

STUDENT PERCEPTIONS OF INSTRUCTOR IMMEDIACY
IN ONLINE PROGRAM COURSES

by

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DEDICATION

I dedicate this work to my wife, Hyun Jung and my three amazing children Rylee, Anthony and Ryan. Additionally, I also dedicate this to my parents who continuously reminded me to “just get it done!”

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ABSTRACT

The first online course was taught over 30 years ago. Over that time, instructors have primarily used text-based asynchronous communication in the online courses they teach. However, advances in technology over the last ten years have given rise to more opportunities to use new synchronous and semi-synchronous communication technologies (e.g., video, mobile and social networking technologies) in online courses. These advances in technology are likely to not only influence how instructors today communicate in the online courses they teach but ultimately influence their instructor immediacy. Instructor immediacy is the degree of psychological closeness students perceive there to be with their instructor. Overall, though, there has been very little research conducted on instructor immediacy in online learning. Given this, the purpose of this study was to explore behaviors that students perceive to contribute to or detract from instructor immediacy. More specifically, I conducted a sequential explanatory mixed methods research study to investigate student perceptions of instructor immediacy in online programs. Quantitative results found significant and moderate correlations between instructor immediacy and student learning and course satisfaction. Additionally, five themes emerged in the qualitative phase of the study. Synthesis of the results led to seven key findings.

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LIST OF ABBREVIATIONS

| | |
|------|---|
| BAT | Behavior Alteration Techniques |
| BII | Behavioral Indicators of Immediacy |
| CMIB | Computer-Mediated Immediacy Behaviors |
| CoI | Community of Inquiry |
| GI | General Immediacy measure |
| KMO | Kaiser-Meyer-Olkin measure of sampling adequacy |
| LMS | Learning Management System |
| NBI | Nonverbal Immediacy Behaviors measure |
| NIM | Nonverbal Immediacy Measure |
| O | Other |
| P | Person |
| RNIM | Revised Nonverbal Immediacy Measure |
| VIB | Verbal Immediacy Behaviors Indicators |

CHAPTER ONE: INTRODUCTION

Between 2012 and 2015, the total enrollments in higher education in the United States dropped by 3.2% to 20,266,367 students while during that same period, the number of students taking distance education courses grew by 11% reaching a total of six-million students, representing 29.7% of all students in higher education in the Fall of 2015 (Allen & Seaman, 2017). Due to this growth, coupled with decreases in enrollments overall, universities have been looking to online learning as a way to increase enrollments while also reaching previously underserved communities. Online learning has become popular for students as well, particularly those who cannot attend traditional face-to-face classes, due to its potential to provide “flexible access to content and instruction at any time, from any place” (Means, Toyama, Murphy, Bakia, & Jones, 2010, p. 1).

Fundamental to the continued growth of online learning is the design and delivery of high quality courses that provide an engaging and effective learning experience. In the early days of online learning, online instruction was criticized due to concerns about the quality of education offered (Aragon, Johnson, & Shaik, 2002) and perceptions of a lack of socio-emotional interaction between learners and between learners and their instructors in text-based, asynchronous environments (Daft & Lengel, 1986; Kemp & Rutter, 1986). However, studies have found that online learning can provide opportunities for socio-emotional interaction, even in text-based, asynchronous courses (e.g., Walther, 1992) and that online learning can be as effective as traditional face-to-face classes in meeting educational outcomes (Aragon et al., 2002; Dendir, 2016; Kissau, 2015; Means et al.,

2009). Initiatives to improve online course design, such as the Quality Matters framework (Shattuck, 2012), have helped improve learning outcomes, student satisfaction, and student retention in online courses (Martin, Ndoeye, & Wilkins, 2016). Despite many improvements in online course design, online learner retention rates still remain significantly lower than face-to-face courses across disciplines and universities (Allen & Seaman, 2013; Glazier, 2016); while the numbers vary, retention rates for online courses are between 10% and 35% lower than in-class retention rates (Glazier, 2016; Smart & Saxon, 2016).

One explanation for lower retention rates in online courses could be the sense of isolation and lack of guidance that students often report feeling when courses have low levels of student-instructor interaction (Cole, Shelley, & Swartz, 2014; Jackson, Jones, & Rodriguez, 2010; Kim, Liu, & Bonk, 2005; Kruger-Ross & Waters, 2013; Richardson, Koehler, Besser, Caskurlu, Lim, & Mueller, 2015; Tichavsky, Hunt, Driscoll, & Jicha, 2015). Research suggests that student-instructor relationships can promote student retention, engagement, and overall academic success (Andersen, Lampley, & Good, 2013; Kim & Lundberg, 2016). By building personal relationships with students, instructors can convey a sense of empowerment and mutual investment in students' education (Crosnoe, Johnson, & Elder, 2004; McKinsey, 2016). Students report wanting instructors who are willing to listen to their concerns, provide them with timely and high quality feedback, and provide them with guidance on how they can improve (Gaytan, 2015; Lee, Srinivasan, Trail, Lewis, & Lopez, 2011; Vesely, Bloom, & Sherlock, 2007). At the heart of the matter is that students want instructors who they perceive are approachable (Martinez-Caro, Cegarra-Navarro, & Cepeda-Carrion, 2015; McKinsey,

2016). When students feel that their instructors are approachable, they are more motivated to persist and succeed in a course (Glazier, 2016). One way in which instructors communicate that they are approachable to their students is through immediacy (Ellis, 1995).

Benefits of Instructor Immediacy

Immediacy refers to communication behaviors that reduce social and psychological distance between people (Mehrabian, 1971, 1981). Immediacy research has a long history in the field of communication as well as in the field of education (Witt, Schrodt, & Turman, 2010; Witt, Wheelless, & Allen, 2004). Studies have consistently found a positive relationship between instructor behaviors and student learning (e.g., Christensen & Menzel, 1998; Christophel, 1990; Gorham, 1988; King & Witt, 2009; McDowell, McDowell, & Hyerdahl, 1980; Mottet & Beebe, 2002; Witt & Wheelless, 2001), learner satisfaction (e.g., Arbaugh, 2010; Ghamdi, Samarji, & Watt, 2016; Hackman & Walker, 1990; Henning, 2012; Jaasma & Koper, 1999; LeFebvre & Allen, 2014), and intent to persist in their coursework (Witt, Schrodt, Wheelless, & Bryand, 2014). Similar effects, though varying in degree, have been found across ethnic groups (e.g., Neuliep, 1995), across cultures (e.g., McCroskey, Richmond, Sallinen, Fayer, & Barraclough, 1995, 1996; Santilli, Miller, & Katt, 2011; Zhang, Oetzel, Gao, Wilcox, & Takai, 2007), across genders (Menzel & Carrell, 1999;) and academic disciplines (e.g., Kearney, Plax, Wendt-Wasco, 1985; Moore, Masterson, Christophel, & Shea, 1996; Ni & Aust, 2008). Research has also found that instructor immediacy relates to improved student compliance with instructor requests (Burroughs, 2007; Gorham & Christophel, 1992; Miller, Katt, Brown, & Sivo, 2014), improved class attendance (Rocca, 2004) and

participation (Roberts & Friedman, 2013; Rocca, 2009), decreased anxiety and communication apprehension (Chesebro & McCroskey, 1998, 2001; Ellis, 1995;) improved perceptions of instructors as caring, competent, trustworthy, and credible (e.g., Guerrero & Miller, 1998; Kerssen-Griep & Witt, 2012; Schrodtt & Witt, 2006; Teven & Hanson, 2004; Thweatt & McCroskey, 1998) and higher perceptions of homophily and interpersonal attraction (e.g., Edwards & Edwards, 2001; Rocca & McCroskey, 1999). In addition, it has been found that immediacy is a skill that can be taught (Jensen, 1999).

Instructor Immediacy and Online Learning

Although there has been extensive research on instructor immediacy in the traditional classroom, there has been little research conducted on instructor immediacy in online learning contexts. Further, the research that has been conducted on instructor immediacy in online learning contexts has focused primarily on instructor immediacy through the use of asynchronous, text-based channels of communication (i.e., via email, discussion boards, and written feedback on assignments) (Arbaugh, 2001; Baker, 2010; Baker & Woods, 2004; Carrell & Menzel, 2001; Campbell, 2014; Fahara & Castro, 2015; Ghamdi et al., 2016; Kucuk, 2009; LaRose & Whitten, 2000; Melrose & Bergeron, 2007). For instance, Fahara and Castro (2015) looked into immediacy behaviors of instructors and teaching assistants in an online graduate program at a Mexican university. They conducted a content analysis of discussion boards and interviewed instructors and their teaching assistants. They concluded that course design was an important factor in promoting immediacy and identified several types of communication that the instructors thought promoted immediacy, including: replying immediately to students' questions, being empathetic to students, addressing students casually, asking about personal details

such as health, engaging low-participation students, and treating student questions with importance.

In another recent study, Campbell (2014) pointed out that few researchers have focused specifically on instructor immediacy in online learning environments. In his study, Campbell used a semi-experimental design to look at the level of student participation in discussion boards in an online course. In the discussion boards, half of the class received a higher immediacy treatment from their course teaching assistants while the other half received “normal” levels of immediacy from their teaching assistants. No statistically significant differences were found in the frequency of postings or course outcomes between the two groups. Campbell attributed the lack of any difference between the groups to possibly being a result of a weak manipulation of instructor immediacy.

As demonstrated in the above two examples, studies that have looked at immediacy in online learning have typically focused on formal instructor and student interactions using asynchronous, text-based communication, particularly on discussion boards and have resulted in mixed results. Online immediacy studies have also tended to focus on how instructor immediacy is related to the development of social presence on discussion boards (e.g., Arbaugh, 2010; Baker, 2010; Conaway, Easton, & Schmidt, 2005; Ni & Aust, 2008; Shutt, Allen, & Laumakis, 2009), a related but different construct from immediacy. The difference between immediacy and social presence is not clear in the online education literature. The next section explores this distinction.

Distinguishing Between Immediacy and Social Presence

Instructor immediacy is related to social presence, as well as instructor social presence, and teaching presence (cf. Garrison et al., 2000; Richardson & Lowenthal, 2017; Short, Williams, & Christie, 1976). Social presence is a popular construct used to understand how people socially communicate in online learning environments (Anderson, Rourke, Garrison, & Archer, 2001; Garrison, Anderson, & Archer, 2000; Gunawardena & Zittle, 1997; Swan, 2003). Social presence dates back to the 1970s when Short et al. (1976) introduced the construct. Short et al. conceptualized social presence as the “degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships...” (p. 65). Garrison et al. (2000) popularized social presence by including it as one of the three presences of their Community of Inquiry (CoI) framework. The CoI consists of three core elements: teaching presence, cognitive presence, and social presence. However, CoI research has centered primarily on the development of social presence through positive student-student interaction within a course (Garrison & Arbaugh, 2007). Although instructors are considered part of the dynamic, their interaction with students has been largely minimized in the CoI literature (Pollard, Minor, & Swanson, 2014; Swan, 2003). More recently, researchers have highlighted the importance of instructor social presence (Arbaugh, 2010; Pollard et al., 2010; Richardson & Lowenthal, 2017).

Immediacy and social presence have often been conceptualized as essentially the same thing in the social presence literature. For example, Gunawardena and Zittle (1997) developed the social presence scale based on immediacy, stating that it “embodied immediacy” (p. 15) and “is based on the concept of ‘immediacy’” (p. 16). Swan (2003)

considered immediacy and social presence to be essentially the same thing as well. For example, she stated that “Research on *social presence/immediacy* [emphasis added] in online environments... has accordingly concerned itself with the immediacy behaviors of all discussion participants” (p. 15). Short et al. (1976) also recognized some similarities between the two constructs. They described immediacy as being particularly relevant to social presence theory and distinguished between two types of immediacy: social immediacy and technological immediacy (p. 73). Social immediacy, they claimed, is the relational aspects of communication that are conveyed through implicit verbal and non-verbal cues, as conceptualized by Weiner and Mehrabian (1968) and Mehrabian (1966, 1969, 1971, 1972, 1981). Technological immediacy, Short et al. asserted, is the objective immediacy which is afforded by the medium itself such that “the more information a medium can transmit, the greater its immediacy” (p. 73). They pointed out that technological immediacy may seem similar to their own theory of social presence (p. 73).

In order to distinguish between the two theories, Short et al. argued, like Mehrabian (1981) later did, that the selection, itself, of a communication channel by a communicator may be construed by the addressee as connoting more or less approach-avoidance and like-dislike. For example, if one were to telephone another who is close-by, the other person might construe that as nonimmediate behavior by the addressee. Conversely, telephoning someone who is physically very distant would not carry such connotations since it is a matter of practicality. Thus, the distinction made is that, with the immediacy construct, an addressee makes judgements as to the intentions and motivations a communicator has when a medium of communication is selected, and used, and that these construe attitudes of like or dislike; conversely, the communicator is

motivated to select one medium over another based on the desired degree of immediacy or nonimmediacy conveyed (i.e., the desired level of positive or negative socio-emotional interaction) with the addressee. Social presence, Short et al. claimed, does not carry such connotations. They asserted that the social presence afforded by a telephone would be the same whether someone is nearby or distant – unless the quality of the sound is poor (p. 73).

Short et al.'s distinction is that while both constructs focus on the ability of the medium to convey socio-emotional cues through implicit verbal and nonverbal communication, immediacy-nonimmediacy is a construct of positive-negative affect (Gottlieb, Wiener, & Mehrabian, 1967; Wiener & Mehrabian, 1968) where coded and decoded implicit messages are interpreted to signal like/dislike and approach/avoidance; on the contrary, social presence is a neutral construct focusing on the level of “salience” of the other, necessary to task achievement, which is affected by the degree to which the medium affords the communication of socio-emotional cues (Short et al., 1976). In other words, social presence, as conceived of by Short et al., is not concerned with *how* positive or negative feelings are communicated across a medium or *how* the medium affects positive and negative feelings, intended or perceived. From Short et al.'s perspective, social presence is focused on the nature of the task where the socio-emotional cues required for the task achievement are viewed in utilitarian terms. This contrasts with immediacy theory which *is* focused on *how* the implicit aspects of communication reveal and convey information about feelings of like and dislike.

The concept of social presence, even from its inception with Short et al., has been confounded in many ways with the concept of immediacy. Researchers in the social

presence and immediacy literature have pointed out a need to more clearly define social presence and distinguish it from other constructs such as immediacy (Lowenthal, 2009; Richardson & Lowenthal, 2017). Moreover, social presence and CoI researchers have also pointed out that there has been a minimization of the unique role that instructor's play in online learning (Arbaugh, 2010; Pollard et al., 2014; Richardson & Lowenthal, 2017). Such researchers have pointed out a need to distinguish between *teaching* presence, one of the three elements of the CoI framework and *instructor* social presence (Arbaugh, 2010; Richardson et al., 2015). Richardson et al. (2015) described instructor social presence as “emerging from the intersection of social presence and teaching presence” and being “the specific actions and behaviors taken by the instructor that projects him/herself as a real person... [and] is more likely to be manifested in the ‘live’ part of courses—as they are being implemented—as opposed to during the course design process” (p. 259). In the immediacy literature, Arbaugh (2010) presented a similar conceptual framework in which formal instructor roles are related to teaching presence and informal instructor roles are related to instructor immediacy behaviors, as depicted in Figure 1.1 below.

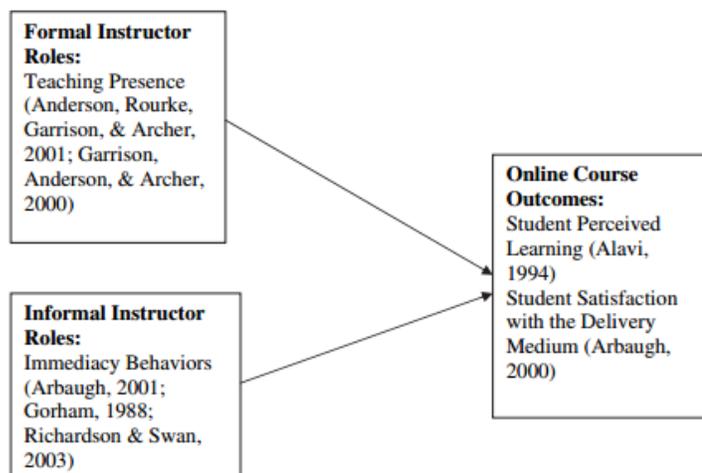


Figure 1.1 Formal and informal instructor roles (Arbaugh, 2010, p. 1235)

Both the immediacy and the social presence literature have pointed to either immediacy or instructor presence as an informal role of the instructor that takes place during the instructional process. While the distinction between immediacy and social presence is still not clear, what is clear is that there is a need for more research on the unique role of the instructor in online courses and how their communication behaviors during course delivery contribute to student learning and satisfaction.

Statement of the Problem

It has been firmly established that instructor immediacy contributes to student learning and course satisfaction in traditional classroom contexts (Arbaugh, 2001; Jaasma & Koper, 1999; Ni & Aust, 2008). Moreover, decades of research have identified specific instructor communication behaviors, both verbal and nonverbal, that are perceived by students to be immediate (Gendrin & Rucker, 2004; Gorham, 1988; Richmond et al., 1987; Zhang et al., 2007). Understanding of specific behaviors that develop a sense of immediacy has made it possible to train instructors to use such behaviors in traditional classrooms to improve outcomes (Jensen, 1999). Online instructors, however, do not

learn how to incorporate such behaviors into their instruction due to the fact that there is little understanding of what immediacy behaviors look like in an online context (Baker, 2010; Campbell, 2014; Fahara & Castro, 2015).

The little immediacy research in online learning that has been conducted has generally focused on verbal immediacy in text-based discussion boards. This is because early immediacy researchers claimed that nonverbal immediacy could not be established in online courses due to the lack of socio-emotional cues in text-based, asynchronous communication (e.g., Baker, 2004; Hutchins, 2003; Jensen, 1999). However, classroom-based research has found that the greatest associations between immediacy and learning have been found when both verbal and nonverbal immediacy are combined (Witt et al., 2004). Recent researchers have begun to note that it is likely that nonverbal immediacy can be communicated in online learning, particularly due to recent technological advancements that allow for synchronous and video-based communication (Ghamdi et al., 2016). Such technologies also would allow for new dimensions of verbal immediacy to be conveyed in online courses. How such technologies contribute to instructor immediacy, however, is not known.

Although there has been little immediacy research in online learning, there has been extensive research on social presence (Pollard et al., 2014; Swan & Ice, 2010). However, social presence research has focused primarily on the formal roles of instructors through teaching presence, one of the three elements of the CoI. Researchers in the social presence literature have begun to call for investigating the informal role of the instructor during a course's implementation, which is often referred to as instructor social presence or teaching presence (Lowenthal, 2009; Richardson et al., 2015;

Richardson & Lowenthal, 2017). The construct of social presence, itself, is not clear, and is often described in ways that confound it with immediacy (Lowenthal, 2009). This is partially due to the fact that Short et al.'s (1976) original construct was closely related to immediacy. Adding to this confusion is the fact that measures of social presence are often based on the construct of verbal immediacy (Gunawardena & Zittle, 1997; Swan, 2003). What instructor immediacy is, particularly in the online learning environment, and how it is distinct from social presence, needs to be clarified.

Given this, the research and practice of online learning can benefit by focusing on the role of instructor immediacy in online learning environments. As such, I conducted mixed methods, sequential explanatory study of instructor immediacy in fully online program courses in order to learn more about student perceptions of specific immediacy behaviors that instructors use that contribute to their learning and course satisfaction.

Theoretical Framework

There are several models that describe how instructor immediacy contributes to student learning. However, each of these models in and of themselves is incomplete (Witt et al., 2010). Proposals for a combined, or integrated, model of immediacy (Christophel, 1990; Frymier, 1994; Witt et al., 2010; Zhang et al., 2007) form the theoretical framework of this study. A description of the history of the development of models of immediacy are described in the following sections; however, the immediacy literature will be described in greater detail in Chapter 2.

Learning and Arousal Models of Immediacy

Early studies of instructor immediacy were based on a model in which immediacy was seen to have a direct effect on cognitive and affective learning (e.g., Andersen, 1978;

McDowell et al., 1980). Such models have been broadly labeled “learning models” (Rodriguez, Plax, & Kearney, 1996). Figure 1.2 depicts the learning model of immediacy. Although early researchers were able to find a direct relationship between immediacy and affective learning, they were not able to find a direct relationship between immediacy and cognitive learning (Andersen, 1978; Andersen, Andersen, & Jensen, 1979).

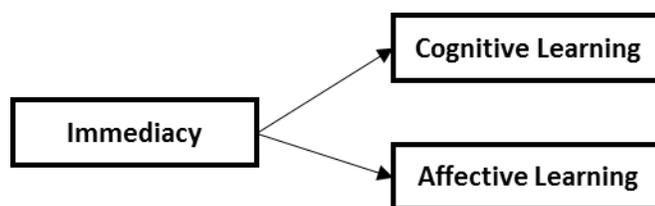


Figure 1.2 Immediacy directly affecting cognitive and affective learning, e.g., the Learning Model

In order to explain how immediacy could have a direct effect on cognitive learning, Kelley and Gorham (1988) presented a learning model, now known as the arousal model. Working from an information processing perspective, they argued that “immediacy is related to arousal, which is related to attention, which is related to memory, which is related to cognitive learning” (p. 201). To test their model, they conducted an experiment using objective measures of cognitive learning through a test of student recall. In the study, immediacy was operationalized through manipulations of eye contact (present and not present) and physical positioning (leaning forward and leaning back). Subjects were randomly assigned to four experimental conditions, varying from high to low conditions of both manipulations. In each condition the experimenter read aloud a list of four groups of six items, after which subjects were expected to write down the items in the same sequence that they were read aloud by the experimenter. The subjects in the high immediacy condition ended up performing significantly better than those in the low immediacy condition. For example, the subjects in the high immediacy

condition had only 11 instances of incorrect sequencing while the subjects in the low immediacy condition had 37 instances of incorrect sequencing. Kelley and Gorham explained that the immediacy behaviors likely provided cues to the subjects that another sequence was coming which allowed them time to prepare to encode for memory storage. Thus, the immediacy cues aroused the subjects and gained their attention, which gave them time to prepare to encode for memory storage, which led to increased learning.

Motivation Model of Immediacy

Drawing from motivation research, Christophel (1990) presented a model that depicted immediacy as being mediated by student state motivation rather than acting directly on affective and cognitive learning (see Figure 1.3). In this sequential model, immediacy increases students' state motivation, which in-turn increases cognitive and affective learning. Christophel (1990) defined state motivation as having "specific directive and stimulating properties...[that] can lead students to arousal and instigative behaviors, give direction and purpose to their behaviors, allow behaviors to persist, and lead to choices of preferred behaviors" (p. 324). This was contrasted with trait motivation, which has been defined as a more enduring predisposition toward learning (Christophel & Gorham, 1995). Christophel (1990) theorized that immediacy behaviors could "impact levels of learning by modifying student classroom motivation" (p. 325).



Figure 1.3 Motivation Model of Immediacy

In her study, Christophel (1990) measured student trait and state motivation, instructor verbal and nonverbal immediacy, and affective learning and perceived

cognitive learning. She found that instructor immediacy was positively associated with perceived learning, but that nonverbal immediacy was more predictive of perceived learning than verbal immediacy. Additionally, she also found that most of the variance of nonverbal immediacy was attributable to the state motivation, which she claimed indicated that nonverbal immediacy must first modify student state motivation (pp. 331-332). Incidentally, she also found that a significant portion of the variance in affective learning could be predicted by nonverbal immediacy, meaning that nonverbal immediacy was mediated through motivation while also having a direct effect on affective learning. However, the direct link between immediacy and affective learning was generally dismissed by Christophel.

In order to test between the learning model and the motivation model, Frymier (1994) conducted a path analysis. She found that verbal and nonverbal immediacy had stronger paths with state motivation than with either affective or cognitive learning; however, similar to Christophel (1990), she also found that immediacy had a direct and significant path with affective learning as well - but in her study, she found verbal immediacy, though not nonverbal immediacy, influenced affective learning. Frymier, like Christophel (1990), generally dismissed this aspect of the finding.

Many studies looking at the relationship between immediacy and motivation have followed Christophel's (1990) landmark study (Allen, Witt, & Wheelless, 2006; Baker, 2010; Booth-Butterfield, Mosher, & Mollish, 1992; Christensen & Menzel, 1998; Christophel & Gorham, 1995; Comadena, Hunt, & Simonds, 2007; Frymier, 1993a, 1993b; Frymier & Houser, 1998; Frymier & Shulman, 1995; Frymier & Shulman, 1998; Gorham & Christophel, 1992; Pogue & AhYun, 2005; Trad, Katt, & Miller, 2014; Velez

& Cano, 2008). For instance, Frymier (1993b) found that students with initially low or moderate state motivation at the beginning of the semester had increased levels of state motivation later in the semester when exposed to a highly immediate instructor, while students who were highly motivated at the beginning of the semester maintained high motivation regardless of the instructor's level of immediacy. Gorham and Christophel (1992) looked at both motivating factors and demotivating factors and found instructor immediacy behaviors accounted for 34% of overall motivators. Additionally, they found that students attribute their lack of motivation in a college class to what the instructor does and attribute their being motivated to more personal factors. In another study, Christophel and Gorham (1995) found consistent results. In their study, 63% of students attributed motivation to self-owned sources while 62% of students attributed demotivation to instructor-owned sources.

Arousal and Motivation Combined Model

Citing Kelley and Gorham's 1988 study, which established a direct connection between immediacy and cognitive learning, Frymier (1994) suggested combining the motivation model with the arousal model, as depicted in Figure 1.4, stating that: "immediacy arouses students, gets their attention, which enhances motivation, which in turn increases learning" (p. 141).

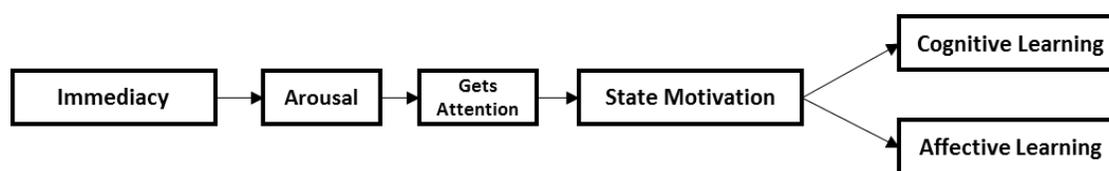


Figure 1.4 Combined Immediacy Model (Frymier, 1994)

Christophel and Gorham (1995) also argued for combining the arousal and motivation models, as depicted in Figure 1.5, where, "(a) immediacy arouses students, this (b) directs

their attention and enhances their motivation, (c) which increases learning (affective and cognitive).”

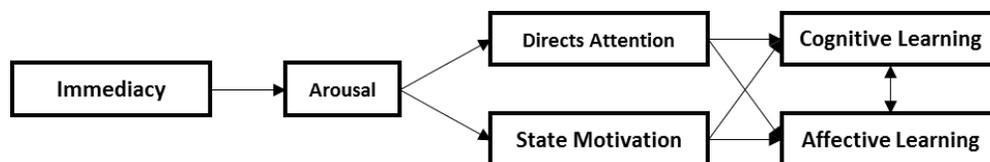


Figure 1.5 Combined Immediacy Model (Christophel and Gorham, 1995)

While similar, there are some notable differences between these two combined models. Christophel and Gorham specifically included *affective* and *cognitive* learning, while Frymier focused just on *learning*. Moreover, Gorham has previously argued that Bloom, Englehart, Furst, Hill, and Krathwohl’s (1956) conception of affective and cognitive learning were not mutually exclusive (Kelley & Gorham, 1987), which Christophel and Gorham’s model supports. Christophel and Gorham spoke of *directing* attention while Frymier spoke of *getting* attention. Additionally, Christophel and Gorham described immediacy as directing attention *and* enhancing motivation while Frymier places the getting of attention as a separate step between motivation and immediacy. In other words, in Frymier’s model, the arousal that occurs as a result of instructor immediacy activates the student’s motivation while in Christophel and Gorham’s model the arousal that occurs as a result of instructor immediacy works to both direct the student’s attention and influence motivation simultaneously. In Christophel and Gorham’s model, there is the potential for immediacy to direct attention and increase learning without necessarily enhancing motivation; likewise, it is possible for immediacy to enhance motivation and in turn increase learning without directing attention. In Frymier’s model, motivation is necessary in order to achieve learning. The instructor, in Frymier’s model, is an agent who motivates students to learn, both affectively and cognitively (Witt et al., 2010) while

in Christophel and Gorham's model, the instructor's immediacy has two functions - to act as a cue to direct cognitive attention while also acting as a motivational device to foster learning. Although this distinction has not been explicitly described in the literature, it is nonetheless important.

Affect Model of Immediacy

The learning model of immediacy and the motivation model of immediacy were both challenged by Rodriguez et al. (1996). They argued that "affective learning is the central causal mediator between nonverbal immediacy and cognitive learning" (p. 296). In this model, depicted in Figure 1.6, immediacy is conceived of as working to enhance affect for instruction and course content, which in turn influences cognitive learning (Allen et al., 2006; Rodriguez et al., 1996; Witt et al., 2010).



Figure 1.6 Affective Learning Model (Rodriguez et al., 1996)

Rodriguez et al. argued that the affective learning model is the most parsimonious of the three models (learning model, motivation model, and affective learning model) for four reasons: *first*, the other models consider affective learning to be a goal state, whereas Bloom et al.'s (1956) original conception of affective learning is that it contributes to cognitive learning; therefore, they argue, separating the two and adding a third factor, motivation, between them is not parsimonious with Bloom et al.'s construct. *Second*, they pointed out that in the literature at the time, immediacy and affective learning had been shown to be highly and consistently correlated while immediacy and cognitive learning had been shown to be much less associated. *Third*, they contended that motivation is an affective measure itself, so it would naturally show up as a mediating factor if introduced

into a causal chain as Frymier (1994) had done. They claimed that since affective learning is the domain that focuses on the adoption of beliefs and attitudes, “affect is by definition, an intrinsic motivator” (p. 297).

Allen et al. (2006) conducted a test of the affect model using data from Witt et al.’s (2004) seminal meta-analysis. They looked at the average correlations between measures of immediacy and cognitive learning, immediacy and affective learning, and cognitive and affective learning. They found that the data were consistent with a model where instructor immediacy behaviors predict or cause a level of affective learning and that the level of affective learning predicts or causes the level of cognitive learning. Moreover, they interpreted the results, saying “teacher behavior creates a motivational affective outcome that substantially contributes to the generation of a cognitive outcome” (p. 26). In another study, Allen et al. (2007) described immediacy as “a positive reinforcement that creates a motivation for the student to interact with the instructor and creates a sense of reward or positive valence. The likely result of high immediacy is an increase in the desire of the student to perform the role of student or learner in the classroom” (p. 24).

Model Grounding this Study

Rodriguez et al.’s (1996) first argument that the affect model is more parsimonious with Bloom et al.’s (1956) taxonomy is not supported. Bloom et al. conceived of the two domains as not being mutually exclusive and conceived of each domain as influencing and reinforcing the other. While affective learning contributes to cognitive learning, as Rodriguez et al.’s model depicts, cognitive learning also contributes to affective learning according to Bloom et al. (1956). Rodriguez et al.’s

second argument that immediacy has been consistently associated with affective learning, but less so with cognitive learning does not support their model, but rather contradicts it. By pointing out that immediacy is less associated with cognitive learning, Rodriguez et al. are at the same time acknowledging that immediacy has been found to have some direct effect on cognitive learning. The relationship between immediacy and cognitive learning has been found to be supported in several studies, including Witt et al.'s (2004) seminal meta-analysis. Rodriguez et al.'s model does not account for immediacy's direct influence on cognitive learning. Finally, Rodriguez et al.'s third argument is that affect and motivation are the same thing since affect "is by definition, an intrinsic motivator" (p. 297). This contrasts with Bloom et al.'s (1956) construct of affective learning, which considers affective learning to be a process of internalization of initially external values, through various stages leading to intrinsic valuing, e.g., characterizing. Moreover, claiming that affect is, by definition intrinsic motivation, does not account for extrinsic motivation nor varying degrees of motivation from extrinsic to intrinsic, as modeled in Ryan and Deci's (2000) self-determination theory.

Christophel and Gorham's (1995) combined model describes immediacy as acting on both affective and cognitive learning. Their model accounts for both a direct effect of immediacy on affective and cognitive learning while also allowing for it to be mediated by motivation. This is parsimonious with Bloom's (1956) conception of affective and cognitive learning as well as Mehrabian's (1981) construct of immediacy and is supported by the literature (e.g., Witt et al., 2004). As such, this research project views immediacy through the conceptual lens of Christophel and Gorham's (1995) combined model of instructor immediacy.

Purpose of the Study

The lack of research on instructor immediacy in online learning represented a gap in the literature. Given the aforementioned problems, the purpose of this study was to explore what behaviors students perceived contribute to instructor immediacy in online learning environments.

Research Questions

The overarching research question for this study was, what behaviors do students perceive develop instructor immediacy and supports their learning in fully online programs? More specifically, this study sought to answer the following five sub-questions:

1. To what degree do students perceive instructor immediacy in fully online program courses?
2. What is the relationship between perceived instructor immediacy and learning in fully online program courses?
3. What is the relationship between instructor immediacy and student satisfaction in fully online program courses?
4. What instructor behaviors do students perceive contribute to immediacy in fully online program courses?
5. How do students feel instructor immediacy supports their learning in an online course?

Overview of Methods

An overview of the methods is briefly described in this section. A more thorough description of the methodology used for this study is discussed in Chapter 3. This study

used a sequential explanatory mixed-methods research design (Creswell, 2008; Ivankova, Creswell, & Stick, 2006). Sequential explanatory research uses a two-phase model where quantitative data is collected in the first phase and qualitative data is collected in a second phase in order to further elaborate on the quantitative results (Creswell, 2008; Ivankova, et al., 2006). The combination of both methods takes advantage of the strengths of each and allows for a more robust analysis (Ivankova et al., 2006).

Sample

There were 2,216 students enrolled in courses in fully online programs at Boise State University at both the graduate and undergraduate level at the time of this study. In the first quantitative phase, a survey was sent to 422 students who have completed at least one course in an online program and 177 students responded, representing a 42% response rate. In the second qualitative phase of the study, nine students were purposefully selected to take part in a follow up interview.

Data Collection and Analysis

In the first phase of the study, quantitative data was collected via an online survey that incorporates measures of verbal and nonverbal immediacy as well as measures of perceived cognitive learning, affective learning, and course satisfaction. Descriptive analysis was used to measure central tendency and variability, and correlational analysis was used in order to identify linear relationships between immediacy (both verbal and nonverbal) and perceived cognitive learning, affective learning and course satisfaction. Follow up interviews sought to elaborate on the findings of the initial survey. Maximum variation sampling was used to identify cases for follow-up interviews to further explain the findings. Maximum variation sampling, one of the more popular approaches used in

qualitative research, is a purposeful sampling method in which participants are selected in a way that maximizes variation based on a set of criterion so as to reflect differences or different perspectives (Creswell, 2013). By maximizing variation, any common patterns that are found are of particular interest because of the fact that they emerged despite great variation (Patton, 2002).

The goal of the interviews was to develop themes through the use of constant comparative method. When using the constant comparative method, “the researcher attempts to ‘saturate’ the categories – to look for instances that represent the category and to continue looking (and interviewing) until the new information obtained does not provide further insight into the category” (Creswell, 2013, Chapter 8, Grounded Theory Analysis and Representation, para. 2). By the end of the ninth interview, I determined that saturation had been achieved, based on two criteria: first, no new themes were emerging by the ninth interview despite the wide variance in demographics of student interviewees; second, I had achieved a high level of elaboration in describing the complexity of the phenomenon of student perceptions of instructor immediacy based on the data obtained. Additional interviews may have been able to shed additional light on some new questions that arose as I continued to interview students. However, such questions were primarily related to potential differences in perceptions of instructor immediacy based on group differences, which was outside of the scope of this study. For example, one question that arose was whether graduate and undergraduate students perceived instructor immediacy differently. Another question that arose was whether age influenced perceptions of instructor immediacy. In fact, many such questions arose as I interviewed the participants. However, by the ninth interview, the level of saturation

achieved was sufficient to answer the focused research questions for this study which were not comparing groups.

An initial set of interview questions was developed based on the research questions. Additionally, follow up questions explored themes that emerged during interviews. Interviews were conducted and recorded using the video-conferencing software Zoom. Recordings were transcribed and analyzed using first and second cycle coding to develop categories and major and minor themes (Saldana, 2016). Themes were layered upward and interrelated in order to develop a more complex understanding of them (Creswell, 2008). Five themes emerged, including: Commitment to the role, student advocate, accessible and responsive, extensive guidance and feedback, and encouraging and reassuring. The results described in Chapter Four of this paper and elaborated on in Chapter Five.

Reliability and Validity

In order to validate the findings, the study was guided by the theoretical framework of the study. Moreover, findings were corroborated through member checking, comparisons with the quantitative data and the open-ended question on the survey from phase one, and comparisons with the literature. Additionally, rich and thick descriptions are provided in the narrative descriptions in Chapter Four.

Significance of the Study

The purpose of this study was to identify instructor immediacy behaviors that students taking online courses in fully online programs perceived contributed to instructor immediacy. The results of this study can be used to advance the literature by expanding the construct of immediacy to online education, particularly in understanding

how instructor immediacy is perceived by students in fully online programs.

Additionally, it sheds some light on the distinction between the constructs of social presence and immediacy. The results of this study can also be used to help improve the design and delivery of online courses to better support student learning outcomes.

Moreover, understanding how instructors can improve their immediacy in online courses can potentially improve student satisfaction and retention.

Chapter Summary

Online learning in higher education has grown tremendously over the last 20 years and continues to do so. Although online learning has been found to be as effective as traditional classroom-based instruction in achieving learning outcomes, retention rates of online courses are much lower. One explanation for the lower retention rates may have to do with a lack of student-instructor interaction, particularly informal communication. Students want instructors whom they perceive as being approachable. When students feel that their instructors are approachable, they are more motivated to persist and succeed in a course. One way in which instructors communicate that they are approachable to their students is through immediacy.

Instructor immediacy has been extensively researched in classroom settings and it has been well established as contributing to student satisfaction and learning. Despite this, little research has been conducted on instructor immediacy in online learning with most online research having focused primarily on student-student interaction. However, researchers have begun to call for investigations into the informal role of instructors, otherwise referred to as instructor presence, instructor social presence or instructor immediacy. This study attempted to expand the literature by investigating the instructor's

informal role through the lens of instructor immediacy. The findings of this research can be used to develop online instructor training programs that focus on prescribing low-inference immediacy behaviors that students perceive as contributing to their learning, course satisfaction, and retention to degree completion.

CHAPTER TWO: REVIEW OF THE LITERATURE

Immediacy Theory Overview

Immediacy is defined as behaviors that reduce the physical and/or psychological distance between people (Mehrabian, 1971, 1981; Wiener & Mehrabian, 1968). Central to immediacy theory is the proposition that the closer one is to another person the more sensory-stimulus they can exchange while communicating. The theory draws from Hall's (1966) construct of proximity which classifies the distance people choose to converse with each other, though varying from culture to culture, (Hofstede, Hofstede, & Minkov, 2010; Mehrabian, 1981) as ranging from intimate, to personal, to social, and to public. Mehrabian also drew from Argyle and Dean's (1965) approach-avoidance theory which described people as being both attracted and repelled by others simultaneously. According to the theory, when two or more people enter into an interaction with each other, each adjusts their distance from the other(s) until an equilibrium of appropriate distance of sensory-stimulus exchange is established among them (Short et al., 1976).

Mehrabian (1981) described three factors as affecting the approach and avoidance of others: feelings of arousal, pleasure, and power (dominance or submissiveness). When one is faced with the potential to interact with another person, one considers how arousing the other person is and whether or not the arousal is positive or negative. Where the arousal is pleasing, liking occurs and, conversely, where the arousal is unpleasing, disliking occurs. The relationship between arousal, pleasure, and liking, as depicted by Mehrabian (1981) is shown in Figure 2.1. Elaborating of the theory, Mehrabian (1981)

stated, “People are drawn towards persons and things they like, evaluate highly, and prefer; they avoid or move away from things they dislike, evaluate negatively, or do not prefer” (p. 1). When people move towards things and people they like, the increased physical proximity conveys to others a message of liking; likewise, moving away from others and decreasing of physical proximity conveys a message of dislike (Mehrabian, 1972; Mehrabian, 1981).

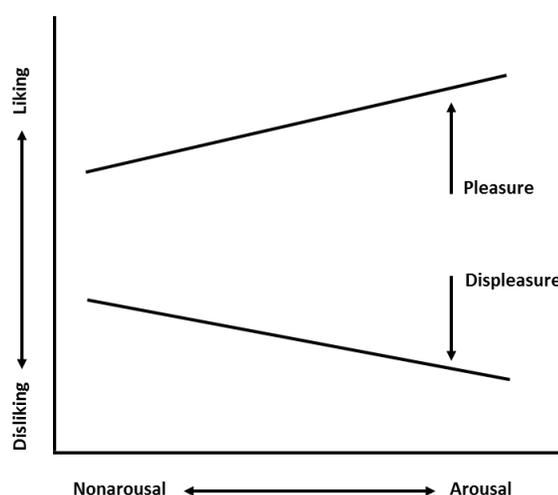


Figure 2.1 Relation of Pleasure and Arousal with Liking (Mehrabian, 1981)

Whereas the arousal-pleasure-like heuristic is one determinant of whether one approaches another, approach and avoidance decisions are also affected by perceptions of power. When one is aroused by another, they consider how powerful the other person is in relation to themselves and whether or not they would be dominant or submissive in the dyad. Figure 2.2 depicts the relationship between arousal, pleasure, and power on liking and approach avoidance behaviors. Note that the line from power to approach-avoidance does not directly interact with liking.

