online survey response rate was 62.1%, regular mail response rate was 57.1%, and the overall survey response rate was 61.9%. In total, 47.3% of the total population completed a usable survey, which exceeded Neuman’s (2003) recommended convenience sampling ratio of 30%.

*Qualitative Categorization*
In addition to ranking their usage rates and opinions, coaches were asked to explain their reasons for certain rankings in the usefulness, appropriateness, and comfort categories. For example, if coaches selected that a particular CMC medium was 'not at all useful' or 'inappropriate' they were provided with a text box to write more detail about their opinion. Only eight coaches chose not to write in any of the text boxes. Coaches were also given the opportunity at the end of the survey to list general comments on any specific medium or on CMC media in general. Seventy-seven coaches (89.5%) wrote additional comments. All qualitative results were secondary to quantitative results and only emergent primary themes were explored in detail.

The qualitative section of the current research was investigated using inductive coding. All qualitative responses were categorized by theme, using meaning categorization as explained by Kvale (1996). Meaning categorization allows “statements to be reduced to simple categories” so that each response can be determined to be a part of one category or another (Kvale, 1996, p. 192). Organizing the responses in this manner allows for the quantification of qualitative data and the reduction of sentences to simple codes (Kvale, 1996). Each response from the coaches was assigned a main dimension with a number of subcategories. The main dimensions were 'player-related', 'coach-related' and 'medium-related'. Within each of these main dimensions, subcategories divided the responses by theme (Bernard, 2000). The 'player-related' dimension included the subcategories 'perception of access', 'perception of usage rate', and 'respect for distance'. One respondent wrote of the usefulness of text-messages: “not everyone has a way to receive a text or instant message”. This response was coded 1.1 which indicates the first main dimension, player-related, and the first subcategory.
Another respondent wrote of the inappropriateness of social networking websites: “I believe social networking is for socializing and not to be used for team communication with individuals or the entire team”. This response was coded 2.3, which indicates the second main dimension, coach-related, and the third sub-category within that dimension, which is ‘perception of relevance’. Some responses were given more than one code if the response contained more than one theme. Once all of the responses were coded for the first time, the qualitative codebook was revised, and the responses were coded a second time using the revised codebook. The codebook was then revised once more and the responses were coded for a third and final time. See Appendix C for the final qualitative codebook.

Coaches’ general comments at the end of the survey were not coded because these responses were too open-ended and unstructured. Coaches were asked for their thoughts on the media and responses ranged from explaining how often they practice with their club to listing their team website address for the researcher to visit. However, applicable general comments were considered by the researcher in the discussion of the qualitative results.

Restatement of Hypotheses

The purpose of the study was to investigate coaches’ use of and opinions of new communication media in the context of the coach-player relationship. The sample consisted of male amateur baseball coaches in the province of Ontario who coached a competitive team of 15-18 year old males in 2007. The study had six hypotheses. The first hypothesis was that, excluding their use of email, coaches infrequently used new communication media, such as text-messages, instant messages, and social networking
websites, to communicate with their players. The second hypothesis stated that younger coaches use these new communication media more frequently than older coaches. The third hypothesis stated that more experienced coaches use these new communication media more frequently than coaches with little coaching experience. Next, the fourth hypothesis stated that younger coaches were more comfortable than older coaches when they use the new communication media. Finally, the fifth hypothesis stated that coaches used new communication media only for impersonal interactions, and the sixth hypothesis stated that coaches were generally not aware of the potential dangers of using the new media to interact with their teenage players.

Support for Hypotheses

Hypothesis One

Hypothesis 1 was supported. Coaches were asked to rank the frequency of their usage of each of the following six communication media in their interpersonal interactions with their players: phone, email, text-messaging, instant-messaging, a blog or team website, and social networking websites. Coaches could choose ‘1’ meaning no use of that medium, ‘2’ meaning rare use, ‘3’ meaning sometime use, or ‘4’ meaning frequent use. Approximately 37% of coaches indicated that they frequently use the phone to communicate with players, and 83.5% of coaches chose that they frequently used email to communicate with players. However, coaches’ use of newer means of communication, such as instant messaging and text messaging, was rare or non-existent. When communicating with their players, 62 coaches (76.5%) responded that they never used text-messaging, 65 coaches (81.3%) responded that they never used instant-messaging, and 72 coaches (86.7%) responded that they never used social networking
websites. Combined, the mean response for use of phone was 3.19 with a standard deviation of .719. The mean response for use of email was 3.73 with a standard deviation of .697. The combined mean response for the four other communication media, where a ‘4’ would indicate no use of any of the media and a ‘16’ would indicate frequent use of all the media, was 5.84 with a standard deviation of 2.15. Full results of this question are detailed in Table 3.