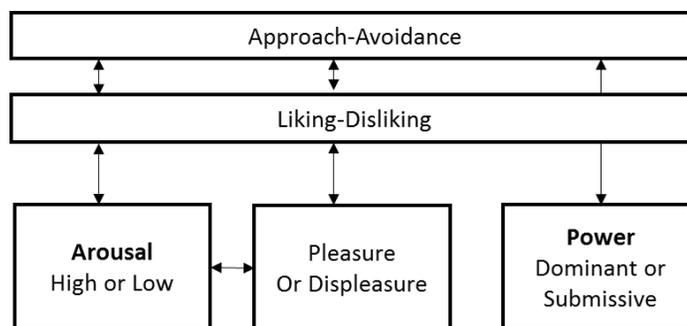


Figure 2.2 Basic Approach-Avoidance Model as described by Mehrabian (1981)

In cases of asymmetrical power-differentials, “socially dominant people determine the degree of approach that is permitted in their interactions with others” (Mehrabian, 1981, pp. 62-63), and by logical extension the amount of distance the other may be required, by the dominant person, to maintain. Approach-avoidance, therefore, is determined across four possibilities, as depicted in Figure 2.3: (a) when people judge they are dominant in the dyad and arousal is found to be pleasing, liking will occur and will lead to approach; (b) when people judge they are dominant in the dyad and the arousal is found to be displeasing, disliking will occur and will lead to avoidance (e.g., walking away or demanding the submissive person to leave); (c) Conversely, when people judge they are submissive in the dyad and the arousal is found to be pleasant, liking will occur and will lead to approach, if possible; however, in this case, approach is dependent upon the invitation of the dominant person; (d) when people judge they are submissive in the dyad, and the arousal is found to be unpleasant, dislike will occur and will lead to avoidance, when possible; however, in this case if the dominant person demands approach, the submissive will be required to do so despite their negative arousal and displeasure. When power is asymmetrical, the dominant person has the prerogative to approach or avoid the submissive, or to compel the submissive to approach or avoid them (Mehrabian, 1981, p. 58). The dominant person also has the prerogative to allow the

submissive to approach them through an invitation to do so. However, as Mehrabian (1981) pointed out, often refusal of the invitation is not considered a realistic response.

Thus, in either case, the submissive is compelled to approach the dominant.

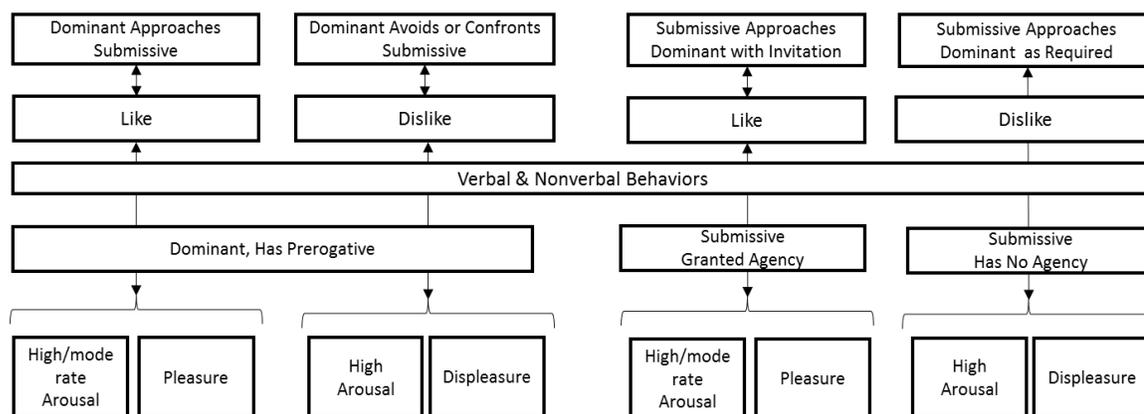


Figure 2.3 Approach-Avoidance as the Dominant Person's Prerogative

In contrast to circumstances where there are asymmetrical power-differentials between individuals, in situations where there are symmetrical power-differentials between people, each party is autonomous in their decision to approach or avoid the other. In this case, approach-avoidance decisions may focus primarily on evaluations of like and dislike based on the level of arousal and pleasure-displeasure that the potential interaction elicits, as is depicted in Figure 2.4. In this situation, one can trace approach back to strong liking as a result of high arousal and high pleasure while intermediate approach can be traced back to high arousal and moderate pleasure or moderate arousal and high pleasure (Mehrabian, 1981, pp. 50-51). Likewise, avoidance can be traced back to strong disliking as a result of high arousal and high displeasure while intermediate avoidance can be traced back to high arousal and moderate displeasure or moderate arousal and high displeasure.

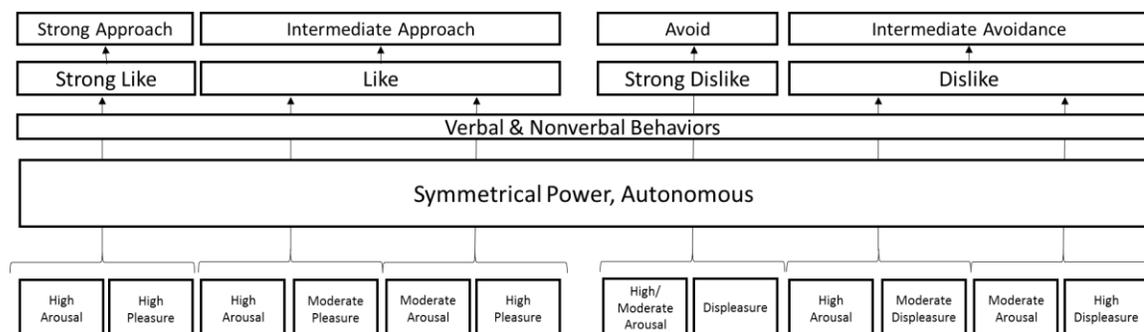


Figure 2.4 Approach When Power is Symmetrical and Autonomous (Mehrabian, 1981)

Proximity between people is a negotiation where interlocutors evaluate the arousal of others and the power-differentials between them, conduct an analysis of the mutual pleasure or displeasure (i.e., the fulfillment of needs) that interaction would incur, and the degree of autonomy they have in choosing or demanding approach and avoidance of the interaction. While this negotiation may involve communication that is verbally explicit (e.g., “come here”) or nonverbally explicit (e.g., motioning for someone to stop), a large part of the verbal and nonverbal communication involves subtle implicit phenomena where information about power, feelings, and like-dislike attitudes are encoded and decoded between interactants (Mehrabian, 1971, p. 3).

Abbreviated Approach-Avoidance

While communication may involve implicit and subtle messages that invite or reject physical approach, approach itself may also be abbreviated. Many situations do not allow people to physically move toward the things or people they like, or move away from those they dislike. According to Mehrabian (1969, 1981), in such cases, people will approach or avoid others using abbreviated nonverbal and verbal approach behaviors. Examples of abbreviated nonverbal approach behaviors include: assuming a forward lean, turning one’s body toward another, engaging another in conversation, making eye

contact with another, and paying attention to someone. Examples of abbreviated nonverbal avoidance behaviors include: leaning and turning away from another, avoiding eye contact, remaining silent, and feigning preoccupation with other things or people (Mehrabian, 1981).

Abbreviated verbal linguistic structures also indicate like and dislike and approach and avoidance (Mehrabian, 1966, 1967, 1971, 1981; Mehrabian & Wiener, 1966; Weiner & Mehrabian, 1968). For example, saying or writing, “These people need help” is more immediate than “Those people need help;” “I want to see X” is more immediate than “I have to see X;” and “I am dancing with X” is more immediate than “X and I are dancing” (Mehrabian & Wiener, 1966, p. 421). In each of these cases, the speaker is using language variations to metaphorically indicate greater or lesser proximity between the subject and the object of the sentence.

Proximity, Synchronicity, and Sensory Stimulation

According to immediacy theory, each of our senses provides a channel for sensory stimulation and therefore a channel of communication for explicit and implicit messages. Closer proximity allows for greater sensory exchange (with touch being the most intimate) and subsequently greater arousal. The more communication channels that are available between interactants (i.e., visual, tactile, auditory, and olfactory information), the greater the degree of arousal, like-dislike, and approach-avoidance that can be communicated (Mehrabian, 1981). Moreover, whilst the physical and metaphorical space one puts between the self and the other (i.e., proximity) conveys arousal, like-dislike, and approach-avoidance, the duration of time (synchronicity-

asynchronicity) one puts between the stimulus and response conveys like-dislike and approach-avoidance.

Regarding proximity and synchronicity of communication, Mehrabian (1981) described the degree of approach as being influenced by the actual and psychological distance between communicators, the time it takes for information to be exchanged, as well as the number of channels of sensory stimulus between two communicators. Therefore, a medium that allows faster feedback, higher actual or perceived physical and psychological proximity, and more channels of sensory stimulus, involves more immediacy; conversely, a medium that allows for slower feedback, lower actual or perceived physical and psychological proximity, and less channels of sensory stimulus involves less immediacy. Thus, a letter received via mail would be both objectively and subjectively less immediate than a telephone call due to the slower feedback time involved, a lower sense of the actual proximity, as well as fewer channels of sensory stimulus that the two communication mediums convey. In contrast, face-to-face communication affords close proximity and high synchronicity, as well as the greatest number of channels through which to arouse the other through explicit and implicit stimuli across the five senses, and subsequently, convey feelings of like-dislike and approach-avoidance.

Immediacy and Medium Effects

In the nuanced interactions of approach-avoidance, communicators mutually evaluate the intentions, requests, and responses of their counterparts as they negotiate the potential interaction exchange. Throughout the communication exchange space, each party scrutinizes the explicit and implicit verbal and nonverbal messages as to the

intentions of the other (i.e., what do they want), the level of mutual reciprocation (i.e., symmetrical or asymmetrical) that will be involved in an interaction, as well as the degree of autonomy they have to stipulate, reject or accept terms offered. In the exchange, the proximity and time one places between the self and other carries connotations of like-dislike. Likewise, the selection of a medium of communication can be used as part of the exchange negotiation, as each party considers and interprets the intentions and motivations for selecting a given communication medium (Mehrabian, 1981), as is depicted in Figure 2.5. For example, when one is within close proximity of another but chooses to make a telephone call rather than go to the other physically, an impression of non-approach, and therefore dislike, displeasure and/or disrespect, may be perceived by the addressee (Mehrabian, 1981). Similarly, when a person chooses to call someone by beeping a car horn rather than walking up and ringing their doorbell, intentions and feelings of like and dislike are implicitly communicated and perceived through the choice of the communication technology used (Mehrabian & Wiener, 1966).

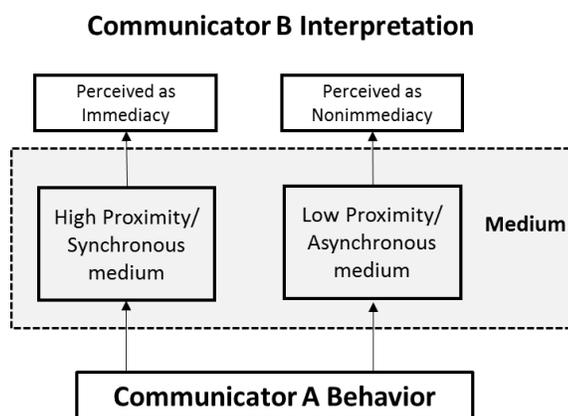


Figure 2.5 Effect of Medium Selection on Perceived Immediacy

While the selection of a medium may signal more or less approach (Mehrabian, 1981), the written or spoken words which one chooses when communicating through a

medium can also connote higher or lower proximity and therefore immediacy or non-immediacy (Mehrabian, 1967; Mehrabian, 1981; Weiner & Mehrabian, 1968). Thus, while the selection of a medium may connote immediacy or nonimmediacy, verbal and nonverbal cues transmitted through a given medium also influence the degree of immediacy and nonimmediacy conveyed (Mehrabian, 1981; Short et al., 1976; Walther, 1992) and interpreted, as is depicted in Figure 2.6. Therefore, if one must use a low-proximity, asynchronous medium to communicate with another, the way in which one communicates through that medium can be adapted further to convey even higher or lower desired proximity (Mehrabian, 1968, 1972, 1981). For example, one can respond to an email either immediately or wait several days. Likewise, the content of the email can be written to convey closeness, e.g., “Hi John. We are doing great on the project. 📧 ” or distance, e.g., “Mr. Smith, you and I have done well enough on the project.” The latter has used formal titles, maintaining a power-differential between parties. Moreover, the latter places a distance between the subject pronouns, “you and I” while also placing the project in the past using the past-perfect verb tense. The former example uses informal styling which places the verb in the present-continuous tense and uses the “We” pronoun signifying closeness. The first example also involves nonverbal communication through the inclusion of an emoticon signaling both informality and friendly terms. Thus, the selection of a medium can signal, and be interpreted as desired approach or avoidance (when various mediums to communicate are available); however, when there is only one medium available for communication, interpretations as to desired approach or avoidance may not be attributed to the medium selection as it is considered a matter of practicality or as a matter of fact (Short et al., 1976, p. 73). In either case, the implicit cues within the

content of the message, both verbal (written and spoken) and nonverbal, where available, will be interpreted as to the intentions and feelings of the communicator.

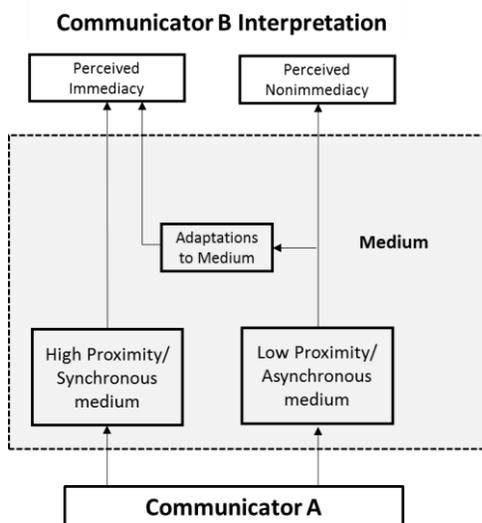


Figure 2.6 Communication Adaptations for Low Proximity Medium to Signify Immediacy

Instructor Immediacy Research in Higher Education

The construct of immediacy was first applied to higher education by Andersen (1978) in her seminal dissertation, “The Relationship between Teacher Immediacy and Teaching Effectiveness.” Looking to improve instructor effectiveness, Andersen examined how nonverbal immediacy behaviors could be used to produce positive interpersonal relationships between instructors and students. Andersen argued that scholars, up to that time, had held to a “myth” that nonverbal variables in the classroom were not worthy of attention (p. 4). Andersen drew from Mehrabian’s (1969) conception that immediacy was related to behaviors that indicate physical or psychological closeness. Andersen (1978) also looked at Wheelless’ (1976) conception of solidarity which regarded people as having “a generally symmetrical relationship” (p. 9). She

described immediacy as a construct which is subsumed within the concept of solidarity where immediacy behaviors are “one way to demonstrate solidarity” (p. 9).

In her study, Andersen focused on nonverbal immediacy behaviors, while recognizing that Mehrabian’s (1967, 1971, 1972) construct of immediacy could also be expressed through implicit verbal communication behaviors. She hypothesized a linear combination of student perceptions of instructor immediacy as being directly correlated with student affective and cognitive learning (p. 12). This is represented by what Rodriguez, Plax and Kearney (1996) called “the learning model” (p. 294) and is depicted in Figure 2.7.

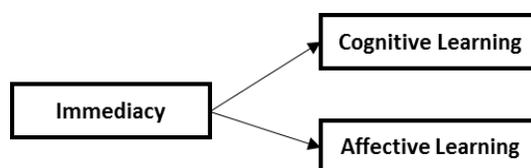


Figure 2.7 Immediacy Learning Model

In order to measure immediacy, Andersen (1978) needed to generate measures for it. As described in a later publication (Andersen et al., 1979), Andersen developed three ways in which to measure immediacy: *first*, through a subjective gestalt measure of immediacy, which led to the General Immediacy (GI) scale; *second*, through the measure of low-inference behavioral indicants of immediacy that students subjectively report on, which led to the behavioral indicants of immediacy (BII) scale, and, *third*, through objective counting and coding of individual nonverbal immediacy behaviors conceptualized as immediate, which led to the development of a rater immediacy (RI) scale (Andersen et al., 1979, pp. 154-155). Although she developed three scales, she only used the GI and the BII for her dissertation study.

The GI scale was a nine-item semantic differential scale that measured the general immediacy of the instructor as a gestalt. The BII scale was a 28-item, low-inference measure which asked students to rate the extent to which their instructors engaged in specific immediacy behaviors (see Table 2.1 below for an overview of immediacy measures). Andersen developed the BII scale based on Mehrabian's (1972) description of the immediacy construct, which she defined as:

those communication behaviors manifested and perceived when a person maintains closer physical distance, uses direct body orientation, is relaxed, uses overall purposeful body movement, gestures, engages in positive head nods, smiles, uses eye contact and is vocally expressive. (p. 17)

In order to validate the BII scale, Andersen (1978) had students rate instructor immediacy using the BII scale while trained observers simultaneously rated the same instructors using the RI scale. The result was that the BII and the RI scales had a correlation of .80, which when correcting for attenuations had a correlation of .92. Andersen et al. (1979) concluded that the high correlation between the measures "suggests that students perceive instructor immediacy behaviors in the same way that trained raters perceive immediacy behaviors" (p. 60).

In order to measure affective learning, Andersen (1978) used a measure developed by Osgood, Suci, and Tannenbaum (1957) that included four seven-step evaluative semantic differential scales. The four scales were: affect toward communication practices suggested in the course, affect toward the subject matter or content of the course, affect toward the instructor of the course, and overall affect towards the course in general (pp. 20-22). Additionally, two measures of behavioral commitment were used: likelihood of actually attempting to engage in the communication practices suggested in the course and the likelihood of actually enrolling

in another course or related content if a schedule so permits (p. 22). Scores from a course exam with 50 multiple-choice items were used to measure cognitive learning.

Andersen (1978) found that nonverbal immediacy was related to both affective and behavioral learning, but no relationship was found between instructor immediacy and cognitive learning. Andersen speculated that one reason for not finding a relationship between immediacy and cognitive learning might have been because the students were tested too early in the semester, meaning immediacy may not have had enough time to have had an effect. A second interpretation was that perhaps there is no relationship between affective learning and cognitive learning. A third interpretation was that it was due to the nature of the course being a mastery level course where a high number of student scores fell into the higher end of the bell-curve, thus reducing the predictive power of the instrument (pp. 36-38). Another interpretation that has been put forth by Richmond, Gorham, and McCroskey (1987) was that since most instructors may already use moderate immediacy behaviors, there frequently is not enough variation among populations of instructors to detect a difference.

Since Andersen's (1978) finding of a relationship between immediacy and affective learning, as many as 200 studies on instructor immediacy have found various positive associations (Witt et al., 2010). Several early studies of instructor immediacy using Andersen's GI and BII measures produced similar results, finding consistently that nonverbal immediacy was related to affective learning but not cognitive learning (Andersen, Norton, & Nussbaum, 1981; Andersen & Withrow, 1981; Chaikin, 1978; Kearney et al., 1985). McDowell et al. (1980) had one of the first studies to find a direct correlation between instructor immediacy and cognitive learning based on a measure of

student final grades. Their study was different because it was conducted at the middle school and high school level where students spent more time with their instructors. This addressed Andersen's speculation that the students in her study may not have had enough time with their instructor for immediacy to have an effect.

Studies up until the present have consistently found immediacy to be strongly correlated with affective learning (Baker, 2010; LeFebvre & Allen, 2014; Richmond et al., 1987; Schrodtt, Witt, Turman, Myers, Barton, & Jernberg, 2009; Witt et al., 2004; Witt et al., 2010). However, there have been mixed results in trying to directly link immediacy to cognitive learning based on objective measures of cognitive gains. While direct measures have had mixed results, measures that have used student perceptions of their own cognitive learning have consistently been found to be highly correlated with instructor immediacy.

Perceptions of Cognitive Learning

A connection between immediacy and cognitive learning was first established when Richmond et al. (1987) measured cognitive learning based on students' perceptions of their learning rather than objective measures such as test scores or course grades. They justified the use of perceived measures of cognitive learning by arguing that it is reasonable to expect students to be able to estimate the amount they learn in a class with considerable accuracy, which they argued, would be at least as good as subjective grades that instructors provide in courses. They also reasoned that the relationship between immediacy and affective learning and cognitive learning is not mutually exclusive, and that notions that they are, is not parsimonious with Bloom's taxonomy of learning nor with Mehrabian's (1971, 1981) conceptualization of the immediacy construct. According

to their argument, affective learning is integrated with cognitive learning, with each impacting the other. They cited McDowell et al.'s (1980) speculation that students may have studied harder for exams in courses with instructors whom they liked and wished to please. Based on these justifications, Richmond et al. (1987) introduced their measure of cognitive learning based on student perceptions of their own learning. In their 1987 study, they found that the correlation between perceived cognitive learning and total immediacy indicated approximately 50% shared variance. They measured learning based on a differential between how much students believed they learned and how much they felt they could have learned from an ideal instructor. The difference between the two scores were calculated to form a third variable termed, "learning loss."

The measure of learning loss represented a shift in the measure of cognitive learning in the immediacy literature and the field of communications overall. Subsequent to Richmond et al.'s (1987) study, many other immediacy researchers have used the learning loss method in order to measure perceptions of cognitive learning (e.g., Chesebro & McCroskey, 2001; Fayer, Gorham, & McCroskey, 1988; Gendrin & Rucker, 2004; Gorham, Cohen, & Morris, 1999; Hinkle, 1998; McCroskey et al., 1996; Messman & Jones-Corley, 2001; Myers, Zhong, & Guan, 1998; Neuliep, 1995; Neuliep, 1997; Ni & Aust, 2008; Witt & Wheelless, 2001). This research has consistently found a relationship between instructor immediacy and perceived cognitive learning.

Despite its extensive use, there have been criticisms of perceived learning measures such as Richmond et al.'s (1987) learning loss method (Comstock, Rowell, & Bowers, 1995; Hess & Smythe, 2001; Smythe & Hess, 2005). Comstock et al. (1995) criticized the use of student's perceptions and memories for both the dependent

(cognitive learning) and independent variable (immediacy). They argued that students' memories may have been affected by the grades the instructors gave them on assignments and the course, which in turn may have been influenced by the instructor's affect toward the students. Additionally, they contended that perceptions of learning should not be the "sole basis for knowledge claims regarding teacher immediacy and cognitive learning" (p. 252) and called for more empirical studies.

Hess and Smythe (2001) also criticized the lack of empirical studies on immediacy and cognitive learning citing Chesebro and McCroskey's (2001) study as the only one that had done so. In their study, Chesebro and McCroskey compared measures of performance on a quiz as well as student perceptions of their learning using the learning loss measure. They found a strong positive correlation between the two, which subsequently has been cited as evidence to support the use of measures of student perceptions of cognitive learning. However, Hess and Smythe (2001) countered that there were design flaws in Chesebro and McCroskey's study. First, they pointed out that students had calculated their degree of learning after having taken a quiz, which would be influenced by perceptions as to how well they felt they had performed on it. They also pointed out that the students viewed recorded lectures rather than live lectures, which lacks ecological validity. Hess and Smythe (2001) replicated Chesebro and McCroskey's (2000) study and found, consistent with the literature, that perceived immediacy correlated with perceived affective and cognitive learning measures. However, they did not find a link between perceived learning and actual scores on performance exams or between performance exams and immediacy.

While there has been criticism of the learning loss measure, others have argued in support of the use of student perceptions of their learning. McCroskey et al. (1996) made a robust argument that there is solid justification to accept student reports of cognitive achievement. Additionally, other research has replicated Hess and Smythe's (2001) study and have found, like Chesebro and McCroskey (2000), a correlation between student perceptions of cognitive learning and objective measures. Witt and Wheelless (2001), for example, used an experimental design and randomly assigned students to four different manipulations of a video lecture. They measured student recall of the content of the video lecture using a quiz. Additionally, they measured perceived cognitive learning based on learning loss. They found that both recall and perceived learning had a positive relationship with instructor immediacy.

In order to establish a direct relationship with cognitive learning, other studies have tried to use objective measures of cognitive learning with mixed results. For example, in a more recent study, LeFebvre and Allen (2014) compared instructor immediacy between lab sections of a large lecture course and used course grades as a measure for cognitive learning. They found a positive relationship between immediacy and course grades. However, other studies have failed to find a relationship. King and Witt (2009) found a significant positive relationship between perceived instructor nonverbal immediacy and perceived learning, but no relationship with immediacy when measured by course grades. In another study, Goodboy, Weber, and Bolkan (2009) conducted an experiment where subjects viewed videos in which both verbal and nonverbal immediacy were manipulated. They used a recall test in order to objectively measure cognitive learning. The results were that recall scores were not significantly

related to either verbal or nonverbal immediacy alone, but were significantly correlated with recall when combined.

Nonverbal Immediacy Measures

In addition to introducing the perceived learning (i.e., learning loss) measure to the field of study, Richmond et al. (1987) adapted Andersen's (1978) behavioral indicants of immediacy (BII) scale and introduced a 14-item instrument to measure nonverbal immediacy called the nonverbal immediacy behavioral (NIB) indicants measure (Witt et al., 2010). Their instrument included seven indicators for immediacy that were drawn from Mehrabian's (1971) conceptualization of the construct as relating to physical proximity and perceptual stimulation: direction of one's body in relation to others, proximity with others, touch, eye contact, smiling, physical movement, and nonverbal vocalics (paralinguistic factors). The instrument was found to have an alpha reliability of .87 in their first study and .80 in their second study. Using the NIB, they found a strong positive correlation between instructor nonverbal immediacy and learning loss.

Additionally, they found that "vocal expressiveness, smiling at the class, and having a relaxed body position had the highest positive association with learning" (p. 585). They also found that it was very unusual for the college instructors in their study to touch the students and rare for them to stand behind or sit on a desk or have a tense body position.

Richmond et al.'s (1987) NIB items included:

1. Sits behind desk when teaching. *
2. Gestures when talking to the class.
3. Uses monotone/dull voice when talking to the class. *
4. Looks at the class when talking.
5. Smiles at the class as a whole, not just individual students.
6. Has a very tense body position when talking to the class. *
7. Touches students in the class.
8. Moves around the classroom when teaching.

9. Sits on a desk or in a chair when teaching. *
 10. Looks at board or notes when talking to the class. *
 11. Stands behind podium or desk when teaching. *
 12. Has a very relaxed body position when talking to the class.
 13. Smiles at individual students in the class.
 14. Uses a variety of vocal expression when talking to the class.
- * Presumed to be nonimmediate

Instruments used to measure nonverbal immediacy have gone through several iterations since Andersen's (1978) BII scale and Richardson et al.'s (1987) NIB measure (see Table 2.1 below). In 1990, Gorham and Zakahi made minor modifications to the NIB which they renamed the nonverbal immediacy measure (NIM). Modifications included dropping the "Sits on desk or in a chair when teaching" and changing instances of the term "when" to "while." The 13-item measure was revised again by Thomas, Richmond, and McCroskey (1994) and renamed the revised nonverbal immediacy measure (RNIM). Modifications to this measure included dropping three additional items: "Sits behind desk while teaching," "Touches students in the class," and "Stand behind podium or desk while teaching." Moreover, "Smiles at the class as a whole, not just individual students" was contracted to "Smiles at the class as a whole." The four items were dropped because they dealt with touch, standing and seating which did not contribute to reliability or validity of the measure when used in college classrooms (p. 109). Another revision led to the development of the nonverbal immediacy scale (NIS) which was developed by Richmond, McCroskey, and Johnson (2003). The NIS has two versions, a self-report of immediacy (NIS-S) and an other-report of immediacy (NIS-O). The NIS has 26-items which are designed to be applicable to contexts beyond the classroom. The various measures of immediacy are shown in Table 2.1 below.

Table 2.1 Nonverbal Immediacy Measures

| Measure Name | Author(s) | Number of Items |
|--|--|-----------------|
| General Immediacy (GI) measure | Andersen (1978) | 9 |
| Behavioral Indicators of Immediacy (BII) measure | Andersen (1978) | 28 |
| Nonverbal Immediacy Behaviors (NIB) measure | Richmond et al. (1987) | 14 |
| Nonverbal Immediacy Measure (NIM) | Gorham and Zakahi (1990) | 13 |
| Revised Nonverbal Immediacy Measure (RNIM) | Thomas, Richmond, and McCroskey (1994) | 10 |
| Nonverbal Immediacy Scale (NIS) | Richmond et al. (2003) | 26 |

Verbal Immediacy Measure

In addition to the NIB measure of immediacy (Richmond et al., 1987), Gorham (1988) explored verbal immediacy and its influence on learning in her pivotal 1988 study. While Andersen (1978) had recognized that Mehrabian's (1968, 1971) construct of immediacy included verbal aspects of communication that indicate like-dislike, Andersen chose not to look at it in her research. Gorham (1988) pointed out that Andersen recommended future research look into verbal immediacy, and, moreover, that Mehrabian's initial construct of immediacy was that of verbal immediacy (Gottlieb et al., 1967; Mehrabian, 1966; Weiner & Mehrabian, 1966) prior to introducing nonverbal immediacy. Gorham (1988) also drew on findings at the time that greater cognitive and affective learning resulted when instructors used verbal behaviors that conveyed pro-social (reward, expert and referent power) as opposed to anti-social (coercive and legitimate power) messages based on French and Raven's (1959) five bases of power

model. In her study, Gorham set out to identify low-inference verbal immediacy variables that signal approach, as was done with Andersen's (1978) BII scale and Richmond et al.'s (1987) NIB for verbal immediacy. In order to develop a low-inference measure, Gorham (1988) drew from Mehrabian's (1967, 1971, 1972, 1981) conception of verbal immediacy where approach-avoidance are signaled through verbal language constructs including:

variations in adjectives ("This person needs help" vs. "That person needs help"), verb tense (present vs. past), order of occurrence of references, inclusivity ("we" vs. "I"), mutuality ("Judy and I do X" vs. "I do X with Judy"), implied voluntarism ("want to" vs. "have to" or "should"), probability ("will" vs. "may"), conditionality ("I would like to see you again" vs. "I want to see you again"), and responsibility ("I conclude" vs. "The results lead me to conclude;" "I don't like her" vs. "Most people find her an intolerable bore"). (p. 42)

In order to generate low-inference verbal immediacy items, Gorham asked forty-seven undergraduate students to "think of the best teachers they had had throughout all their years of school and list the specific behaviors which characterized those teachers" (p. 43). The result was a list of 17 low-inference verbal immediacy behaviors (VIB) of instructors. The items included:

1. Uses personal examples or talks about experiences she/he has had outside of class.
2. Asks questions or encourages students to talk.
3. Gets into discussions based on something a student brings up even when this doesn't seem to be part of his/her lecture plan.
4. Uses humor in class.
5. Addresses students by name.
6. Addresses me by name.
7. Gets into conversations with individual students before or after class.
8. Has initiated conversations with me before, after or outside of class.
9. Refers to class as "our" class or what "we" are doing.
10. Provides feedback on my individual work through comments on papers, oral discussions, etc.
11. Calls on students to answer questions even if they have not indicated that they want to talk. *
12. Asks how students feel about an assignment, due date, or discussion topic.
13. Invites students to telephone or meet with him/her outside of class if they have questions or want to discuss something.
14. Asks questions that solicit viewpoints or opinions.

15. Praises students' work, actions or comments.
 16. Will have discussions about things unrelated to class with individual students or with the class as a whole.
 17. Is addressed by his/her first name by the students.
- * Presumed to be nonimmediate

After creating the VIB, Gorham used it, in addition to the 14-item NIB (Richmond et al., 1987), to measure student perceived cognitive learning, based on Richmond et al.'s (1987) learning loss measure, and affective learning, based on McCroskey, Richmond, Plax, and Kearney's (1985) affective learning instrument. The results of the study indicated "substantial relationships between immediacy and learning" (p. 46). Among the correlations, several were particularly strong, including: praise of students' work, actions, or comments; humor; frequency of initiating conversations; and, being willing to become engaged in conversations with students before, during, after and outside of class. Additionally, Gorham (1988) reported several other items that correlated moderately with learning, including: instructor self-disclosures; asking questions and encouraging students to talk; soliciting viewpoints and opinions; following up on student-initiated topics; providing feedback on student work; asking how students feel about assignments, due dates and discussion topics; referring to the class as "our" class and what "we" are doing; and inviting students to telephone or meet outside of class (pp. 47-48).

In addition to devising the VIB and finding a positive correlation between both verbal and nonverbal immediacy and cognitive and affective learning, Gorham also found interactions with class size. She found that verbal immediacy dropped as class sizes increased, while nonverbal immediacy was not affected by class size. Regarding the former, she found that as class size increased some behaviors, in particular, increased in value, including: instructor self-disclosure; asking questions or encouraging students to

talk; referring to the class as “our” class; addressing students by name; and asking for opinions and viewpoints (p. 50).

Criticisms of Immediacy Research in Higher Education

Despite the extensive use of immediacy measures over several decades of research (e.g., GI, BII, NIB, NIM, and RNIM and VIB), researchers have criticized immediacy research for three reasons: (1) construct validity (particularly the VIB), (2) the subjective nature of perceptions of instructor immediacy behaviors, and (3) over-reliance on cross-sectional, survey based research (Frymier & Thompson, 1995; Symthe & Hess, 2005; Witt et al., 2004, Witt et al., 2010).

Criticisms of Nonimmediacy Research

Regarding the first criticism of immediacy measures, the Andersen’s (1978) BII scale has been criticized as not being a valid measure of nonverbal immediacy because it requires students to compare instructors in their responses (McCroskey et al., 1995; McCroskey et al., 1996). Without a similar basis for comparison, students would be providing data on different scales. McCroskey et al. (1995) contended that the NIB and NIM measures provide more valid measures of instructor immediacy because they provide “a reference base consistent for all students, regardless of subject matter being studied or the culture of the student” (p. 284).

Another criticism of immediacy measures has been related to instrument reliabilities of the measures. While most studies have found reliabilities of .70 for nonverbal immediacy measures, and many with reliabilities of .80 (Rocca & McCroskey, 1999), some have challenged these. Hess and Smythe (2001), for example, only achieved reliabilities of .64 for the VIB and .67 for the NIB. They speculated that the difference

could have been due to the fact that most studies had asked students to rate the immediacy behaviors of prior instructors while theirs asked students to report on their current instructor.

Another criticism of nonverbal immediacy research has focused on the use of student reports of instructor immediacy. Frymier and Thompson (1995) argued that studies such as Gorham and Zakahi's (1990), which found a correlation of .81 ($p < .01$) between student reports of instructor immediacy and instructor self-reports of their immediacy, did not take into account student characteristics that could influence how they perceive their instructor's behavior. They claimed that in order for student reports to be a valid methodology, individual characteristics of students "must not significantly and meaningfully affect the manner in which they report their instructors' immediacy behaviors" (p. 86).

In order to challenge student report measures of instructor immediacy, Frymier and Thompson (1995) conducted a series of four studies to test the validity of student reports of instructor immediacy. Across the four studies, they looked at student trait characteristics, including: social style, self-esteem, communication apprehension, trait motivation, sex, and class rank. Unexpectedly, they found that these trait characteristics did not influence the ability of the students to observe and report on instructors' immediacy. Frymier and Thompson (1995) also found no significant differences in verbal and nonverbal immediacy measures between students from a variety of different majors. This was in alignment with the findings of Kearney et al. (1985) who also had found that immediacy was critical for student affective learning outcomes in both people-oriented and task-oriented majors, despite the fact that students in task-oriented majors did not

believe that instructor immediacy was necessary for learning in their majors. Frymier and Thompson (1995) concluded that the behavioral indicant measures of immediacy are effective because they do not ask students to evaluate instructor behaviors, rather, they only ask them to estimate how frequently the behaviors have been exhibited, which they speculated may help the students to be more objective.

Smythe and Hess (2005) also contended that student reports were not a valid measure of instructor immediacy behaviors. They pointed out that while Andersen (1978) paid careful attention to psychometrics when developing the BII, most studies had adopted Richmond et al.'s (1987) NIB, and revised versions of it, the NIM and the RNIM (p. 171). Smythe and Hess (2005) strongly criticized the use of subjective measures of instructor immediacy behaviors. In order to test the ability of students to accurately report instructor immediacy behaviors, they replicated Andersen's (1978) dissertation study and compared student reports of instructor immediacy with those of trained raters. The results of their study were that student perceptions of instructor immediacy did not correlate with those reported by trained observers. They concluded that, "Until researchers can provide convincing behaviorally anchored evidence for the validity of student reports, any claims about the impact of teacher nonverbal immediacy on instruction which is based on student report data should be viewed with skepticism" (p. 178).

It is important to note here that the focus on "behaviorally anchored evidence" belies an objectivist ontology of perception. While some recent research has continued to criticize student reports of immediacy from an objectivist perspective (e.g., Roberts & Friedman, 2013), socio-constructivist perspectives, which view meaning creation as a transactional process, have emerged in the literature in more recent years (e.g., Allen,

Long, O'Mara, & Judd, 2008; Kelly, 2012; Kelly, Rice, Wyatt, Ducking, & Denton, 2015; Kelly & Westerman, 2014), particularly in studies comparing perceptions of instructor immediacy between cultures.

Criticisms of Verbal Immediacy Research

The verbal immediacy behaviors (VIB) measure has been used extensively by researchers, particularly in conjunction with nonverbal immediacy measures (Christensen & Menzel, 1998; Christophel, 1990; Frymier, 1994; Frymier & Thompson, 1995; Furlich, 2016; Ghamdi et al., 2016; Hackman & Walker, 1990, McAlister, 2001; Powell & Harville, 1990; Witt et al., 2004). However, in addition to facing criticisms similar to measures of nonverbal immediacy, as discussed above, the validity of verbal immediacy as a construct itself has been challenged (Hess & Smith, 2001; Richmond et al., 2003; Robinson & Richmond, 1995; Thomas et al., 1994). Thomas et al. (1994) initially expressed doubts as to the validity of the VIB in a note appended to their research study. In the note, they explained that while the subjects of their study had completed the VIB measure, results were not presented due to concerns with the face validity of it. Their concerns were that the items were generated by the undergraduate students in Gorham's (1988) study based on behaviors of an "effective" instructor rather than behaviors that are immediate, which they believed could be resulting in "extreme response bias" (p. 113). Robinson and Richmond (1995) also presented extensive concerns with the VIB, describing it as lacking both face and construct validity. They argued that nonverbal factors are likely the essence of the immediacy construct and that verbal factors are related to other constructs, not immediacy. They concluded with a recommendation that the VIB "should not be allowed to become entrenched in the literature of the field as a

measure of something that it does not measure” (p. 81) and that “Until the issue is resolved, advancement of theory and research related to immediacy should focus on its nonverbal components” (p. 84). Nearly a decade later, Richmond et al. (2003) claimed that the VIB is “completely invalid as a measure of verbal immediacy” and that it is instead “a measure of the verbal behaviors exhibited by good teachers—not necessarily immediacy behaviors” (p. 505). Despite serious criticisms of Gorham’s (1988) VIB, many researchers (e.g., Arbaugh, 2010; Baker, 2010; Furlich, 2016; Ghamdi et al., 2016; Gendrin & Rucker, 2004; Goodboy et al., 2009; Shutt et al., 2009; Titsworth, 2004; Velez & Cano, 2008; Wilson & Locker, 2007; Witt & Wheelless, 2001) have continued to use the measure. Many researchers have measured verbal immediacy rather than nonverbal immediacy due to beliefs that nonverbal socio-emotional cues could not be communicated in online learning that was asynchronous and text-based (Arbaugh, 2001; Baker, 2004; Hutchins, 2003; Jensen, 1999; Rourke, Anderson, Garrison, & Archer, 1999; Swan, 2003).

Synthesis of Findings of Instructor Immediacy Research

The first 20 years of immediacy research, which focused on higher education and the impact of instructor immediacy (in the lecture hall) on student learning, consistently found that instructor immediacy was associated with student learning. Witt et al. (2004) conducted a seminal meta-analysis and compared three types of learning – affective learning, cognitive learning, and perceived cognitive learning - across verbal immediacy, nonverbal immediacy and combined immediacy. They found that as verbal and nonverbal immediacy increased, affective learning measures and students’ perceptions of their cognitive learning increased dramatically, particularly when verbal and nonverbal

immediacy were combined. Using the binomial effect size display method to compare the magnitude of findings, they found relative size increases of 341% for perceived learning and 244% for affective learning related to instructor immediacy. While dramatic results were found for affective and perceived cognitive learning, the results for objective measures of cognitive learning, as measured by recall, recognition and retention of specific course content, were much lower, with an increase of only 27%. They concluded that, “even though students like more highly immediate instructors and think they learn more from their courses, actual cognitive learning is not affected as much as they think it is” (p. 201).