_Hypothesis Two_

Hypothesis 2 was not supported. Hypothesis 2 stated that younger coaches use new communication media more frequently than older coaches. The mean age of the sample was 45.84 years with a standard deviation of 7.83. Young coaches who coach players between 15 and 18 years old appear to be rare. The Pearson’s correlation coefficient between age and the combined frequency of use of the five new communication media (including email) was -.10 and was not statistically significant.

Qualitative results revealed that coaches who did not use the media did not use them for three main reasons: (1) they did not know how to use them, (2) they were not interested in them, or (3) they did not see the necessity for them. Responses from coaches of all ages and coaching experience ranged from the new media being unnecessary (“I have no need to learn these types of communication, as email serves all my needs in this area”), to coaches’ lack of interest in the medium (“Not interested in acquiring that knowledge”). Coaches also had concerns about the privacy of the new media. One coach wrote about social networking websites: “I understand they may be open to more than just a team setting. I would not want that situation. Some team things are for [the] team only”.
Hypothesis Three

Hypothesis 3 was not supported. For Hypothesis 3 to be supported, the coaches with few years of coaching experience, when responding to their frequency of use of the new media, should have selected ‘frequently’ or ‘sometimes’ more often than coaches with many years of coaching experience. The Pearson’s correlation coefficient between total years of coaching experience and the combined frequency of use of the five new communication media (including email) was .07 and was not statistically significant. The Pearson’s correlation coefficient between total years coaching 15-18 year-olds and the combined frequency of use of the five new communication media (including email) was .04 and was not statistically significant.

Hypothesis Four

Hypothesis 4 was not supported. Coaches were asked how comfortable they were when using new communication media to interact with their players. Coaches could select ‘Very Comfortable’, ‘Somewhat Comfortable’, ‘Somewhat Uncomfortable’, ‘Very Uncomfortable’ or ‘Never via CMC’. Hypothesis 4 stated that younger coaches are more comfortable than older coaches when using the new media. The Pearson’s correlation coefficient between age and the combined comfort level with the five new communication media (including email) was -.11 and was not statistically significant. There was only a small segment of the sample that was comfortable using any of the new media.

An equal number of coaches (85.9%) selected that they were very comfortable using either phone or email in their interactions with their players. Although 40 coaches (47.1%) listed that they never used text-messaging to interact with players, there were 17
coaches (20%) who listed that they were very comfortable communicating with players via this medium. Similarly, 41 coaches (48.2%) selected that they never used instant-messaging to communicate with their players, but 15 coaches (17.6%) listed that they were very comfortable using this medium. Full results for this question are listed in Table 4.

Hypothesis Five

Hypothesis 5 was supported. Hypothesis 5 stated that coaches use the new media only for impersonal interaction. For interactions such as communicating 'schedule changes' and 'game information/results', the majority of coaches (83.5% and 68.2% respectively) selected that they use email as the primary medium for this type of contact. Blogs/team websites were also a primarily used medium for the delivery of game information/results for 21 coaches (24.7%). For personal interactions such as 'praise/criticism', 'instruction', and 'get to know the player', the majority of coaches selected 'Never via CMC'. Additionally, there were no coaches who selected that they used text-messages as their primary method of communication for any type of interaction. Full results for this survey question are detailed in Table 5.

Hypothesis Six

Hypothesis 6 was not supported. Hypothesis 6 stated that coaches were unaware of the potential dangers of communicating with players via the new communication media. Most coaches do not use these media to communicate with players, which may tacitly indicate that coaches are aware of the potential dangers of personal interaction with the new media. Phone was selected by 80 coaches (94.1%) as a very appropriate medium by which to communicate with players, and email was selected by 71 coaches
(83.5%) as very appropriate. Instant-messaging was chosen by 27 coaches (33.7%) as at least somewhat inappropriate, while social networking websites were chosen by 37 coaches (47.4%) as at least a somewhat inappropriate medium by which to communicate with players. Full results for this question are listed in Table 6. Coaches’ qualitative responses provided further insight as to their knowledge of the dangers and appropriateness of the new media.

Coaches wrote about the importance of professionalism: “I feel I am intruding on their down time and I like to approach them in a more official and professional manner so they respect me as I push and develop them”. Another coach was worried about potential favouritism: “As not all players and coaches use these types of communication; it does not send a message of consistency to the players”. Coaches also wanted parents to know what they say to the players: “I want parents to know what I am saying to avoid any conflicts”. Coaches recognized that some media are for players’ exclusive use: “The last thing they want is their coach joining in on their own personal time and space” and “I feel that MSN and Facebook are ways that players communicate with each other and their friends - I don’t feel comfortable using these media to speak to them.”

Some coaches recognized the potential danger of blurring the authority boundaries: “I do not want to become like a buddy as hard decisions have to be made all season long. [I] would like to keep that little distance between us so I can be fair and objective” and “As a head coach I don’t think communicating with my team in this manner is appropriate in that I am their coach not a school buddy”.

Although most coaches were aware of the dangers of using the new media, there were a few responses that did not agree with the majority opinion. One coach wrote
about instant-messages: “Great out of the blue communication especially when someone has been struggling and you can catch them when their friends are not around.” Other coaches understand that young teenagers are frequently using non-email methods of communication in their daily lives: “Players have access daily and use these resources day-to-day” and “You know they will get the [text] message when they turn on the phone”. Some coaches were enthusiastic about using the new media and intend to use them while recognizing the potential dangers. One coach wrote: “If all the boys were [users] and agreed, then I could see myself using most of these media” and “The best thing that ever happened was when [I] was introduced [to] other means of communication”.

One coach, who was 47 years old (the mean age of respondents was 45.8) and with 2 years coaching players aged 15-18 (the mean years experience coaching this age group was 4.8), wrote a summation that reflects an average response recognizing the dangers of player-coach communication via new communication media:

Text-messaging, instant-messaging, and social networking websites are all accepted methods for my players to communicate with each other and they use these methods all the time. The problem I have with these types of communication is that in many cases you are communicating with individual players and not the entire team. My team is made up of 15 and 16 year old boys and for coaches to communicate in virtual privacy with an individual player would be considered by me and our association as highly inappropriate. I think that all communication need[s] to be team based and in full view of the parents.

Non-Hypothesized Data
Usefulness of the Media

Coaches responded that the most useful media were email and phone. Email was chosen by 50 coaches (58.8%) as an extremely useful medium, while phone was chosen as extremely useful by 27 coaches (31.8%). The least useful medium was instant-messaging, with 28 coaches (34.6%) selecting 'not at all useful'. Social networking websites were chosen by only 13 coaches (15.8%) as being either very useful or extremely useful. Full results for this question are listed in Table 7.

Coaches had a number of different reasons for explaining why some of the media were not at all useful. The two primary reasons for this response were that coaches were not interested in the medium, especially text and instant messaging, and that they believed most players did not have regular access to them. Coaches explained that email was extremely useful mostly because it allowed coaches to reach everyone simultaneously. The reach limitation of a medium was also a frequent explanation for why coaches did not use instant messaging or text messaging.

Perception of Player Use

Coaches were asked to choose how often they thought their players used each of the communication media when communicating with other young adults. Coaches believed that instant-messaging and social networking websites were being used very often, with 59 coaches (71.1%) believing that text-messaging is frequently used, and 41 coaches (50%) believing that social networking websites are frequently used. Full results of this question are detailed in Table 8.

Parent-Coach Use
It could be expected that coaches who are also parents of players on the team would be less likely to communicate with other players via new communication media. There were 59 coaches (68.6%) who identified themselves as the parent or primary guardian of one of the players on their team. The Pearson's correlation coefficient between parent-coaches and the combined frequency of use of the five new communication media (including email) was .179 and was not statistically significant.

*Contextualization of Results*

This research has added to computer-mediated communication (CMC) literature and to coach-player relationship literature. For the purposes of this research, the most relevant approach to studying CMC theory was the 'cues filtered in' approach. The 'cues filtered in' approach details how role-related and nonverbal communicative cues can be included or embedded in the messages exchanged via non-face-to-face contact. The role-related cues include the separation of authority between communicators, where the nonverbal cues include avatar images, text colour and length, and capitalization. Within the 'cues filtered in' approach to CMC theory, Walther and Parks (2002) explained the concept of social internet research. Social internet research uses concepts from interpersonal communication to describe and/or explain communication happening via media such as instant-messaging, email, and postings on social networking websites (Walther & Parks, 2002). Studying the coach-player relationship through these lenses can help both disciplines grow and progress.

Soukup (2000) explained that CMC literature must continue to evolve in order to continue to be relevant. Studies that integrate multiple media and multiple disciplines are especially valued. Soukup (2000) presented a call for future directions in CMC research:
First, researchers must integrate empirical research across disciplinary and methodological lines. A much more integrated 'body' of CMC research must begin to develop in order for effective theory to be built. […] As CMC utilizes more and more multi-media applications, the nature of multi-media CMC requires research. The research can take many forms, from controlled laboratory experiments to naturalistic ethnographic observations of the CMC context to rhetorical and critical analyses. (p. 418)