While Witt et al. (2004) concluded that actual cognitive learning was not affected greatly, they acknowledged that all of the studies that measured cognitive learning as performance in their meta-analysis did so based on lower-order outcome measures such as recall, recognition, and test grades. Moreover, they pointed out that while course grades may reflect some types of higher-order learning, as defined by Bloom’s taxonomy, “levels of learning involving analysis, synthesis, and problem solving were not identified or directly measure[d] in this body of research” (p. 198). Considering that immediacy is a highly socio-emotional interaction between people, as defined by Mehrabian (1971, 1972, 1981), one would not expect immediacy to have as high of an impact on lower-order cognitive learning tasks as it would have on higher-order cognitive learning tasks, particularly those which require high socio-emotional interaction and the development of values and beliefs. In other words, higher-order cognitive learning likely involves a greater interaction with affective learning than lower-order cognitive learning.

Immediacy as a Nonlinear Phenomenon

As seen in the relevance studies of Frymier and colleagues (Frymier & Shulman, 1995, Frymier, Shulman, & Houser, 1996; Frymier & Houser, 1998) and the notetaking studies of Booth-Butterfield et al. (1992), Carrell and Menzel (2001) and Titsworth (2001, 2004), the influence of instructor immediacy on learning is complex and multifaceted. Evidence in the immediacy literature suggests three things: (1) immediacy influences both affective and cognitive learning, directly and indirectly; (2) nonverbal immediacy and verbal immediacy operate in different ways on affective and cognitive learning; and, (3) the relationship between immediacy and learning is positive, but nonlinear. Previous sections of this paper have discussed the first two points. This section addresses this third point.

In their landmark study, Richmond et al. (1987) found that the correlation between nonverbal immediacy and cognitive learning was nonlinear where the higher the nonverbal immediacy of the instructor, the higher the affective learning. In contrast, they found that higher immediacy did not have any additional gain for cognitive learning. They summarized from their findings that low immediacy generates low cognitive and affective learning, moderate immediacy generates higher cognitive and moderate affective learning, and high immediacy generates similar levels of cognitive learning as moderate immediacy but even higher affective learning. In other words, high immediacy had additional gains for affective learning, but no additional gains for cognitive learning. Thus, depending on the focus of a learning outcome, predominantly affective or predominantly cognitive, the degree of immediacy that an instructor uses when interacting with students should be varied to have an optimal effect.

In another study, Comstock et al. (1995) found that nonverbal immediacy had an inverted U curvilinear relationship with cognitive, affective and behavioral learning where, moderately high instructor immediacy was found to be more effective than excessively high or low immediacy. In contrast to Richmond et al. (1987), however, they found that excessively high immediacy actually led to attenuated learning, both cognitive and affective. They concluded that, “where teacher nonverbal immediacy is concerned, students can get either too little or too much of a good thing” (p. 262). Christensen and Menzel (1998) also found a threshold effect for immediacy. However, unlike Richmond et al. (1987) and Comstock et al. (1995), they found that both verbal and nonverbal immediacy had a positive, linear correlation with all aspects of affective and behavioral learning. While higher levels of immediacy did produce higher learning, the gains for high immediacy over moderate immediacy were lower than the gains for moderate immediacy over low immediacy. Resonant with Richmond et al.’s (1987) contention that most instructors may already be moderately immediate, Christensen and Menzel (1998), asserted that moderate levels of immediacy may be sufficient in most cases and that extreme immediacy may be rare in the real world of teaching (p. 88). Menzel and Carrell (1999) also found that perceptions of learning increased between low and moderate nonverbal immediacy instructors, but not between moderate and high nonverbal immediacy instructors. Collectively, these findings suggest that where affective learning is a priority, high immediacy is beneficial, but where cognitive learning is a priority, particularly for low-level cognitive learning outcomes, moderate immediacy is both sufficient and perhaps even necessary to achieve optimum learning.

While moderate use of instructor verbal and nonverbal immediacy behaviors may be common, the way they are used and the timing of their use varies between highly effective instructors and those who are less effective. Evidence of this can be found in studies which have looked at the verbal immediacy behaviors of humor and self-disclosure – both of which have been found to correlate highly with student perceptions of learning (Downs, Javidi, & Nussbaum, 1988; Ghamdi et al., 2016; Gorham & Christophel, 1990; Jensen, 1999; Myers et al., 1998; Roberts & Friedman, 2013; Wanzer & Frymier, 1999). Several studies have found that humor and self-disclosure have a nonlinear relationship with learning, where too much of either could have a diminished effect if overly used (Downs et al., 1988; Gorham & Christophel, 1990; Miller et al., 2014; Sorenson, 1989). Gorham and Christophel (1990) found that high immediacy instructors used 63% more humor than low and moderate immediacy instructors. However, they found that not all humor was the same. Self-deprecating and tendentious comments were used 85% and 31% more, respectively, by low immediacy instructors. Conversely, moderate and high immediacy instructors used seven-times more physical and vocal humor. They also found that humor had a more pronounced effect for male students and male instructors. In an earlier study, Downs et al. (1988) compared award winning faculty with other faculty and found that while award-winning faculty used high amounts of humor and self-disclosure in their teaching, they did so less frequently relative to other faculty. Additionally, they found differences in how humor and self-disclosure were used. The award-winning instructors were most active in their use of humor during the second week of the semester, less in the sixth week and least in the tenth week of classes; they were most active in their use of self-disclosures in the second

week, less in the sixth week, and then slightly more active again in the tenth week (p. 136). The non-award-winning instructors were more consistent in their high use of humor and self-disclosures throughout the semester.

An additional difference Downs et al. (1988) found was that award-winning instructors' use of humor and self-disclosure was relevant to course content and was used to clarify course materials. Conversely, other instructors often used humor and self-disclosure that was either not related to the course content, was inappropriate, or involved too much disclosure. Sorensen (1989) also found that "good teachers" used more immediate behaviors than "poor teachers" but that they also engaged in less disclosure than poor teachers. Moreover, good teachers used positive wording and pro-social disclosures while poor teachers used anti-social self-disclosures such as negative thoughts or ego-inflating statements. Miller et al. (2014), as well, found that negative self-disclosures were detrimental to student perceptions of instructor credibility and immediacy.

Differing Effects of Verbal and Nonverbal Immediacy

While immediacy has consistently been found to have a positive relationship with student learning outcomes, the relationship between verbal and nonverbal immediacy on learning have been inconsistent. Christensen and Menzel (1998) found that verbal immediacy accounted for twice as much variance for perceived cognitive learning as nonverbal communication and, conversely, nonverbal immediacy exceeded verbal immediacy in explaining all but one aspect of affective learning and behavioral learning. Likewise, McCroskey et al. (1996) found that verbal immediacy tends to influence cognitive learning while nonverbal immediacy influences affective learning. Looking at

course satisfaction, Moore et al. (1996) found that verbal immediacy was the strongest predictor of student satisfaction with instructor support. For lectures, however, they found that verbal and nonverbal immediacy functioned together to influence student ratings of instructor effectiveness. In a similar study, Wilson and Locker (2007) found a moderate correlation between measures of instructor effectiveness and nonverbal and verbal immediacy.

Rocca and McCroskey (1999) looked at nonverbal immediacy's influence of homophily, "the amount of similarity two people perceive themselves as having" (p. 310), between students and their instructors. They found that nonverbal immediacy was positively correlated with student perceptions of homophily. In contrast, Edwards and Edwards (2001) found that although verbal immediacy was related to student perceptions of homophily with instructors, nonverbal immediacy did not have a significant association with perceptions of homophily.

Collectively, these findings point to the proposition that highly effective instructors vary their use of both verbal and nonverbal immediacy depending on the timing of the semester and learning objectives. At the beginning of the semester, when an instructor may have the objective of developing a relationship with students, highly immediate verbal and nonverbal behaviors may be most effective, as was seen in Downs et al.'s (1988) study. Moreover, for learning activities that require low socio-emotional task accomplishment, instructors may find it more effective to provide relevant and clear materials while using only moderate immediacy that focuses on directing learners' attention (Christensen & Menzel, 1998; Comstock et al., 1995; Richmond et al., 1987; Sorensen, 1989). Conversely, for learning activities that have objectives which require

high socio-emotional interaction, students would likely benefit from both high verbal and nonverbal immediacy behaviors (Christensen & Menzel, 1998; Richmond et al., 1987; Witt et al., 2004). However, how verbal and nonverbal immediacy interact with each other is not clear in the literature. Menzel and Carrell (1999) suggested that “Although nonverbal behaviors signal to the student that an instructor is open to his or her contribution, verbal behaviors may actually ask for the contribution. If oral participation is the outcome sought, then verbal immediacy seems to be a good way to achieve that outcome” (p. 38). In other words, if you have a learning task which has a highly socio-emotional component to it, such as an oral discussion, then both verbal and nonverbal immediacy behaviors should be used to invite students to participate.

Factors which Interact with Instructor Immediacy and Learning

The need for moderate instructor immediacy appears to be a precondition for highly effective instruction (Frymier & Shulman, 1996) and the degree of immediacy behaviors exhibited, likely needs to be varied based on the objectives of instructional/learning tasks. An additional factor that should be considered when adapting communication behaviors is the context in which the communication is occurring. Various factors--including instructor and student characteristics, the nature of the discipline, and the medium through which instruction is occurring--have an impact on how instructor immediacy behaviors are perceived by students.

The age and experience of an instructor can affect the way instructors' immediacy is perceived by their students. Gorham and Zakahi (1990) found that verbal immediacy had a higher correlation with student learning than nonverbal immediacy for less experienced instructors (1-5 years) but found no differences between verbal and

nonverbal immediacy behaviors for more experienced instructors (11 or more years). Conversely, student self-perceptions of their own immediacy also affect how they view their instructors' immediacy behaviors. Allen et al. (2008) found that students who have higher self-perceptions of immediacy view their professors as being less immediate, whereas students who viewed themselves as less immediate attributed problems in classroom communication to the professor's inability to communicate effectively (Allen et al., 2008).

Immediacy has also been found to interact with gender, though findings are inconsistent. Menzel and Carrel (1999) found that for male students, perceptions of learning increased between low nonverbal immediacy and moderate nonverbal immediacy, but not between moderate nonverbal immediacy and high nonverbal immediacy. In contrast, female students perceived higher learning across all levels of nonverbal instructor immediacy.

Student communication apprehension has also been found to influence student perceptions of instructor immediacy. Frymier (1993a) found that students who had high verbal immediacy instructors had higher motivation to study regardless of their level of communication apprehension; in contrast, when instructors were perceived as using low levels of verbal immediacy, highly apprehensive students had the lowest levels of motivation. Nonverbal immediacy had no significant correlation with motivation to learn in the study. In a similar study, Ellis (1995) found that verbal immediacy was negatively correlated with student public speaking anxiety, particularly for students with high communication apprehension, and stated that "a teacher's high verbal immediacy behavior may make as much as a 45% difference in the success rate of high

apprehensives” (p. 74). However, like Frymier (1993a), Ellis found that nonverbal immediacy did not have a significant relationship with communication apprehension. Similar results have been found in other studies. Menzel and Carrel (1999) found that students with instructors high in verbal immediacy were more willing to talk. Moreover, perceived learning was positively related to instructor verbal immediacy and willingness to talk. While students with high verbal immediacy instructors may report lower communication apprehension than with low verbal immediacy instructors, they may still report their instructors as being less verbally immediate than their low communication apprehension peers. Allen et al. (2008) found that students high in communication apprehension perceived instructors as less nonverbally immediate and also had a less positive attitude toward their instructors, expected lower grades, liked the course content less, and did not perceive behaviors recommended as being useful.

Differences in perceptions of instructor immediacy are also influenced by the academic discipline that students are in. Moore et al. (1996) found that students in the physical sciences reported their instructors as using significantly lower immediacy than students in people oriented majors, e.g., communication, business, the arts, humanities and social sciences (Moore et al., 1996). They speculated that the students in the physical sciences may be less concerned with instructor immediacy or that the results may reflect a difference in teaching styles in the two different disciplines. Kearney et al. (1985) found similar results in an earlier study. In their study, students from task-oriented majors (e.g., sciences and engineering) believed that instructor immediacy behaviors were not important for their learning while students from people-oriented majors (e.g., humanities and social sciences) believed them to be important. However, they found that students in

task-oriented majors, despite their beliefs about the lack of importance of instructor immediacy behaviors reported higher perceived learning with instructors they rated as more highly immediate.

Course size also affects student perceptions of instructor verbal and nonverbal immediacy. Moore et al. (1996) found that instructors of small classes with between 1 and 20 students were reported as using higher immediacy than instructors of larger classes, and instructors of medium size classes with between 21 and 40 students were perceived as having higher immediacy than instructors of even larger courses. In another study, Messman and Jones-Corley (2001) found that, overall, student affect for public speaking decreased from the first week of the semester to the last week of the semester in a basic public speaking course with 1515 undergraduates enrolled. Forty-one percent of the students were enrolled in a large lecture version of the course that met once a week and had break-out sessions with 23 students led by an instructor's assistant twice a week. The other 59% were enrolled in self-contained versions of the course that met three times a week with a teaching assistant and only had 26 students in each section. While affective learning decreased overall for the entire enrollment of students, students who rated their teaching assistants as highly immediate maintained their high levels of affect for public speaking in both modalities.

Medium Effects

The effects of instructor immediacy also interact with the medium through which learning occurs. Freitas, Myers, and Avtgis (1998) found that students watching live-streamed video courses reported the same amount of instructor verbal immediacy as classroom students, but students in classrooms reported significantly higher levels of

instructor nonverbal immediacy. Aligned with Moore et al.'s (1996) results, Carrell and Menzel (2001) found that students viewing a live lecture perceived general instructor immediacy as being higher than students viewing a live video stream of the same lecture and students listening to the same lecture while viewing a PowerPoint presentation instead of the video stream.

Ethnic and Cultural Effects

A large number of studies have compared the effects of immediacy between different ethnic and cultural groups. Across different groups, findings have generally found a relationship between instructor immediacy and student learning, though the effects were different. Fayer et al. (1988) compared U.S. mainland students with Puerto Rican students. They found a relationship between instructor immediacy and student learning in both cultures, though instructor immediacy accounted for greater variance in both cognitive and affective learning on the U.S. mainland. Sanders and Wiseman (1990) looked into the effects of both verbal and nonverbal immediacy on affective and perceived cognitive learning across ethnic groups within the United States – White, Asian, Hispanic, and Black students. They found that immediacy was positively associated with learning for all groups, though the levels of the association varied. They concluded that there appears to be a pan-cultural effect for instructor immediacy in terms of learning. Neuliep (1995) compared perceptions of instructor immediacy between African-American and Euro-American instructors and students. They found that there were significant positive correlations between both verbal and nonverbal instructor immediacy with affective and perceived cognitive learning. However, similar to Sanders and Wiseman (1990), they found differences between groups. For Euro-American

students, immediacy was more highly correlated with affect for the instructor, attitudes about the course content, intentions to enroll in another class with the same instructor, and intentions to engage in the behaviors taught in class than African-American students. One explanation provided by Neuliep (1995) was that the Euro-American students may be less immediacy-oriented than the African-American students, meaning that high immediacy instructors may have a more arousing effect on the Euro-American students if they value it positively. For the African-American students, high immediacy may be less arousing if they were more culturally immediacy-oriented than the Euro-American students.

McCroskey et al. (1995, 1996) compared U.S., Australian, Puerto Rican, and Finnish students' perceptions of instructor nonverbal immediacy with affect toward the instructor and perceived learning. They found in all four cultures that increased instructor immediacy had a positive correlation with both affect towards the instructor as well as perceived cognitive learning. They also found that while the differences in perceived instructor immediacy were not very large, there were some differences. For example, Puerto Rican and U.S. students reported their instructors similarly, but they reported significantly higher immediacy than the Australian and Finnish students. The Finnish students reported more negative attitudes towards their instructors than the other groups, while the Australian students reported less willingness to enroll in another class with the same instructor. They also found substantial differences in the degree to which instructor immediacy was associated with perceived cognitive learning. For the Finnish students, immediacy could predict over 46 percent of the variance with perceived learning while for the Australian group it was only a quarter of that (p. 210). An additional finding was

that movement and gesturing were the least associated with perceived cognitive learning, while vocal variety, eye contact, and smiling were most highly related to learning across cultures. Based on their findings, McCroskey et al. (1995, 1996) postulated that there is a baseline student need for instructor immediacy across cultures, which they believe varies inversely with the normative level of expected immediacy within a culture. They also postulated, like Neuliep (1995) that in non-immediate cultures the impact of immediate instructors could be comparatively even higher than in immediate cultures due to positive valence of expectancy violations.

Studies which compared students in Asian countries with those in America have also found positive relationships between immediacy and learning. Hinkle (1998) used a translated version of the RNIM and found a strong correlation between nonverbal immediacy and perceived learning for Japanese students. Neuliep (1997) compared the effects of instructor verbal and nonverbal immediacy on American and Japanese students' affective and perceived learning. They found a significant and positive relationship between verbal and nonverbal instructor immediacy with perceived learning and affective learning for both cultural groups, though American students perceived more immediacy from their instructors overall. For the American students, verbal immediacy was more predictive of learning outcomes while for the Japanese students' nonverbal immediacy was more predictive of learning outcomes than verbal immediacy.

Comparing perceptions of instructor verbal and nonverbal behaviors between American and Chinese students, Myers et al. (1998) had similar results as Neuliep (1997). They found that Chinese students overall reported their instructors to be less immediate than their American counterparts. For the Chinese students, the strongest

correlations of immediacy with perceived cognitive learning were the nonverbal behaviors of “monotone/dull voice,” “having a tense body position,” and “smiles at individual students.” Like McCroskey et al. (1995), they concluded that it is possible that regardless of culture, particular instructor nonverbal behaviors can impact student learning.

Overall, intercultural immediacy studies have supported Mehrabian’s (1981) contention that immediacy is a universal construct. Mehrabian (1981) recognized that cultural differences may play a part in interpreting emotional states, attitudes, likes-dislikes, or preferences conveyed through implicit cues in verbal and nonverbal communication. However, he conceived that there was a universal component to implicit communication, where implicit communication both within and between cultures has “some degree of consistency in the use of subtle behaviors to convey a certain state, relation, or feeling” (p. 3).

Instructor Immediacy and Perceptions of Power

Much of the immediacy research has looked at interactions between an instructors’ immediacy behaviors and learning as mediated through instructor power, particularly in more recent years (Allen et al., 2008; Finn & Schrodt, 2012; Kelly et al., 2015; Kerssen-Griep & Witt, 2012; Miller et al., 2014; Mottet, Parker-Raley, Cunningham, & Beebe, 2005; Mottet, Parker-Raley, Cunningham, Beebe, & Raffeld, 2006; Pogue & AhYun, 2005; Rocca, 2004, 2009; Rogers, 2015; Schrodt & Witt, 2006; Schrodt et al., 2009; Teven & Hanson, 2004; Trad et al., 2014; Witt & Kerssen-Griep, 2011, 2012; Witt et al., 2014).

Richmond, Plax, McCroskey and colleagues published a series of papers titled “Power in the Classroom” which investigated the use and effects of instructor power (McCroskey et al., 1985; Plax, Kearney, McCroskey, & Richmond, 1986; Richmond, 1990). The studies were conceptualized based on French and Raven’s (1959) bases of power model. The bases of power model posits that there are five types of power that one can exert over another to influence their behavior. The five types of power fall into two categories: those that are anti-social and those that are pro-social. Anti-social power bases include: reward power, coercive power, and legitimate power. Pro-social power bases include: referent power and expert power. Reward power is based on a person’s (P) perception that the other (O) can mediate rewards for him. Coercive power is based on P’s perception that O has the ability to mediate punishments for him. Legitimate power is based on P’s perception that O has a legitimate right to prescribe behavior for him. Referent power is based on P’s identification with O. Expert power is based on P’s perception that O has some special knowledge or expertise (French & Raven, 1959, p. 151).

According to this model, the anti-social power bases of coercion, reward, and legitimate power are closely linked. The use of coercion power results in decreased attraction of P toward O and high resistance to O; conversely, the use of reward power results in increased attraction of P toward O and lower resistance. Legitimate power is based upon social structures that involve hierarchy and authority, where the higher the perceived legitimacy of O, the lower the resistance to coercive power there will be and the greater the attraction to rewards. The perception of O’s legitimate power is also based upon cultural values and the perception and acceptance of P that O has the right to hold

his position within the hierarchy. The range of a base of power varies depending upon the context, and can range from a very specific office within an organization, to very broad beyond a specific context. Culturally derived bases for legitimate power can be especially broad. In general, anti-social bases of power can be seen as using extrinsic motivation in order to exert power over others.

Pro-social basis of power is based upon intrinsically motivating factors. Referent power is based on P's feeling of oneness with O and P's desire to identify with O. It is this identification with O that allows O to have an influence upon P's behavior. Referent power requires that P believes "I am like O, and therefore I shall behave or believe as O does" or "I want to be like O, and I will be more like O if I behave or believe as O does" (pp. 154-155). According to French and Raven, the greater the attraction of P towards O, the broader the range of the referent power across contexts. Expert power, the other pro-social base of power, is based on P's evaluation of O as an expert within a domain relative to his own knowledge or skills. French and Raven consider expert power to be related primarily to O's influence on P's cognitive structure (p. 155). French and Raven distinguished between expert power based on P's perception of the credibility of O, and expert power based on P's evaluation of O's logical arguments or facts presented. According to their theory, expert power produces in P "a new cognitive structure which is initially dependent upon O ... [and P] is likely to become more independent with the passage of time" (p. 156). French and Raven distinguish between referent and expert power, where expert power is primarily cognitive in nature and limited to an area where the expert is seen as having superior knowledge or ability. Conversely, referent power

has a broader range and can be one of the most powerful bases of power depending upon the degree of P's attraction towards O.

Referring to the bases of power model, Richmond (1990) described the difference between compliance and motivation:

When we do something because another person wants us to do that thing, even though we would prefer not to do so, we are complying with the other person's wishes. Key here is the probability that motivated behaviors will occur regardless of the presence of others, whereas the compliant behavior will only occur in the presence (physical and/or psychological) of the compliance-seeking person. (p. 182)

In previous studies, Richmond (1990) found that the use of anti-social behavior alteration techniques (BATs), led to negative affective responses to both the instructor and the subject matter while pro-social BATs led to positive affective responses (McCroskey et al., 1985; Plax et al., 1986). In her (1990) study Richmond investigated the interaction between instructor use of BAT behaviors (anti-social power bases/extrinsic motivation), affinity seeking behaviors (pro-social power bases/intrinsic motivation) and instructor immediacy and their relationship to student reports of motivation, affective learning and perceived cognitive learning. She found a negative relationship between the use of BATs and motivation. Conversely, affinity seeking behaviors and instructor immediacy each had a positive correlation with student motivation, affective learning and perceived cognitive learning. Richmond (1990) concluded, saying "Teachers, we believe, use anti-social BATs primarily because either they are not aware of other options or because their power bases for pro-social BATs is simply inadequate for effective use" (p. 194).

The results of Richmond's (1990) study are similar to the findings of Booth-Butterfield et al.'s (1992) study on immediacy and student involvement. In their study, the use of anti-social power led to lower affective learning for students in high

immediacy conditions; conversely, the use of anti-social power led to improved learning outcomes for students with low immediacy instructors, most likely due to their use of notetaking. However, evidence from relevance and notetaking studies (Carell & Menzel, 2001; Frymier & Shulman, 1995, 1996; Frymier & Houser, 1998; Titsworth 2001, 2004), point to shorter term cognitive learning gains, at lower-order outcome levels, when anti-social power is used as opposed to longer-term affective and cognitive learning gains when high immediacy and pro-social power is used. This is parsimonious with Mehrabian's (1981) conception of immediacy as behaviors that signal approach not only through high arousal, pleasure and liking, but also the signaling of autonomous and/or invited approach in the face of power. Using anti-social power to compel students to approach the learning tasks, content, values, and beliefs of instruction may produce short-term results; however, the use of immediacy behaviors to signal pro-social power that invites approach, while also stimulating positive arousal and pleasure and directs cognitive attention, seems to produce longer term cognitive and affective learning.

The use of immediacy behaviors and pro-social power appear to be connected. In another study on instructor use of BATs and immediacy, Kearney, Plax, Smith, and Sorensen (1988) found that students were likely to resist instructors who used anti-social power techniques while also using immediacy behaviors. Conversely, instructors who used immediacy behaviors and pro-social power strategies were resisted the least. More surprisingly, students were most likely to resist instructors who were non-immediate and used pro-social techniques, more so than non-immediate instructors who used anti-social strategies. Kearney et al. (1988) interpreted the findings as indicating that students may perceive the nonimmediate instructor's use of prosocial behaviors as insincere attempts to

gain compliance. Kearney et al. concluded stating that, “immediate teachers who occasionally resort to antisocial means of control may be tolerated by their students” (p. 65).

Immediacy and Instructor Credibility

From the perspective of French and Raven’s (1959) bases of power, instructors have two possibilities for exerting pro-social power – referent power and expert power. Instructor referent power is dependent upon students evaluating the instructor as someone who is attractive, with whom they would like to identify themselves with, and whose values and beliefs they would like to emulate (French & Raven, 1959). Thus, by definition, referent power is likely to influence student’s affective learning. Instructor expert power, on the other hand, is related to student evaluations of the instructor as a credible expert within their domain of expertise and that the domain of expertise is something which the student values. French and Raven (1959) described expert power as a social influence on the cognitive structure, primarily. Thus, expert power, by definition contributes to student cognitive learning. While each of the pro-social bases of power may primarily influence one respective learning domain, i.e., affective or cognitive, both the cognitive and affective learning domains are likely to mutually influence each other (Bloom, 1956). Thus, expert power is likely to reinforce referent power and referent power is likely to reinforce expert power. Therefore, instructor credibility is a critical factor in developing and maintaining both expert and referent power.

Andersen et al. (1978) pointed out that immediacy could influence instructor credibility. Subsequently, many immediacy studies have looked at the influence of immediacy on instructor credibility and student identification with the instructor. Gorham

et al. (1999) looked at the effect of instructor immediacy on five dimensions of student perceptions of their instructor related to referent and expert power – competence, character, sociability, composure and extroversion – as well as two dimensions of homophily. They found that student perceptions of instructor immediacy had a positive correlation with all seven perceptions of their instructor. They concluded that students' judgements of their instructors' approachability and credibility are influenced by their immediacy behaviors. In another study, Thweatt and McCroskey (1998) investigated student perceptions of instructor credibility (based on measures of competence, trustworthiness and caring), nonverbal immediacy and instructor misbehaviors (defined as incompetence, offensiveness and indolence). Similar to Kearney et al.'s (1988) findings, Thweatt and McCroskey (1998) found that instructors who were high in immediacy and without misbehaviors were seen as the most competent, most trustworthy, and more caring. In regard to caring, they found that even with misbehaviors, instructors with high immediacy were seen as the most caring. Thweatt and McCroskey (1998) concluded that "Teachers who engage in occasional misbehavior, but are generally immediate, can preserve their credibility" (p. 356).

While instructor immediacy can protect an instructor's loss of credibility from occasional misbehaviors, instructor nonimmediacy itself can be considered by students to be misbehavior and have a negative impact on instructor credibility. Thweatt and McCroskey (1996) looked at instructor immediacy and found that in conditions where there were no instructor misbehaviors, but the instructors were described as using nonimmediate behaviors, the students perceived them as misbehaving. In other words, nonimmediacy, itself, was considered misbehavior by the students.

The effect of instructor immediacy behaviors on instructor credibility depends upon how students interpret them. Behaviors that may be perceived as positively arousing and signaling autonomy to some students may be valenced negatively by others and subsequently lead to avoidance behaviors. Sidelinger, Allen, and Laumakis (2015) studied instructor personal disclosures and found that instructors who disclose too much or too often lose credibility. Like Thweatt and McCroskey (1996), they found that nonverbal immediacy partially mediated the relationship between inappropriate conversations and student communication satisfaction. However, inappropriate disclosures by instructors that were too extreme or too extensive, violated the expectations of students to the point that nonimmediacy behaviors could not attenuate the negative effects associated with the violations.

Recent research has found support for a model in which instructor immediacy interacts with instructor credibility and subsequently student learning outcomes. Miller et al. (2014) investigated how instructor credibility mediated nonverbal immediacy and disclosures with student incivilities in the classroom. Incivility was defined as behaviors which interfere with a harmonious and cooperative learning atmosphere (p. 2). Credibility was measured based on three variables: trustworthiness, caring and competence. The results were that nonverbal immediacy was mediated by all three factors of credibility. Moreover, disclosure relevance was mediated by caring, and negative disclosures were mediated by instructor competence and trustworthiness while competence, trustworthiness and negative disclosures had a direct effect on student incivility. In another study, Schrodtt et al. (2009), investigated credibility as a mediator of pro-social communication behaviors (nonverbal immediacy, instructor clarity and

perceived confirmation) and student motivation, affective learning and cognitive learning. They found that instructor credibility partially mediated instructor clarity and confirmation behaviors, but that it fully mediated nonverbal immediacy cues. They also found that clarity was a particularly strong predictor of instructor credibility. These research findings are parsimonious with French and Raven's conceptions of referent and expert power (pro-social power) and support the notion that immediacy influences instructor credibility, which in-turn motivates students and increases affective and cognitive learning. This is also parsimonious with Mehrabian's (1981) conception of immediacy as being related to not only arousal, but also pro-social power. Likewise, it is parsimonious with the combined model of immediacy described by Christophel and Gorham (1995).

Immediacy and Clarity

Instructor clarity has been postulated as a factor in promoting instructor credibility as well as directly influencing cognitive learning (Chesebro & McCroskey, 1998; Comadena et al., 2007; Powell & Harville, 1990). There have been several studies that have examined the relationship between instructor immediacy, instructor clarity and student learning. In an early study, Powell and Harville (1990) conducted a cross-cultural study which investigated the effect of verbal immediacy, nonverbal immediacy and instructor clarity on student affective learning and intent to persist in college. They found that both nonverbal and verbal immediacy were related to instructor clarity, though the relationship varied by culture group. In another similar study, Chesebro and McCroskey (2001) found that instructor immediacy and instructor clarity positively correlated with affect for the instructor, affect for the course, motivation and cognitive learning.

However, unlike Powell and Harville (1990), they found no significant interactions between nonverbal immediacy and clarity. Similarly, Chesebro (2003) found that clear teaching led to greater cognitive learning, as measured by recall, than non-clear teaching regardless of the level of nonverbal immediacy. Additionally, affect for the instructor and for course materials was higher for both students with clear instructors and students with immediate instructors. In contrast to Chesebro and McCroskey (2001), they did not find a significant relationship between instructor immediacy and cognitive learning. Comadena et al. (2007) looked at interactions between immediacy, caring and clarity. Similar to the studies discussed above, they found that all three contributed to affective learning; however, only clarity made a statistically significant contribution to perceived cognitive learning.

Immediacy and Receiver Apprehension

Immediacy researchers have also looked at the influence of instructor immediacy on students' receiver apprehension. Chesebro and McCroskey (1998) used an experimental design to look into the effects of verbal and nonverbal instructor immediacy behaviors and clarity on receiver apprehension. They pointed out that while many studies had looked at the willingness of students to talk, no studies had looked at the willingness of students to receive information depending on their anxiety levels. They found that students with either clear or immediate instructors reported significantly lower receiver apprehension scores, and those with both clear and immediate instructors had an even greater reduction in receiver apprehension. In another study, Chesebro and McCroskey (2001) found that students with instructors who taught clearly and exhibited immediacy behaviors reported much lower receiver apprehension. The correlations between

instructor clarity and instructor immediacy with receiver apprehension were nearly identical.

Witt et al. (2014) found that credibility moderated the negative effects of receiver apprehension on intent to persist, but only for students who already had low receiver apprehension; credibility had no relationship with intent to persist for students with high receiver apprehension. However, nonverbal immediacy mitigated the negative effects of receiver apprehension on student intent to persist to the point that high immediacy rendered the inverse association between receiver apprehension and persistence statistically nonsignificant. Interpreted through French and Raven's (1959) bases of power model, these findings point to the possibility that credibility primarily influences expert power, whereby the motivation of students with low receiver apprehension is activated through the cognitive learning they perceive they are experiencing based on the logical arguments of the credible instructor. Credibility, and the expert power associated with it, may do little to influence the persistence of students with high receiver apprehension. Conversely, immediacy may more directly influence referent power, whereby the motivation of students with high receiver apprehension is activated by an emotional identification with the highly immediate instructor.

Immediacy and Face Threat Mitigation

Feedback is one of the most critical aspects of instruction. However, instructional feedback can put a strain on instructor-student relationships and damage instructor credibility in the eyes of the student (Kerssen-Griep & Witt, 2015). As such, feedback interventions need to provide corrective feedback while also maintaining the instructor-student relationship. Recent research has investigated the interaction of instructor

immediacy with face-threat mitigation tactics when conducting feedback interventions with students (Kerssen-Griep & Witt, 2012, 2015; Trad et al., 2014; Witt & Kerssen-Griep, 2011). Witt and Kerssen (2011) proposed that instructor use of nonverbal immediacy and face-threat mitigation communication behaviors could preserve or even enhance a student's perception of instructor credibility while maintaining the student's sense of face. Face is defined as "a person's desired social self-image" which is preserved through facework-- "interactional strategies that restore, protect, threaten or maintain those relational and self-identities for others and oneself" (Kerssen-Griep & Witt, 2012, p. 502). Feedback intervention theory posits that if a student's sense of face is not maintained in a feedback session, they will divert cognitive energy to self-identity-protecting processes rather than to task-learning or task-motivation regulatory processes. Witt and Kerssen-Griep (2011) theorized that, "This cognitive diversion limits a learner's ability to engage the substance of what was advised and diminishes the effectiveness of the feedback and its source" (p. 81). Witt and Kerssen-Griep (2011) and Kerssen-Griep and Witt (2012) postulated that instructor nonimmediacy behaviors and face-mitigation tactics would work together to maintain both the instructor's credibility and the student's face, which would in-turn allow a student's cognitive resources to be directed to task-learning. In their 2011 study, Witt and Kerssen-Griep looked at the interactions between instructors' use of face-attentive feedback and instructor nonverbal immediacy on instructor credibility, where instructor credibility was measured based on three variables: competence, character, and caring. Similar to Witt et al. (2014), they found that face-attentive feedback alone did not change student perceptions of instructor competence unless nonverbal immediacy was simultaneously employed. Instructor character, which

was measured as trustworthy, ethical and honorable, had slightly different results. Instructor character was negatively affected when either face-attentive feedback or immediacy behaviors were not used, but was maintained when both were used simultaneously. The caring dimension of credibility also had different interaction results. Perceptions of instructor caring were maintained when face-attentive feedback was provided regardless of immediacy; however, student perceptions of instructor caring were further enhanced when immediacy behaviors were also employed.

Trad et al. (2014) replicated Witt and Kerssen-Griep's (2011) study with a modification. In their study, they presented students with text-based feedback scenarios using only face-attentive feedback without nonverbal immediacy cues. They found that despite an absence of nonverbal cues available in the feedback scenarios, face-threat mitigation alone produced results similar to the high nonverbal immediacy/high face-attentiveness condition in Witt and Kerssen-Griep's (2011) and Kerssen-Griep and Witt's (2012) studies. They explained that the results of their findings were in line with Walther's (1992) social information processing theory that individuals are able to form impressions of others via text-based communication without visual cues. However, their results found only a small, though significant effect, for face-attentive feedback on competence and character and a moderate effect on caring.

One explanation for the finding that face-attentive communication, alone, had positive influences on instructor competence and caring in both Witt and Kerssen-Griep's (2011) and Trad et al.'s (2014) studies may be that the face-attentive messages are actually verbal immediacy behaviors. Weiner and Mehrabian (1968) conceptualized verbal immediacy as the use of grammatical structures which increase the sense of

proximity and autonomy, and consequently invite approach, as discussed previously in this paper. In both studies, the face-attentive examples provided incorporated such grammatical structures. For example, both studies used low face-attentive language such as “You have to practice giving the speech.” The use of “have to” indicates the assertion of power and lack of autonomy. Conversely, the higher face-attentive example provided, “You might also consider,” allows for autonomy. The finding in Witt and Kerssen-Griep’s (2011) study that nonverbal immediacy enhanced the effect of face-attentive communication behaviors on instructor credibility is not surprising considering that many studies have found that verbal immediacy and nonverbal immediacy, when combined, lead to higher affect and motivation (e.g., Goodboy et al., 2009; Witt et al., 2004) and that additional immediacy behaviors can have a compounded effect to increase perceptions of immediacy (e.g., Burgoon, Buller, Hale, & deTurck, 1984).

The findings that student perceptions of instructor credibility are both maintained and enhanced during feedback interventions that use both verbal (i.e., face-attentive feedback) and nonverbal immediacy behaviors resonate with previous findings that immediacy is more than just assertiveness or responsiveness. Thomas et al. (1994) pointed out that nonverbal immediacy behaviors, as defined by Mehrabian (1972, 1981) could be viewed as responsive, such as when drawing close to someone to assist them, or they could also be viewed as assertive, such as when two people draw near to each other to fight. In their study, Thomas et al. (1994) examined whether immediacy is something more than just responsiveness and hypothesized that immediacy would have positive associations with both assertiveness and responsiveness. The results of their study found that all of the items on the nonverbal immediacy instrument (NIB) correlated with both

assertiveness and responsiveness. However, some items correlated more strongly with one or the other. For example, vocal variety was significantly more associated with assertiveness while smiling was significantly more associated with responsiveness. Based on their findings, they suggested that competent communicators are those who are androgynous – high in both assertiveness and responsiveness. They concluded, saying:

While immediacy is substantially related to responsiveness, which manifests itself in behaviors commonly associated with what most people would consider being warm and open, it is equally related to assertiveness, which manifests itself in taking control and acting as a leader...Immediate teachers appear to be appropriately assertive as well as responsive to the needs of their students (p. 112)

In another study, Wanzer and Frymier (1999) examined the verbal immediacy behavior of humor and the socio-communicative style (i.e., assertive-responsive) of instructors. They found a positive association between instructor humor-orientations, perceptions of immediacy and perceptions of cognitive learning. Additionally, they found that instructors high in humor-orientation were also more likely to be perceived as competent-androgynous. They conjectured that the effective use of humor may be dependent upon the ability of the instructor to be appropriately assertive and responsive. These findings resonate with Kerssen-Griep and Witt (2012) who pointed out that there is an often commonly held belief in a false dichotomy that “instructors typically try to balance what they perceive as an inevitable trade-off between maintaining the relationship and improving the learning” (p. 499). Instructors can provide both critical feedback and maintain relationships with students while maintaining their credibility and a student’s sense of face and autonomy.

Looked at through the conceptual framework of Christophel and Gorham’s (1995) combined immediacy model and French and Raven’s (1959) power-base model, verbal and nonverbal immediacy behaviors appear to be critical pro-social behaviors which

arouse students and invite approach through the development and maintenance of instructor referent and expert power as well as a sense of student autonomy. This in turn engages students in the enculturation process of their academic discipline and subsequently contributes to higher-order affective and cognitive learning. Moreover, as students are initially introduced to their discipline, at the early stages of the enculturation process, immediacy behaviors may work to arouse students, gain their attention and contribute to lower-order affect such as pleasure and liking. At the same time, immediacy behaviors may also direct their attention and assist in the process of encoding information to memory for lower-order cognitive learning.

Instructor Immediacy in Online Instruction

While most instructor immediacy studies have been conducted in classroom-based contexts, some researchers have investigated instructor immediacy in online learning contexts (Arbaugh, 2001; Baker, 2004; Baker, 2010; Baker & Woods, 2004; Carrell & Menzel, 2001; Campbell, 2014; Conaway et al., 2005; Fahara & Castro, 2015; Ghamdi et al., 2016; Hutchins, 2003; Kucuk, 2009; LaRose & Whitten, 2000; Melrose & Bergeron, 2007; Ni & Aust, 2008; Trad et al., 2014). Studies on immediacy in online learning have typically looked at instructor interactions with students via asynchronous communication (e.g., email, discussion boards) and written feedback on assignments (Arbaugh, 2001; Baker, 2004; Campbell, 2014; Conaway et al., 2005; Fahara & Castro, 2015; Kucuk, 2009; Melrose & Bergeron, 2007; Ni & Aust, 2008). Moreover, most studies of immediacy in online learning have focused on verbal immediacy to the exclusion of nonverbal immediacy, a trend that is in contrast to the tendency of more

recent classroom-based immediacy studies focusing on nonverbal immediacy to the exclusion of studies of verbal immediacy.

Verbal Immediacy in Text-based Online Learning

The dearth of immediacy research in the online learning literature can be traced back to assumptions made by immediacy researchers at the end of the 1990's who asserted that verbal immediacy behaviors were more relevant to online learning. Jensen (1999) claimed that "verbal immediacy behaviors are especially relevant for online instruction because they are easily controlled and not bound by physical proximity as with nonverbal immediacy behaviors" (p. 5). Hutchins (2003), echoed Jensen, saying "While nonverbal immediacy is important, verbal immediacy may be more relevant to web-based instructional settings as the instructor is not physically apparent to provide nonverbal cues" (Instructional immediacy, para. 2). Baker (2004) also held this sentiment, stating that "the lack of consistent nonverbal cues in a textual asynchronous learning environment hinder the traditional measure of nonverbal immediacy" (p. 6). As a result of these assertions, immediacy research in online courses has centered on verbal immediacy (Baker, 2010).