This study explained whether coaches frequently used these new text-based media, and whether or not they were useful or appropriate in communication with the coaches’ players. Walther and Parks (2002) wrote that in the absence of face-to-face contact “communicators substitute the expression of impression-bearing and relational messages into the cues available through the CMC” (p. 535). However, close to 80% of coaches responded that each of text-messages, instant-messages, and social networking websites were only ‘somewhat useful’ or even ‘not at all useful’ (See Table 6). Some coaches provided reasons that specifically refuted the ‘cues filtered in’ approach of Walther and Parks (2002). Coaches wrote that new media are unable to “convey the tone of a personal message the way a one-on-one phone call does” and that they are “impersonal… very cold.” These results seem to oppose researchers’ position that the ‘cues filtered in’ approach is the most effective approach to studying CMC theory. However, it is more likely that some coaches are simply not aware of the robustness of the media. The current study added empirical data to the coach-player relationship literature by investigating methods of communication between players and coaches.
A coach-player relationship between an adult and a young person is especially interesting because of the generation gap and the implicit boundaries in the relationship. Smith and Smoll (1972) wrote "much of the controversy that surrounds youth sports concerns the roles that adults play in the process... coaches not only occupy a central and influential position in the athletic setting but their influence can extend into other areas of the child's life as well" (p. 125). Studying how coaches communicate with their young players via CMC added needed empirical results combining the two fields of research.

Recent coach-player relationship literature still has gaps in the area of coach-player non-face-to-face communication. Ripken (2008) noted the dangers of parents and coaches communicating with each other exclusively through email and non-face-to-face contact, and cites that messages may be misinterpreted or be received as dictatorial. Hoch (2008) suggested that coaches should consider creating email distribution lists so that parents can be informed of team developments as a group. Though Ripken (2008) and Hoch (2008) understand the growing trend toward CMC, they do not address coaches communicating with players through these media. MacDonald (2004) wrote about young coaches who are coaching a team of teenage players for the first time. MacDonald (2004) listed methods by which coaches can moderate the small age difference, such as "make your age irrelevant by establishing authority and respect" and "you don't need 17-year old friends; be a coach and mentor, not a pal" (p. 90). But MacDonald (2004) did not address how to communicate with young players, even though the young coach and the young players likely use the same non-face-to-face media in their personal communication. What should the young coach do if the teenage player sends him a text message?
These gaps in the coach-player relationship literature have still not been addressed, but the current study attempted to add empirical data to the discussion. This research found that coaches know that players use and prefer new communication media such as social networking websites and instant-messaging (See Table 8). Although coaches know players use the media, coaches themselves choose not to (or do not know how to) communicate with the players via their preferred media. The present study identified coaches’ reasons for this difference. Some coaches claim that they are too old or indifferent to learn, while others believe that the media are not widely used. One coach explained that he may, perhaps one day, adapt: “I do not know how they work and I guess I am happy to send out emails. [A few] years ago it was always 12-18 phone calls, so I am happy with the emails. Maybe if someone showed me how to use something different, and if I liked it and it was easy to use, then I would maybe do it that way perhaps.”

Coaches who are aware of the new media have pressing concerns about them. Primarily, coaches understand that players need their private space and a coach infringing on this space may be considered unwelcome. Some coaches believe that the media are not private and that communication over some of the media (particularly social networking websites) is unsafe. One coach responded: “Players need to know that certain information exchanged between them and the coaches doesn’t go any further”. Another coach wrote that “It doesn’t work for me and at this age I want parents to know what I am saying to avoid any conflicts”. Coaches may be aware that communicating with players via new media can result in hyperpersonal discussions (Walther, 1996; Walther & Parks, 2002). These hyperpersonal discussions could easily become inappropriate.
Coaches also have more practical concerns about the media; believing that text-messages and instant-messages only reach one player at a time and that a coach would not receive confirmation if a player receives or read an email. One coach responded: “I feel that telephone conversation is the most effective way of communication at this time. If I speak with the player I am sure he received my message”. Though players may not ever use their home phone, communicating via this medium was still the preferred option for some coaches: “Phone is much easier to talk with players as you can get a better sense of their feelings on things by the tone and inflection in their voices. I feel it is just more personable!"

This research has contributed to the coach-player relationship literature by illustrating how and how often adult coaches communicate with their young players via new text-based communication media. Coaches no longer exclusively hold team meetings and interact face-to-face with their athletes. Diagrams depicting the communication process as two giant heads talking to each other (as in Martens, 1997) no longer illustrate the complete picture. Coaches are using CMC in their communication process and this study fills a gap in the literature by explaining how and how often. Now that coaches’ use of and impressions of new communication media are known, there are many future research opportunities.

**Limitations**

The present research contributes to the coach-player relationship literature and to the CMC literature but there are some limitations to the findings. Primarily, the results cannot be directly applied to other populations. Ontario-based male amateur baseball coaches who coach players between 15 and 18 years old are a unique population. Results
cannot be directly applied to, for example, female field hockey coaches in Arizona because these coaches communicate under different circumstances and with different variables. Arizona field hockey may be a year-round sport (whereas Ontario baseball is only six months) and females may have different communication patterns and opinions than males. Further, coach-player communication in a team setting would naturally be different than coach-player communication in an individual setting, such as in swimming or gymnastics. Though the results cannot be directly applied to other populations because of the variable differences, the results are an indicative ‘snapshot’ of coaches’ use of and impressions of the new communication media. The survey questions were phrased in such a way to avoid asking about ‘baseball’ and to give more emphasis on the respondent’s role as a coach. In their qualitative responses, no coach specifically mentioned baseball or gave any indication that the nature of the sport dictated their usage rate or opinion of any medium.