Arbaugh (2001) believed that nonverbal immediacy was problematic in online learning due to technical difficulties preventing full motion video from becoming widespread. As such, he looked at verbal immediacy, which he considered possible in the virtual environment since an instructor could still use humor, encourage discussion, use emoticons, and address students by name, echoing earlier researchers (e.g., Jensen, 1999). Arbaugh (2001) found that verbal immediacy behaviors were significant predictors of student learning and course satisfaction.

Similar to Arbaugh (2001) and Jensen (1999), Baker (2004) acknowledged that although the immediacy construct consists of both verbal and nonverbal components, the lack of nonverbal cues in text-based, asynchronous learning at the time did not support traditional measures of nonverbal immediacy. Baker (2004) conducted a study on the relationship between instructor verbal immediacy and perceived cognitive learning, as measured using Richmond et al.'s (1987) learning loss measure, and found a strong positive correlation, concomitant with the research literature on classroom-based immediacy findings. While expressing doubt as to the applicability of nonverbal immediacy in online learning contexts, Baker (2004) did note that instant messaging could potentially promote immediacy by allowing students to know when an instructor is online and available for a quick conversation, which he compared to an instructor on-campus being available for drop-in visits.

Arbaugh (2010) looked into instructor immediacy and teaching presence in online Graduate MBA courses. As part of the study, Arbaugh (2010) presented a model of teaching presence which splits the role of teaching presence in the CoI into formal instruction practices as well as informal teaching influences through instructor immediacy. Regarding this, Arbaugh considered teaching presence to primarily be what happens before the course begins and instructor immediacy as the actions which occur when the course is being taught, stating "teaching presence frames the environment around which immediacy behaviors may be used" (p. 1238). Arbaugh found that both teaching presence and instructor verbal immediacy were highly significant predictors of course satisfaction and perceived learning, though the effect size for teaching presence was larger than that for instructor immediacy.

Melrose and Bergeron (2007) conducted a qualitative study of instructor immediacy in online courses. They found that three categories emerged regarding instructor immediacy over the course of a semester: the beginning/engagement stage, middle/encouragement stage, and the ending/closure stage. In the first stage, they found that students “consistently expressed a need to know that their instructor would remain attentive to their individual needs” (p. 137). In the second stage, they found that students believed instructor-initiated networking opportunities were helpful. Moreover, they found that students appreciated instructor guidance during group work. Such guidance included, conflict resolution, the establishment of rules and guidelines, and clarification of expectations. Students also expressed a welcoming of private emails from their instructor, particularly during group work, which they felt, “opened the door to share their individual needs...Whether it was difficulties at home, at work, or even with technology” (p. 141). Especially powerful was instructor feedback on participation and positive affirmations on their participation. During the ending stage, inviting students to formally debrief their experiences and inviting them to virtual celebrations were seen as especially important. Melrose and Bergeron concluded that “students valued messages from their instructors that communicated a genuine willingness to remain available and present” and that the instructors’ first introductory messages determined whether they were perceived as immediate or not (p. 143).

Nonverbal Immediacy in Synchronous (Video-based) Online Courses

While most instructor immediacy studies have focused on asynchronous online learning, one study has investigated instructor immediacy in online courses that used synchronous conferencing. Baker (2010) compared student perceptions of instructor

immediacy between synchronous and asynchronous online instruction. The results of the study found a positive correlation between instructor immediacy and both student affective learning and cognitive learning as well as student motivation. Additionally, Baker found higher levels of immediacy being reported in the synchronous courses than in asynchronous courses, leading him to conclude that there is a “necessity of incorporating synchronous activities into the online learning environment” (p. 21).

Social Presence and Immediacy in Online Courses

Several studies have looked at both immediacy and social presence. However, as described earlier in this paper, researchers are not in agreement on the meaning of these two constructs. While some researchers treat them as identical constructs, others have measured them separately (Conaway et al., 2005; Kucuk, 2009; Ni & Aust, 2008; Shutt et al., 2009). In either case, most of the studies have considered how instructor immediacy contributes to student-student interaction and/or the development of a sense of community. For example, Conaway et al. (2005) conducted a qualitative study to investigate instructor and student immediacy behaviors in online discussion boards. In order to identify immediacy behaviors of both students and instructors, they coded for immediacy using three social presence categories developed by Rourke et al. (1999): affective, cohesive and interactive. Kucuk (2009) conducted a similar study investigating the verbal immediacy of instructors on asynchronous discussion boards in two graduate level courses. Like Conaway et al. (2005), they operationalized immediacy and social presence as the same construct and used Rourke et al.’s (1999) social presence indicators to identify verbal immediacy behaviors.

Shutt et al. (2009) looked into instructor immediacy and social presence using a 2 X 2 experimental design in which undergraduate students were separated into four groups who viewed either audio or video presentations of instructors who exhibited either high or low verbal and non-verbal immediacy. Gorham's (1988) verbal immediacy behaviors (VIB) measure was used to measure verbal immediacy and Richmond et al.'s (1987) nonverbal immediacy behaviors (NIB) measure was used to measure nonverbal immediacy. Minor modifications of the immediacy measures were made to reflect the computer conferencing nature of the study. Social presence was measured using an online learner role adjustment scale developed by Garrison, Cleveland-Innes, and Fung (2004) which was conceptualized based on the community of inquiry framework. Shutt et al. (2009) found that the degree of immediacy that participants perceived was higher in the high immediacy conditions than in the low immediacy conditions, as hypothesized, and that it was perceived highest in the video presentations with instructors who exhibited high verbal and nonverbal immediacy. Video alone did not, however, lead to higher perceptions of immediacy in the low immediacy conditions. They also found that high-immediacy conditions also led to significantly higher perceptions of instructor social presence. Students reported that the instructor in the high immediacy presentation seemed like a real person whom they could hear or see, used gestures, answered questions, and encouraged them to talk. They concluded that while the medium did have some influence on the perception of social presence, the students' perceptions of social presence will depend on the social presence created by the instructor (p. 145). Due to the similarities of Gorham's (1988) verbal immediacy measures and Swan's (2003) social presence measures, it is not surprising that there was a correlation between them.

Ni and Aust (2008) looked at the effect of perceived instructor verbal and nonverbal immediacy and sense of community on student course satisfaction, perceived learning and online discussion frequency. They conducted a survey of 214 undergraduate and graduate students. Verbal immediacy was measured using a modified version of Gorham's (1988) VIB and McAlister's (2001) CMIB online immediacy scale (only the verbal immediacy items of the latter were incorporated). Course satisfaction was measured using a modified version of Arbaugh's (2001, 2010) satisfaction scale and perceived learning was measured using a modified version of Richmond et al.'s (1987) learning loss scale. Discussion board posting frequency was measured through student responses to their perceived frequency of posting on threaded discussions. The results of the study found a large positive correlation between instructor verbal immediacy and sense of classroom community. A moderate positive correlation was found between verbal immediacy and satisfaction. A significant relationship was found between verbal immediacy and learning as well as with posting frequency. While the level of satisfaction was accounted for by a linear combination of instructor verbal immediacy and sense of classroom community, instructor verbal immediacy was not found to be a significant individual predictor. Classroom community was the only significant predictor of learner satisfaction and perceived learning while instructor verbal immediacy was the only significant predictor of learner's posting frequency on discussion boards. This is similar to the findings of Arbaugh (2010) and Baker (2010) who both found that instructor immediacy alone was not a significant predictor of classroom community.

Student-Student Immediacy

The immediacy construct has typically been focused on instructor immediacy behaviors, or perceived immediacy behaviors, and their effect on student learning. Some studies have looked at student immediacy (Conaway et al., 2005; LaRose & Whitten, 2000; Ni & Aust, 2008; Pelowski, Frissell, Cabral, & Yu, 2005); however, only LaRose and Whitten (2000) conceptualized immediacy without confounding it with social presence theory. LaRose and Whitten conducted a qualitative study in which they identified both instructor-student immediacy behaviors as well as student-student immediacy behaviors across three types of online courses: text-only, audio-only, and video-only. They classified four emergent categories: (1) social incentives, which were defined as immediacy behaviors that were socially rewarding and included expressions of social approval and social interest such as instructor smiles, using learners names and inviting comments; (2) power and status incentives, which were defined as those immediacy behaviors that enhanced the status of the student; (3) status recognition, which was defined as immediacy behaviors that lowered status barriers such as the provision of personal information and provision of revelations; and (4) status enhancement, which were defined as immediacy behaviors that invited close relationships such as offering opportunities to meet outside of class and nonverbal behaviors that evoked closeness (p. 328). LaRose and Whitten found that text-based courses allowed for more immediacy than was anticipated, but recommended that live-classroom interactions be integrated when web-technologies permit. Moreover, they identified the concept of vicarious immediacy, which they defined as immediate behaviors that can be observed by third-persons. Another thing they introduced was a

concept of computer immediacy, where the instructional design as well as the interface itself can promote a sense of immediacy between students and between the instructor and students.

Verbal and Nonverbal Immediacy in Online Learning

While most online research has looked at instructor verbal immediacy, some research has used combined measures of both verbal and nonverbal immediacy. Campbell (2014) used a semi-experimental method to compare high and low immediacy conditions and the effect on student participation on discussion boards. A class of 132 students was split, with half receiving highly-immediate messages and personalized feedback on assignments from their teacher assistants (TAs) and the other half receiving a “normal number” of course related messages from their TAs. Normal messages included: assignment reminders, brief feedback on homework submissions, prompts to stay involved on discussion forums, explanations of grading, and general messages intended to motivate the students. In the high-immediacy group, students received the same level of feedback as the “normal” group but in addition they received six personalized messages. In order to test the effect of the high immediacy messages, student dropout rate, student participation on discussion boards, and the number of homework assignments completed were compared. They found no significant differences between the two groups and attributed this to a weak manipulation of instructor immediacy. Based on an examination of the study, it appears that a weak manipulation of instructor immediacy was the case. Considering French and Raven’s (1959) power base model, the normal messages would likely be viewed as legitimate power being exercised rather than expert power and referent power influences. Verbal immediacy factors (e.g.,

Gorham's 1988 VIB) such as humor, self-disclosure on the part of the instructor, initiating and having conversations with students outside of official coursework, asking students to call them by their first name, and inviting students to contact the instructor do not appear to have been utilized. Moreover, Weiner and Mehrabian's (1968) conception of utilizing grammatical structures that imply closeness were possibly utilized, but that can only be speculated. The manipulation appears to be focused more on regular unidirectional feedback from the teaching assistants focused on managing student time and attention to course activities than immediacy behaviors.

A qualitative study was conducted at a Mexican University by Fahara and Castro (2015) which explored factors that promoted immediacy in online discussion forums. Through observations and interviews with head instructors and teaching assistants, factors that emerged as promoting immediacy were: replying immediately to student questions, being empathetic, addressing students casually, asking about their personal lives, respecting their questions, paying attention to them, providing personalized messages, establishing personal links, and making the students feel they were in a classroom. These factors align with the conception of both verbal and nonverbal immediacy (Gorham, 1988; Mehrabian, 1971, 1972, 1981; Weiner & Mehrabian, 1968).

In another study, Ghamdi et al. (2016) included measures of both verbal and nonverbal immediacy, believing that the challenges of conveying both verbal and nonverbal immediacy cues in an online environment can be overcome. They offered as an example that quick instructor responses to students through various electronic communication means could contribute to the creation of online closeness regardless of the distances separating instructors and students. In their study they found that there was

a significant and positive correlation between instructor verbal and nonverbal immediacy and students' online participation and communication satisfaction. However, this was only looked at on asynchronous, text-based discussion boards.

McAlister (2001) looked at instructor immediacy and student learning in online learning for his dissertation. In order to measure both verbal and nonverbal immediacy, McAlister combined and modified Gorham's (1988) VIB and Richmond et al.'s (1987) NIBI in order to adapt them to the online learning environment. The measure, which he called the Computer-Mediated Immediacy Behaviors (CMIB), was administered to 150 graduate students in a distance education course. He also measured perceived cognitive learning (learning loss) and affective learning. Based on a pilot study of the CMIB, two items were dropped based on a factor analysis for unidimensional structure. The final CMIB had an overall internal consistency with a Cronback alpha of .95 (p. 68). The results of the study found that immediacy had a direct positive correlation with student perceived cognitive learning.

Online immediacy research has primarily focused on measuring verbal immediacy due to perceptions that nonverbal immediacy would not be applicable in text-based, asynchronous education. However, some early researchers recognized that nonverbal immediacy could potentially be utilized in online education when technologies advanced to allow for more synchronous interaction (Arbaugh, 2001; Baker 2004). Baker (2004), for example, pointed out that instant messaging could potentially promote immediacy by allowing students to know when an instructor was online and available. This aligns with Melrose and Bergeron's (2007) finding that students appreciated knowing the instructor was available. While McAlister (2001) developed and tested a

combined immediacy measure for online learning – the CMIB – only one study (Ni & Aust, 2008) has used it. However, that study only used the verbal component items of the measure. More recent immediacy research in online education, such as Ghamdi et al. (2016), has begun to combine both verbal and nonverbal immediacy. However, Ghamdi et al. looked at differences between perceptions of instructor immediacy based on student gender and its relationship with course satisfaction and discussion board participation. Baker (2004) and Ghamdi et al. (2016) recognized that semi-synchronous communication apps could provide a sense of instructor availability. Although there have been some studies of immediacy in online learning, no studies have looked at and provided an account of student perceptions of instructor immediacy, both verbal and nonverbal, in fully online program courses.

Gaps in the Literature

Immediacy theory has a long history in higher education, however we know little about how instructor immediacy influences student learning in online courses. Researchers in the communication field have, for the most part, limited their research of instructor immediacy to a rhetorical perspective (McCroskey et al. 2004) despite evidence that both student and instructor characteristics affect how and whether an instructor's behaviors are perceived by students to be immediate (Kelly, 2012; Kelly & Westerman, 2015). Moreover, in recent years classroom-based instructor immediacy studies have tended to focus on nonverbal immediacy due to concerns about the validity of verbal immediacy measures as well as the construct of verbal immediacy itself. Recent classroom-based researchers have been focusing, instead, on the relationship between nonverbal immediacy and other verbal communication behaviors such as instructor self-

disclosures and humor and how they contribute to instructor credibility (i.e., competence and caring) and student face-maintenance. However, these verbal communication behaviors are very similar to Mehrabian's (1966, 1971, 1972, 1981) construct of verbal immediacy and Gorham's (1988) measures of verbal immediacy.

While recent classroom-based immediacy studies have focused on nonverbal immediacy and instructor credibility, online instructor immediacy researchers have tended to focus on verbal immediacy. Some researchers have combined both verbal and nonverbal immediacy measures for online immediacy studies (e.g., Ghamdi et al., 2016; McAlister, 2001). However, for the most part, online immediacy research has focused on how instructor immediacy contributes to the development of student-student interaction and a sense of community in online learning or confirmed a relationship between instructor immediacy and affective and perceived cognitive learning, as was done in early classroom-based immediacy studies.

Although there have been some studies of immediacy in online learning contexts, none have been identified that investigated instructor immediacy in fully online programs. The studies that have been identified appear to have looked at online courses that are targeted for students that are campus-based rather than truly distance education learners. Students in fully online, higher education programs are typically non-traditional college students who juggle multiple roles in their lives (Johnson, 2015; Munro, 2011). Moreover, many have never taken online courses prior to enrolling in the program (Yu & Richardson, 2015). As such, they are used to learning in face-to-face environments where they are in close proximity to their instructors and classmates with full access to socio-

emotional verbal and nonverbal communication cues. There is little known regarding student perceptions of instructor immediacy in such programs.

Immediacy research has identified that “best teachers” vary their immediacy behaviors throughout a course, being more highly immediate at the beginning and end of the course while being more moderately immediate in the middle of the course. However, all courses identified in this research project have been based on traditional four-month long terms. Many online programs are now using more intensive, short-term courses that are seven or eight weeks in length. No studies have been identified that have looked at instructor immediacy in such courses.

Chapter Summary

There has been a great deal of research on instructor immediacy in traditional classroom-based higher education contexts. Instructor immediacy, both verbal and nonverbal, has been found to be strongly associated with student satisfaction as well as affective learning and perceived cognitive learning, and to a lesser degree with objective measures of cognitive learning. However, the research on instructor immediacy in online learning is sparse. That which has been conducted has focused primarily on verbal immediacy in text-based, asynchronous discussion forums and has often been construed to be the same as social presence. Studies have not looked at specific instructor behaviors that contribute to immediacy in online learning from the students’ perspective. Many questions remain as to how instructor immediacy is related to student learning, satisfaction, and retention in online education. In the next chapter, Chapter 3, I outline the methods that were used in this study.

CHAPTER THREE: METHODS

Past research has consistently found a relationship between student perceptions of instructor immediacy and students' perceived learning in both classroom-based settings as well as online settings. However, researchers are unclear what instructor behaviors students perceive as immediate and contribute to their learning in online courses. The purpose of this research was to explore what behaviors students perceived contribute to instructor immediacy in online learning environments. To accomplish this, I used a sequential explanatory mixed-methods research design. A sequential explanatory mixed-methods design, according to Creswell and Stick (2006) is appropriate for not only obtaining quantitative results, but also explaining the results in more detail particularly in terms of the voices of the participants "when little is known about the mechanisms behind the trends" (p. 151).

Research Questions

Research questions are useful for narrowing the research purpose (Creswell, 2008). The main research question for this study was: What behaviors do students perceive develop instructor immediacy and support their learning in fully online programs? The following five sub-questions were identified to guide this study:

1. To what degree do students perceive instructor immediacy in fully online program courses?
2. What is the relationship between perceived instructor immediacy and learning in fully online program courses?

3. What is the relationship between instructor immediacy and student satisfaction in fully online program courses?
4. What instructor behaviors do students perceive contribute to immediacy in fully online program courses?
5. How do students feel instructor immediacy supports their learning in an online course?

Research Design and Rationale

A sequential explanatory design was used to answer these research questions. The sequential explanatory design is one of the most popular mixed methods research designs in educational research (Creswell, 2008; Ivankova et al., 2006). It is a two-phase model where a researcher collects quantitative data in the first phase and then collects qualitative data in the second phase in order to further elaborate on the quantitative results. Quantitative research is used to find statistical relationships between variables “to determine whether one or more variables might influence another variable” (Creswell, 2008, p. 52). Qualitative research, on the other hand, tends to address research problems where there is little understanding about a problem or where a detailed understanding of a complex central phenomenon is required, by taking into account the perspective of the research participant (Creswell, 2008). Each method, by itself, is not sufficient to capture the details and full complexity of trends or a phenomenon. Therefore, the combination of both methods takes advantage of the strengths of each and allows for a more robust analysis (Ivankova et al., 2006).

In a sequential explanatory design, typically, the quantitative data is used to identify extreme cases to follow up with for interviews (Creswell, 2008; Ivankova et al.,

2006). When using this design, priority is given to either the quantitative or qualitative phase, or both equally, depending upon the goals of the research and which phase the researcher gives more weight or attention to (Ivankova et al., 2006). The decision about the phase to which the researcher might give more weight can be made at the study design stage or later during the data collection and analysis stage. In this study, more weight was given to the qualitative stage of the study due to the purpose of this study, which was to describe student perceptions of instructor behaviors that contribute to immediacy and how these behaviors support student learning in fully online degree programs in higher education.

The two phases of this study as well as the procedures and the products of each are shown in Figure 3.1. The first phase of the study utilized a survey to explore student perceptions of instructor immediacy as well as to examine the relationship between student perceptions of instructor immediacy and perceived learning. The results were also used to identify students that perceived their instructors to be either notably high or low in immediacy. In the second phase of the study, nine students were interviewed to identify and explain what instructor behaviors they perceived as contributing to, or detracting from, a sense of instructor immediacy as well as how they perceived those behaviors supported or diminished their learning. Table 3.1 shows the alignment of data collection in both phases of the study with the five research questions of this study.

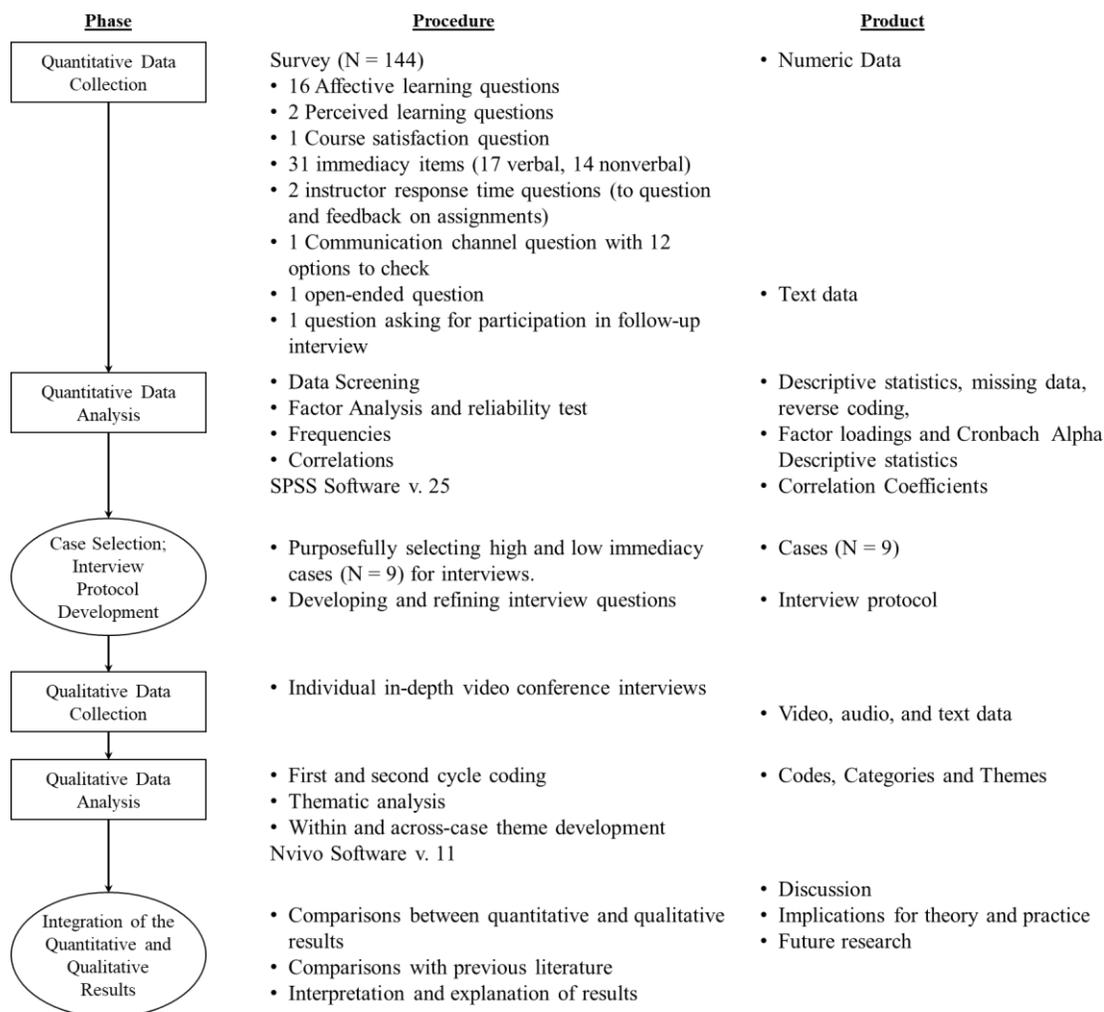


Figure 3.1 Procedures and Products for Each Phase of this Sequential Explanatory Mixed Methods Study

Table 3.1 Data Collection Matrix

| Phase | Data Collected | Type of Data | Research Questions |
|-------|--|---|--|
| One | Affective Learning: Attitudes and Behavioral Intent (McCroskey et al., 1985) | Quantitative, 4 items (16 sub- items) | Q2. What is the relationship between perceived instructor immediacy and learning in fully online program courses? |
| One | Perceived Cognitive Learning using learning loss measure (Richmond et al., 1988) | Quantitative, 2 items | Q2. What is the relationship between perceived instructor immediacy and learning in fully online program courses? |
| One | Student Satisfaction | Quantitative, 1 item | Q3. What is the relationship between instructor immediacy and student satisfaction? |
| One | Verbal Immediacy, Adapted from McAlister's (2001) CMIB, which was derived from Gorham's (1988) Verbal Immediacy Scale | Quantitative, 17 items | Q1. To what degree do students in fully online program courses perceive their instructors' immediacy to be? |
| One | Nonverbal Immediacy Adapted from McAlister's (2001) CMIB, which was derived from Richmond et al.'s (1987) Nonverbal Immediacy Scale (NIB) | Quantitative, 14 items | Q1. To what degree do students in fully online program courses perceive their instructors' immediacy to be? |
| One | Timeliness of Response | Quantitative, 2 items | Q1. To what degree do students in fully online program courses perceive their instructors' immediacy to be? |
| One | Technology Usage | 1 item, 12 sub- items | |

| | | | |
|-----|--|--|--|
| One | Open Ended Question Regarding perceptions of instructor approachability | Qualitative, 1 item open ended survey question | Q1. To what degree do students in fully online program courses perceive their instructors' immediacy to be? |
| One | Willingness to participate in Interview question | 1 item | |
| Two | How approachable do you feel your instructor was? Why? How did this affect your learning in the course? Why? | Qualitative | Q2. What is the relationship between perceived instructor immediacy and learning in fully online program courses? Q5. How do students feel instructor immediacy supports their learning in an online course? |
| Two | Instructor immediacy is defined as instructor behaviors that increase psychological closeness between instructors and students. What behaviors did your instructor use that contributed to (or detract from) your sense of psychological closeness with him/her? | Qualitative Interview | Q4. What instructor behaviors do students perceive contribute to immediacy in fully online program courses? |
| Two | How do you feel your perceptions of your instructor as being close and approachable (or distant and unapproachable) affect your motivation to participate in and succeed in the course? | Qualitative Interview | Q3. What is the relationship between instructor immediacy and student satisfaction? |

Survey Design

For the first phase of the study, a survey was selected as an appropriate method to collect data. Surveys are good to use when investigating attitudes, beliefs, opinions or practices and describing the relationship among variables (Creswell, 2008). The purpose of the survey was to measure verbal immediacy and nonverbal immediacy, affective learning, cognitive learning, and student satisfaction. To accomplish this, a survey was constructed in the following way:

- Verbal immediacy and nonverbal immediacy: A modified version of McAlister's (2001) Computer-Mediated Immediacy Behaviors (CMIB) scale measure of verbal immediacy and nonverbal immediacy.
- Cognitive learning: Richmond et al.'s (1987) measure of perceived cognitive learning.
- Affective learning: McCroskey et al.'s (1985) six-scale measure of affective learning.
- Satisfaction: Students were asked to respond to a single item regarding their overall satisfaction with the course they were reporting on.
- Communication Behaviors: Two questions regarding the response time of the instructor they were reporting on to questions about the course and feedback on assignments.
- Open-ended question: One open-ended question which asked students to describe what, overall, the instructor they reported on did in the course that either contributed to or detracted from developing a sense of

psychological closeness and approachability with them and how that contributed to or detracted from their learning

The following sections describe the construction of each of these measures.

Verbal and Nonverbal Immediacy Measures

McAlister's (2001) Computer-Mediated Immediacy Behaviors (CMIB) scale measure of verbal and nonverbal immediacy was used to collect data on low inference measures of immediacy. The CMIB was developed based on the Gorham's (1988) Verbal Immediacy Scale (VIB), referred to as the VIS in McAlister's study and Richmond et al.'s (1987) NIB, which McAlister referred to as the NIBI in his study. McAlister (2001) modified the items on the measures in order to make them more appropriate for an online learning context (see Appendix C for a full listing of items used in this study in comparison to the CMIB and original measures). For example, item 3 on the VIB, "Got into discussions based on something the student brought up even when it didn't seem to be part of his/her lecture plan" was modified on the CMIB to state, "Got into discussions based on something a student brought up even when it didn't seem to be part of his/her plan." Item 7 on the VIB, "Got into conversations with individual students before or after class" was modified on the CMIB to state, "Communicated with individuals beyond course work." For the nonverbal items, McAlister reported that the conversion required "more extensive interpretation and application for the text-based communication of immediacy. However, it was theorized that the items could be successfully transferred" (p. 52). For example, item 1 on the NIB, "Sat behind the desk while teaching" was modified to state, "Seemed distant personally" on the CMIB, since "interposing the desk between the instructor and student was seen as distancing" (p. 52). Another example of a

modification was the conversion of item 4 on the NIB “Looked at class while talking” to “Gave specific attention to students” on the CMIB since “the action, looked at, was understood to mean paid attention” (p. 53). Of the 31 items on the CMIB, two were dropped. Item 11 was misunderstood by participants as being immediate despite being designed to represent non-immediacy. Item 20 was dropped due to a low factor loading. The remaining 29 items had excellent internal consistency with a Cronbach alpha of .95.

This study is focused on instructor immediacy beyond text-based communication in online learning. Therefore, additional modifications were made in order to reflect the potential for instructors to communicate with students using synchronous, semi-synchronous, and asynchronous, non-text-based communication (e.g., video messages sent to students) which are listed in Appendix C. Item 1 on the CMIB “Used personal examples or wrote about experiences she/he had outside the course” was modified to state “Used personal examples or described experiences she/he had outside the course.” In this case, “wrote about” was replaced with “described.”

Item 10 on the CMIB, “Provided feedback on my work through comments on papers, or in discussion” was modified to state, “Provided feedback through comments on my individual work.” In this case, the focus of the item was interpreted to be the provision of individual feedback to students on their own personal work, which is consistent with the original item on the VIB which stated, “Provides feedback on my individual work through comments on papers, oral discussions, etc” (Gorham, 1988, p. 44).

Item 13 on the CMIB “Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something” was

modified to state, “Invited students to telephone, meet, chat or otherwise communicate outside formal course structure if they had questions or wanted to discuss something.” In this case, “chat or otherwise” was included to represent the multi-faceted forms of synchronous and semi-synchronous communications now available. The term “course” was also added to better represent the VIB which used the phrase, “outside of class” since McAlister also felt the term course would be more applicable to the online education context as a synonym for class.

Item 20 on the CMIB “Used the same writing tone (formal, informal, etc.) all the time even for different purposes, like syllabus and feedback to students” was modified in this study to state, “Used the same monotone/flat style of communicating all of the time.” This is closer to the original item on the NIB, “Uses monotone/dull voice when talking to class” and allows for a wider variety of communication channels beyond just text-based communication.

Item 21 on the CMIB, “Gave specific attention to students” was modified in this study to state, “Paid attention to students.” The original item on the NIB was, “Looks at class while talking.” McAlister interpreted “looked at” to mean, “paid attention” (p. 53). It was therefore deemed appropriate to use the term “paid attention” rather than “gave specific attention” since this was closer to the original NIB item which does not include focusing on specific students for this item.

Item 25 on the CMIB, “Used a variety of approaches” was modified in this study to state, “Used a variety of communication approaches.” The original item on the NIB, “Moves around the classroom while teaching” represents the idea that the instructor is moving closer to students, which provides a higher degree of access to socio-emotional

cues through greater proximity as well as increased arousal through variety and movement. It was viewed that McAlister's interpretation of this item focused on arousal through variety but did not reflect the immediacy generated by increasing proximity. The inclusion of the term "communication" helps to focus this more on the increase of communication behaviors of the instructor rather than students potentially interpreting this to represent the types of assignments or formatting of materials in the course design.

Item 30 on the CMIB, "Expressed friendliness to individual students" was modified in this study to state, "Individually expressed kindness to students." The original item on the NIB was, "Smiles at individual students in the class." McAlister interpreted smiles to be friendly. However, friendliness connotes friendship, which in turn connotes equal power between two people. Since there is a power differential between students and instructors, friendliness does not align with Mehrabian's (1981) conception of immediacy where the more powerful individual has the prerogative of inviting approach. Rather than smiling as representing friendliness, smiling in this study is considered to represent both arousal and an invitation of non-coerced approach. The term "kindness" represents acts of warmth, gentleness, care and concern that can be expressed between individuals of equal or differing power. Therefore, friendliness has been replaced with kindness in this study. Additionally, the term "Individually" was moved to the beginning of the statement because McAlister's structuring of the item, "Expressed friendliness to individual students" was viewed as potentially being understood by some students as the instructor selectively being friendly with some students, but not others.

Item 31 on the CMIB, “Used a variety of tones in writing” was modified in this study to state, “Used expressive variety in communicating.” The original NIB item was “Uses a variety of vocal expressions while talking to the class.” McAlister had interpreted vocal expressions to be the tone used in text-based communication. For this study, tone was replaced with “expressive variety” as this phrase was seen as being both closer to the original item on the NIB as well as more representative of the variety of communication channels and modalities that are now available for instructors to communicate with students beyond just text-based communication. Moreover, it aligns with Mehrabian’s conception that immediacy is related to arousal which is related to variety and novelty. Mehrabian (1981) stated that:

The environmental counterpart of high arousal is the interesting, changeable, unusual, and foreground rather than common and background quality of people or events in one’s surroundings...people are more aroused by and are more responsive to strange, novel, and changing things than they are to familiar and static entities. (p. 15)

Cognitive Learning Measure

Cognitive learning was measured using Richmond et al’s (1987) measure of perceived cognitive learning. This measure was selected because it has been used in a number of immediacy studies (Witt et al., 2004). The measure has two items each on a scale from 0-9. The first question asks “On a scale of 0-9, how much did you learn in this class, with 0 meaning you learned nothing and 9 meaning you learned more than in any other class you have had.” The second item using the same scale and asks, “How much do you think you could have learned in the class had you had the ideal instructor?” The second item is then subtracted from the first measure which is used to determine a variable of “learning loss.” The learning loss measure is “intended to remove some of the possible bias with regard to estimated learning that could stem from being forced to take

a class in a disliked subject” (Richmond et al., 1987, p. 581). The correlation between the first scale and the learning loss scale was .94 in Richmond et al.’s study, which they deemed as “virtually identical.” While there have been criticisms of perceived cognitive learning measures as actually being measures of affective learning and not cognitive learning (e.g., Hess & Smythe, 2001; Witt et al., 2004), in this study I took the position that higher outcome levels of cognitive learning involve higher levels of socio-emotional interaction, social construction, and inter-personal subjectivity. Therefore, perceptions of higher-outcome levels of cognitive learning cannot be measured purely on cognitive measures that look at lower-level cognitive measures such as recall. Thus, in order to measure higher order cognitive learning outcomes, subjective measures of perceptions of either the student or the instructor become more appropriate. Additionally, while looking at the relationship between instructor immediacy and student learning in online program courses was an objective of this study, the primary purpose of the quantitative phase was to identify extreme cases of students who perceived exceptionally high or low instructor immediacy and perceived learning in order to conduct interviews in the second, qualitative, phase of this study.

Affective Learning Measure

Affective learning was measured using McCroskey et al.’s (1985) six-scale measure of affective learning. This measure is the most prevalent measure of affective learning (Baker, 2010). The first three items measure attitudes towards: the course content, behaviors recommended, and course instructor. These are measured using four seven-step bi-polar scales: good/bad, worthless/valuable, fair/unfair, and positive/negative. The latter three items measure behavioral intent, including: likelihood

of actually attempting to engage in the behaviors recommended in the course; likelihood of actually enrolling in another course of related content if choice and schedule permitted; likelihood of actually taking another course with the same instructor if choice and schedule permitted. The latter two state that if the student is in in their final semester, to assume they will still be in school. The behavioral intent items are also measured using four seven-step bi-polar scales: likely/unlikely, impossible/possible, probable/improbably, and would/would not. McCroskey et al. (1985) found alpha reliabilities for each of the measures were above .90, with an overall Alpha reliability of .94 for the measure. Gorham (1988) found a split-half reliability for the measure of .98.

Course Satisfaction

Students were also asked to respond to a single item regarding their overall satisfaction with the course they are reporting on. In order to be consistent with the measures of cognitive and affective learning, a seven-point Likert scale item was used.

Participants

For the quantitative phase of this study, both undergraduate and graduate students in fully online degree or certificate programs who had completed at least one course within their program at Boise State University were invited to participate in the study. Online programs at Boise State University are considered self-supported or non-self-supported. Self-supported programs are locally funded, academic credit-bearing certificate or degree programs that have a funding model that is distinct from traditional offerings of the institution. As described in State Board Policy V.R. “such programs are distinct by serving a population that does not access the same activities, services and features as regular tuition-paying students. Such programs can include fully online

programs, programs offered off-campus, or programs designed specifically for working professionals” (BSU Policy #6320, Section III). In contrast to self-supported online programs, non-self-supported online programs follow a traditional funding model.

At the time of this study, there were approximately 2,216 students in fully online programs at Boise State University. Of those students, 1,252 were in programs that were self-supported. Another 964 of those students were in programs that were non-self-supported. This project focused on students in non-self-supported programs in order to control for several variables. First, students in non-self-supported programs all use the same learning management system (LMS), Blackboard Learn. Second, all non-self-supported program courses are developed through a standardized course design process through Boise State University’s eCampus Center; this standardized process results in courses and programs that have relatively similar structure and design elements. Third, non-self-supported program courses receive similar levels of support throughout the course implementation, evaluation, and revision process, meaning that external support factors were held to a minimum. To illustrate, all courses in non-self-supported programs are developed based on established program learning outcomes and course design standards. Such standards include standardized syllabus design, navigation structure, module structure, due dates, and communication policies. During course development, faculty from a program work with eCampus instructional design consultants throughout a 12-week development process. Course content, activities, and assessments are designed based on the established program outcomes and course design standards. Courses are then developed using a standardized production process that adheres to Quality Matters™ standards. This process includes quality assurance checks as well as rigorous accessibility

and copyright reviews. When course development is complete, courses undergo a one-semester pilot. During the pilot phase, instructors provide continuous feedback on a course revisions request document capturing any changes that need to be made to the course. During this phase, courses also undergo an internal Quality Matters™ review. After the pilot phase of the course, faculty meet with a course revisions team at eCampus in order to discuss the results of the Quality Matters review as well as feedback provided by the instructor and students. Courses are then revised prior to their next implementation. Each semester thereafter, courses are continuously updated and revised based on instructor feedback and requests.

Due to concerns about conflicting with another institutionally led survey of graduating students being conducted at the same time, graduating students were omitted from the pool of potential students to survey. This left 844 students in the population from which to draw a sample. In order to have a sample size that was large enough to conduct correlational analysis, approximately 200 responses were required to provide a 95% confidence interval with a sampling error of +/- 6 percent (Creswell, 2008). It was determined that a sample consisting of half of the population could provide enough responses to meet this criterion. To create the sample, a list of all 844 students was generated. Each student was then assigned a randomly generated number. The list of students was then reordered from lowest to highest based on the randomly assigned number. The first 422 students on the list were then selected to include in the sample. A small guaranteed incentive was offered (i.e., a \$5 Amazon gift card) to encourage students to complete the survey. As part of the survey, students were also asked whether they would be willing to participate in a follow up interview. Students who subsequently

participated in an interview were provided an additional \$15 Amazon gift card as a gesture of appreciation.

Data Collection

As a sequential explanatory research study, mixed methods were used to collect data in two phases, with quantitative data being collected and analyzed in the first phase and qualitative data being collected and analyzed in the second phase. Table 3.1 shows the data collected in each phase of the study. Phase one collected data through the survey instrument while phase two collected data based on interviews with extreme cases identified at the end of phase one.

Phase One (Quantitative): Survey

Data collection in phase one consisted of contacting 422 randomly selected students via email. The email included an introductory message, an explanation of the study, a request for response, and a link to a survey in Qualtrics. Seven days after the initial email was sent inviting students to complete the survey, a follow-up message was sent thanking those who responded and reminding students who had not yet responded of the survey request. A final third message of the same nature was sent one-week after the first reminder. The survey was closed at the end of the third week after the initial request was sent out. In the survey instructions, participants were asked to respond to one of the instructors with whom they most recently completed a course. If participants had taken two or more courses at the same time, they were asked to select the instructor whose course number was higher in order to stimulate variance (e.g., if they took a 302 and 304 course, they would be asked to respond to the 304 course).

In total, 177 responses were received, representing a 42% response rate. Of those, 144 responses were included in the study. Fifteen responses were not included due to a failure to complete most of the survey items. An additional 18 surveys were discarded because the responses were from students in the online MBA program, which was subsequently identified as being a self-support program. While this was below the 200 responses that would have provided a 95% confidence interval for statistical analysis, it was deemed sufficient for the main purpose of this study, which was to identify interesting cases for follow-up interviews in the second phase of this study.

Of the 144 valid survey respondents, 108 (75%) were graduate students and 36 (25%) were undergraduate students and represented 11 different fully online degree programs. A breakdown of the frequency of responses from each of the programs is shown in Table 3.2. The number of semesters that respondents had been in their programs ranged from one semester to six semesters (See Table 3.3). Regarding gender, 108 (75%) were female and 34 (23.6%) were male. Two respondents (1.4%) did not report their gender. Respondents ranged in age from 21 to 69 with an average age of 36 ($SD = 9.48$). Respondents were residents of 35 different states with 52.1% coming from four states: Idaho (30.6%), Washington (8.3%), California (6.9%), and Utah (6.3%). Of the survey respondents, 96 (66.7%) agreed to participate in a follow-up interview if requested while 48 (33.3%) declined.

Table 3.2 Survey Sample Participant Frequency by Degree Program

| Degree Program | Frequency | Percent |
|----------------------------------|-----------|---------|
| Master of Science in Accountancy | 4 | 2.8 |
| Bachelor of Applied Science | 5 | 3.5 |

| | | |
|-----------------------------------|-----|-------|
| Early Childhood Intervention MIT | 4 | 2.8 |
| Early and Special Education MEd | 2 | 1.4 |
| Imaging Science BS | 9 | 6.3 |
| IPT-MST | 31 | 21.5 |
| Multidisciplinary Studies BA | 13 | 9.0 |
| Management BBA | 9 | 6.3 |
| Masters of Special Education MIT | 3 | 2.1 |
| Masters of Social Work (Advanced) | 15 | 10.4 |
| Masters of Social Work | 49 | 34.0 |
| Total | 144 | 100.0 |

Table 3.3 Number of Semesters in Online Program

| Semesters | Frequency | Percent |
|-----------|-----------|---------|
| 1 | 21 | 14.6 |
| 2 | 46 | 31.9 |
| 3 | 14 | 9.7 |
| 4 | 53 | 36.8 |
| 5 | 9 | 6.3 |
| 6 | 1 | .7 |
| Total | 144 | 100.0 |

Phase Two (Qualitative): Follow Up Interviews

Follow up interviews were conducted to elaborate on the findings of the initial survey (see Appendix B for the interview protocol questionnaire). Based on the results of

the quantitative phase of the study, cases were selected for interviews to further explain the findings. Cases were selected using maximum variation sampling. Maximum variation sampling, one of the more popular approaches used in qualitative research, is a purposeful sampling method in which participants are selected in a way that maximizes variation based on a set of criterion so as to reflect differences or different perspectives (Creswell, 2013). By maximizing variation, any common patterns that are found are of particular interest because of the fact that they emerged despite great variation (Patton, 2002). The first criterion for selecting participants was to identify participants who reported the highest and lowest instructor immediacy scores. To calculate an instructor immediacy score, a total immediacy score was first calculated for both verbal immediacy and nonverbal immediacy. Total immediacy was then calculated as an average of the two ($M = 2.40, SD = .70$). Survey participants with a total immediacy score greater than one standard deviation above or below the mean were identified as meeting this criterion. After filtering out those who had declined follow up interviews on the survey, 13 high immediacy cases and 13 low immediacy cases were initially identified for follow up interviews. These cases were selected based on maximum variation of age, gender and degree level (i.e., graduate or undergraduate). After only limited initial responses to the request for interviews, a second request was sent out to five additional moderately high immediacy cases and five additional moderately low immediacy cases, i.e., students who fell more than half a standard deviation above or below the mean. In total, nine survey participants agreed to be interviewed- six high immediacy and three low immediacy cases. While the criterion of maximum age variance was generally achieved, variance in

degree level and gender was generally homogenous with only one undergraduate and only one male responding to a request for an interview. Table 3.4 shows the participants.

Table 3.4 Interview Participant's Listed by Total Immediacy Rank

| Code | Pseudonym | Gender | Age | Degree Level | Immediacy Rank | Immediacy Score |
|------|-----------|--------|-----|---------------|----------------|-----------------|
| 1620 | Lisa | Female | 52 | Graduate | 3 | 3.82 |
| 3860 | Rylee | Female | 46 | Graduate | 9 | 3.50 |
| 2870 | Barb | Female | 26 | Undergraduate | 11 | 3.46 |
| 2247 | Sonja | Female | 37 | Graduate | 15 | 3.32 |
| 1173 | Tony | Male | 44 | Graduate | 22 | 3.20 |
| 7325 | Jodi | Female | 40 | Graduate | 96 | 2.04 |
| 3266 | Mary | Female | 35 | Graduate | 130 | 1.50 |
| 5624 | Sue | Female | 37 | Graduate | 131 | 1.46 |
| 4270 | Laura | Female | 43 | Graduate | 140 | 1.25 |

Interviews were scheduled to last about 30-45 minutes with each student. Upon confirmation of an interview, a date, time and mode of meeting (i.e., in-person or via video conference) was scheduled. Participants were provided with a copy of the interview protocol as well as an informed consent document at the time of scheduling a date, time and mode of meeting. All participants agreed to meet using the video-conferencing software Zoom. Instructions for logging into Zoom were provided in advance via email along with a link to the meeting room. Upon meeting up at the scheduled time, permission to record the session was asked of all participants. All participants permitted recording the sessions. However, due to the researcher's error, one session was not recorded. In that case, once the researcher noticed that he forgot to record the meeting, he

took extensive notes immediately after the interview ended with a focus on capturing the ideas expressed and specific terms used by the interviewee. After receiving permission to record the session, the informed consent document was shared on the screen with the interviewee. Time was spent to review each aspect of the consent document. Participants were also informed that their data would be secured on university servers and that all identifying information would be removed from the data and final report.

Interviewees were asked if they understood all the terms of the informed consent document and whether or not they would like to continue with the interview. All nine participants provided verbal consent to participate in the study with the understanding that they were free to end the interview or refuse to answer any questions at any time. Once informed consent was received, the questions on the interview protocol were the starting point for all nine interviews. The questions included:

1. How approachable do you feel your instructor was? Why? How did this affect your learning in the course? Why?
2. Instructor immediacy is defined as instructor behaviors that increase psychological closeness between instructors and students. What behaviors did your instructor use that contributed to (or detracted from) your sense of psychological closeness with him/her?
3. How do you feel your perceptions of your instructor as being close and approachable (or distant and unapproachable) affect your motivation to participate in and succeed in the course?
4. What communication technologies, if used by your instructor, would give you a greater sense of them being close by, available and there for you?

Additional questions explored participant responses and drew from the verbal

immediacy and nonverbal immediacy items from the survey. Participants were asked:

- Did the instructor encourage students to ask questions or respond to questions?
- Did the instructor ever talk about things that were not part of the class or beyond the coursework?
- Did the instructor use humor in the class?

- Did the instructor invite students to telephone or communicate outside the formal structure of the course?
- Did the instructor offer praise on your work?
- Do you feel the instructor paid attention to students in the course?
- How long do you feel is the appropriate amount of time for an instructor to respond to student questions and provide feedback?
- Was the instructor formal or informal in his/her communication?
- What tools did your instructor use to communicate with students in the course?
- What two or three things would you recommend an instructor do to be more approachable and develop a sense of psychological closeness?

Data Analysis

As a sequential explanatory mixed methods design study, the data were analyzed in two phases. In Phase One, the survey data were downloaded from Qualtrics and imported into SPSS version 25. The data were examined for outliers and missing data. The data were normally distributed and missing data were minimal. The data were cleaned and prepared for quantitative analysis.

Phase One Data Analysis (Quantitative)

In Phase One, a three-step statistical quantitative analysis was conducted. In the first step, factor analysis was conducted to test for internal consistency of verbal immediacy items and nonverbal immediacy items. Second, a Cronbach Coefficient Alpha reliability test was run in order to check reliability with a single variable computed for each of three variables: verbal immediacy, nonverbal immediacy, and affective learning. In the third step, descriptive data were analyzed and a Pearson Correlation Coefficient was run between the variables to test for any correlations. In this test, instructor immediacy was treated as the independent variable with the dependent variables of affective learning, perceived cognitive learning, and course satisfaction. Based on the results of the descriptive data analysis, extreme cases of high immediacy or low

immediacy instructors were identified and used to select students to interview for the second, qualitative phase of the study.

Phase Two Data Analysis (Qualitative)

After each interview, a transcript of the recordings was created. Transcripts were then imported into Nvivo 11 for analysis. Data analysis used first and second cycle coding techniques. In the first cycle, open coding, also referred to as initial coding, was used. Initial coding “breaks down qualitative data into discrete parts, closely examines them, and compares them for similarities and differences” (Saldana, 2016, p. 115). In this cycle, interview transcripts were first read over in their entirety in order to familiarize myself with the material. Each transcript was then analyzed line-by-line. Initially codes, or nodes as they are called in Nvivo, were created based on the content of participant responses as they emerged. The text to be coded was highlighted and then dragged and dropped into the node that represented the code being created. Subsequently, as coding progressed, text representing similar concepts were added to existing nodes or new nodes were created when a new concept emerged. By the end of first cycle coding, 54 nodes were generated based on the data collected from the nine interviews (see Appendix E).

Second cycle coding was then used to synthesize initial codes into categories and develop themes. For second cycle coding, selective and axial coding were used to determine which codes from first cycle coding were more dominant and which were less dominant. Selective coding “searches for the most frequent or significant codes to develop the most salient categories” (Saldana, 2016, p. 240). Axial coding “‘aims to link categories with subcategories and asks how they are related,’ (Charmaz, 2014, p. 148) and specifies the properties and dimensions of a category” (Saldana, 2016, p. 244).

Constant comparative methodology was used to arrive at major and minor categories during axial coding (Saldana, 2016). Categories were then layered upward and interrelated in order to develop a more complex understanding of them and develop themes (Creswell, 2008). As codes were combined and categories created during second cycle coding, participant responses to the open-ended question on the survey were also analyzed and coded according to the categories and themes that emerged. The results of several iterations of second cycle coding was the emergence of five themes each with several sub-categories. The results are reported in detail in Chapter 4 through a narrative discussion that elaborates on the themes that emerged.

Validity and Reliability

The CMIB measured nonverbal immediacy based on Richmond et al.'s (1987) NIBI. The NIBI has been used for a large number of studies and is considered to have acceptable reliability (McCroskey et al., 1996; Witt et al., 2010). The measure consists of 14 items that were designed based on Anderson's (1978) BII measure. Richmond et al. (1987) reported alpha reliabilities ranging from .80 to .87. Gorham and Zakahi (1990) reported reliabilities ranging from .73 for instructors to .89 for students. Overall, reliabilities of between .70-.85 have been found in most reports (McCroskey et al., 1996).

The CMIB measured verbal immediacy based on Gorham's (1988) VIS. Gorham reported split-half reliability was .94 for the 17 verbal immediacy items. Gorham and Zakahi (1990) reported alpha reliabilities of .89 for instructors and .92 for students.

Credibility and Transferability

Rather than validating the findings of qualitative research, qualitative researchers focus on credibility by seeking "a confluence of evidence that breeds credibility, that

allows us to feel confident about our observations, interpretations and conclusions” (Eisner, 1991, p. 110). In order to establish credibility of the findings, the theoretical framework for this study, which is based on Christophel and Gorham’s (1995) combined immediacy model and Mehrabian’s (1971) immediacy theory was used to guide interpretations and conclusions. Additionally, evidence was corroborated between individuals interviewed, the quantitative data and the open-ended question on the survey from Phase One, as well as comparisons with the literature. Thick descriptions are provided in a narrative description. Thick description involves “sufficiently detailed descriptions of data in context and report[ing] them with sufficient detail and precision to allow judgement about transferability” which “enables observers of other contexts to make tentative judgements about applicability of certain observations for their contexts” (Erlandson, Harris, Skipper, & Allen, 1993, p. 33). For dependability, member checking was used by asking participants of the study to check the accuracy of the account (Saldana, 2016). Member checking is considered one of the most critical techniques for establishing credibility (Creswell, 2013). Creswell (2008) described member checking as “a process in which the researcher asks one or more participants in the study to check the accuracy of the account” (p. 267). Members were asked whether they felt the description was complete and realistic and if the themes and interpretations were fair and representative of their experience.

Delimitations

This project studied the perceptions of instructor immediacy of students in fully online programs at Boise State University. There are 2,216 students in fully online programs at Boise State University as of February, 2018. Of those students, 1,252 are in

programs that are self-supported. Another 964 of those students are in programs that are not self-supported, with 844 identified as not graduating in the same semester of this study. This project focused on students in non-self-supported programs in order to control for several variables. First, courses in non-self-supported programs all use the Blackboard learning management system (LMS), while self-support programs use a variety of platforms such as Canvas and Moodle. Non-self-support programs were all designed through a similar process involving a team of professional instructional designers, copyright and accessibility checks, quality assurance checks, and Quality Matters reviews. Courses within each program are relatively standardized including layout of the LMS features, syllabus design, due dates, and module structures. Conversely, self-support programs use a variety of different course design and course design processes. Additionally, all courses in non-self-support programs are similarly supported by eCampus Center during implementation and revision of courses.

The sample of students from non-self-support programs was limited to students who had completed at least one course in their online program or were currently enrolled in a course in their online program and had completed at least two-thirds of a course (e.g., five weeks in a seven-week course or ten weeks in a fifteen-week course). Online certificate programs that primarily attract on-campus students were also excluded from the sample. Additionally, students who were graduating in the semester that this research study was conducted were excluded from the study in order to avoid exposing them to survey fatigue (graduating students are requested to complete other surveys at the end of their final semester). Finally, students under the age of 18 at the time of the survey were also excluded from the sample.

Limitations

The generalizability of this research to a larger audience was limited due to the nature of the sample as described above. The students in the sample from this research study came from a single university and were all in fully online program courses that have been designed and implemented based on a single production model and a common LMS (Blackboard). This does not represent the various design and implementation strategies that other online courses use. Moreover, students in this research were all part of fully online programs; therefore, the findings may not generalize to students who take online courses but are otherwise campus-based. Generalizability of results of quantitative analysis is also limited since the number of survey responses did not provide a sample size that satisfies requirements for sufficient statistical power. This may have resulted in Type I or Type II errors (Salkind, 2016). The transferability of the qualitative results of this study are also limited, despite the use of rich and thick description, due to the unique nature of the study population and participants selected for interviews. Finally, due to the nature of qualitative research, the results of the second phase of the study may have been influenced by the researchers own personal beliefs, biases and idiosyncrasies. This may call into question the validity of the results.

Role of the Researcher

I have 20 years of experience in both instruction and instructional design in higher education. I took my first online courses as a graduate student in 2009 and have been teaching online courses at both the undergraduate and graduate level since 2012. Since 2016 I have designed and developed 25 online courses at both the undergraduate and graduate level for Boise State University as an employee of their eCampus Center. My

role at eCampus Center is to work with faculty to develop courses for new programs to be delivered fully online.

Biases

From my research and experience taking, teaching, and designing online courses I have come to the conclusion that no matter how well a course is designed, the communication behaviors of the instructor are vital for student success and persistence to course and program completion. With relatively low retention rates for online courses compared with traditional face-to-face course, I believe that instructor immediacy behaviors, as well as high instructor social presence, when learning outcomes and assignments require complex socio-emotional interaction, are vital for improving satisfaction, learning, and ultimately program retention rates.

I have personally experienced online courses that are fully asynchronous and text-based, as both a student and an instructor, and feel that they are generally sufficient for achieving course outcomes. However, I believe that many instructors are not aware of the importance of immediacy and instructor social presence in online courses. Moreover, I also sense that instructors are not fully taking advantage of new methods of communication available to improve the online learning experience and improve learning outcomes, particularly when it comes to the achievement of enculturation into an academic discipline, which is vital for fully online programs.

Instructors in fully online programs need to learn how to improve their immediacy in online courses and offer opportunities for students to develop a relationship with them, in order to role-model the values, behaviors and thinking of the discipline. Through higher levels of instructor immediacy and instructor social presence, when necessary,

students in online programs can achieve higher affective as well as cognitive learning outcomes. This, in-turn, can lead to higher retention rates in courses and persistence to degree completion.

I remained aware that I needed to remain conscious of my beliefs and biases while conducting this research study and acknowledge a degree of subjectivity may have influenced my research approach, findings and conclusions. In order to remain conscious of my biases and prejudices and how they influence my research, I used journaling throughout the research project to reflect on my subjectivity. I endeavored to bracket myself out of the study in order to set aside my personal experiences and focus on the experiences of the online learners whom I interviewed in the second, qualitative, phase of the study (Creswell, 2013). Bracketing “does not take the researcher completely out of the study, but it does serve to identify personal experiences with the phenomenon and to partly set them aside so that the researcher can focus on the experiences of the participants in the study” (Creswell, 2013, *Phenomenological Research, Defining Features of Phenomenology*, para. 5).

Chapter Summary

Most of the studies of instructor immediacy in online learning that exists in the literature, have been conducted using instruments that were not developed to measure immediacy in an online environment. Typically, such studies have measured verbal immediacy using Gorham’s (1988) verbal immediacy measure (e.g., Arbaugh, 2001, 2010; Baker, 2004, 2010). Some studies have used a combined measure of both verbal and nonverbal immediacy, but did so using immediacy measures designed for classroom based instruction (e.g., Furlich, 2016; Ghamdi et al., 2016). Recognizing that immediacy

in online environments would need to be measured differently, McAlister (2001) developed a combined measure of verbal and nonverbal immediacy based on the VIB and NIB, but adapted it for the online learning environment. Despite this, only one study conducted by Ni and Aust (2008) used the CMIB, and they only used six questions related to nonverbal immediacy.

To overcome the methodological shortcomings of previous online instructor immediacy studies, this study did several things. First, this study used both quantitative and qualitative measures by employing a sequential explanatory design in order to understand the complex nature of immediacy in online learning. Additionally, this study measured and investigated both verbal and nonverbal immediacy and used an instrument that is appropriate for measuring immediacy in an online environment. For the qualitative phase of the study, student perceptions of instructor immediacy behaviors were explored through interviews that sought to identify instructor immediacy behaviors from the students' perspective rather than from the instructor's perspective. The theoretical framework which guided the interpretation of the data was based on Christopher and Gorham's (1995) combined model of immediacy, rather than the arousal, motivation, or affect models. Christopher and Gorham's combined model is superior to other models because it is parsimonious with Mehrabian's (1971, 1981) construct of verbal and nonverbal immediacy as well as Bloom's conception of affective and cognitive learning.

CHAPTER FOUR: RESULTS

The purpose of this study was to explore what behaviors students perceived contribute to instructor immediacy in online courses. A two-phase sequential explanatory mixed-methods research design was employed. In Phase One, students were surveyed. The survey was completed by 177 students in online program courses at Boise State University. Of those responses, 144 were included for quantitative analysis. Subsequently nine cases representing maximum variance were identified for interviews and qualitative analysis in Phase Two. This chapter presents the results of both phases of the study.

Phase One Data Analysis

The survey data were downloaded from the Qualtrics survey software and imported into SPSS version 25. First, survey items that were designed to measure non-immediacy were reverse-coded. The data were then examined for outliers and missing data. The data were normally distributed and missing data were minimal. Eight students only answered four of sixteen affective learning questions. For the verbal immediacy items, nine of the 17 items were missing one data point, three were missing two data points, and one question was missing three data points. The valid N listwise was 137. For the nonverbal immediacy variables, five of the 14 items were missing one data point, two were missing two data points, and one was missing three data points. The valid N listwise was 135.

The data were then cleaned and prepared for a three-step statistical analysis. Preparation included reverse coding verbal immediacy and nonverbal immediacy

variables that were designed to measure nonimmediacy, e.g., the nonverbal immediacy measure NV6 “Communicated in a tense manner” was changed to NV6R, with R representing reverse coding. A perceived learning variable was generated based on Richmond et al.’s (1987) learning loss method, where the score on the scale “Please rate how much you could have learned from the ideal instructor” was subtracted from the score on the scale “Please rate how much you learned in comparison to other classes you had taken.” This led to a negative number for most variables; therefore, this was reverse coded to provide a positive score and was labeled “perceived cognitive learning.” An affective learning variable was then created by calculating the mean of the 16 affective learning variables on the survey.

With the data ready for analysis, the first step was to conduct a factor analysis to test for internal consistency and construct validity of the verbal immediacy and nonverbal immediacy scales. The second step was to conduct a Cronbach Coefficient Alpha reliability to check reliability of the verbal immediacy and nonverbal immediacy scales as well as the affective learning scale items. In the third step, descriptive data were analyzed and a Pearson Correlation Coefficient was run between the variables in order to test for any correlations. In this test, verbal immediacy, nonverbal immediacy, and total immediacy were treated as the independent variables with the dependent variables of affective learning, perceived cognitive learning, and course satisfaction. Additional analyses looked at the relationship between verbal immediacy and nonverbal immediacy and reply time to questions, reply time for feedback, and number of channels of communication used. The following sections describe the results of phase one.

Factor Analysis Results

A factor analysis was conducted of the 31 verbal immediacy and nonverbal immediacy variables. Several well-recognized criteria for the factorability of a correlation were used. First, a visual inspection of the correlations matrix found that 30 of the 31 items had a correlation of .3 or more ($p < .001$) with at least one other item, suggesting reasonable factorability. Second, Bartlett's test of sphericity, which tests the overall significance of all the correlations within the correlation matrix, was significant ($X^2(465) = 2157.13, p < .001$). Third, a Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy indicated that the strength of the relationships among variables was high (KMO = .87) and above the commonly recommended value of .60. Based on these results, it was deemed acceptable to proceed with the factor analysis.

Prior to continuing with the factor analysis, three immediacy variables were eliminated: V5, V11R, and NV11. V5 "Addressed students by name" had a strong correlation ($r = .87, p < .001$) with V6 "Addressed me by name," representing multicollinearity between the two variables. It was determined that it was more appropriate to remove V5 due to the nature of asynchronous online courses where students are likely to interact individually with the instructor rather than as a group together with other students and the instructor. The second variable removed, V11R "Asked students questions even if they had not indicated they wanted to respond" was apparently misunderstood by participants to be an indicator of immediate behavior despite being designed to measure nonimmediate behavior. McAlister (2001) found the same result in his dissertation study and discarded the item from further analyses. Therefore, V11R was eliminated. The variable NV11R "Was formal in his/her approach"

did not have significant correlations with any of the other 30 variables and was therefore eliminated as well.

A factor analysis of the remaining 28 immediacy variables was conducted using the principal axis method of extraction, one of the most commonly used methods (Bandalos & Finney, 2010). To be consistent with the theoretical underpinnings of the study, the number of factors extracted were fixed at two. A Promax oblique rotation was used, as it was determined that it would provide the best defined factor structure. Coefficients were sorted by size with those with absolute values below .30 to be suppressed in order to allow for patterns to be more readily observed.

With the three variables eliminated, Bartlett's test of sphericity was significant ($X^2(378) = 1849.11, p < .001$). Moreover, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy indicated that the strength of the relationships among variables was slightly higher (KMO = .87) when the three variables were eliminated. A two-factor solution was supported based on examination of a scree plot (see Figure 4.1) where eigenvalues "leveled off" after two factors. The first factor was robust, with a high eigenvalue of 10.02 and accounting for 35.79% of the variance in the data. Factor-two had an eigenvalue of 2.38 and accounted for an additional 8.50% of the variance in the data. These results, though similar, are a little lower than the results reported by McAlister in his study using the CMIB. In his study, he reported on a one-factor solution with an eigenvalue of 12.007 that accounted for 41.40% of variance.

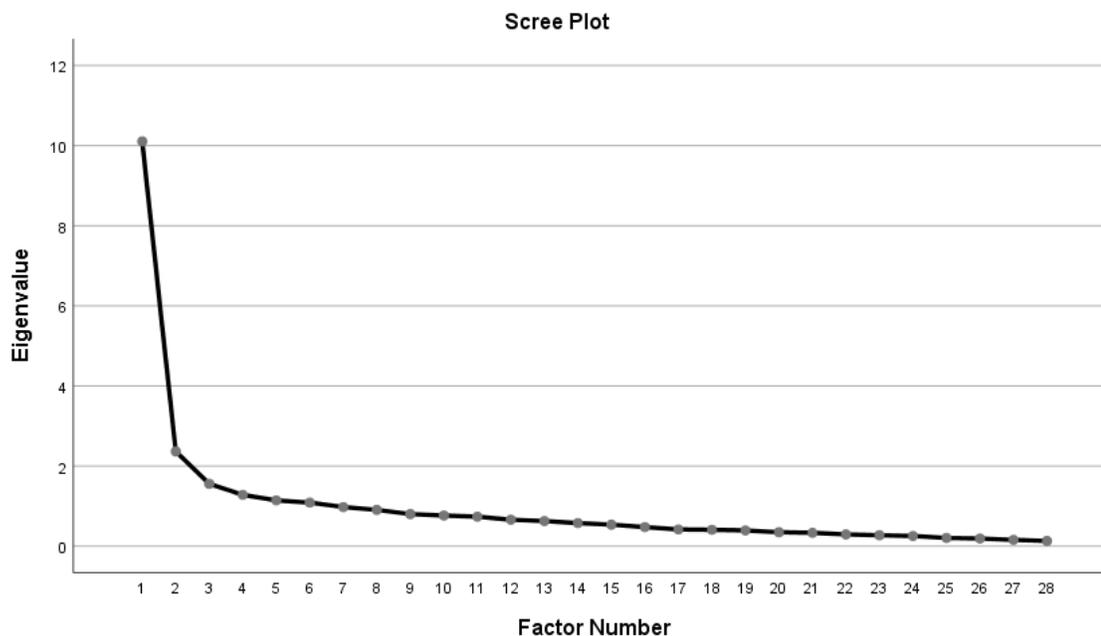


Figure 4.1 Scree Plot for Factor Analysis

Analysis of the pattern matrix (see Table 4.1) showed high construct validity. Most of the variables with primary loadings on the first factor were those derived from the verbal immediacy scale (VIB) with the exceptions of NV7 and NV2 which had primary loadings on factor-one. Most of the variables with primary loadings on the second factor were those derived from the nonverbal immediacy scale (NIB) with the exceptions of V15 and V10 which had primary loadings on factor-two. NV14 and NV8 had similar loadings on both factors. V13 did not load on either of the factors based on the suppression of values under .30. However, it did load on both factors when the suppression was changed to .20, with a loading of .27 on the first factor and a loading of .29 on the second factor.

Table 4.1 Pattern Matrix of Verbal and Nonverbal Immediacy Variables Forced onto Two Factors

| Variable | | Factor | |
|----------|--|--------|------|
| | | 1 | 2 |
| V16 | Had discussions about things unrelated to class with individual students or with class as a whole. | .79 | -.32 |
| V8 | Initiated communication with me beyond coursework. | .75 | |
| V4 | Used humor in the course. | .69 | |
| V3 | Got into discussions based on something a student brought up even when it didn't seem to be part of his/her plan. | .69 | |
| V1 | Used personal examples or described experiences she/he had outside the course. | .67 | |
| V7 | Communicated with individual students beyond coursework. | .62 | |
| V12 | Inquired how students felt about an assignment, due date, or discussion topic. | .60 | |
| V14 | Asked question that solicited a viewpoint. | .56 | |
| NV2 | Used creative means of emphasis and expression to communicate. | .55 | .32 |
| V2 | Asked questions or encouraged students to respond. | .49 | |
| V9 | Referred to course as "our" course or what "we" were doing. | .48 | |
| NV7 | Used physical metaphors in communicating, like "let me extend a helping hand" or "a pat on the back to Joe for a good answer." | .47 | |
| V17 | Was addressed by his/her first name by students. | .44 | |
| NV14 | Used a variety of tones in communicating. | .39 | .34 |
| NV8 | Used a variety of communication approaches in the course. | .39 | .37 |
| V6 | Addressed me by name. | .33 | |
| NV6R | Communicated in a tense manner. | | .84 |
| NV1R | Seemed distant personally. | | .77 |
| NV4 | Paid attention to students. | | .75 |

| | | |
|-------|---|-----|
| NV10R | Was inattentive to students. | .74 |
| NV5 | Was pleasant and friendly with entire class not just individual students. | .74 |
| NV9R | Seemed passive. | .65 |
| NV3R | Used the same monotone/flat style of communicating all of the time. | .64 |
| NV13 | Expressed friendliness to individual students. | .51 |
| NV12 | Had a very relaxed style of communicating. | .46 |
| V15 | Praised student's work, actions or comments. | .44 |
| V10 | Provided feedback through comments on my individual work. | .41 |
| V13 | Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something. | - |

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

Although the scree-plot and eigenvalues indicated a two-factor solution was appropriate, a one-factor solution was also investigated because verbal immediacy and nonverbal immediacy are considered indicators of a single immediacy construct (Gorham, 1988; Mehrabian, 1972, 1981; Weiner & Mehrabian, 1968). The single-factor analysis was run using the principal axis method of extraction and the number of factors extracted were fixed at one. Coefficients were sorted by size with those with absolute values below .30 suppressed. The one-factor solution resulted in all 28 immediacy variables, including V13, loading on a single factor (see Table 4.2). V13 was retained for further analyses based on the results of this one-factor analysis as well as the fact that a one-factor solution is consistent with immediacy theory.

Table 4.2 Factor Matrix of Verbal and Nonverbal Immediacy Variables Forced onto One Factor

| Variable | | Factor 1 |
|----------|---|-------------|
| NV2 | Used creative means of emphasis and expression to communicate. | .79 |
| NV4 | Paid attention to students. | .78 |
| V4 | Used humor in the course. | .73 |
| NV8 | Used a variety of communication approaches in the course. | .70 |
| NV1R | Seemed distant personally. | .69 |
| V2 | Asked questions or encouraged students to respond. | .68 |
| NV14 | Used a variety of tones in communicating. | .66 |
| V3 | Got into discussions based on something a student brought up even when it didn't seem to be part of his/her plan. | .65 |
| V14 | Asked question that solicited a viewpoint. | .62 |
| NV13 | Expressed friendliness to individual students. | .62 |
| NV5 | Was pleasant and friendly with entire class not just individual students. | .61 |
| V10 | Provided feedback through comments on my individual work. | .59 |
| NV3R | Used the same monotone/flat style of communicating all of the time. | .58 |
| V8 | Initiated communication with me beyond coursework. | .56 |
| V12 | Inquired how students felt about an assignment, due date, or discussion topic. | .55 |
| V15 | Praised student's work, actions or comments. | .55 |
| NV12 | Had a very relaxed style of communicating. | .55 |
| V1 | Used personal examples or described experiences she/he had outside the course. | .54 |
| NV9R | Seemed passive. | .53 |

| | | |
|-------|---|-----|
| V7 | Communicated with individual students beyond coursework. | .51 |
| V13 | Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something. | .50 |
| NV6R | Communicated in a tense manner. | .50 |
| V9 | Referred to course as “our” course or what “we” were doing. | .46 |
| V6 | Addressed me by name. | .45 |
| V16 | Had discussions about things unrelated to class with individual students or with class as a whole. | .43 |
| NV10R | Was inattentive to students. | .41 |
| V17 | Was addressed by his/her first name by students. | .39 |
| NV7 | Used physical metaphors in communicating, like “let me extend a helping hand” or “a pat on the back to Joe for a good answer.” | .39 |

Extraction Method: Principal Axis Factoring.

Cronbach’s Coefficient of Reliability

Internal consistency for each of the two scales – verbal immediacy and nonverbal immediacy – were examined using Cronbach’s alpha. The verbal immediacy scale (with V5 and V11R removed) had a Cronbach’s alpha of .88 while the nonverbal immediacy scale (with NV11 removed) had a Cronbach’s alpha of .89. All 28 measures together had a Cronbach’s alpha of .93. Internal consistency was also examined for measures of affective learning and resulted in a Cronbach’s alpha of .94. These results are consistent with previous research. For the nonverbal immediacy scale, Richmond et al. (1987) reported alpha reliabilities ranging from .80 to .87. Gorham and Zakahi (1990) reported reliabilities ranging from .73 for instructors to .89 for students. For verbal immediacy, Gorham reported a Cronbach alpha of .94 for the 17 verbal immediacy items. Gorham and Zakahi (1990) reported alpha reliabilities of .89 for instructors and .92 for students.

McAlister (2001) reported a Cronbach alpha of .95 for the 29-item CMIB measure in his dissertation.

Findings Related to Research Question 1

Research Question 1 asked, “To what degree do students in fully online program courses perceive their instructors’ immediacy to be?” Table 4.3 shows the frequencies of scores of verbal immediacy items listed by the value of their mean. As a whole, the sample ($N = 144$) reported a moderate level of total instructor immediacy ($M = 2.40$, $SD = .70$). The mean for total verbal immediacy ($M = 2.18$, $SD = .78$) was lower than the mean for total nonverbal immediacy ($M = 2.65$, $SD = .72$).

Looking at the verbal immediacy variables, V10 “Provided feedback through comments on my individual work” ($M = 3.06$, $SD = 1.03$), V6 “Addressed me by name” ($M = 3.03$, $SD = 1.18$), V15 “Praised student’s work, actions or comments” ($M = 3.01$, $SD = .97$), and V2 “Asked questions or encouraged students to respond” ($M = 2.77$, $SD = 1.31$) had the highest means while V16 “Had discussions about things unrelated to class with individual students or with class as a whole” ($M = 0.91$, $SD = 1.11$), V8 “Initiated communication with me beyond coursework” ($M = 1.13$, $SD = 1.35$), V4 “Used humor in the course” ($M = 1.55$, $SD = 1.19$), and V12 “Inquired how students felt about an assignment, due date, or discussion topic” ($M = 1.54$, $SD = 1.32$) had the lowest means.

Table 4.3 Verbal Immediacy Item Response Frequencies and Measures of Central Tendency

| Variable | 0 | 1 | 2 | 3 | 4 | N | M | SD |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|-----------|
| V10 Provided feedback on work | 2 | 13 | 20 | 48 | 60 | 143 | 3.06 | 1.03 |
| V6 Addressed me by name | 6 | 12 | 25 | 29 | 72 | 144 | 3.03 | 1.18 |
| V15 Praised student work | 1 | 10 | 31 | 47 | 55 | 144 | 3.01 | 0.97 |
| V2 Asked questions | 12 | 15 | 25 | 33 | 58 | 143 | 2.77 | 1.31 |
| V13 Invited telephone calls | 11 | 20 | 21 | 39 | 51 | 142 | 2.70 | 1.30 |
| V9 Referred to “our” course | 18 | 13 | 29 | 37 | 47 | 144 | 2.57 | 1.36 |
| V14 Solicited student viewpoints | 11 | 18 | 33 | 43 | 38 | 143 | 2.55 | 1.23 |
| V17 Was addressed by first name | 27 | 22 | 18 | 31 | 45 | 143 | 2.31 | 1.52 |
| V7 Beyond course communication | 33 | 24 | 34 | 23 | 28 | 142 | 1.92 | 1.43 |
| V3 Discussed things beyond plan | 32 | 31 | 33 | 19 | 27 | 142 | 1.85 | 1.42 |
| V1 Used personal examples | 37 | 27 | 25 | 32 | 22 | 143 | 1.83 | 1.43 |
| V4 Used humor | 31 | 45 | 34 | 24 | 9 | 143 | 1.55 | 1.19 |
| V12 Inquired how students felt | 41 | 35 | 30 | 23 | 14 | 143 | 1.54 | 1.32 |
| V8 Initiated communication | 67 | 33 | 14 | 16 | 13 | 143 | 1.13 | 1.35 |
| V16 Discussions unrelated to course | 69 | 34 | 24 | 9 | 5 | 141 | 0.91 | 1.11 |

0= never, 1=rarely, 2=occasionally, 3=often, 4=very often
N=144

Table 4.4 shows the frequencies of scores of nonverbal immediacy items listed by the value of their mean. The means for NV6R “Communicated in a tense manner” ($M = 3.50$, $SD = .82$), NV10R “Was inattentive to students” ($M = 3.19$, $SD = 1.12$), NV5 “Was pleasant and friendly with entire class not just individual students” ($M = 3.13$, $SD = .99$), and NV9R “Seemed passive” ($M = 3.07$, $SD = 1.08$) were highest while the means for and NV7 “Used physical metaphors in communicating, like ‘let me extend a helping hand’ or ‘a pat on the back to Joe for a good answer’” ($M = 1.08$, $SD = 1.19$), NV2 “Used

creative means of emphasis and expression to communicate” ($M = 2.06$, $SD = 1.23$), NV8 “Used a variety of communication approaches in the course” ($M = 2.24$, $SD = 1.21$), and NV14 “Used a variety of tones in communicating” ($M = 2.24$, $SD = 1.22$) were lowest.

Table 4.4 Nonverbal Immediacy Item Response Frequencies and Measures of Central Tendency

| Variable | 0 | 1 | 2 | 3 | 4 | N | M | SD |
|----------------------------------|----|----|----|----|----|-----|------|------|
| NV6R Tense communication | 1 | 4 | 12 | 32 | 95 | 144 | 3.50 | 0.82 |
| NV10R Inattentive to students | 7 | 7 | 16 | 36 | 78 | 144 | 3.19 | 1.12 |
| NV5 Pleasant and friendly | 3 | 7 | 23 | 46 | 64 | 143 | 3.13 | 0.99 |
| NV9R Seemed passive | 4 | 10 | 24 | 40 | 66 | 144 | 3.07 | 1.08 |
| NV4 Paid attention to students | 0 | 14 | 32 | 52 | 44 | 142 | 2.89 | 0.96 |
| NV1R Seemed distant personally | 9 | 12 | 32 | 31 | 58 | 142 | 2.82 | 1.23 |
| NV13 Expressed friendliness | 6 | 10 | 35 | 46 | 47 | 144 | 2.82 | 1.10 |
| NV3R Used monotone/flat style | 8 | 13 | 36 | 31 | 56 | 144 | 2.79 | 1.21 |
| NV12 Relaxed style communication | 5 | 15 | 45 | 54 | 25 | 144 | 2.55 | 1.01 |
| NV14 Variety of tones | 16 | 18 | 51 | 31 | 27 | 143 | 2.24 | 1.22 |
| NV8 Variety of communication | 11 | 32 | 37 | 37 | 26 | 143 | 2.24 | 1.21 |
| NV2 Used creative expression | 18 | 29 | 42 | 34 | 20 | 143 | 2.06 | 1.23 |
| NV7 Used physical metaphors | 59 | 39 | 24 | 11 | 8 | 141 | 1.08 | 1.19 |

0= never, 1=rarely, 2=occasionally, 3=often, 4=very often

N=144

Findings Related to Research Questions 2 and 3

Research Question 2 asked, “What is the relationship between perceived instructor immediacy and learning in fully online program courses?” and research question 3 asked, “What is the relationship between instructor immediacy and student satisfaction in fully online program courses?” Pearson’s Correlation coefficients were first run for total immediacy with affective learning, perceived learning (learning loss),

and course satisfaction. Moderate correlations were found between total immediacy and affective learning ($r = .567, p < .001$), perceived learning ($r = .397, p < .001$), and course satisfaction ($r = .545, p < .001$).

Pearson's Correlation Coefficients were run for verbal immediacy variables with affective learning, perceived learning (learning loss), and course satisfaction (see Table 4.5). Moderate correlations were found between total verbal immediacy and affective learning ($r = .497, p < .001$), perceived learning ($r = .373, p < .001$), and course satisfaction ($r = .453, p < .001$). While V6 and V12 had significant relationships with affective learning and course satisfaction, they did not have significant relationships with perceived learning. V16 and V17 did not have significant relationships with any of the three dependent variables. All other verbal immediacy variables had significant relationships with all three dependent variables.

Table 4.5 Pearson's Correlation Analysis of Verbal Immediacy Variables

| Verbal Immediacy Variable | Affective Learning | Perceived Learning | Course Satisfaction |
|-------------------------------------|--------------------|--------------------|---------------------|
| V1 Used personal examples | .319** | .341** | .277** |
| V2 Asked questions | .471** | .334** | .425** |
| V3 Discussed things beyond plan | .346** | .192* | .250** |
| V4 Used humor | .405** | .336** | .351** |
| V6 Addressed me by name | .263** | .164 | .262** |
| V7 Beyond course communication | .280** | .224** | .174* |
| V8 Initiated communication | .278** | .201* | .202* |
| V9 Referred to "our" course | .217** | .219** | .266** |
| V10 Provided feedback on work | .491** | .342** | .472** |
| V12 Inquired how students felt | .304** | .121 | .279** |
| V13 Invited telephone calls | .277** | .244** | .379** |
| V14 Solicited student viewpoints | .303** | .215* | .331** |
| V15 Praised student work | .358** | .254** | .397** |
| V16 Discussions unrelated to course | .150 | .117 | .020 |
| V17 Was addressed by first name | .153 | .131 | .143 |

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

N = 144

Pearson's Correlation Coefficients were run for nonverbal immediacy variables with affective learning, perceived learning (learning-loss), and course satisfaction (see Table 4.6). A moderate correlation was found between total nonverbal immediacy and affective learning ($r = .565, p < .001$), perceived learning as measured by learning loss ($r = .365, p < .001$), and course satisfaction ($r = .574, p < .001$). While NV7, NV12, and NV13 had significant relationships with affective learning and course satisfaction, they did not have significant relationships with perceived learning. All other nonverbal immediacy variables had significant relationships with all three dependent variables.

Table 4.6 Pearson's Correlation Analysis – Nonverbal Immediacy Variables

| Nonverbal Immediacy Variables | Affective Learning | Perceived Learning | Course Satisfaction |
|----------------------------------|--------------------|--------------------|---------------------|
| NV1R Seemed distant personally | .477** | .301** | .471** |
| NV2 Used creative expression | .443** | .290** | .442** |
| NV3R Used monotone/flat style | .443** | .251** | .422** |
| NV4 Paid attention to students | .517** | .294** | .527** |
| NV5 Pleasant and friendly | .419** | .319** | .457** |
| NV6R Tense communication | .281** | .174* | .283** |
| NV7 Used physical metaphors | .197* | .066 | .183* |
| NV8 Variety of communication | .404** | .255** | .438** |
| NV9R Seemed passive | .410** | .331** | .427** |
| NV10R Inattentive to students | .357** | .342** | .414** |
| NV12 Relaxed style communication | .242** | .084 | .232** |
| NV13 Expressed friendliness | .299** | .156 | .216** |
| NV14 Variety of tones | .281** | .220** | .307** |

** Correlation is significant at the 0.001 level (2-tailed).

* Correlation is significant at the 0.01 level (2-tailed).