Future Directions

Almost every day there is a story in the news about text-messaging, instant-messaging, or social-networking websites. There is growing interest in CMC relationships and the use of CMC in everyday life. The role of social networking websites in power relationships is particularly interesting and understudied. There are no guidelines for whether or not bosses and employees, students and teachers, or coaches and players can interact online. People are required to use their own sense of morality and ethics in making these tough determinations. One software company boss responded to the ‘should an employee befriend her boss online’ question: “Everyone has a different definition of what is personal and private. There is a line there, but it’s a wiggly line”
(Diaz, 2008). That person has decided to accept friend requests - but not initiate them. A music teacher uses an effective analogy to explain his own ethical guidelines: “If I waved to the kids on the bus first, they would think I'm a pervert. But if they wave to me first, then it's OK for me to wave back” (Diaz, 2008). Academic research has not yet attempted to explain this grey area.

In Mississippi, a teacher was charged with sexual assault after her explicit text messages to a student became public knowledge (Wiener, 2008). Another teacher was arrested after a student-initiated text relationship became sexual (Collins, 2008). Text-messaging has since been banned in some school districts, but other areas promote student-teacher text message exchanges. CBC Radio recently held a discussion that hypothesized teacher-student text exchanges were effective teaching tools (Bowie, 2008). One Missouri teacher believes that “sites like MySpace help [teachers] connect with their students about homework, tutoring and other school matters” (Simon, 2008). There is clearly a difference of opinion about what is the 'best practice' for teachers' use of CMC in communicating with their students.

Professional athletes use text-messaging to communicate with each other but it is unknown whether elite or professional coaches interact with their players via the new media. College recruiters in the USA recently had their text-messaging activity banned by the NCAA after student-athletes complained about the frequent contact by scouts and coaches (Wieberg, 2007). After some recruiters opposed the ruling, the NCAA decided to uphold the ban on text-messaging and explained that text-messages were being used to circumvent existing limitations on recruiters’ use of phone contact, email, and visitations (Thomas, 2008). The NCAA may not be aware of the potential for hyperpersonal
communication between the student-athlete and the coach but the organization has reacted to an issue related to the developing media.

Future research ought to explore ethics-related academic literature (such as Owen & Zwahr-Castro, 2007) and attempt to create a general set of guidelines for authority figures who communicate regularly with young people. Guidelines could recommend that authority figures cut off all contact with teenagers because of the potential minefield. Or guidelines could recommend that authority figures embrace CMC as the primary method by which young people communicate and learn new knowledge. General ‘lessons learned’ documents could be included with coaching education modules and with teacher training tools. One set of proposed ethical guidelines regarding Facebook use in the teacher-student relationship was posted on a Facebook group by a professor from the University of Michigan (Faculty Ethics on Facebook, 2008). See Appendix D for the list of suggested guidelines.

Future research should explore teenagers’ opinions of adults and authority figures communicating with them via CMC. A similar study to the present research could ask teen players how and how often they interacted with their adult coaches via the new CMC media. Asking the teenage players which medium they would prefer to use in their interactions with coaches, and which media were inappropriate, would be a revealing study and would also help coaches understand their players better (An & Frick, 2006). Coaches could consider implementing a pre-season questionnaire for players that asks them which medium they prefer to use in their team-related communication.

Researchers could easily replicate this study and apply it to another sport. Applying the survey to an indoor sport may reveal that the variable differences in the
sports (such as season-length and amount of contact) are inconsequential. However, researchers should take care to ensure their studies are not too sport specific. Asking sport-specific questions would be unnecessary and would detract from the generalizability of the results and the overall practical application of the study.

Academia is lagging behind popular developments in CMC. Livingstone (2003) wrote: “Research on the supposed dangers of the internet has attracted considerable public attention and concern, although as yet neither question has been substantially researched empirically” (p. 150-151). Opportunities for future research in area of coach-player interaction via CMC can include understanding coaches’ motivations for communicating with teenage players (Henderson & Gilding, 2004) and how players interpret or accept a coach’s entry into “their” space (Livingstone, 2008).