$N = 144$

Findings Related to Research Question 4

Research Question 4 asked “What instructor behaviors do students perceive contribute to immediacy in fully online program courses?” In order to explore what instructor behaviors were most commonly used by high immediacy instructors, the sample was split into high and low total verbal immediacy using the mean for total verbal immediacy ($M = 2.18$, $SD = .78$) as the criterion for splitting the sample. Table 4.7 shows a comparison of the verbal immediacy variables ranked by means when the sample was split. One variable, V2 moved up or down more than two places in the ranking when comparing the above-mean and below-mean halves of the sample. V2 is ranked second in

the above-mean half of the sample while it is ranked sixth in the below-mean half of the sample. For the full sample, V2 ranked fourth.

Table 4.7 Split Sample Ranking of Variables by Total Verbal Immediacy Mean

| Rank | Total Verbal Immediacy Above Mean ($N = 70$) | | Total Verbal Immediacy Below Mean ($N = 74$) | |
|------|---|------|---|------|
| | Variable | Mean | Variable | Mean |
| 1 | V10 | 3.64 | V6 | 2.58 |
| 2 | V2 | 3.61 | V15 | 2.55 |
| 3 | V6 | 3.51 | V10 | 2.49 |
| 4 | V15 | 3.49 | V13 | 2.04 |
| 5 | V13 | 3.39 | V9 | 2.04 |
| 6 | V14 | 3.30 | V2 | 1.96 |
| 7 | V9 | 3.13 | V14 | 1.84 |
| 8 | V17 | 2.84 | V17 | 1.81 |
| 9 | V3 | 2.70 | V7 | 1.19 |
| 10 | V7 | 2.67 | V1 | 1.04 |
| 11 | V1 | 2.67 | V3 | 1.01 |
| 12 | V4 | 2.29 | V12 | 0.88 |
| 13 | V12 | 2.25 | V4 | 0.84 |
| 14 | V8 | 1.90 | V16 | 0.46 |
| 15 | V16 | 1.39 | V8 | 0.38 |

The sample was also split into and high and low total nonverbal immediacy using the mean for total nonverbal immediacy ($M = 2.65$, $SD = .72$) as the criterion for splitting the sample. Table 4.8 shows a comparison of the nonverbal immediacy variables ranked by means when the sample was split by the mean for total nonverbal immediacy. The first four variables retained the same ranking in both halves of the sample as they did for the full sample. One variable moved up or down more than two places in the rankings when comparing the above-mean and below-mean halves of the sample. NV1R is ranked fifth in the above-mean half of the sample while it is ranked eighth in the below-mean half of the sample. NV1R was ranked sixth, for the full sample.

Table 4.8 Split Sample Ranking of Nonverbal Immediacy Variables by Their Means

| Rank | Total Nonverbal Immediacy Above Mean ($N = 76$) | | Total Nonverbal Immediacy Below Mean ($N = 68$) | |
|------|---|------|---|------|
| | Variable | Mean | Variable | Mean |
| 1 | NV6R | 3.87 | NV6R | 3.09 |
| 2 | NV10R | 3.68 | NV10R | 2.63 |
| 3 | NV5 | 3.62 | NV5 | 2.57 |
| 4 | NV9R | 3.61 | NV9R | 2.47 |
| 5 | NV1R | 3.59 | NV4 | 2.27 |
| 6 | NV3R | 3.54 | NV13 | 2.21 |
| 7 | NV4 | 3.44 | NV12 | 2.04 |
| 8 | NV13 | 3.37 | NV1R | 1.97 |
| 9 | NV12 | 3.00 | NV3R | 1.96 |
| 10 | NV8 | 2.88 | NV14 | 1.58 |
| 11 | NV14 | 2.83 | NV8 | 1.52 |
| 12 | NV2 | 2.76 | NV2 | 1.29 |
| 13 | NV7 | 1.40 | NV7 | 0.71 |

Instructor Speed of Response

One question on the survey asked how “How quickly did your instructor respond to your questions in the course?” A second question asked “How quickly did your instructor provide feedback on assignments you submitted in the course?” Descriptive statistics were analyzed for the responses to these two questions. The results are shown in Table 4.9. Generally, students reported that instructors replied to their questions in the course in a moderate amount of time ($N = 144$, $M = 2.66$, $SD = 1.04$). Reply speed to questions in the course had a significant and positive correlation with total immediacy ($r = .481$, $p < .001$), total verbal immediacy ($r = .362$, $p < .001$) and total nonverbal immediacy ($r = .547$, $p < .001$). Students reported that their instructors provided feedback on assignments in a moderate amount of time ($N = 143$, $M = 2.24$, $SD = 1.04$), though slower than replies to questions. Reply speed on feedback on assignments had a

significant and positive correlation with total immediacy ($r = .388, p < .001$), total verbal immediacy ($r = .337, p < .001$) and total nonverbal immediacy ($r = .381, p < .001$).

Table 4.9 Instructor Reply Speed on Questions in the Course and Feedback on Assignments

| Question | 0 | 1 | 2 | 3 | 4 | N | M | SD |
|--|---|----|----|----|----|-----|------|------|
| How quickly did instructor respond to questions? | 4 | 10 | 56 | 35 | 39 | 144 | 2.66 | 1.04 |
| How quickly did instructor give feedback? | 4 | 29 | 60 | 28 | 22 | 143 | 2.24 | 1.04 |

0= never responded, 1=very slowly, 2= slowly, 3= quickly, 4= very quickly

0= didn't provide feedback, 1=very slowly, 2= slowly, 3= quickly, 4= very quickly

Channels of Communication Used by Instructor

Students responded to a survey item which asked them to report on their instructor's use of various channels of communication ranging from asynchronous (email, announcements, discussion forums, feedback on assignments, and instructor videos) to synchronous (telephone calls, video conferencing, and in-person meetings) and semi-synchronous (SMS text-messaging, mobile texting apps, instant-messaging apps, and social media). The student reported frequency of instructor use of each type of communication channel was analyzed with results shown in Figure 4.2. Asynchronous, text-based communication channels were generally the most prevalent types used, while synchronous communication channels were used less frequently. Semi-synchronous communication channels were only used in a few cases (SMS and instant messaging); students reported that no mobile texting apps or social media were used for communication with their instructors.

In order to look at relationships between communication channels used and instructor immediacy, a total number of communication channel types used by an instructor was calculated for each student respondent. Total number of communication channel types used by an instructor ranged from 1 to 7 channels out of 12 possible communication channel types ($M = 4.20$, $SD = 1.40$). Pearson's Correlation coefficients were run for total verbal immediacy and total nonverbal immediacy with total number of communication channel types used by an instructor. The total number of communication channel types used by an instructor had a significant and positive correlation with total immediacy ($r = .522$, $p < .001$), total verbal immediacy ($r = .470$, $p < .001$) and total nonverbal immediacy ($r = .504$, $p < .001$).

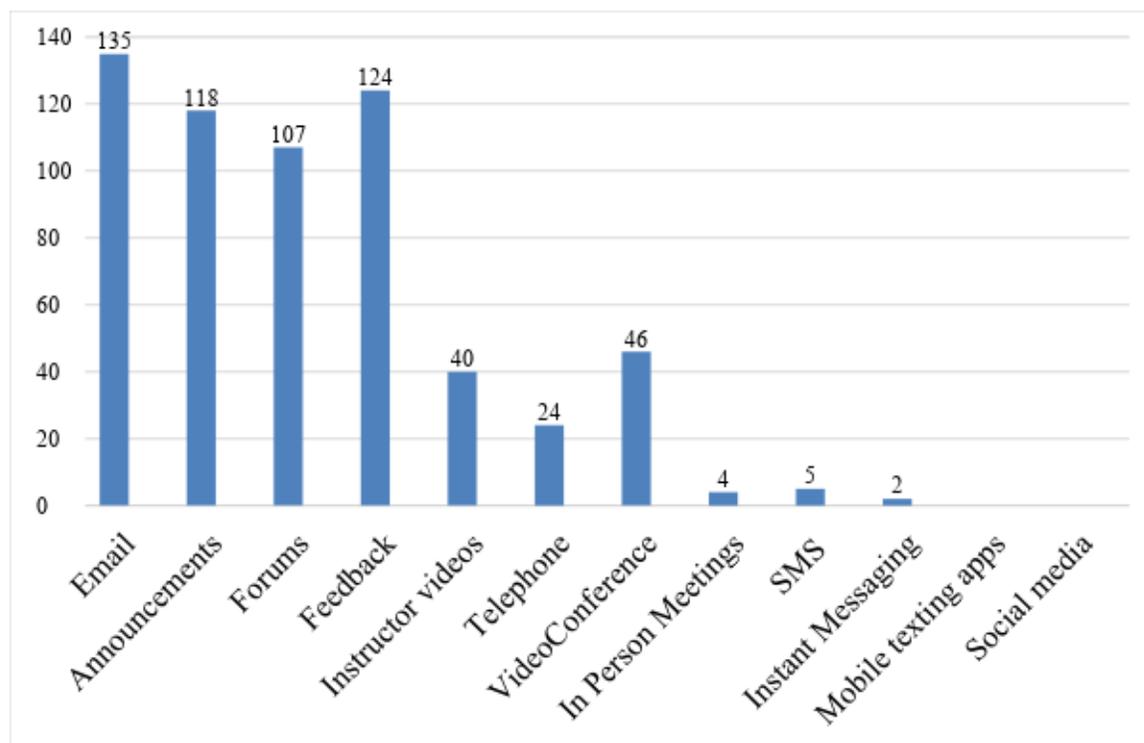


Figure 4.2 Frequency of Communication Channels Reported to be Used

In order to investigate which communication channels were being used by high immediacy instructors, the sample was split into high and low immediacy groups. The

mean of total immediacy ($M = 2.40$, $SD = .70$) was used as the criterion for splitting the sample. Figure 4.3 shows a comparison of the percentage of high and low immediacy instructor use of each of the ten communication channels that students reported being used by their instructors. High immediacy teachers used each of the communication channels more than low immediacy teachers; however, the largest differences in communication channel use was announcements, video conferencing, feedback, and forums.

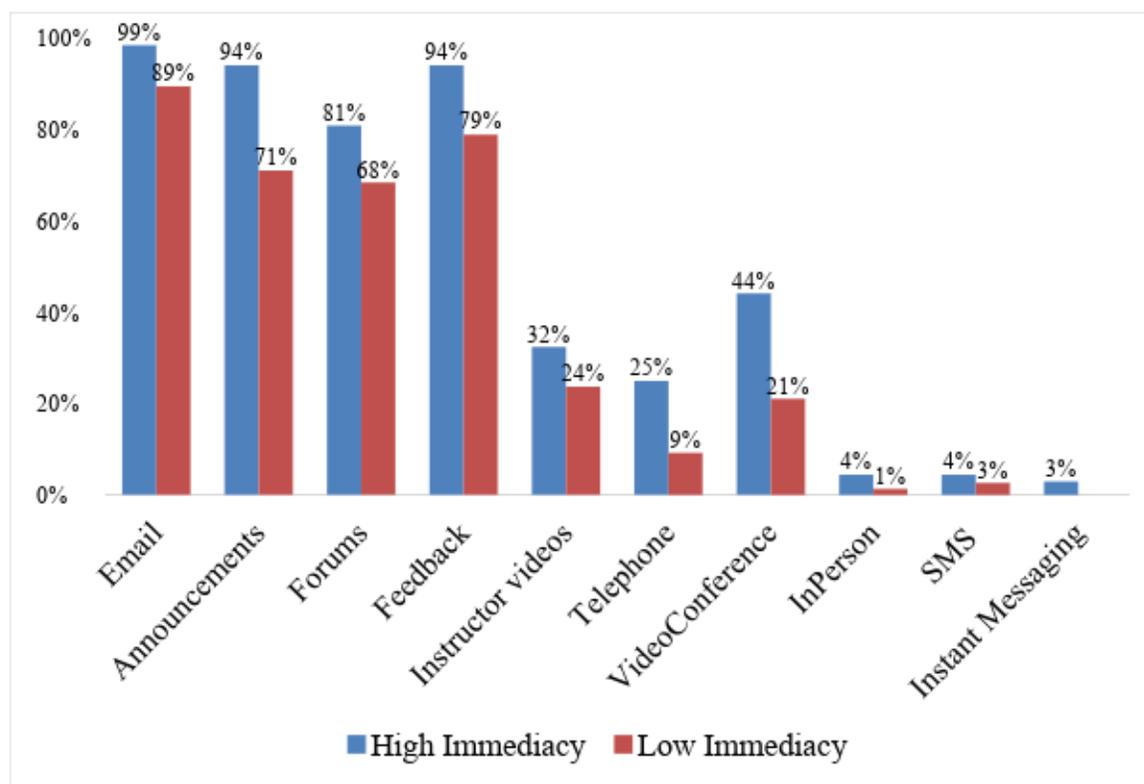


Figure 4.3 Percentage of Communication Tools Used Comparing High and Low Immediacy Instructors

Pearson's Correlation coefficients were run to investigate the relationship between the use of communication channels with instructor total immediacy, total verbal immediacy, total nonverbal immediacy (see Table 4.10). Significant and positive, though weak, correlations were found for email, announcements, forums, feedback, telephoning,

and video conferences with all three measures of immediacy. While instructor videos had weak correlations with total immediacy and nonverbal immediacy, it did not have a significant correlation with verbal immediacy. In-person meetings and SMS did not have significant correlations with any of the immediacy measures. Instant messaging had weak but significant positive correlations with total immediacy and verbal immediacy, but not with nonverbal immediacy.

Table 4.10 Pearson's Correlations Relating Communication Channel with Instructor Immediacy

| Communication Channel | Total Immediacy | Verbal Immediacy | Nonverbal Immediacy |
|-----------------------|-----------------|------------------|---------------------|
| Email | .294** | .264** | .280** |
| Announcements | .385** | .384** | .326** |
| Forums | .203* | .196* | .181* |
| Feedback | .280** | .212* | .322** |
| Instructor Videos | .171* | 0.105 | .220** |
| Telephone | .236** | .249** | .183* |
| Video Conferences | .217** | .205* | .200* |
| In Person Meetings | 0.103 | 0.066 | 0.133 |
| SMS | 0.127 | 0.119 | 0.118 |
| Instant Messaging | .182* | .186* | 0.148 |

** Correlation is significant at the 0.001 level (2-tailed).

* Correlation is significant at the 0.01 level (2-tailed).

$N = 144$

Summary of Phase One Results

There are six main results of the quantitative analysis. First, preliminary factor analysis of the revised-CMIB resulted in three items being removed, leaving 28 variables.

Factor analysis found that a two-factor solution was supported with verbal immediacy variables primarily loading on the first factor and nonverbal immediacy variables primarily loading on the second factor. The first factor accounted for 35.79% of variance while the second factor accounted for an additional 8.50% of variance. Both the verbal immediacy and the nonverbal immediacy scales had high reliability coefficients, with the verbal immediacy scale having a Cronbach alpha of .88 and the nonverbal immediacy scale having a Cronbach alpha of .89. The affective learning scale was also found to be reliable, with a Cronbach alpha of .94. While a two-factor solution was supported, a one-factor solution was also supported with all 28 immediacy variables loading on a single factor.

Second, descriptive statistics found that students reported moderate levels of verbal immediacy and nonverbal immediacy, though students reported that instructors used nonverbal immediacy behaviors more than verbal immediacy behaviors. Third, moderate correlations were found between students' perceptions of both verbal immediacy and nonverbal immediacy with affective learning, perceived learning, and course satisfaction. Nonverbal immediacy had stronger correlations with affective learning and course satisfaction than verbal immediacy; however, verbal immediacy had a slightly higher correlation with perceived learning than did nonverbal immediacy.

In the fourth step of the analysis, the sample was split into high and low immediacy (both verbal and nonverbal). The means of verbal immediacy and nonverbal immediacy variables were ranked. The result was that for both verbal immediacy and nonverbal immediacy one variable moved up or down the rankings more than two places while other variables remained relatively constant. For verbal immediacy, variable V2

“Asked questions or encouraged students to respond” was ranked second for the high immediacy half of the sample while it ranked sixth for the low immediacy half of the sample. For nonverbal immediacy, variable NV1R “Seemed distant personally” was ranked fifth for the high immediacy half of the sample while it ranked eighth for the low immediacy half of the sample.

The fifth step of the analysis looked at relationships between instructor speed in replying to questions and instructor speed in providing feedback with total immediacy, verbal immediacy, and nonverbal immediacy. Moderate correlations were found for all comparisons; however, the correlation between speed of reply and nonverbal immediacy was strongest. The sixth step looked at differences in communication channels used by high and low immediacy instructors. The sample was split again between high and low immediacy instructors using the mean of total immediacy as the criterion for doing so. The type of communication channels used between high immediacy and low immediacy instructors were then compared. Findings indicated that high immediacy instructors used all forms of communication more frequently than low immediacy instructors did, particularly announcements, video conferences, feedback on assignments, and forums.

Phase Two Results

The second phase of the study primarily focused on the results of interviewing nine students as well as the open-ended responses provided by 123 of the 144 respondents to the survey. The qualitative analyses resulted in the emergence of the following five themes: commitment to the role, student advocate, accessible and responsive, extensive and continuous guidance and feedback, and encouraging and

reassuring. The sections below provide a rich description of these themes and categories related to each.

Commitment to the Role

Students frequently described their immediate instructors in ways that indicated that they sensed their instructors were committed to their role. This theme, commitment to the role, is related to instructor behaviors that signaled a dedication to their work and their role as an instructor and the effect this had on student motivation to try hard and put effort into coursework.

Students often explained that they felt their immediate instructors were willing to put time into their course and their students. Tony described his instructor, saying “I get a lot of respect out of the work ethic and the way the discussion is held and it was...It was professional.” When asked to elaborate on what he meant by a “good work ethic” Tony said:

Rigorous. Set the bar high. Had expectations. They did their part they expected a lot of us, but they also made responses in enough time. They didn't wait to the last minute. They gave us responses in enough time where we could change our thinking and kind of respond to that. So you can tell that this professor is always on their game and that's something I respect because I mean you take time away from your family and you come home after work and you try to do as best you can on these courses and it's refreshing to see that the instructor is doing that as well...

Similarly, Lisa described the dedication her instructor demonstrated by holding weekly synchronous video-conferences, saying:

Those usually happened on the weekends, which, that in and of itself... a professor to give time on the weekends knowing the crazy schedule of students also added to...the... I think just the experience and the closeness of the relationship... when someone is willing to meet with you on a Sunday night because that's the only time you can find to meet with somebody...

Immediate instructors gained the respect of students who perceived they worked hard and were actively involved in the course. When describing what his instructor did that contributed to a sense of psychological closeness, one student (9117) wrote on the survey that “[he] had my respect for his hard work and involvement.” In contrast, when students felt their instructors were not putting time into the course, it detracted from their sense of psychological closeness, which made it harder to approach their instructors and seek answers to their questions. Mary described her non-immediate instructor as not putting time into the course or the students. Although she described him as dutiful, she felt that he did not take time to engage with the students or provide necessary support and feedback. Mary explained, “he did his job, he did it to an extent, you know, it’s just... we weren’t...we didn’t feel he was approachable, you know, we couldn’t approach him.” When asked how this affected her learning, she said, “I had to work harder and it stressed me out more because I had to figure it out for myself... but I felt like I had to work harder because he was unapproachable and it was more difficult.”

Moreover, participants frequently described their instructor’s level of dedication to their role as having either an inspiring and motivating or uninspiring and demotivating effect on their own effort in the class. Tony described how his instructor’s level of engagement in the course motivated him to go above and beyond what was required:

...you know, the professor is engaged and they're engaging so it made me want to engage back... and not just give... like some of the responses I would look at and [think] like ‘these are graduate responses?’ and it made me want to go above and beyond.

Similarly, Mary described the role an instructor’s enthusiasm for teaching plays in motivating students:

[we want them to give us] a little bit of motivation...a little reason...motivation... we all know we need the course to graduate and we all understand it will help us

when we graduate...but a good instructor wants us to feel... they enjoy what they teach... and they want us to enjoy it and learn from it.”

When asked to elaborate on this, Mary explained “[if] the teacher is not willing to help us, then we don't have any real reason or motivation to do better and learn more in the class because... it's kind of like ‘what's the point?’ you know?”

Students often described feeling a desire to impress instructors who inspired them.

Lisa described how her desire to impress her instructors motivates her:

I really want to make my teachers happy ...that's part of what motivates me to get the good grades not just a...and I think a lot of that...trying to please the instructors, I know not everybody's personality is that way, you know a lot of people don't care...they're just doing their own thing. Um, but I've always been that way. I just ...part of the reason I do as good as I do is because I'm trying to please the teacher.

When instructors were perceived as not willing to put time into their role, students often described resorting to just “jumping through hoops” and doing the minimum required to complete the course. Mary explained, saying:

It's very frustrating. So if you don't feel comfortable talking to them then you have to figure out the assignments for yourselves... and then there's a fear perception that they're not approachable. You just kind of suck it up and not reach out...you just...you just try to graduate.

Similarly, Laura described how having an instructor who was not putting time into the course and fulfilling his role of supporting the students affected her:

Well, as I already said, I wanted to do well in the class. But it was almost... I almost felt like I was doing well in the class in spite of her... Like I'm gonna make this work for me, but I'm not feeling motivated or engaged or really even necessarily understanding what you, the instructor, are trying to teach me. I'm just gonna get in here and...because this is a course that I selected to take because I want to learn something about this topic...I'm gonna see if I can figure it out ...and I'm gonna jump through your hoops, but I'm annoyed.

In contrast, Rylee described how having an approachable and supportive instructor helped her to get through a course:

I definitely feel like it did affect my motivation... because I could see where if I didn't have somebody that was as willing to help and guide me and try to make sure I'm on the right track.... I could see where this class could have been a nightmare. And then very, very, difficult just because of the level of information that I was dealing with... again because it was something that I just had no experience with...and I could see that if I didn't have somebody there that I probably would [still] have been motivated to want to do well, but not take it to that next level of 'I really want to understand this I really want to do a good job on this. I want to make sure it's making complete sense.' My motivation the other way would have been..." just help me get through this, you know...do what I have to get through it.

Related to the theme of commitment to their role, was that immediate instructors put time into organizing and preparing for their class. When asked what his instructor did to develop a sense of psychological closeness and approachability, one student on the survey (5808) wrote, "The instructor was organized and had a steady lesson plan laid out that was clear and easy to follow and understand." Rylee elaborated on this same point by contrasting her immediate instructor with a previous nonimmediate instructor:

I've actually had that other instructor for another class before... and this particular class he did not actually put it together... somebody else had done it... and this was the first semester that he had taught it and...I had the same situation the last class I had with him a couple years ago... and it is a little frustrating because sometimes I feel like, "did you even see what the assignments were? Cuz sometimes your answers are not making sense when I'm asking a question" ...and so I kind of almost felt like, okay, this is different but I'm just gonna go with it. I'm just gonna go with it. So it's it almost... I hesitate to say disorganized... but it kind of felt that way ...that he was disorganized and maybe not as prepared... and I know with the professor that I had a great experience with, I know that she has taught that class for a very long time and so I'm sure that that plays into it, too

Continuing to contrast the two instructors, Rylee described how her organized and prepared instructor made things go smoother, saying "because she is very organized and she has things set a certain way, it was extremely helpful to have her be that way because it made things go a lot smoother." When suggesting what instructors should do to develop a sense of psychological closeness, Rylee said "be organized enough to know the structure of the course that you're teaching and what's coming up. So that if people ask

you questions... you are not almost coming back and sounding like you're caught off-guard by it.”

In summary, student perceptions of instructor immediacy were related to students perceiving that the instructor is putting time into the course. The immediate instructor was described as spending time organizing and preparing the course, and working hard to help and support students. The immediate instructor was also described as being passionate about their teaching and helping students. Students described feeling respect for the work ethic and passion that their immediate instructors brought to their job and being inspired by it. This, in turn, motivated students to want to put time into the course and do their best.

Student Advocate

This theme is related to the instructor’s attitude towards their students. Instructors acting as a student advocate signaled that they respected their students, cared about their students’ success, and viewed them as valued individuals. They also signaled that they valued their role as an instructor and that their students’ success was their own success. Immediate instructors were described as building relationships with students, fostering a sense of partnership with their students, and caring about individual student success. The central factor of this theme was the development of growth-oriented relationships with students that allowed them to feel that they were cared for while also challenged.

In order to develop relationships, immediate instructors invited students to use their first names rather than formal titles. Sonja described the benefit of using first names as helping to avoid an us-them mentality between the instructor and the students, saying “I think it adds to, again, that connection piece. I respect and understand the work that it

takes to become a Doctor, and have that, that, delineation...[however] You sometimes risk an us-and-them mentality.” Other students were not comfortable using an instructor’s first name, even when invited to by an immediate instructor. Tony stated, “The professor always encouraged people to call him by his first name, but that's a non-negotiable with me. They're a professor and they earned it, so I'm gonna call them doctor.” Immediate instructors also used student first names when addressing them, particularly when providing feedback. On the open response to the survey, one student (9117) stated that his instructor’s use of his first name contributed to a sense of psychological closeness and approachability. Mary also described this, saying that her instructor was “one of the few who addressed me by name on my grading [sic] feedback comments.”

In addition to efforts to build relationships, immediate instructors made efforts to develop a sense of collegiality and partnership with their students. Immediate instructors did not elevate themselves above students; rather they spoke to them as if they are on the same level. Rylee described this relationship:

...despite me knowing that she's got vast amounts of knowledge... She was very good about being able to come down to my level. And explain things...and not make me feel stupid for asking or anything like that. She was very patient and, like I said, just really could speak to my level...and didn't make me feel like ...at the time when I'm asking or something ...that well, I'm stupid, I'm dumb or something like that... So, um ...even though I know she has vast amounts of knowledge... I didn't feel like “Okay, gosh, she just knows way more than I do it and I'm just a little peon.”

As part of this partnership, instructors were open to learn from their students and engage in reciprocal learning. Barb recalled feedback from her immediate instructor on an assignment which said, “Thank you for challenging me in your writing and giving me a different way to think.” Students often described their immediate instructors as being inviting of and being open to feedback on the course as part of this partnership.

In order to build relationships, immediate instructors frequently engaged in self-disclosures by discussing their personal life and incorporating examples from their own personal experiences into their interactions with students. Students appreciated this transparency and described it as helping to make the instructor more human. Lisa explained, “There were a couple of times that she let us know what was going on in her life. You know, ‘Sorry I didn't get this done...this and this happened and I wasn't able to get to it.’” When asked how that made her feel, Lisa described it as making the relationship more personal and helping to build a sense of closeness. Another student, Jodi, described similar disclosures by an instructor as helping her to feel more empathy towards and forgiving of an instructor, stating “it made *me*, I guess... approachable and more sympathetic, more empathetic, to what was going on and my train of thoughts and things.” Tony reported that his instructor connected her personal work experiences to student posts, saying “I think she did that every time that she thought was appropriate... tying into the person's post... elaborating on it and relating it to, you know, her personal work experiences.”

Building relationships with students also went beyond coursework in some cases. Sonja reported that her instructor offered to write her a reference letter for graduate school, which she said made her feel “awesome.” Rylee mentioned that she and her instructor communicated via social media, though contact that way was limited. On the survey, another student (3648) described how her instructor’s caring attitude encouraged her to reach out to her instructor beyond the classroom:

She cared about what I had to say and encouraged growth. I just had a conversation, which I initiated, about a possible [...] project with her. She gave me hints to help expand my thinking around the concept I'm exploring. Her caring attitude is what has caused me to seek out her help outside of the classroom.

Other students mentioned that communication outside the content of the coursework would make them uncomfortable. Sonja stated, “Like to get a text message from a professor that was like, ‘oh hey I know you like the Knicks and they're playing on Saturday night. Are you watching the game?’ Like that would be a little much.”

However, she also said that this would be more of a case-by-case situation that depended on the type of relationship that had been developed with the instructor.

While immediate instructors worked to build personal relationships with students, they did so in a way that was balanced between formality and a relaxed, friendly style. Sonja called it “right in the middleness.” She stated, “I think that her communication style in general was just kind of right down the middle; like...wasn't too casual but it wasn't formal where you felt stuffiness at all.” Barb also described a balanced approach saying, “...it was a mixture of both. She was stern when she needed to be and relaxed when she needed to be.”

This idea of balance between a formal and informal approach was also described as “responsive and friendly yet professional” and “supportive...but also realistically critical” by other students. This “middleness” can also be seen in a description of an immediate teacher’s use of humor. Jodi described two immediate instructors saying, “...they both have had great senses of humor. You know... good to get along with but they know when to be serious as well... so that definitely helps.” Students appreciated and respected that their immediate instructors were able to strike this balance. Tony described this saying:

...it leaned towards a more formal language and it wasn't a laid-back informal... I mean it was conversational, but you could tell that it was leaning towards the side a professional instead of more casual like ‘yeah I’m gonna be the learners’ friends

and the people in the class are gonna see me as cool.' You know, I really, really respected that.

Common to the theme of instructors acting as a student advocate was the sense that the instructors cared about their success. Immediate instructors were focused on student learning rather than just having them “jump through hoops.” Lisa said about her instructor, “she's somebody that wants you to learn, not just hurry up and get it done and turn it in. She wants you to learn from it.” Knowing that their instructors cared about their success allowed students to feel encouraged to approach them for help. Barb stated that it:

made me feel like I didn't have to worry that I was gonna, you know, bother her or something like that...I felt like, you know, she's very into what she does. She likes what she does and she's really interested in my success.

Elaborating on the same idea, Rylee said:

I mean... she didn't seem like she was put out or aggravated or felt like I was bothering her. Again, she is very into what she does and it comes through not only, you know, through phone but through email and even through the feedback that she gives you. She's very into what she does and she comes across as sounding like she really wants you to be successful and to do a good job.

Immediate instructors were described as having empathy and compassion for their students and this is connected to their concern for their students' success. They understand that their students are juggling many roles including work and parenting in addition to their schoolwork. One student on the survey (1197) expressed this sentiment saying that her instructor has, “...the ability to connect with students and understands that we are human and have lives outside the classroom.” Immediate instructors are flexible and accommodate their students when life gets in the way of their completing of assignments on time. Lisa described one incident where her instructor gave her extra time to submit an assignment:

I told her, you know, the extenuating circumstances, I have a little boy that's disabled, and I've got all these therapies I do for him, here, with different things, and she was very understanding and she said, 'you know I understand ... just try to make sure you get em' in by Sunday night' and, um, I just, I think it's good to have a relationship with the instructor.

As a result of the instructor's relationship building, Lisa felt comfortable approaching her instructor and being transparent, knowing that her instructor would be understanding.

When instructors are not immediate, students feel uncomfortable approaching them and being honest and transparent about such challenges. Laura described a similar situation that arose with a non-immediate instructor, saying, "I would be very uncomfortable... Would have been uncomfortable... saying 'hey my assignment is gonna be late and here's why...'" Asked to explain why, Laura said:

I would have been very anxious about how she would have responded because I don't think she would have been very forgiving or understanding. Just, you know, this is, this is... what we're here to do...and you're gonna do it and then we're gonna move on to the next thing.

Immediate instructors, however, are not pushovers. They are balanced in their approach. In addition to exercising empathy and compassion, they were described as also having high expectations for their students. They challenged their students not to just jump through hoops and complete assignments, but to learn and grow. They asked students thought provoking questions that challenged them to think more deeply. Tony explained this saying that his instructor "asked us thought-provoking questions just to kind of get the student, the learner, to that next level." He described his instructor as having high expectations while also being supportive and described one incident where the instructor "gave our class a beat down." Explaining this, he said,

I remember one specific example where nobody was...people weren't doing their first post by the time... and he kind of didn't yell at the class but he said 'I expect everybody to be posting. I noticed nobody's been posting.' So, and like within the next like 12 hours there was like 20 posts on there. So I kind of laughed at that...

Immediate instructors were also described as challenging their students to perform better while providing supportive feedback and encouragement. One student on the survey (5714) described this supportive-as-well-as-challenging approach in his instructor's feedback on discussion board posts, saying: "This instructor took time to comment on my discussion board posts. Those comments showed support and prompted further thought and effort to understand concepts." Rylee explained that her immediate instructor used this balanced approach when providing feedback on formal submitted assignments:

So if you weren't going on the right path, it wasn't like 'no you're doing it wrong.' It was more like 'well, here's where you've done something right... This is where you could improve, this is how you could improve it...' And then she would give you an opportunity to fix it.

In summary, immediate instructors were described as advocating for students and building partnerships with them in order to help them learn and grow. In order to achieve this, they asked students to call them by their first names and personalized messages to students by using their first names as well. They self-disclosed by sharing information about both their personal and their professional life and experiences. Moreover, they participated in reciprocal learning and expressed to their students that they were learning through the relationship as well. The relationships that immediate instructors developed with their students were professional and respectful. They effectively struck a balance between responsiveness and assertiveness, both caring for the students as well as challenging and inspiring them to think more deeply, try harder, and persist. This "middleness" encouraged students and helped them to feel comfortable approaching their instructors when they were having personal problems or were struggling with the course. In turn, their instructors were responsive, flexible, and encouraging.

Accessible and Responsive

This theme refers to an instructor signaling a willingness to provide students with continuous support throughout a course, both explicitly and implicitly as well as verbally and nonverbally. Immediate instructors were described as being highly accessible and responsive to their students. These instructors were perceived by their students as being available to answer their questions at almost any time and being happy and willing to do so. On the survey, one student (5714) described her instructor, saying, “The instructor was available to me via email as needed and was eager to answer all questions to assist in clarifying material.” Likewise, another student on the survey (1428) wrote about his instructor saying, “he seems open to answering all questions on blackboard collaborate/email/ discussion posts, etc.” Not only did students sense that their instructors were available and eager to take questions, their instructors specifically told them that they were available for questions, welcomed their questions and wanted them to ask questions. Tony described how his immediate instructor not only encouraged students to reach out and ask questions, but also emphasized that she would be there for them when they needed her:

the professor invited us all... they would say... in posts...to reach out if there are any problems... and especially... this... I had the same professor this semester... and they said that they're emphasizing more about if we're having trouble with the material...that we'll get through it. They're gonna help us through it. So not to give up or despair. So that's encouraging.

In addition to encouraging students to ask questions, some instructors also let students know specifically when they were available. One student (5714) described her instructor’s invitation to ask questions saying, “He frequently states his availability and encourages us to reach out if we have any questions or need guidance.”

The sense that their instructor was there and willing to communicate was highly appreciated and encouraged students. Barb described this availability of her immediate instructor, saying “I felt my professor was extremely approachable and if I had any issues, I just contacted her and she had no issues contacting me back.” Not only did they appreciate their instructor’s availability, students also felt that instructor availability made them more willing to participate, seek out answers to questions they had, and to try harder. Barb described this saying, “I think it encouraged me to participate because I knew that if I had any troubles that I could ask her anytime and she would be available for me.” Similarly, Rylee described how her instructor’s availability and willingness to help affected her by contrasting her experiences with an immediate and nonimmediate instructor:

Yeah, yeah, you are... and instead of maybe like, you know...with the other class that I had where, you know, if I would have asked a question, I didn't necessarily get the answer that I needed... I would not go to him and be like ‘hey, can I talk to you on the phone.’ I would just be like, ‘Okay, I’m just gonna go with it and go with it the best I can and we’ll see how it turns out.’ Where with her I did feel more comfortable to say ‘I’m still lost. I need to talk to you.’

Another student, Lisa, described how discouraged she felt when an extremely non-immediate instructor was not only not available to help, but directly told her not to ask for help:

I had one instructor he really came out and told me ‘I’m just going to ignore you, I just want you to get your work done, it’s an online class and I have so many live classes, I don’t have time.’ That was very disheartening to me. Because I take classes because I want to learn, I’m an eager learner, and when you’re just telling me you’re going to ignore me and you’re not helping me where I need help, it’s not very motivating. It’s just...just very frustrating.

Similarly, Mary described the frustration she felt when her instructor would not give her the direction she were seeking. She explained:

But if you're not answering our questions and saying you know, read the book, read the book, read the material that's in there. It tells you how to do it...follow the instructions.....he kept telling us to Google it. Just Google it...Google it...Okay, we can Google it all day long but we still don't understand what it's asking us to do.

Students perceived their instructors as being approachable and immediate not only by their expression of availability and willingness to help, but also by providing timely responses to questions from students. In this study, timeliness of response was the most commonly described instructor behavior that contributed to a sense of instructor immediacy. One student (5714) described this sentiment saying, “The professor achieved approachability by quickly answering my questions and encouraging me to continue to ask questions as I have them.”

Being able to contact an instructor and get a timely response helped students to move forward with their work while also reassuring them that they were doing what was expected. Expressing this, Lisa stated, “...it's very frustrating when you have to wait a week for a response and you can't get your work done because there is something you're stuck on or that you really need help with and then they're not responsive.” Similarly, Rylee said:

...a lot of times we're expected to do a lot... in the timeframe that were given and if you can't get a quick answer it's really putting you in a position where you're kind of guessing... You're not 100% certain that you're going the right direction if you find that you're not and if it's two or three days later... that can really hinder you being able to be successful and thorough in what you're trying to do.

Students typically considered timely responses to be those that were within 24 hours. More than 24 hours was considered too long. When asked the appropriate time that instructors should get back to their students in, Lisa stated, “A day or two, a day would be best if they at least get back with you the next day, but, um, I think two days is, you know, is too long.” Barb described the same timeframe for her immediate instructor's

response to questions saying that she replied “Usually within a day... or you could email her and she would respond back almost immediately.”

Although 24 hours was a typical timeframe within which students expected their instructors to reply, students often described their immediate instructors as getting back to them within a few hours or even a few minutes. When asked how long her instructor took to respond to a question, Sonja replied:

...when you emailed her it was usually between two to three hours and you had a response; and so that's vesting in what we're doing and you know really looking to push us forward... and her responses were thoughtful and thorough not just “see page six of the syllabus” you know... you know nothing like that.

When instructors took more than 24 hours to respond, it affected student motivation to do their best on assignments. Students took this to signify that the instructor did not care which in turn influenced the student's level of commitment to their work.

Sonja described this effect saying:

I've taken online classes before and you'd email the professor and they take you know...oh, well we'll get back to you within 48 hours and you never got to really know them, any more than just some little statement that they would write us feedback on our paper...and after a, while it was kinda like, well if you don't really care then I don't really care either.

While 24 hours was an expected response time, responding at least within the timeframe that the instructor stated within their syllabus was an absolute minimum expectation. Moreover, students expected instructors to be more responsive as deadlines neared. Laura described this saying:

I guess it just depends on what it is.... a lot of the instructors.... as I mentioned this is an entirely online program.... and I think every instructor I've had so far at the beginning of the course has outlined in the syllabus what kind of response time we can expect... and... so, first I would like them to meet whatever that is. I think as deadlines are nearing, being responsive, within a few hours...especially during a work day when I'm guessing they're sitting in their office... If I send something in the middle of the night, I don't expect to get something back until you know sometime the next morning... next afternoon.... and if they've.... if the

professor has stated I'll respond within X number of hours, then I expected [them] to meet that...

Students reached out to instructors for help for a variety of reasons, but typically it was related to clarifying questions, technical issues, or personal issues that were preventing them from submitting an assignment on time. Generally, when they are reaching out to their instructors for one of these reasons, students were already feeling frustrated, a term commonly used by interviewees. When asked to describe what frustration meant to her, one student, Mary, replied:

Frustrated is just annoyed, upset, perturbed, it's... frustrated means, like we need help and assistance, but we don't feel comfortable reaching out to get to help and assistance... so we're just kind of spinning our wheels and figuring out the course and the information on our own... and it's not a conducive learning environment. So we have to learn teach it to ourselves which... why do we have a teacher...? There's no assistance so it's just...frustration. It's not a good word...but...annoyed, anger, all those emotions, you know...

Although students may come to an instructor already frustrated, communication and persistent effort by the instructor to engage with the student to resolve the issue was vital to develop a perception of psychological closeness. Jodi described how she felt frustrated that she was not getting the answers that she was looking for in a course with two instructors. However, once the instructors engaged in extensive communication with her and persisted to help her resolve the problem, her perception of the instructors shifted. She described this situation saying:

I was at one end of the scale, especially with them, because I just was frustrated with everything and I didn't seem like I was getting the answers I wanted... but once the communication really set in and they became, you know, more talking with them more time with them and stuff... it definitely helped and it definitely made me more motivated to actually finish the class, and you know, do well in the class...I will tell you, at one point I was having a serious meltdown and was about ready to drop class... but... that was my own personal thing.

In addition to encouraging students to ask questions and providing timely responses, student perceptions of their instructors' immediacy were related to the instructor's willingness to engage with the students over diverse channels of communication. Highly immediate instructors were described as being willing, in particular, to hold synchronous sessions with students to help sort out more complicated concerns. Typically, students described reaching out to their instructors initially through asynchronous channels of communication such as email or "Ask the Professor" forums. However, high immediacy instructors were willing, and even suggested, switching over to a synchronous channel of communication such as a phone call or video conferencing system, e.g., Skype or Google Hangouts. Rylee described her instructor using a combination of question forums, email and phone calls to field her queries:

She did use the forum quite a bit. That's... I honestly, I think that's her preferred method and mode... which is fine because she's one of the few professors that is really on top of checking it and you can put something in there usually within a couple hours you have an answer to your question or you have feedback... so so.... she primarily likes that but if you send her emails or you asked to set up a time to call her, she's more than willing to do that as well.

The option to call their instructor's cell phone was also something several students mentioned their instructors offered. Moreover, some students described their instructors as encouraging the use of text messaging. One student (9938) explained on the survey that, "The instructor provided his email address and cell phone number to communicate with him. He encouraged use of text message as he responds to that much quicker." Lisa described her experience using text messaging with her instructor, saying "She was very helpful. She gave me her cell number and she was available through text or phone or email and every time I needed something she just kind of responded right away." For Lisa, text messaging suited her lifestyle better since she worked most of the

day and did not have access to the Internet to check email. She described the use of text messaging as promoting the development of a relationship between the student and the instructor and a sense of psychological closeness and availability:

I have like two teachers that I've texted before. One was my Spanish teacher that I...and um, he even told me you know, even after your done with the class any question you have, or whatever, you just text me anytime and he was just always, you know, available whenever you want him. And um, I think, just it creates a relationship between the instructor and the student. Whether it is just for that class time or further and it just, you know, it makes them available to you when you need them.

Although some students liked the option to use text messaging with their instructors, others preferred to default to more traditional communication channels. When asked about using text-messaging, Barb stated, “No, I wouldn't be interested in that because when we get in groups, we have to do these group texts and... I would just rather it be on a formal playing field like Blackboard for my email... not text messaging.”

Video conferencing was also described by many students as contributing to a sense of instructor immediacy. Several students described video conferencing with their instructors as helping to build a connection by creating a sense that there is someone real on the other side. Sonja described her experience using video conferencing with her instructor saying that it “builds a connection between two people and when you're seeing somebody and you're watching the facial expressions and you're seeing, you know, what's going on as you're talking... that inevitably builds a stronger connection.”

Another student (2857) described on the survey how her experience joining a video conference with her instructor, despite her own reluctance, contributed to her sense of closeness with the instructor:

I don't usually reach out personally to instructors in online courses. In this case, we were required to have some meetings with the instructor and after having the first "required" meeting, I realized how approachable the instructor was. BUT, it

took a requirement to get me over my reluctance to reach out personally. During that first discussion, the instructor was warm, friendly, humorous and very approachable. That has made subsequent discussion feel easy and smooth.

Video conferencing was also used by some instructors to help student-groups to problem solve and improve group dynamics. Rylee described how this helped develop a sense of closeness with the instructor:

...he would literally say, 'What's working...? What's not? What can we talk about? How can, you know how can we make this better?' So really I think understanding, that he was just as vested in our success as we were... I think added to that to that closeness.

One challenge of video conferencing that students described was not being able to attend scheduled meetings due to personal scheduling conflicts or differences in time zones. One student (0126) described this type of situation in her survey response, saying:

The professor set up virtual meetings throughout the semester. They were always at the same time on the same day, so I was not able to attend any of them. I like the idea of setting up the meetings, but I think there needed to be a variety of different times available for those who couldn't make the time she set....

Although video conferencing was cited as providing an opportunity to develop psychological closeness, the high-fidelity nature of the medium itself is not the only important factor contributing to instructor immediacy. The way the instructor behaves during the video conference also affected student perceptions of psychological closeness and approachability. Mary described attending an optional video conference that her instructor held weekly on Saturday mornings. She described her instructor as only talking about himself, not paying attention to the students, not clearly answering questions, and generally rambling on. She said:

It was too much detail...Just too much talking...yeah, he just talked about stuff and what was going on...it was weird. So we would ask him questions and he wouldn't answer the question, you know, like a politician... You ask them a question and they give you a 20 minute spiel...but it doesn't answer the question... I just did the one video chat... there wasn't a lot of... again communication other than the video

chats or the discussion... I would say he was kind of narcissistic, but that's just me, he talked about himself a lot. That was in the one video session I was in, so...Or I was maybe in a couple of them...

Students emphasized that they wanted their instructors to respond to their questions in a timely manner and through a channel that was appropriate to their preferred channel of communication as well as the type of problem they were having. Sonja summarized this well. When asked what she felt was the most important thing for an instructor to do to develop a sense of psychological closeness, she stated:

I think that the video capability is... and being willing and available to do those kinds of synchronous things is probably one of my one of my biggest. It just makes you feel connected and human. I think the use of announcements as a motivational tool... I think, also helps me to know on this side of the screen that you on the other side of the screen is really pulling for me and wants me to succeed. And then I think the third one would be... I think, the...like I think the way that someone communicates just in terms of what... however it is... whether it's quick responses on the discussion board or being able to, you know, get them on the phone or like the one professor who was like here's my calendar plug yourself in where it works for you. Knowing, that even with the time change...even with the time change, I was never, I was never kind of up a creek without being able to figure out what I needed to do. So I think just however they choose to communicate... just being there to communicate...

Responding to the same question, Jodi suggested the offering of diverse communication channels as “the biggest one.” She emphasized that different students have different needs for communicating and that there was no best channel for all students:

...not everybody is great with a phone call. You know, somebody might need the Google Chats or something... You know... Definitely... I know that, like, probably on campus there's office hours... is like... maybe consider office hours for your online.... Say, ‘hey specifically between this time and this time I’m gonna be on google chats...or I’m gonna be available for text messages or a video conference if you need to’

In summary, students described immediate instructors as being available and timely with their responses to questions. Moreover, immediate instructors were described

as expressly stating their availability and their welcoming of questions. Their actions spoke to the same. They typically responded to questions within 24 hours, and frequently within a few hours or even minutes. They were open to communicating with their students via synchronous channels, including phone calls and video conferencing. While some students preferred being able to use synchronous communication, others preferred to use traditional asynchronous channels of communication such as email and question forums. The level of complexity of the problem the student was having often dictated the level of fidelity and synchronicity that the students felt necessary to perceive that their instructor was there for them and was trying their best to resolve the concern. It was not just the communication channel and timeliness that was important, but also the way the instructor responded over those communication channels that influenced students' perceptions of their instructor's immediacy. Immediate instructors were described as being there for their students, willing to take the time to help, responding in a timely manner, persisting in helping them, and being able to effectively solve their problems and answer their questions. As a result, students felt reassured and encouraged to try harder, participate, ask questions, and approach their instructors.

Extensive and Continuous Guidance and Feedback

This theme refers to instructors signaling that they are invested in their students' success through the provision of extensive and continuous guidance and feedback. Such guidance and feedback is growth and success oriented, personalized, and demonstrates the engagement of the instructor throughout a feedback cycle.

High immediacy instructors provided their students with extensive and continuous guidance and feedback throughout the course, not only by being responsive to their

questions and concerns about the course process and activities, but also in regard to the completion of major course assessments and activities. In order to keep their students on task and support their meeting of course learning objectives, they used a variety of approaches. One of those approaches was the effective use of reminders and notifications. Sonja described her instructor as sending regular course-wide reminders:

she was constant with the reminders and they weren't nagging and 'oh my gosh lady I know this is what I have to do.' They were short, sweet, pertinent, but provided enough information that you always knew what was going on in the course... there was never a question.

Such reminders helped to clarify assignment requirements and notify students of upcoming deadlines. One student (2770) described on the survey how her instructor did this, saying "She always made it very clear through announcements and email what she expected from us as a class. If she was getting a lot of questions she would reach out with another announcement to attempt to clear things up further."

Along with course-wide reminders, immediate instructors paid attention to what individual students were doing and provided guiding feedback. One commonly described strategy was instructors reaching out to students individually to remind them to turn in an assignment that was late. One student, Tony, described how such an experience contributed to his sense that his instructor was approachable and trustworthy:

I had one instance last semester where I thought I had submitted the first of a two-part assignment in Dropbox... and I had submitted the wrong one... and the due date was coming up and the professor contacted me through email and said 'I don't have your response yet' and I was like 'oh crap.' So... I really appreciated that... made my trust level go up and made that professor more approachable, so... I really respected that because they could have just said zero, you know...

Another student, Sue, described an instructor whom she had viewed as being generally very nonimmediate sending her such a reminder. He communicated with her once by email to let her know she was late on an assignment that was due. She said she

was very surprised that he sent it and that she was thankful that he did. However, she was conflicted about it because she felt that it was out of character for him.

Some instructors were also described as being proactive in “checking in” on students to see how things were going for them. When asked to suggest instructor behaviors that would contribute to a sense of psychological closeness with an instructor, Jodi stated, ‘being definitely aware of what all your students are doing and checking in with them... even if you haven't heard from them... you know.... shooting them an email saying ‘hey, I haven't heard much from you. How's it going?’” While this is a strategy that students believed would contribute to a sense of psychological closeness and approachability, this was not a behavior typical of even immediate instructors. Generally, students did not expect instructors to do this. Tony responded to a question about this saying:

Yeah, I'm not uh, I [not] really sure what to expect with what that means... because I never had a professor reach out and say ‘how are things going,’ you know. I suppose that if I was in their classroom and I talked to him about having severe clinical depression...they would probably reach out and they would say to me. ‘Hey, Tony I noticed that you weren't online or posting this weekend. Are you going through...Is everything all right?’

Another strategy used by immediate instructors was the provision of messages that provided an overview of a module at the outset and another that summed up what had occurred at the end of the module. Often this was done using course-wide announcements and emails. On the survey, one student (9738) described such announcements and emails saying, “The instructor provides frequent announcements/emails and topic summaries throughout the week to help set the tone and provide guidance.” Tony also described appreciating that his instructor used course-wide announcements in this way:

...at the end of the module there will be a posting with the final comments and the wrap up... kind of like a synopsis and what kind of things were noticed and what things weren't liked and what was appreciated. So there's that kind of communication. There's class-wide announcements.

Some students described how such announcements and reminders were motivating and helped to reassure them that their instructor cared about their success. Sonja explained this, saying, "I think the use of announcements as a motivational tool... I think, also helps, me to know on this side of the screen that you on the other side of the screen is really pulling for me and wants me to succeed."

In addition to providing reminders and checking in on students, some students reported immediate instructors using regular messages throughout the week to keep them engaged and encourage them to explore further what they were learning in the course.

Rylee described her instructor doing this via email:

...she [sent] emails out to the entire class and she was really good about usually sending two to three emails out to the class a week... just on different things... whether it be on some link that she found that she thought might be helpful to us or there was some seminar or something that you know online webinar something that she thought that we might enjoy.... So she did that two three times a week.

Another common strategy students described being used by immediate instructors was the use of instructor-made videos which provided an overview of a module, explained module content, and clarified the instructor's expectations of students on assignments. On the survey, one student (4908) described how her instructor's videos helped to clarify expectations saying, "The professor posted weekly videos on what she expected of students throughout the week, which was helpful." Such videos were described as not only helping to provide a sense of clarity, but also helping the students to feel a connection with their instructor. On the survey, a student (0882) explained this saying, "I think my professor is friendly and personable. She would video her

announcements and it allowed us to get to know her personality a little better and get a sense of who she was.”

While instructor videos were described as providing a sense of clarity and fostering a sense of connection with the instructor, they were not vital for developing a sense of immediacy. Barb described her instructor as providing third-party videos (e.g., TED Talks), but not instructor-created videos. When asked if instructor videos would have created a greater sense of closeness, she responded, “Um, no because she was still there supporting us through the feedback she was giving us.” In other words, the instructor effectively developed immediacy through individualized support and feedback on assignments.

In addition to providing guidance by clarifying expectations and assisting students, immediate instructors were growth oriented and cared about long-term student success and achievement. In order to achieve this, immediate instructors provided students with feedback that was growth oriented, specific, thorough, interactive, iterative, and personalized. Specific and thorough instructor feedback addressed the details of a student’s work and was based on clear criterion. Sonja contrasted a nonimmediate instructor’s feedback with the growth-oriented and specific feedback that she received from her immediate instructor:

[the non-immediate instructor was] not providing growth feedback. You know maybe scoring something and saying, well you know, ‘You were missing this part and you didn't do that part’ but not, not telling us really how, to improve...which reminds, me that professor that I did the survey on she would literally... in her feedback... she would refer to a reading or the textbook where it said what she was trying to get you to understand and she would be like go back and read this article on this page for more information. So I think just, you know, providing just random feedback without linking it back to course content really, feels disconnected, because sometimes you're like, ‘how, was I supposed to know that... you know that... but how was I supposed to know that...’

Barb echoed this sentiment by contrasting her experience with an instructor who used a rubric and explained why points were deducted with an instructor who did not:

So if she took points off for anything, she would explain to me why she did that versus another professor I had... I was taking currently... he would take points off and not explaining but he'll take points off his saying good job. 'If it was a good job. Why did you take points off?' you know, so she backed up everything that she did.

Immediate instructors did not only explain why they were deducting points using clear criterion; they went further and gave feedback that provided students with specific direction on how to improve their assignment or how they, as the expert, might have done it differently. They also asked students thought-provoking questions that challenged them to go deeper. Rylee described how her instructor did this, saying:

...a lot of times she would go in and say 'well hey, you know, did you think of this? Well, how do you think this might be different if it was this situation?' Or she might, you know,...say 'hey, okay elaborate on this or give me a little bit more so I have a better understanding of where you're going with this'

Immediate teachers were often described as engaging the student in a discussion about their feedback. One student, Sonja, described how her instructor had students submit their assignments to a discussion forum. She then worked with her students, like a co-author, actively suggesting changes and explaining why she was suggesting them:

We would submit a document and then she would use track changes and she would... what was neat about her is not only would she tell us to look at something but, she would... if it was easy changes.... She would just recommend the change and then you would approve it. Again, she was just... it was about... um, I mean she could have referred us back, 'well go see your APA Style Guide on page whatever to see that.' No. Like, she was just like, 'hey this is why I think you should change this and I changed it for you.'

In contrast to immediate instructors, nonimmediate instructors were described by students as not engaging students in a conversation about their feedback, particularly when an instructor provided feedback that asked questions. Students often described

responding to these questions and then being disappointed that their instructors did not continue the dialogue. One student, Laura, described such an experience:

The one place where it seemed like she was trying to engage with students was in these private forums that she was using to give us our weekly feedback... 'This is how you're doing in the course...' and she would write sometimes two or three paragraphs.... I don't think she would introduce... maybe she would introduce it with, you know, [name] comma and then kind of a letter format.... But ...and she would say, you know, 'You made some good comments about this...your response to this student in the class made me think about this other thing ...did you consider...blah, blah, blah'...but that would be a question.... 'Did you consider?' And her tone there would be a little bit more conversational....well kind of almost conversational...[however] there was no indication that she knew that you had posted the response much less replied to it. So it did not become a conversation. It was her one-sided feedback

In addition to engaging students in a dialogue about their feedback on assignment submissions, immediate instructors offered opportunities for formative feedback on assignment drafts as well as opportunities to resubmit their assignments after they had received feedback on final submissions. One student, Lisa, described this saying:

...she even encouraged us to turn in assignments that weren't due yet to kind of get a critique on how we were doing and on how we could do better and she was really good with that, you know. She said, 'you know maybe try this, this, and this and then turn it in again and I'll let you know, you know, how you did on that.' And she was just very helpful with...she wasn't just concerned with hurry up, get it done, and turn it in. She was more concerned with 'I want you to learn the material.' Um, even like the tests where you took it the first time, and you were able to see what the correct answers were. You learn a lot better if you know the answers than if you just got em' wrong and you go on to the next thing.

Immediate instructors were also described as providing feedback that was personalized. One key personalization strategy, described by all nine interviewees, was the use of a student's name when providing feedback. Additionally, immediate instructors were described as drawing from previous information students had provided about themselves on other assignments when giving feedback. Rylee described how her

instructor drew from personal information she had posted on a self-introduction forum at the beginning of the course in feedback on a later assignment:

she was very good about...at the beginning of the class we always kind of like share different things about ourselves. They like to you know certain little personal things about you and she would actually... throughout the course...if you reached out to her and you know, you were asking her something... she would actually pull info from that...I mean 'So how's your kid doing' or whatever you might have put in there. And so she would tie a lot of that in... which was kind of cool because you kind of felt like..., well, gee, she's really taking the time to read info about me and trying to get to know me and not just be like, 'oh you're a student, you know, let's get down to business and move you on and okay. Get to the next class.'

Immediate instructors also encouraged students to use personal examples from their own life and tie that into what they were learning. On the survey, one student (6527) described how this strategy affected her, saying "The instructor encouraged us to use personal examples and tie what we were learning to those. She quite frequently commented on things that we shared, which added to my feeling of importance and value." Immediate instructors also connected what students were saying to their own professional experiences in their feedback. Tony described this, saying "[he tied] into the person's post... elaborating on it and relating it to, you know, his personal work experiences."

The feedback immediate instructors gave was also respectful and validating of student ideas, which made students feel safe to express themselves. Jodi described how her instructor did this on discussion forums:

I could see from other people you know in the in the class as well...That, you know, everybody's idea, you know, had meaning and worth, you know, I guess... she validated everybody's ideas... so like that really helps when you are you're talking that you know... you're afraid to post something because you don't know if it's wrong or right... and even if it isn't quite on the right track, you know, it was more of you know, "Hey, that's, that's great you know but think along these lines... I see where you're getting started" and stuff and just being very helpful

with a lot of things and not dismissing anybody so you know to me, right, there's a respect for myself and for other students.

Students described feedback as one of the most important things that online instructors could do. They described it as helping students to learn, grow, improve upon their performance, and develop psychological closeness. When asked what the most important thing instructors can do to improve psychological closeness with their students, Barb stated:

I think it would definitely have to be the feedback on your assignments. That definitely has to be the biggest thing for me because it was it was super informative and it helped me with my next project to not make those same mistakes if I made any.

In summary, immediate instructors were described as providing extensive and continuous guidance and feedback to students. They often did so by providing clarity through course-wide announcements and emails. The content of these announcements was encouraging and provided overviews and summaries of materials. They also provided suggestions to relevant materials and resources. Some instructors used video announcements, which students described as helping to develop a sense of psychological closeness. Additionally, immediate instructors paid individual attention to students and often reached out with reminders to turn in assignments or simply to check in on them and see how things were going.

One of the most defining behaviors of immediate instructors was their provision of great feedback on assignments. The essence of immediate instructor guidance and feedback was that it was growth and success oriented. It was described as personalized through the use of student names, direct references to the content of their assignments, and drawing connections to previous disclosures made by the student in the course. In addition, immediate instructors connected the ideas expressed in student assignments to

their own personal experiences. Additionally, feedback was based on clear criterion, explained why points were deducted, directed students to materials and resources they should review, offered thought provoking questions, and suggested things that students might do differently. At the same time, feedback was also described as respectful, validating of student ideas, and acknowledging the effort students put into their work as well as emphasizing what they got right. Moreover, immediate instructor feedback was process oriented. This process occurred over a period of time through active engagement with the student in dialogue about their assignments. Throughout this process, immediate instructors provided students with opportunities to submit drafts for formative feedback as well as opportunities to resubmit final submissions based on feedback received. In sum, immediate instructors were described as not looking just to get the grading done and move on to the next student and the next course. They cared about the success of their students.

Encouraging and Reassuring

This theme refers to instructor communication behaviors that signaled caring about their students and supported their students' sense of self-efficacy as they worked through course content and assignments. Immediate instructors expressed their caring for student success by encouraging and reassuring them continuously through the support, guidance and feedback they provided in the course. Their communication was described as having an overall positive tone, which conveyed warmth and respect. Much of this was expressed verbally, through the tone of both written and spoken feedback. However, it was also expressed nonverbally through the level of support, accessibility and responsiveness instructors provided students.

One of the most common behaviors described of immediate instructors was the use of a great deal of praise. Praise was described as encouraging students by acknowledging what they had done right, rather than just pointing out what they had done wrong. One student, Lisa, described the praise her instructor provided in feedback on assignments:

Yeah, a lot of times she would, you know, usually when she's critiquing the assignment she would say, "you know, you did a really good job on this point and I'm glad that you found this useful, I'm glad that you found this helpful," um you know, different things that...I would tell her in the paper, you know, how I do things and what I've learned and she, you know, would make comments, you know, "I'm glad that you were able to use that ...or...you know...I think you did a really good job with this part...." and she did a lot of that.

In contrast, Mary described her nonimmediate instructor as only focusing on what students had gotten wrong on their assignments:

He would say we were wrong, or he would give like, you know, 'this was wrong and you should do it this way'... but if you don't understand that yes means no and no means yes...and it still doesn't make sense...you don't understand the feedback and you don't understand how you're wrong.

Similarly, one student (6061) described desiring more praise, recognition, and acknowledgement for the effort she had put into her work by her nonimmediate instructor, saying "At times I felt I could have benefited from more positive feedback on my thoughts and assignments. Sometimes I felt I worked hard but my effort wasn't recognized or affirmed."

Praise encouraged students, made them feel that they were growing and thriving and motivated them to persist. Tony described the effect professor compliments on his work, saying:

I was kind of astounded by the compliments that I was being given by the professor and it made me feel like... I think I said to my girlfriend like.. 'you know what' ...or she actually said to me she's like 'see all that hard work baby. It actually matters. He sees what you're doing.' It was refreshing. You know, I'm

not gonna throw in the towel just because I don't get a good comment. But it is refreshing and I kind of, you know it kind of bolstered your ego and makes you feel like 'hey, you know, I saw this unit kind of correctly' ... so that was good in that sense.

Encouragement also took the form of instructors reassuring students that they would help them to get through the course. Tony described the encouragement he felt from the reassurance he received from his instructors. He explained, "...they're emphasizing more about if we're having trouble with the material...that we'll get through it. They're gonna help us through it. So not to give up or despair. So that's encouraging."

Praise that acknowledged student work and reassured them was described as encouraging, which in-turn motivated students to persist and to do their best in the course. Tony described the effect of encouragement and reassurance saying:

I think it gave me motivation and [made me] want to impress the professor.... If that's a way to put it... But yeah. There was certainly a drive there that I already had but it, it, reassured me. Like I remember the comments the professor would give me on my post... I read it to my girlfriendand you know I got encouragement from her and it was encouragement from the professor.... So it really kept me motivated in the course. So that was a good positive effect of it

Immediate instructors were also described as communicating with their students with a friendly and positive tone, whether it was through text, voice or video. On the survey, one student (7058) wrote that, "The instructor was always friendly during email exchanges and extremely pleasant, encouraging, and reassuring during video conference sessions." Rylee also described her instructor's positive tone being present across various forms of communication:

Her tone was very positive. I guess, very helpful. I mean.... she didn't seem like she was put out or aggravated or felt like I was bothering her. Again, she is very into what she does and it comes through not only, you know, through phone but through email and even through the feedback that she gives you...it was more dynamic... more animated... I never felt like it had any negative undertones and always had positive, positive undertones to it... and more kind of like encouraging.... So if you weren't going on the right path, it wasn't like 'no you're

doing it wrong.’ It was more like ‘well, here's where you've done something right.’

Immediate instructors were described as being consistently positive in their tone, focusing on strengths when communicating with students, and providing feedback. One student (1196) on the survey described her instructor, writing, “She always uses first names when addressing students and finds something positive in everyone's work, even if it was done incorrectly. She hasn't ever given negative feedback that I've seen.” Another student on the survey (4182) described his instructor's tone writing, “He responded to my emails in a friendly and personable way bringing up strengths and always encouraging.”

Not only is the tone of immediate instructors positive and encouraging, it is also respectful. Rylee described that her instructor's respectful tone “made me feel like when I went to her and asked for something that I was important.” Tony also described his immediate instructor as making him feel respected. When asked what being respectful meant to him, Tony responded:

Never putting out the person in front of their peers. There was never any sarcastic comments...never downplayed a person's opinion... if they had a difference in opinion... I always noticed that this professor didn't agree with me a couple times and would say ‘that's what I was thinking; What are your thoughts on this’ ...you know and ask me.... It was it was very tactful there was tactful communication and it was just respectful, you know. Kind of like I would speak to elders... it was it was iron how this professor was treating, you know, people junior to him.

Students were also reassured when immediate instructors communicated in a manner which demonstrated they respected their ideas. Jodi described this saying:

You know, she respected my ideas and you know really asked a lot more of, like, what I was thinking and what I thought about the course and stuff like that... and just, you know, made me feel like I was not... I guess you could say...not stupid for asking so many questions when I really didn't understand things and stuff... so that definitely helped.

The positive tone that immediate instructors used when communicating with their students motivated them to follow up on their instructor's feedback and suggestions.

Tony described this effect saying:

I guess it was... you could tell that the professor was interested and sincere and it certainly wasn't flat. I would err on a more positive side. It was it was engaging it... you know, they asked us questions and by the tone of the conversation or the comment I wanted to go back and find the answers to those questions of theirs.

A student's perception of an instructor's tone can also contribute to a sense of nonimmediacy. Laura described an instructor who had encouraged students to ask questions by email or by phone. However, when she did contact her, the instructor's tone was perceived as discouraging. Laura explained:

she had also encouraged us to use her... if we had specific questions... to use her email or to even call her. I think she's based in [another state]. So it was not like, you know, you could drop by office hours...the program I'm in is entirely online... And so when I would send her an email... which I did once or twice... she would reply very promptly. But her tone did...made me feel a little bit like she was annoyed that I had to ask this question because she felt like I should have understood from the instructions given in the Syllabus, or in the, you know...she broke the course into modules...so the module instructions... and so by asking a clarifying question, she made me feel a little like 'You dummy? Why are you asking?'

Laura described the lack of "cushioning" in her instructor's feedback, describing it as:

...really short declarative sentences... And no kind of cushioning. I think when you're communicating in writing, it's important to include things like... "I'm so glad you asked or I appreciate that blah blah blah.... This was a good question... or let me clarify... I apologize that my... that I wasn't clearer initially..." bla bla...that cushioning, I guess is it.

Laura contrasted her nonimmediate instructor's communication style with an immediate instructor she had previously had, saying, "In the wonderful class, the instructor['s] communication style was also using that kind of softer, less directive... but asking students to think about things differently... but in a gentle way."

The way that the instructor communicated with the students was described as setting the tone for the course. Sue discussed at great length how her instructor's overall tone affected her. She said that he did not participate in the discussion boards at the beginning of the course, and that in turn set the tone for the whole course. She explained that in her other courses instructors had responded to almost all of the posts, but he did not participate in the discussion boards at all. She said that it affected her learning because she "wasn't going the extra mile to learn or do extra work or research." She described how she started to do the "bare minimum" in the course because that was the tone that the instructor had set.

In summary, students were attuned to the instructor's tone, which was conveyed both verbally and nonverbally as well as explicitly and implicitly. The tone of the instructor was described as being apparent across all channels of communication and setting the tone of the entire course. Moreover, students described mirroring the tone the instructor set. In turn, this tone affected their motivation and the amount of effort they were willing to put into the course and assignments. Immediate instructors were described as having a tone that was warm, friendly, gentle, soft, "fuzzy," respectful, and acknowledging of student ideas and efforts. Their tone was described as always positive and never negative. Additionally, immediate instructors were described as using a great deal of praise when communicating with students, particularly when giving feedback. They "cushioned" critical feedback using praise and focusing on strengths. A positive tone and the use of praise reassured and encouraged students. It made them feel that they were growing, thriving, and it motivated them to persist, to do their best, and follow up on the instructor's feedback and suggestions.

Chapter Summary

The purpose of this study was to explore what behaviors students perceived contribute to instructor immediacy in online learning environments. A two-phase sequential explanatory mixed-methods research design was employed. The first phase entailed a survey and a subsequent quantitative analysis. Results of the quantitative analysis revealed that both verbal immediacy and nonverbal immediacy measures had significant relationships with student learning and course satisfaction. Additionally, comparisons between high and low immediacy instructors identified differences in the most frequently used instructor immediacy behaviors. Differences included those related to the verbal and nonverbal immediacy measures as well as those related to timeliness of response to questions and feedback as well as the types of communication technologies used. High immediacy instructors were found to be timelier in responding to student questions in the course as well as in providing feedback. Moreover, they used more channels of communication to interact with their students and, in particular, they used synchronous technologies and instructor created videos much more frequently than low immediacy instructors did.

The second phase of the analysis of results involved first and second cycle qualitative analysis of nine interviews with students who reported high or low immediacy instructors as well as the open-ended responses on the survey. First and second cycle analysis resulted in the emergence of five main themes: commitment to the role, student advocate, accessible and responsive, extensive and continuous guidance and feedback, and encouraging and reassuring.

The results of both phases of this study were compared and synthesized and resulted in several key findings. These key findings are discussed in Chapter 5.

CHAPTER FIVE: DISCUSSION

Past research has consistently found a relationship between instructor immediacy and student learning and satisfaction in both classroom-based settings as well as online settings (e.g., Arbaugh, 2010; Ghamdi et al., 2016; Mottet & Beebe, 2002; Witt et al., 2004). Moreover, extensive research has identified specific instructor immediacy behaviors that contribute to developing a sense of psychological closeness (e.g., Gorham, 1988; Kerssen-Griep & Witt, 2012; Miller et al., 2014; Richmond et al., 1987). However, there is little understanding as to what instructor behaviors contribute to a sense of psychological closeness in online learning, particularly for students in fully online programs (Ghamdi et al., 2016; Melrose & Bergeron, 2007; Trad et al., 2014). The main research question for this study was: What behaviors do students perceive develop instructor immediacy and supports their learning in fully online programs? Five sub-questions guided this study. The first question looked at the degree of perceived instructor immediacy in fully online program courses. The second question looked at the relationship between instructor immediacy and learning while the third question looked at the relationship between instructor immediacy and student satisfaction in fully online program courses. Question four looked to identify specific instructor behaviors that contributed to a sense of immediacy while the fifth question investigated student perceptions of how instructor immediacy contributed to their learning. The five sub-questions were:

1. To what degree do students perceive instructor immediacy in fully online program courses?
2. What is the relationship between perceived instructor immediacy and learning in fully online program courses?
3. What is the relationship between instructor immediacy and student satisfaction in fully online program courses?
4. What instructor behaviors do students perceive contribute to immediacy in fully online program courses?
5. How do students feel instructor immediacy supports their learning in an online course?

In order to accomplish this, I used a sequential explanatory mixed-methods research design. A sequential explanatory design is appropriate for not only obtaining quantitative results, but also to explain the results in more detail particularly in terms of the voices of the participants “when little is known about the mechanisms behind the trends” (Ivankova et al., 2006, p. 151).

This final chapter contains a discussion of key findings, the theoretical contributions of this research project, limitations of the study, and implications and recommendations for future research and practice.

Key Findings

Results of the quantitative analysis revealed that both verbal immediacy and nonverbal immediacy measures had significant relationships with student learning and course satisfaction. Additionally, comparisons between high and low immediacy instructors identified differences in the most frequently used instructor immediacy

behaviors. Differences included those related to the verbal and nonverbal immediacy measures as well as those related to timeliness of response to questions and feedback. Additionally, high immediacy instructors were found to be timelier than low immediacy instructors in responding to student questions and providing feedback. Moreover, they used more channels of communication to interact with their students and, in particular, they used synchronous technologies and instructor created videos more than low immediacy instructors did. Qualitative analysis of data collected in the second phase of the study resulted in the emergence of five main themes: commitment to the role, student advocate, accessible and responsive, extensive and continuous guidance and feedback, and encouraging and reassuring. Comparisons of the results from both phases of the study were made and related to previous research. This led to a synthesis of the results and the identification of several key findings. The following sections present a discussion on the key findings of this study.

Verbal and Nonverbal Immediacy in Online Courses

Results from both the quantitative and qualitative phases of this study provide support that instructor immediacy is related to student learning in online courses. Quantitative analysis found moderate correlations between both verbal and nonverbal immediacy with affective learning, perceived cognitive learning, and course satisfaction. This is consistent with past findings of instructor immediacy in classroom-based higher education. In a seminal metaanalysis, Witt et al (2004) looked at nearly 20 years of research on instructor immediacy in the classroom and found that instructor verbal and nonverbal immediacy had moderate correlations with perceived learning and affective learning and to a lesser degree with objective measures of cognitive learning (see Table

5.1). Witt et al. found that across the studies in their metaanalysis, the correlations were relatively the same between measures of verbal and nonverbal immediacy with perceived cognitive learning and affective learning. In the present study, similar relationships were found; however, there was more variance in the range of correlations. In this study correlations ranged from .368 for verbal immediacy and perceived learning to .579 for nonverbal immediacy and affective learning. Witt et al. also found that studies that only looked at combined, or total immediacy, had a stronger effect than studies that looked at either only nonverbal immediacy, verbal immediacy. Similarly, in this study, total immediacy had higher correlations with perceived learning and affective learning than nonverbal immediacy or verbal immediacy did, but only slightly.

Table 5.1 Comparison of Pearson's Correlation Coefficients (r) Immediacy and Learning

| | Witt et al. | | This Study | |
|---------------------|--------------------|--------------------|--------------------|--------------------|
| | Perceived Learning | Affective Learning | Perceived Learning | Affective Learning |
| Nonverbal Immediacy | .510 | .490 | .365 | .565 |
| Verbal Immediacy | .491 | .491 | .373 | .497 |
| Total Immediacy | .634 | .550 | .397 | .567 |

In addition to the findings of this study corresponding with past research regarding the relationship between instructor immediacy and student learning in the classroom, the findings of this study also support that instructor immediacy is associated with student learning in online education. Moreover, the results of this study are also consistent with other online immediacy studies that have found relationships between instructor immediacy and student learning (Arbaugh, 2001; Baker, 2004; Baker, 2010;

McAlister, 2001). Baker (2010) measured verbal immediacy using Gorham's (1988) original Verbal Immediacy Scale (VIB) and found a similar, but stronger relationship than this study did between instructor verbal immediacy and affective learning ($r = .56, p < .01$) and perceived learning ($r = .53, p < .01$). Likewise, Arbaugh (2010) used Gorham's (1988) VIB to measure instructor verbal immediacy and found a significant relationship between verbal immediacy and perceived learning ($r = .42, p < .001$), though again, slightly higher than this study found. Neither of these previous studies, however, looked at nonverbal immediacy.

Early online education researchers believed that nonverbal immediacy did not apply to online learning due to a lack of implicit nonverbal cues that would typically be communicated in face-to-face interaction (Arbaugh, 2001; Baker, 2004; Jensen, 2003; Hutchins, 2003). Moreover, they assumed that online courses were fully asynchronous and text-based. These assumptions led them to look at only verbal immediacy through text-based communication in online education. Contrary to these assumptions, the results of this study support and extend limited research that nonverbal immediacy also contributes to learning in online education, and may make a larger contribution than verbal immediacy. The present study also found similar relationships as McAlister (2001). McAlister created an instructor immediacy measure intended for use in online learning. He developed his scale, the CMIB, by modifying the language of items on Richmond et al.'s (1987) NIB and Gorham's (1988) VIB. This study used McAlister's CMIB, but further modified the items to make them more relevant to the context of online learning today and, in some cases, realign them with the original items on the NIB and VIB. In his study, McAlister combined both verbal immediacy and nonverbal

immediacy into one measure and found a positive relationship between total immediacy and perceived learning ($r = .62, p < .001$) and affective learning ($r = .54, p < .001$). In this study, the relationships between verbal immediacy and nonverbal immediacy with learning and course satisfaction were looked at separately in addition to combined immediacy.

The results of this study support McAlister's (2001) finding that instructor immediacy is associated with student learning in online learning. Moreover, the results of this study extend the literature by finding that not only is nonverbal immediacy related to student learning in online courses, but that it may also have a stronger relationship with learning than verbal immediacy. In this study, nonverbal immediacy had stronger relationships with affective learning, perceived learning, and course satisfaction than verbal immediacy (see Tables 4.4 and 4.5). Moreover, the means for nonverbal immediacy behaviors used by high immediacy instructors were higher than the means for verbal immediacy usage by high immediacy instructors.

In addition to exploring the relationship between instructor verbal and nonverbal immediacy with learning and satisfaction, an additional goal of this research project was to identify behaviors that high immediate instructors use by conducting both quantitative and qualitative analyses. Quantitative analysis identified five top nonverbal immediacy variables and five top verbal immediacy variables that high immediacy instructors were reported to use. The top five nonverbal immediacy behaviors used by high immediacy instructors were (Note that "R" signifies that the item was reverse coded):

1. NV6R – Communicated in a tense manner (i.e., Communicated in a non-tense manner).
2. NV10R – Was inattentive to students (i.e., Was attentive to students).
3. NV5 – Was pleasant and friendly with entire class not just individual students.

4. NV9R – Seemed passive (i.e., Did not seem passive).
5. NV4 – Paid attention to students.

The top five verbal immediacy variables that high immediacy instructors were

identified as using were:

1. V10 – Provided feedback through comments on my individual work.
2. V6 – Addressed me by name.
3. V15 – Praised student’s work, actions, or comments.
4. V2 – Asked questions or encouraged students to respond.
5. V13 – Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something.

While the top five nonverbal and verbal immediacy behaviors were identified,

there were differences between reports of the immediacy behaviors. Table 5.2 shows the top nonverbal immediacy and verbal immediacy variables most frequently used by high immediacy instructors. The table also shows Pearson’s Correlation coefficients based on the whole sample. Overall, nonverbal immediacy variables had higher frequency means than verbal immediacy with the exception of NV4 “Paid attention to students” which ranked eighth, below three verbal immediacy variables. However, NV4 had the strongest correlations with affective learning and course satisfaction among all 28 immediacy variables.

Table 5.2 Immediacy Behaviors Most Frequently Used by High Immediacy Instructors

| Rank | High Immediacy Instructor | | Pearson’s <i>r</i> for Whole Sample | | |
|------|---------------------------|------|-------------------------------------|--------------------|---------------------|
| | Variable | Mean | Affective Learning | Perceived Learning | Course Satisfaction |
| 1 | NV6R | 3.50 | .281** | -.174* | .283** |
| 2 | NV10R | 3.19 | .357** | -.342** | .414** |
| 3 | NV5 | 3.13 | .419** | -.319** | .457** |
| 4 | NV9R | 3.07 | .410** | -.331** | .427** |
| 5 | V10 | 3.06 | .491** | -.342** | .472** |
| 6 | V6 | 3.03 | .263** | -.164 | .262** |
| 7 | V15 | 3.01 | .358** | -.254** | .397** |
| 8 | NV4 | 2.89 | .517** | -.294** | .527** |
| 9 | V2 | 2.77 | .471** | -.334** | .425** |
| 10 | V13 | 2.70 | .277** | -.244** | .379** |

*** Correlation is significant at the 0.001 level (2-tailed).*

** Correlation is significant at the 0.01 level (2-tailed).*

N = 144

The findings of the quantitative analysis resonate strongly when triangulated with the qualitative analysis results, which identified five main themes: commitment to their role, student advocate, accessible and responsive, extensive and continuous guidance and feedback, and encouraging and reassuring. The following sections elaborate on key findings related to immediate instructor behaviors based on a synthesis of the quantitative and qualitative analyses.

Engagement and Interaction Cycle

With regard to instructor immediacy behaviors, one of the key findings of this study was that highly immediate instructors were described as engaging and interacting with students continuously in the course. Primarily, they were described as being available and accessible to provide support and provided extensive guidance and feedback. Quantitative analysis results supported these findings. V13 “Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something” was the fifth highest ranked verbal immediacy behavior high immediacy instructors were reported using. Student accounts described high immediacy instructors as encouraging them to ask questions or contact them if they had any problems. Moreover, students described their instructors as “happy to help” and “eager to help.” Likewise, quantitative and qualitative results both found that instructors engaged and interacted with their students while providing extensive guidance and feedback. Quantitative analysis also revealed that 94% of high immediacy instructors were reported as providing feedback while only 79% of low immediacy instructors did. Additional quantitative analysis found that V10 “Provided feedback through comments on my

individual work” was the highest ranked verbal immediacy behavior of high immediacy instructors. Student accounts also described high immediacy instructors as giving “great feedback” whereas low immediacy instructors were often described as providing “no feedback” or feedback that was subjective or offered no explanations.

Students described feeling a sense that their instructor cared about their success as a result of the support, guidance, and feedback they provided. These findings resound with the findings of a qualitative study on instructor immediacy conducted by Melrose and Bergeron (2007). In their study, they reported that students “consistently expressed a need to know that their instructor would remain attentive to their individual needs” (p. 137). Melrose and Bergeron also found that instructor feedback on participation and positive affirmations on their participation was especially powerful. Melrose and Bergeron concluded that “students valued messages from their instructors that communicated a genuine willingness to remain available and present” (p. 143).

Based on a synthesis of instructor behaviors that students described in interviews and on the survey, this study identified continuous engagement and interaction of immediate instructors as occurring over several stages. In the first stage, instructors established immediacy by letting students know they were available, that they welcomed questions, and that they would be there for them throughout the course. In the second stage, instructors supported students by answering their questions and providing guidance and formative feedback, in a timely manner. In the third stage, instructors provided students with summative feedback while also offering them opportunities to resubmit their assignments. Throughout these stages, high immediacy instructors continuously signaled that they cared about student success through both verbal and nonverbal

immediacy cues. The following sections describe instructor immediacy behaviors throughout the engagement and interaction cycle.

First Stage

The first stage of the engagement and interaction cycle occurred at the outset of the course. During this stage, instructors were described as encouraging students to contact them if they had any questions about the course or assignments. This was communicated in the syllabus and course introduction, as well as in introductions to modules and assignments. Immediate instructors were often described as providing their phone number and sometimes even personal cell phone numbers when encouraging students to contact them. Some students described their high immediacy instructors as providing times that they were available for calls or even sharing their calendar and encouraging students to fill in a time if they would like to speak with them.