Coaches choose to communicate with players via different methods. Some coaches believe that they have to understand a player in order to be an effective coach. Famous football coach Vince Lombardi is quoted as saying “Coaches who can outline plays on a blackboard are a dime a dozen. The ones who win get inside their players and motivate” (Caton, 1999, p. 10). Other coaches believe the role of a coach is impersonal. Famous baseball coach Whitey Herzog is quoted as saying “I’m not buddy-buddy with the players. If they need a buddy, let them buy a dog” (Caton, 1999, p. 16). Similar to the continued debate around the most effective coach-player relationships, there will be further research that discusses and debates the most effective use of CMC in interpersonal relationships. Soukup (2000) claimed that “CMC will continue to change more quickly than scholarship can be published” (p. 422). Researchers, like coaches trying to understand their players, will struggle to keep up.
References


Bergmann Drewe, S. (2002). The coach-athlete relationship: How close is too close?

*Journal of the Philosophy of Sport, 29*, 174-181.


Table 1.

*Age of Respondents (n = 86)*

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<th>Age Range</th>
<th>Number of Respondents</th>
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Table 2.

*Coaching Experience (n = 86)*

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Table 3.

*Frequency of Medium Use*

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<td>1</td>
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<td>10</td>
<td>21</td>
</tr>
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<td>4</td>
<td>3</td>
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Table 4.

*Coaches' comfort with CMC media*

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<td>12</td>
<td>9</td>
<td>48</td>
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Table 5.

**CMC medium used most frequently to deliver certain types of information**

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<th>Schedule Changes ((n = 85))</th>
<th>Game Info / Results ((n = 85))</th>
<th>Praise / Criticism ((n = 83))</th>
<th>Instruction ((n = 85))</th>
<th>Get to know the player ((n = 84))</th>
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<td>1</td>
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<td>2</td>
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<td>49</td>
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Table 6.

Coaches' opinion of CMC medium appropriateness

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Table 7.

Coaches’ perception of CMC usefulness

<table>
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<th>Medium</th>
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<th>Somewhat Useful</th>
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<td>3</td>
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<tr>
<td>Instant-Message ((n = 81))</td>
<td>28</td>
<td>36</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Blog/Team Website ((n = 84))</td>
<td>13</td>
<td>27</td>
<td>29</td>
<td>15</td>
</tr>
<tr>
<td>Social Network ((n = 82))</td>
<td>31</td>
<td>38</td>
<td>10</td>
<td>3</td>
</tr>
</tbody>
</table>
Table 8.

*Coaches' perception of players' CMC use*

<table>
<thead>
<tr>
<th>Medium</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone ($n = 85$)</td>
<td>1</td>
<td>30</td>
<td>37</td>
<td>17</td>
</tr>
<tr>
<td>Email ($n = 85$)</td>
<td>0</td>
<td>7</td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>Text-Message ($n = 84$)</td>
<td>2</td>
<td>8</td>
<td>35</td>
<td>39</td>
</tr>
<tr>
<td>Instant-Message ($n = 83$)</td>
<td>4</td>
<td>3</td>
<td>17</td>
<td>59</td>
</tr>
<tr>
<td>Blog/Team Website ($n = 82$)</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>Social Network ($n = 82$)</td>
<td>9</td>
<td>7</td>
<td>25</td>
<td>41</td>
</tr>
</tbody>
</table>
Appendix A

Coaching Communication Survey

1) What is your age? _____

2) What is your gender? (circle one): Male Female

3) How many years have you been a baseball coach? ______

4) In 2007, did you coach baseball players between the ages of 15 and 18? Yes No

5) How many years have you coached baseball players within this age group? _____

6) Are you the parent or primary guardian of a player from your team? Yes No

When answering the next questions please keep in mind the following computer-mediated communication (CMC) mediums:

x ‘Text Message’ refers to communication sent via cellphones and blackberries
x ‘Instant Message’ refers to communication sent via internet programs such as MSN
x ‘Blog/Team Website’ refers to communication sent via internet websites such as LeagueLineup and Blogspot.
x ‘Social Networking Website’ refers to communication sent via internet websites such as Facebook and Myspace.

7) When communicating with your players how often do you use each of the following mediums?

1 – Never 2 – Rarely 3 – Sometimes 4 – Frequently

• Note – circle one number for each medium

<table>
<thead>
<tr>
<th>Medium</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td></td>
<td></td>
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<tr>
<td>Email</td>
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<tr>
<td>Text-Message</td>
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<td></td>
</tr>
<tr>
<td>Instant-Message</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blog/Team Website</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Networking Website</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8) When you communicate the following types of information to your players, which computer-mediated communication (CMC) medium have you used most frequently to deliver each type of information?

- Note - circle one for each category.

- Note – if you have never used CMC to communicate a particular type of information you should circle ‘Never via CMC’ for that category

<table>
<thead>
<tr>
<th>Schedule Changes</th>
<th>Email</th>
<th>Text-message</th>
<th>Instant-message</th>
<th>Blog/Team Website</th>
<th>Social Networking Website</th>
<th>Never via CMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game Information/Results</td>
<td>Email</td>
<td>Text-message</td>
<td>Instant-message</td>
<td>Blog/Team Website</td>
<td>Social Networking Website</td>
<td>Never via CMC</td>
</tr>
<tr>
<td>Praise/Criticism</td>
<td>Email</td>
<td>Text-message</td>
<td>Instant-message</td>
<td>Blog/Team Website</td>
<td>Social Networking Website</td>
<td>Never via CMC</td>
</tr>
<tr>
<td>Instruction</td>
<td>Email</td>
<td>Text-message</td>
<td>Instant-message</td>
<td>Blog/Team Website</td>
<td>Social Networking Website</td>
<td>Never via CMC</td>
</tr>
<tr>
<td>Get to know the player</td>
<td>Email</td>
<td>Text-message</td>
<td>Instant-message</td>
<td>Blog/Team Website</td>
<td>Social Networking Website</td>
<td>Never via CMC</td>
</tr>
</tbody>
</table>

9) How often do you think your players use each of the following mediums to communicate with their peers?

1 – Never  2 – Rarely  3 – Sometimes  4 – Frequently

- Note – circle one number for each medium

<table>
<thead>
<tr>
<th>Phone</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Text-Message</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Instant-Message</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Blog</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Social Networking Website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
10) Rate the usefulness of each of the following mediums for coaches in their communication with their players

1 – Not at all Useful  2 – Somewhat Useful  3 – Very Useful  4 – Extremely Useful

* Note – circle one number for each medium

<table>
<thead>
<tr>
<th>Medium</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
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<tr>
<td>Email</td>
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<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Text-Message</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Instant-Message</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Blog/Team Website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Social Networking Website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

11) If you answered ‘1’ to any of the above, please explain why you feel that particular medium is not at all useful for coaches in their communication with their players

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

12) If you answered ‘4’ to any of the above, please explain why you feel that particular medium is extremely useful for coaches in their communication with their players

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
13) Please rate your level of comfort while using the following mediums to communicate with your players

1 - Very Uncomfortable   2 - Somewhat Uncomfortable   3 - Somewhat Comfortable   4 - Very Comfortable

- Note - circle one number for each medium

- Note - circle ‘N/A’ if you have never used that particular medium to communicate with your players

<table>
<thead>
<tr>
<th>Medium</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>Email</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>Text-Message</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>Instant-Message</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>Blog/Team Website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>N/A</td>
</tr>
<tr>
<td>Social Networking Website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>N/A</td>
</tr>
</tbody>
</table>

14) If you answered ‘1’ or ‘2’ to any of the above, please explain why you are uncomfortable using those particular mediums

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

15) If you answered ‘N/A’ to any of the above, please explain why you have never tried that particular medium to communicate with your players

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
16) In your opinion, how appropriate is it for you to communicate with your players via the following mediums

1 – Very Inappropriate  2 – Somewhat Inappropriate  3 – Somewhat Appropriate  4 – Very Appropriate

- Note – circle one number for each medium

<table>
<thead>
<tr>
<th>Medium</th>
<th>1</th>
<th>2</th>
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<th>4</th>
</tr>
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<td>Phone</td>
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<td>4</td>
</tr>
<tr>
<td>Text-Message</td>
<td>1</td>
<td>2</td>
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<td>4</td>
</tr>
<tr>
<td>Instant-Message</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Blog/Team Website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Social Networking Website</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

17) If you answered ‘1’ or ‘2’ to any of the above, please explain why you think it is inappropriate to use those particular mediums when communicating with your players

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

18) Please outline your opinions of the following CMC mediums. You can address each one individually or discuss them as a group.

Email
Text-Messaging
Instant-Message
Blog/Team Website
Social Networking Website

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

THANK YOU!
Appendix B

Informed Consent Letter

Date: October 2007  
Project Title: Coaches use of and impressions of computer-mediated communication (CMC) mediums

Principal Investigator: Kevin Lawrie, Graduate Student  
Faculty Supervisor: Phil Sullivan, Associate Professor  
Department of Physical Education and Kinesiology  
Brock University  
647-880-3163 Kevin.Lawrie@brocku.ca  

INVITATION

You are invited to participate in a study that involves research. The purpose of this study is understand coaches use of new communication mediums (i.e., email, instant messaging, text messaging, facebook, blogs) in their interpersonal interaction with their players.

WHAT'S INVOLVED

As a participant, you will be asked to complete a survey about your use of new communication mediums. You will also be asked to outline some of your opinions about these new communication mediums. Participation will take approximately ten-to-fifteen (10-15) minutes of your time.

POTENTIAL BENEFITS AND RISKS

Possible benefits of participation include understanding how and why coaches use new communication mediums when interacting with young players. Understanding how coaches use these mediums may lead to more effective communication between the coach and player and an improved coach-player relationship. There are no known or anticipated risks associated with participation in this study.

CONFIDENTIALITY

All information you provide is considered confidential; your name will not be included or, in any other way, associated with the data collected in the study. Although anonymous quotations may be used, you will not be identified individually in written reports of this research. Data collected during this study will be stored in a locked filing cabinet. Data will be kept for five (5) years after which time the data will be destroyed. Access to this data will be restricted to the principal investigator.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study at any time and may do so without any penalty or loss of benefits to which you are entitled.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available at the conclusion of the research by contacting the principal investigator.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the Principal Investigator or the Faculty Supervisor using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University (file #07-020). If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent by not submitting the survey.

Submitting a completed survey to the principal investigator implies your consent
Appendix C

Qualitative Codebook

1. Player-related
   1.1 Perception of Access (i.e. most players don’t have it)
   1.2 Perception of Usage Rate (i.e. most players don’t use it)

2. Coach-related
   2.1 Preference
      2.1.1 Interest (i.e. not interested, haven’t tried it, don’t use it)
      2.1.2 Access (i.e. don’t have it)
   2.2 Problems with Usage (i.e. don’t know how to use it, unfamiliar, too complicated/time-consuming)
   2.3 Perception of Relevance (i.e. not necessary, don’t need it, it’s not for adults)

3. Medium-related limits
   3.1 Limit: timeliness (i.e. communiqués are not received in a timely manner)
   3.2 Limit: impersonal (i.e. lean medium - little detail can be communicated)
   3.3 Limit: reach
      3.3.1 Reach too few (i.e. inability to inform everyone (player and parents) simultaneously)
      3.3.2 Reach too many (i.e. information open to others outside the team, not confidential)
   3.4 Limit: inappropriate
      3.4.1 Too invasive (i.e. players should have own space)
      3.4.2 Too close (i.e. parents wouldn’t be aware of one-on-one personal interaction, not transparent)

9. Player-related (positive)
   9.1 Perception of Access - (i.e. most players have it)
   9.2 Perception of Usage rate - (i.e. most players use it)

8. Coach-related (positive)
   8.1 Preference - (i.e. prefer to use it)
   8.2 Ease of use - (i.e. easy to use it)
   8.3 Relevance - (i.e. necessary to use it)

7. Medium-related advantages
   7.1 Advantage: timeliness (i.e. know that they player will get it)
   7.2 Advantage: detailed (i.e. able to provide lots of detail)
   7.3 Advantage: reach (i.e. able to reach everyone simultaneously)
   7.4 Advantage: permanence (i.e. able to keep a permanent electronic record)
   7.5 Advantage: break down boundaries (i.e. better able to connect with the player)
Appendix D

Proposed Teacher-Student Facebook Guidelines

Mark Clague
University of Michigan
October 1st 2008

1. Keeping official course activities in official online tools and not on Facebook.

2. Never requiring students to participate in Facebook or having Facebook participation influence a course grade. (An exception is for class projects that might use Facebook for research purposes [such as a statistical analysis of how Facebook groups grow and fade] and make their connection to a course explicit.)

3. Not friending students unless they request the connection. Not poking students. Never pressuring students to friend the professor (such as repeated mention of a faculty profile in class).

4. Accepting friend requests from all students (unless the instructor makes the decision not to friend students at all).

5. Not looking at student profiles unless the faculty member has been friended by the student and even then using Facebook information judiciously and for educational purposes. In short, not spying on students, but getting to know them better when invited to do so.

6. Faculty members should avoid association with Facebook groups with explicit sexual content or views that might offend or compromise the student / teacher relationship. This guideline must be applied sensitively within the context of a diverse educational environment in which both students and faculty practice tolerance and accept competing views.

7. Taking extreme care with privacy settings and faculty profile content to limit profiles to information relevant to educational purposes. A broad variety of information may be appropriate, however, given the area of expertise / subject, the local customs of an instructor's school, and the personal dynamics of his or her classroom. Content should be placed thoughtfully and periodically reconsidered to maintain this educational standard.

8. Exercising appropriate discretion when using Facebook for personal communications (with friends, colleagues, other students, etc.) with the knowledge that faculty behavior on Facebook may be used as a model by our students.

9. Never misrepresenting oneself by using a false name or persona on Facebook, unless that characterization is connected explicitly with the real identity of the instructor.

10. Considering that the uneven power dynamics of the academy in which professors have authority over students, continue to shape the online relationship, even when the network tool (such as Facebook) is apparently democratic.

11. Keeping wall posts and other Facebook communication in concord with standard ethical practices of the educational relationship.

12. Never posting official course communication (feedback on an assignment, for example) in a public area of Facebook. Feedback might be given through private Facebook messaging when the student has asked a question via Facebook or a previous friend connection exists.

These guidelines are intended to be points for consideration and not hard and fast rules or laws of faculty behavior. Individual faculty must make individual decisions about the best practices in specific classrooms and educational contexts, always following the principle of nurturing student learning.