Immediate instructors were also described as using course-wide announcements at the start of modules that explained their expectations and encouraged students to contact them if they had any questions. Some instructors were also reported using video announcements to do this. In this study, announcements were utilized by 94% of high immediacy instructors while only 71% of low immediacy instructors were reported as using them.

In addition to using explicit messages to convey verbal and nonverbal immediacy, high immediacy instructors were described as signaled that they were approachable through their interaction on self-introduction forums. Students described their high immediacy instructors as responding to their posts on these first activities in the course. In their responses, the instructors were described as referring to the specifics of a

student's post. Moreover, they were described as providing self-disclosures through the provision of personal details about themselves, often connecting these to the specific content of student posts. Immediate instructors were also described as referring back to these specifics in later communications with the students in the course.

Through their initial communication at the outset of the course, instructors begin to establish their immediacy – or nonimmediacy. Self-introduction forums appear to be a critical step in this process. Previous research supports this. Melrose and Bergeron (2007) found that “the instructors’ first introductory messages determined whether they were perceived as immediate or not” (p. 143). In the present study, students described the tone set by the instructor in the first stage as motivating -- or demotivating -- the amount of effort they were going to put into the course and assignments.

Second Stage

In the second stage of the engagement and interaction cycle, high immediacy instructors continued to encourage students to participate through both explicit and implicit messages while supporting them through replies to questions and the provision of guidance and feedback. In this study, one of the most frequently described immediacy behaviors signaling approach and developing psychological closeness was the timeliness of instructor responses to questions and feedback on assignments. Interviewees described immediate instructors as responding to questions within 24 hours, and often within a few hours or even minutes. Moreover, they described the 24-hour point to be a threshold, beyond which detracted from a sense of psychological closeness. These accounts were supported by the quantitative results. Correlation analysis found that there was a significant and positive relationship between reply speed to questions in the course and

speed of providing feedback on assignments with verbal immediacy and nonverbal immediacy. In particular, the relationship between instructor nonverbal immediacy and reply speed to questions was stronger than the other three relationships, indicating that timeliness is more strongly related to nonverbal immediacy than verbal immediacy. In comparing split sample means, the reverse coded nonverbal immediacy variable NV10R “Was inattentive to student” (i.e., was attentive to students) was the second highest ranked immediacy behavior high immediacy instructors were reported using.

Additionally, NV4 “Paid attention to students” was the eighth highest ranked immediacy behavior and had the strongest correlation with both affective learning ($r = .517, p < .001$) and course satisfaction ($r = .525, p < .001$) of the 84 relationships investigated in this study. Timely support was also described by all nine interviewees in the second phase of the study. Results from both the quantitative analysis and student accounts indicate that timeliness of response is a nonverbal immediacy cue that is strongly related to students’ perceptions of their instructor’s immediacy.

In addition to responding to students in a timely manner, students described high immediacy instructors as encouraging them to participate and interact. This is supported by the quantitative analysis, which found that V2 “Asked questions or encouraged student to respond” was the second highest ranked verbal immediacy behavior high immediacy instructors were reported using, but only the sixth highest ranked verbal immediacy behavior of low immediacy instructors. Among the variables in the split sample comparisons, this variable had the greatest ranking difference between high immediacy and low immediacy instructors. V2 also had the second highest correlation among the verbal immediacy variables with affective learning ($r = .471, p < .001$) and

with course satisfaction ($r = .425, p < .001$) and the third highest correlation with perceived learning ($r = .334, p < .001$).

High immediacy instructors were described as encouraging students to submit drafts of assignments and then providing them with guiding and formative feedback on them. Guiding and formative feedback was described as directing students to resources, suggesting alternative approaches, asking challenging and thought provoking questions, and encouraging students through praise and recognition. Likewise, when assignments included the use of discussion forums, high immediacy instructors interacted with students on the forums by providing guiding and formative feedback. Quantitative analysis found that 81% of high immediacy instructors were reported to communicate with students on discussion forums, while only 68% of low immediacy instructors did.

Throughout this stage, high immediacy instructors were also described as sending out emails and announcements reminding students of upcoming deadlines, encouraging them to participate, and directing them to pertinent resources and materials. In particular, several students described high immediacy instructors as sending them individual emails alerting them that an assignment deadline had passed and reminding them to submit their assignment. High immediacy instructors were also described as being flexible and understanding regarding the challenges that students faced across the many roles and responsibilities they have. They were described as accommodating students when competing priorities affected their ability to submit an assignment on time by allowing them to submit them late if necessary. In sum, high immediacy instructors were described as being growth-oriented rather than just focusing on managing students and grading assignments.

Third Stage

In the third stage of the engagement and interaction cycle, students described high immediacy instructors as providing thorough summative feedback on assignments that was individualized and personalized. Quantitative analysis supported this. In the split sample analysis, V10 “Provided feedback through comments on my individual work” was the highest ranked verbal immediacy behavior that high immediacy instructors used. Moreover, among all 28 immediacy variables, V10 had the highest correlation with perceived learning ($r = .342, p < .001$), the second highest correlation with both affective learning ($r = .491, p < .001$), and course satisfaction ($r = .472, p < .001$). One approach students described high immediacy instructors using to personalize feedback was addressing them by their names. Quantitative analysis results supported this. V6 “Addressed me by name” was the third highest ranked verbal immediacy behavior high immediacy instructors used. High immediacy instructors were also described as personalizing and individualizing feedback by referring to the specific details of a student’s assignment and providing specific guidance on how to improve upon their work. While providing corrective feedback, instructors also were described as using “cushioning” by acknowledging what the students got right, focusing on strengths, and praising them for their ideas and effort. In addition to providing students with individualized feedback, students also reported that high immediacy instructors referred to clear criterion for how they were assessing student work and why they were assigning a specific grade.

Students frequently described instructors asking questions when provisioning feedback, which students perceived as inviting discussion about it. Students described

experiences responding to these questions and getting no response from low immediacy instructors. On the contrary, they described high immediacy instructors as engaging with them in a discussion about their feedback. As part of the summative feedback discussion, high immediacy instructors were also reported as encouraging students to incorporate the feedback they received and resubmit their assignments for further review.

The defining factor of the engagement and interaction cycle was the continuous use by the instructor of immediacy behaviors, which encouraged students to approach and interact with them and subsequently incorporate their feedback into their work. Students described the engagement of the instructor as inspiring them to try harder, probe deeper and persist--often out of a desire to impress the instructor. The findings of the present study are supported by other research. In a recent study that looked at the instructor's role in online courses, Ma, Han, Yang and Chen (2015) found that "instructor's guidance and assistance had a significant impact on the students' completing learning tasks" (p. 26). The findings of the present study are also similar to those found by Fahara and Castro (2015). In their study, they found that students identified similar instructor behaviors as contributing to a perception of immediacy: replying immediately to student questions, being empathetic, addressing students casually, asking about their personal lives, respecting their questions, paying attention to them, providing personalized messages, establishing personal links, and making the students feel they were in a classroom (p. 373).

Synchronous and Asynchronous Communication

Another key finding of this study was that high immediacy instructors use a variety of communication channels, using both asynchronous and synchronous

technologies to engage and interact with their students, and more so than low immediacy instructors. Results from the survey found that 44% of high immediacy instructors were reported to use video conferencing while only 21% of low immediacy instructors did so. Likewise, 25% of high immediacy instructors were reported to use phone calls to communicate with students while only 9% of low immediacy instructors did so. Split sample analysis also revealed that the one immediacy behavior on the CMIB that related to synchronous communication, V13 “Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something” was the fifth highest ranked verbal immediacy behavior and the tenth highest ranked variable of all 28 immediacy variables for high immediacy instructors.

Previous research suggests that synchronous communication may help to develop both verbal and nonverbal immediacy by allowing the transmission of both verbal and nonverbal cues during communication, which in turn may contribute to the development of a sense of psychological closeness with instructors by increasing perceived proximity with the instructor (Mehrabian, 1972, 1981; Short et al., 1976). In interviews and open responses on the survey, students in this study described video conferencing and telephoning with their instructors as helping to develop a closer relationship with their instructor. These findings resonate with Baker (2004). In his study, Baker compared asynchronous and synchronous courses and found that there was an association between instructor verbal immediacy and learning in both types of courses, but that the students in the asynchronous courses reported significantly lower instructor verbal immediacy than in the synchronous courses. Although he did not look at nonverbal immediacy in his study, Baker (2004) described the potential of synchronous technologies, e.g., telephone

calling, to provide the opportunity for instructors to transmit nonverbal immediacy as well as verbal immediacy cues. He concluded that in order to improve instructor immediacy and learning it was “necessary to incorporate synchronous activities in the online learning environment” (p. 21).

Immediacy theory offers three explanations for how synchronous communication such as video conferencing and telephoning can contribute to a sense of instructor immediacy. The first is the objective capacity of these media to transmit more verbal and nonverbal cues than text-based communication (Mehrabian, 1971, 1972). According to immediacy theory, the more information that can be transmitted, the greater the immediacy of the medium. Short et al. (1976) referred to this as “technological immediacy” (p. 73). The high-fidelity and synchronous nature of these technologies allows for the transmission of more verbal and nonverbal implicit messages than low-fidelity, asynchronous technologies such as letter writing or email. Video conferencing, for example, provides more communication channels through which to arouse feelings of like through the conveyance of a greater quantity and quality of implicit socio-emotional sensory cues. This, in turn, could contribute to a greater sense of psychological proximity and approach.

A second way in which communication technologies such as video conferencing and telephoning may contribute to higher immediacy is based on the synchronous nature of the communication itself. According to immediacy theory, proximity and interaction is not only in space, but in time as well. Even in face-to-face communication, the time one takes to respond to another holds connotations as to their feelings related to the addressee or the content of the message (Mehrabian, 1972). Students in this study consistently

described response time as a factor in their perceptions of psychological closeness with their instructors. Whether it was a quick response to an email, or being able to pick up a telephone and talk with an instructor, students described the time between a question and a response as a powerful factor in their sense of psychological closeness. Mehrabian (1972) described the degree of responsiveness in communication as signaling the degree of importance one attributes to another. Therefore, the level of responsiveness one demonstrates towards another also signals their desire to approach or avoid the other. Since synchronous communication offers more responsiveness than asynchronous technologies, students may feel a higher sense of psychological proximity, and consequently feel that the instructor values them and likes them.

A third way that the use of video conferencing and telephoning may influence student perceptions of instructor immediacy is related to the selection of the technology itself. In this study, students described how video and telephoning with their instructors helped them to feel a greater sense of psychological closeness because it demonstrated a willingness on the part of the instructor to put in the effort and time to do so. Mehrabian (1972) described the selection of the medium itself as conveying subjective immediacy, saying “Given a choice of all these media, the one that someone actually selects is an indicator of his positive-negative feelings” (p. 180). Text-based communication may be able to transmit implicit socio-emotional cues and convey a sense of immediacy (Walther, 1992; Weiner & Mehrabian, 1968); however, in the media-rich environment of today, students may attribute technological choices instructors make to their attitude towards their role, the students, and the subject matter rather than to technological limitations. In other words, students in the past may have accepted that instructors

communicated asynchronously based on pragmatic realities that do not exist today. By expressing a willingness to set aside time to meet with students synchronously, and actually doing so, students may perceive that their instructors are subjectively choosing to be immediate with them.

Related to immediacy, and possibly a contributing factor, is the objective social presence that is afforded through the use of video conferencing and telephoning (Short et al., 1976). Students often described initially reaching out to instructors via email or “Ask the Professor” boards when they had a question or a problem. Phone calls or video conferences often occurred as a result of that initial contact based on a perception that the problem needed a higher fidelity of communication. According to social presence theory, certain tasks are perceived as requiring higher socio-emotional interaction than others in order to have a successful outcome. Moreover, media vary in their objective affordance of social presence based on the level of socio-emotional cues that they can transmit (Short et al., 1976). According to social presence theory, then, the elevation of communication from a low-fidelity communication medium to a high-fidelity communication medium when necessary, or when a student perceives it as necessary, can contribute to more effectively resolving a student’s problem. This willingness of an instructor to take the time and put in the effort to elevate the level of social presence provided to a student could in-turn increase the student’s perception of instructor immediacy.

Instructor Videos

Another salient finding of this study was that only 28% of students reported instructor videos being used in their courses; however, high immediacy instructors used

instructor videos more (32%) than low immediacy instructors (24%). While instructor video had a positive and significant, though weak correlation with total immediacy and nonverbal immediacy, it did not have a significant relationship with verbal immediacy, and had the weakest relationship of all comparisons with total immediacy that were significant ($r = .171, p = .209$). However, it did have a slightly stronger relationship with nonverbal immediacy ($r = .220, p < .01$). These results were consistent with student accounts of instructor videos. In interviews, several students described the use of instructor videos as nice to have, but not necessary. Barb, for example, said that her immediate instructor did not provide instructor created videos. When asked if having such videos would have created a greater sense of closeness, she responded saying she did not think so because the instructor was “still there supporting us through feedback she was giving.” This leads to the next key finding of this study: a threshold effect.

Threshold Effect

One explanation for the lack of a significant relationship between instructor videos and verbal immediacy may be that while instructor videos might be nice to have, they are not necessary if an instructor is already using other immediacy behaviors such as providing timely responses to questions and providing individualized, thorough, and encouraging feedback. Barb’s teacher may have achieved a threshold of sufficient immediacy. Such a threshold has been found in classroom-based immediacy studies. Christensen and Menzel (1998) found that both verbal and nonverbal immediacy had a positive, linear correlation with all aspects of affective learning, but that there was a threshold where the gains for high immediacy over moderate immediacy were lower than the gains for moderate immediacy over low immediacy.

Whereas instructor videos may be nice to have for an already immediate instructor, instructor videos may fail to improve a sense of psychological closeness if an instructor is not achieving a threshold for immediacy. If, for example, an instructor is not oriented towards providing timely replies to student questions or providing extensive and individuated feedback on assignments, videos themselves may not be enough to create a sense of immediacy. Considering immediacy as a gestalt, if an instructor is not holistically immediate, then it is possible that their verbal and nonverbal communication within videos would convey nonimmediacy as well. Likewise, if an instructor does use immediacy behaviors in videos, but is not immediate while communicating with students in other ways, this could lead students to perceive them as being insincere.

In a study that looked at instructor use of immediacy and prosocial behaviors to gain student compliance, Kearney et al. (1988) found that students were most likely to resist instructors who were nonimmediate while simultaneously using prosocial techniques, more so than nonimmediate instructors who used antisocial strategies. In other words, students appear to prefer instructors who consistently convey verbal and nonverbal cues that are either immediate or nonimmediate and find those who send mixed signals to be the least immediate. Students in this present study described feeling frustrated by instructors that sent mixed signals. For example, Laura described her instructor as using immediate language in her communication by encouraging students to contact her if they had any questions; however, when she contacted the instructor with questions, she felt that her instructor's tone conveyed annoyance. She explained:

...if you want to be an instructor that is this very relational style of instructor, then you have to participate in the relationship.... Where if you want to be an instructor that just, you know, logs into the Blackboard site a couple times a day

to see how things are going and have some deliverables that you then grade, then use a more traditional style...

Another explanation for the weak relationship between instructor videos and instructor immediacy may be that some instructors may subscribe to a belief that their role in online courses is to deliver content through the provision of video lectures and grading assignments rather than supporting students through timely responses to their questions, providing individualized feedback, and encouraging them. In my own experience as an instructional designer, I have come across instructors who conceive of online courses as simply the uploading of lecture videos and grading assignments through the use of automated quizzes. Such instructors may feel that online courses are supposed to be automated and perceive that they will require little interaction with students. In this study, Lisa described such an instructor as saying to her, “I'm just going to ignore you, I just want you to get your work done, it's an online class and I have so many live classes, I don't have time.”

Positive Tone

Another finding of this study is that high immediacy instructors were described as communicating with students using a positive tone. Students described the positive tone of the instructor as friendly, warm, encouraging, reassuring, caring, and respectful. Quantitative analysis also revealed that the positive tone of the instructor was highly correlated with instructor immediacy. NV5 “Was pleasant and friendly with entire class not just individual students” had the seventh strongest correlation among all 28 immediacy variables with both perceived learning ($r = .319, p < .001$) and affective learning ($r = .419, p < .001$) and the fourth strongest correlation with course satisfaction ($r = .457, p < .001$). The split sample analysis also found that it was the third highest

ranked nonverbal immediacy variable for high immediacy instructors. This item was modified from Richmond et al.'s (1987) original nonverbal immediacy scale (NIB) which stated, "Smiles at the class as a whole, not just individual students." In their initial study, this item also had one of the highest correlations with perceived learning among the original variables on the NIB. Other research has also found that smiling, or pleasant and friendly as it was defined in this study, was significantly related with affective learning (e.g., Myers et al., 1998).

Students described the tone of the instructor as either motivating or demotivating their desire to approach or avoid their instructor. Tony described the positive tone of his instructor as "engaging" and motivating him to "go back and find the answers to [his] questions." Conversely, Laura described mixed messages from her instructor. Her instructor, she explained, encouraged students to contact her if they had questions. However, when she contacted her instructor, the instructor's tone told a different story, saying, "her tone...made me feel a little bit like she was annoyed that I had to ask this question." Mehrabian (1981) described such communication as "the double-edged message" and provided the example of conflicting words and tone over a telephone conversation, where:

if the vocal expression happens to contradict the words, then the former determines the total impact. This can work either way: The words may be positive and the vocal expression negative, in which case the total sarcastic message is a negative one; or the vocal expression may be positive and the words negative, in which case the total message is a positive one. (p. 77)

According to verbal immediacy theory (Mehrabian, 1972, 1981; Weiner & Mehrabian, 1968), the implicit message conveyed by tone trumps the explicit words being used. In Laura's case, the communication that she was describing had occurred through email. However, it was the implicit cues within the written text that Laura felt

conveyed a tone of annoyance. She described her instructor's emails as very businesslike, not using her name and using "very short declarative statements... bam, bam, bam!" She elaborated, saying that her instructor failed to use "cushioning" in her communication, which resulted in her perceiving an annoyed tone. This is consistent with immediacy theory. Mehrabian (1972, 1981) described approach-avoidance as being conveyed in verbal or written communication through the selected grammatical structure and usage of other linguistic modifiers.

The positive tone that an instructor uses appears to arouse students and convey a sense of liking and approach while also signaling an overall positive attitude of caring about students. Rylee described how her immediate instructor's positive tone was consistent and came across in all forms of communication. She explained that it conveyed a sense that the instructor cared about her students:

Her tone was very positive. I guess, very helpful...and it comes through not only, you know, through phone but through email and even through the feedback that she gives you. She's very into what she does and she comes across as sounding like she really wants you to be successful and to do a good job.

"Middleness"

Another key finding of this study is that students described their immediate instructors as having the right balance. One student, Sonja, referred to her immediate instructor as having a style of "middleness" – where the instructor's communication style was "right down the middle." She described it as not too casual and not too stuffy. Jodi also described her instructor as having a good sense of humor, but also knowing when to be serious. Tony described this "middleness" saying that it was "professional" where it was not "laid-back informal" but conversational and friendly--but not too friendly.

One way in which immediate instructors appear to find “middleness” is in the degree to which they support students and the degree to which they challenge students. Where they challenge students, they do so in a way that is neither too challenging nor too easy. Where they support students, they neither coddle them nor leave them floundering. These findings are supported by previous research. Thomas et al. (1994) found that immediacy had positive associations with both assertiveness and responsiveness, where responsiveness is defined as a set of nurturing and supportive behaviors. In their study they found that some of the items on the nonverbal immediacy scale (NIB) correlated with assertiveness while others correlated with responsiveness. Similarly, Wanzer and Frymier (1999) found that immediate instructors used a competent-androgynous socio-communicative style, and were able to appropriately be both responsive and assertive. Students in this study appreciated that their immediate instructors were encouraging, acknowledging of their efforts, willing to help, and gave praise often. However, they also appreciated that their immediate instructors held students accountable and challenged them to think deeper, try harder and do their best. Tony referred to a time when his immediate instructor “gave our class a beat down” when they were not posting to the discussion board on time. Tony reflected that he “kind of laughed at that.” Tony described having respect for his immediate instructor for being supportive and nurturing, while also holding students accountable and challenging them to do their best.

High immediacy instructors may also use a balanced style of “middleness” when exhibiting other behaviors that contribute to immediacy. Downs et al. (1988) conducted a study looking into self-disclosures of award-winning instructors. Award-winning instructors used self-disclosure that was relevant to the course content and to clarify

materials, and did so moderately. Conversely, non-award-winning instructors used these behaviors too much, or did so in a way that was not related to course content and was felt to be inappropriate. In this study, Mary described feeling that her nonimmediate instructor over-disclosed during video conference sessions with the class. She described him as talking too much about his personal life, “rambling on” without noticing the participants. She described him as a domineering “narcissist.” She also described him as not being supportive, and leaving them floundering to find answers to questions constantly telling them to “Google it!”

Humor

One surprising outcome of this study was that students rarely described their immediate instructors as using humor. Classroom-based research has consistently found that humor has been one of the strongest indicators of instructor immediacy and has had a strong relationship with learning (e.g., Downs et al., 1988; Ghamdi et al., 2016; Gorham & Christophel, 1990; Jensen, 1999; Myers et al., 1998; Roberts & Friedman, 2013; Wanzer & Frymier, 1999). For example, McCroskey et al. (1985) found that it was one of the top four indicators of instructor immediacy. Gorham and Christophel (1990) found that high immediacy instructors used 63% more humor than low and moderate immediacy instructors. While in this study humor did have a significant and positive correlation with affective learning ($r = .405, p < .001$), perceived learning ($r = .336, p < .001$), and course satisfaction ($r = .351, p < .001$), humor was one of the least reported behaviors for all instructors, having the fourth lowest mean ($M = 1.55$) of the 28 verbal and nonverbal immediacy measures. When comparing the high immediacy and low immediacy instructors, humor was still one of the least used behaviors. Interviews and

survey feedback also indicated that humor was not a common strategy used by immediate instructors. In this study, some students appeared to interpret humor as being related to having humility or being personable. Jodi, for example, described her co-instructors as having “great senses of humor” while trying to navigate a course that had been poorly designed by a different instructor. She elaborated saying:

I’ve been lucky for the most part... both professors you know both my courses that I’ve taken so far this last year... they both have had great senses of humor. You know... good to get along with but they know when to be serious as well... so that definitely helps...

Tony seemed to relate humor to humility and being personable. He responded to an inquiry about his instructor’s use of humor saying:

If he did, it was at a minimum where I can't remember. I don't remember any time, where the professor used humor... but I certainly wouldn't put it past him...and another thing I like... doesn't really connect with humor... but he had apologized a couple times because he was letting us know that the grades would be late because his family was...his youngest son was having...was sick...So it's not really humor, but it's showing like a personal side and you know, I respected that as well.

Other students also seemed to interpret humor to mean being personable, or not personable. Laura described her nonimmediate instructor as not using humor and being very business oriented, using “very short declarative statements...bam, bam, bam!”

No student in either the interviews or on the open-ended responses on the survey described their instructors as being “funny,” though some students appeared to interpret humor to mean funny. Sonja, for example, responded to a question about her immediate instructor’s use of humor use, saying, “If she did, I didn’t pick up on it.” Another student, Barb, also seemed to interpret humor to mean making jokes, and recommended against it. Barb explained that she felt that online instructors would be better off not to use humor since it could be easily misinterpreted in online courses. When asked if she thought

instructors should use humor in their courses, Barb replied, “No. Because it can either be good or bad. It can be that dry humor. Some people don't understand it or I may not understand it. I think it's just best to steer away from that.”

Humor is a complicated term that means many different things. Davis and Farina (1970) described humor as “a whole composite of different behaviors rather than a single one, and any explanation which attempts to explain them equally would appear to be doomed to do so by explaining them marginally” (p. 175). Gorham and Christophel (1990) concluded in their study on humor and immediacy that “humor” is more of a composite of many different behaviors rather than any one thing and “is itself a high-inference variable” (p. 48). The initial intention of developing the nonverbal and verbal immediacy scales was to develop low-inference measures of immediacy based on specific behaviors that students observed instructors using (Richmond & Gorham, 1987). Since students in online courses are reporting low use of humor and appear to have very different definitions of what humor means, whether it should be included on a scale of instructor immediacy that is intended to measure low inference behaviors should be reexamined.

Summary of Key Findings

The first key finding of this study was that high immediacy instructors use a continuous engagement and interaction cycle of communication with their students. This occurs through three stages. The second key finding was that immediate instructors use a range of technologies from asynchronous to synchronous, elevating the level of social presence afforded to students based on the complexity of the communication need. This contributes to a sense of instructor immediacy, particularly based on perceptions of

subjective immediacy. The third key finding of this study related to instructor videos and the fourth key finding was related to a threshold effect. This study found that while instructor videos may be nice to have, they are potentially not necessary for instructors who are already achieving a threshold of immediacy behaviors throughout the engagement and interaction cycle, particularly through timely support and feedback, and the use of a positive tone in their communication. Positive tone was the fifth key finding of this study. Immediate instructors were described as using a positive tone that was consistent across all forms of communication throughout the course. This was described as being warm, friendly, caring, sincere, and respectful. Moreover, it was present in explicit communication during feedback that used praise, was growth-oriented, strengths focused, and acknowledged student ideas and effort. The sixth key finding of this study was that immediate instructors were described as using a competent-androgynous socio-communicative style, or “middleness” which was appropriately both responsive and assertive. The final key finding of this study was that immediate instructors were not described as not using humor in their courses. However, students seemed to interpret humor quite differently, ranging from joking to having humility and being personable.

Theoretical Contributions

This study makes two contributions to theory. First, it extends support for a model of instructor immediacy as directly influencing cognitive learning while also indirectly influencing cognitive learning through motivation. Second, it elaborates on Mehrabian’s (1971, 1972, 1981) immediacy theory by presenting a heuristic model which unifies three dimensions of implicit communication: arousal, power, and responsiveness (Mehrabian, 1971, 1972, 1981).

Immediacy and Objective Cognitive Learning

Research has consistently found that instructor immediacy is directly related to affective learning (Andersen, 1978; Witt et al., 2004). Instructor immediacy has also been consistently found to have a relationship with cognitive learning based on measures using student perceptions of their learning (Richmond et al., 1987; Witt et al., 2004). However, there has been much debate as to whether or not instructor immediacy has a relationship with cognitive learning based on objective measures (e.g., Hess & Smythe, 2001; Smythe & Hess, 2005), and moreover whether or not such a relationship, if it exists, is direct or indirect. Studies looking at the relationship between instructor immediacy and cognitive learning based on objective measures have had mixed results, though overall findings have shown a weak but significant relationship (Witt et al, 2004).

Attempts to understand what the relationship is between instructor immediacy and learning have led to several competing models of immediacy: (a) learning and arousal models (Andersen, 1978; Kelley & Gorham, 1988) which describe immediacy as acting directly on both affective and cognitive learning; (b) motivation models (Christophel, 1990) which describe immediacy as acting on affective and cognitive learning indirectly through state motivation; (c) the affect model (Rodrigues et al., 1996) which describes immediacy as acting on cognitive learning through affective learning and argues that affect and motivation are the same thing; and (d) arousal and motivation combined models (Frymier, 1994; Christophel & Gorham, 1995). The arousal and motivation combined models have two variations. Frymier (1994) described a linear model where immediacy arouses students and gets their attention, which in turn influences state motivation, and subsequently influences cognitive and affective learning. Christophel and

Gorham (1995) described a dual channel model which described immediacy as arousing students, which in turn directs their attention while also influencing their state motivation, with each subsequently influencing both affective and cognitive learning. Christophel and Gorham's (1995) combined immediacy model was used as the theoretical framework for this study.

Kelley and Gorham's (1988) experimental study found some of the strongest evidence yet that instructor immediacy cues can lead to direct cognitive gains based on tests of recall. As a result of their findings, they presented an arousal model using cognition theory to explain how instructor immediacy directly influences cognitive learning. They explained that instructor immediacy was "related to arousal, which is related to attention, which is related to memory, which is related to cognitive learning" (p. 201). According to their model, instructor immediacy improves student learning by improving memory as a result of students being aroused and subsequently having their attention directed to relevant information. In this study, student descriptions of immediate instructor feedback support Kelley and Gorham's cognition theory explanation of instructor immediacy's influence on learning.

Results of this study support Kelley and Gorham's proposition that arousal could lead to greater recall by directing students to the content of instructor feedback. In this study, students described the individualized and personalized feedback of high immediacy instructors as arousing them. This occurred through the use of first names as well as through references to specific content of a student's assignment. Such feedback also aroused students because it had a positive tone, focused on strengths, and

acknowledged and praised their ideas and effort. By using positive arousal, instructors appear to direct student attention to critical feedback necessary for improvement.

Face-threat mitigation theory and feedback intervention theory provide an additional explanation as to how instructor immediacy behaviors can directly contribute to student cognitive learning (Kerssen-Griep & Witt, 2012, 2015; Trad et al., 2014; Witt & Kerssen-Griep, 2011). According to the face-threat mitigation theory, during feedback instructors need to protect a student's "face," a "person's desired social self-image" (Witt & Kerssen-Griep, 2011, p. 502). Feedback intervention theory posits that if a student's sense of face is not maintained in a feedback session, they will divert cognitive energy to self-identity-protecting processes rather than to task-learning or task-motivation regulatory processes. Witt and Kerssen-Griep (2011) theorized that, "This cognitive diversion limits a learner's ability to engage the substance of what was advised and diminishes the effectiveness of the feedback and its source" (p. 81). Additionally, high instructor responsiveness and the use of pro-social power behaviors, both implicit and explicit, can further contribute to protecting the "face" of students by making them feel valued and autonomous (French & Raven, 1959; Ryan & Deci, 2000). This can subsequently divert cognitive resources to task-learning and task-motivation processes.

Student accounts of the feedback of immediate instructors supports face-threat mitigation and feedback intervention theory. Immediate instructors in this present study were described as using praise, recognition, acknowledgement, and a positive tone in their communication and their feedback with students. Tony described how his immediate instructor's behaviors encouraged him to engage with his instructor during feedback:

...you could tell that the professor was interested and sincere and it certainly wasn't flat. I would err on a more positive side. It was, it was engaging, it... you know, they asked us questions and by the tone of the conversation or the comment I wanted to go back and find the answers to those questions of theirs.

Elaborating on his instructor's respectful feedback, Tony explained how it encouraged him to want to follow his instructor's suggestions:

No, no, no, not at all. Not at all. It was always, you know... it was respectful and it wasn't necessarily "formal," I guess that's the wrong word of going about it... but.. it was open, it was friendly, it was respectful, It was positive. And you just want... he basically... I wanted to do like what he was trying to accomplish. I guess he was charismatic a little bit.

As a result of instructor immediacy behaviors, both verbal and nonverbal, students were motivated to approach their instructor, engage with them, and process the content of their feedback. Simultaneously, the immediacy behaviors may have helped to divert cognitive energy to task-learning and task-motivation regulatory processes rather than to self-identity-protecting processes.

This study provides some support that instructor immediacy can contribute directly to student cognitive learning. However, the debate as to whether immediacy can contribute to both cognitive learning and affective learning or just affective learning assumes that either can exist without the other. Richmond et al. (1987) argued that the relationship between affective and cognitive learning is not mutually exclusive and that notions that they are is not parsimonious with Bloom's (1956) taxonomy of learning. According to this argument, affective learning is integrated with cognitive learning, with each impacting and reinforcing the other.

Socio-constructivist theory also supports the proposition that affective and cognitive learning are not mutually exclusive. According to the socio-constructivist perspective, learning occurs through a process where an individual interacts with others

in a socio-cultural-landscape to develop affective and cognitive structures that define the culture of the group (Hofstede et al., 2010; Jonassen, 2000). Triandis (1994) described culture as a shared cognitive schema across members of a community where the culture of the community is formed through a continuous transactional process of negation and re-construction by members of the community and existing external conditions. Through this transactional process, new members of a culture construct an understanding of the knowledge, behaviors, beliefs, history, heroes, rituals, processes, practices, assumptions and values of their culture group with existing members who have already internalized and constructed an understanding of the culture, such as the teacher (Hofstede et al., 2010). From this point of view, learning in an academic setting is the process of new learners being enculturated into their chosen field by their instructors. The enculturation process requires role modeling and scaffolding by those who have already developed the cognitive and affective mental schema of the culture. If an instructor only focuses on providing task-based feedback without important socio-emotional interaction, students' affective and cognitive learning will be diminished (Bloom et al., 1956; Piaget, 1962). Together, the affective and cognitive domains form the schema of a culture group; therefore, interaction with the instructor, particularly with novice learners, is a requirement for knowledge development, both affective and cognitive, of a practice field. From this perspective, then, instructor immediacy contributes to student learning by motivating students to approach and engage with their instructors while also arousing and directing their attention to the content and practices of the field, particularly during feedback interventions.

Elaborated Model of Immediacy Theory

The results of this study provide support for Gorham and Christopher's (1995) combined immediacy model. However, their combined immediacy model has three limitations common to other existing models of immediacy (Andersen, 1978; Christophel, 1990; Christophel & Gorham, 1995; Frymier, 1994; Kelley & Gorham, 1988; Rodriguez et al., 1996). The following sub-sections outline the three limitations of current immediacy models and elaborate on how these can be improved.

First Limitation of Existing Immediacy Models

First, existing immediacy models depict instructor immediacy as having a linear and unidirectional influence on student learning. These immediacy models view the construct through an epistemological lens of behaviorism, whereby instructors transmit signals, both explicitly and implicitly, which then arouse students to varying degrees. In turn, students evaluate how pleasing these signals are. When valenced as pleasing, liking occurs, which in turn leads to a desire of students to approach the instructor, the content of instruction, and their role as students. Likewise, instructor implicit verbal and nonverbal cues signal that the instructor likes and desires to approach students, the content of instruction, and their role as instructor.

Linear models of immediacy have persisted despite the fact that immediacy research has found that instructor immediacy behaviors may be perceived differently depending on student characteristics. For example, cross-cultural studies of immediacy (e.g., Fayer et al., 1988; McCroskey et al., 1995, 1996; Myers et al, 1998; Neuliep, 1995, 1997; Sanders & Wiseman, 1990) have found that behaviors valenced positively by students from one culture may be valenced negatively by students from a different

culture. Studies of immediacy and homophily have also found that student perceptions of instructor immediacy may be influenced by how similar students perceive their instructors to be to themselves (e.g., Rocca & McCroskey, 1999). While such studies have found differences in student perceptions of instructor immediacy, there is also evidence that there may be universal behaviors that cut across culture, gender and other demographics and student characteristics (McCroskey et al., 1995; Myers et al., 1998). Mehrabian (1981) himself espoused this perspective. What these universal behaviors are, have not been clearly identified, though some evidence suggests that they may be related to nonverbal immediacy behaviors more so than verbal immediacy behaviors. For example, Edwards and Edwards (2001) found that while verbal immediacy varied with degree of homophily, nonverbal immediacy did not. While there may be some universal immediacy behaviors, there also appears to be individual as well as socio-cultural differences in how people perceive instructor behaviors. Therefore, a model of immediacy needs to account for the student's role in the negotiation and co-construction of a perception of approach and immediacy. Figure 5.1 depicts a model of instructor-student negotiation of approach-avoidance along three dimensions of implicit communication (to be discussed further below).

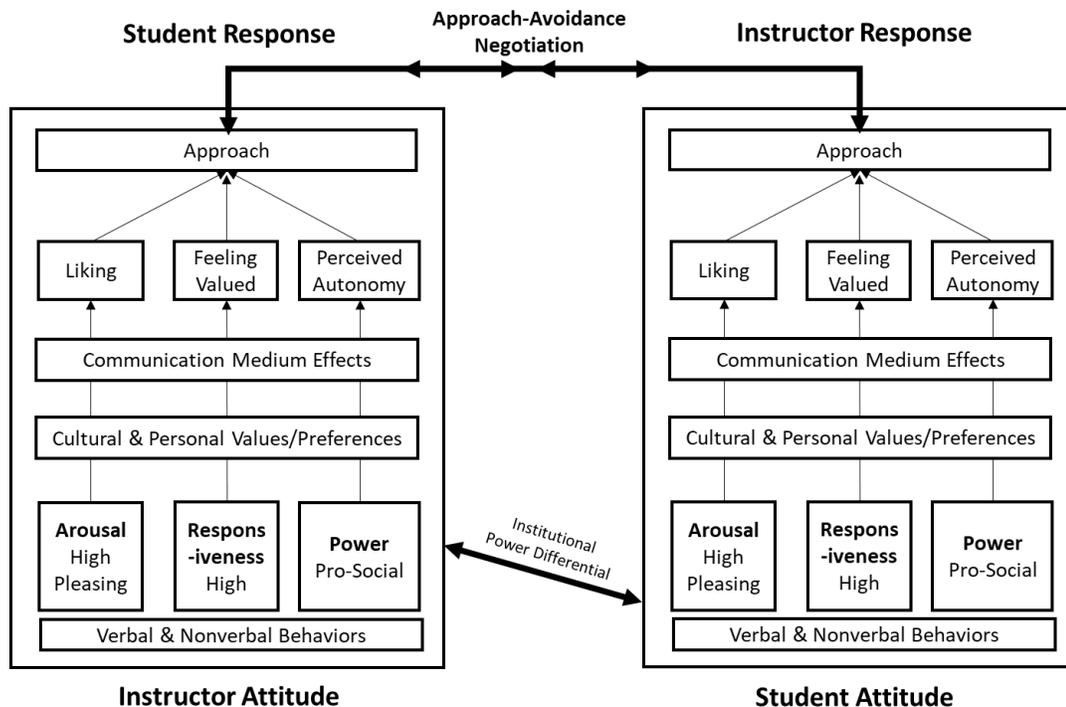


Figure 5.1 Instructor-Student Negotiation of Approach-Avoidance along Three Dimensions of Implicit Communication

Second Limitation of Existing Immediacy Models

A second limitation with existing instructor immediacy models, related to the first limitation, is that they have failed to look at instruction where physical approach and increased proximity may occur, such as in constructivist learning environments (Barab & Duffy, 2000; Jonassen, 2000). In the traditional lecture hall, engagement and interaction typically occurs in a way that is primarily unilateral, where the professor speaks from the lectern to students seated across from them in the gallery. In this context, approach is metaphorical rather than literal, where students are not expected to actually increase proximity with the instructor, nor the instructor with the students. Mehrabian (1972, 1981) described people in such contexts using abbreviated approach. Abbreviated

approach is signified by behaviors that indicate that while one cannot physically approach another, one would like to approach or would like to have others approach them (e.g., leaning towards another or facing in their direction). While students from time to time may approach the instructor at the lectern before or after class, or during office hours, this is rarely done by most students, as typical experience can attest. Likewise, during a lecture the instructor may walk towards or stand near some students, however in such circumstances, close and extended proximity is rare and usually the student is the object of the downward gaze of the instructor.

In contrast to instructivist learning environments, constructivist learning environments have high student-student as well as student-instructor interaction. It is through this interaction that meaning is co-constructed and negotiated and learning is expected to occur (Barab & Duffy, 2000; Jonassen, 2000). A model of immediacy must also be able to account for high levels of proximity and interaction between students and instructors as typically occurs in constructivist learning environments. In such learning environments, the instructor's role is seen more as helping to scaffold student learning through negotiation, feedback, and co-construction of knowledge. Online learning can take many forms based on the ontological and epistemological assumptions held by the instructor and the students. A model of immediacy for online learning needs to account for cognitivist and constructivist learning theories where there are high levels of engagement and interaction between students and instructors.

Third Limitation of Existing Immediacy Models

A third limitation of current immediacy models is that they only account for the arousal dimension of implicit communication and do not account for other implicit

communication dimensions. Mehrabian (1972, 1981) described immediacy as being related to approach-avoidance and three dimensions of implicit communication: arousal, power, and responsiveness. Mehrabian's descriptions of immediacy are quite difficult to grasp. In order for his immediacy theory to be better understood and applied by social science researchers, a clearer and more accessible model of it is necessary. A heuristic model of instructor immediacy based on Mehrabian's theory is thus provided below.

A heuristic model of immediacy occurring along three dimensions of implicit communication are depicted in Figure 5.2. The first element of the heuristic of immediacy occurs along the arousal dimension, where: (a) one's behavior elicits high arousal and feelings of pleasure in another, which (b) in turn leads to liking and a desire to approach, and (c) subsequently results in approach when prosocial power and responsiveness are signaled/perceived. The second element of the heuristic of immediacy occurs along the power dimension, where the degree of approach is influenced by perceptions of autonomy, dominance, or submissiveness. The immediacy heuristic along the power dimension is a condition where: (a) a person of power or authority signals approach using pro-social power, which (b) elicits feelings of autonomy, and (c) subsequently results in approach when high and pleasing arousal as well as responsiveness are signaled/perceived. The third element of the heuristic of immediacy occurs along the responsiveness dimension where: (a) a person is highly responsive to another, which (b) elicits feelings of being valued and important, and (c) subsequently results in approach when high and pleasing arousal as well as prosocial power are simultaneously signaled/perceived. Immediacy is a heuristic where these conditions of these three dimensions are simultaneously signaled and perceived. When all three of

these conditions are met, autonomous approach occurs. The result of autonomous approach occurring is increased proximity between two people which allows for greater degrees of arousal and pleasure, a higher rate of responsiveness, and greater referent and expert influence (French & Raven, 1959; see Chapter Two for a description of the bases of power model). Figure 5.2 depicts how the three dimensions of immediacy relate to learning. The model depicts that the instructor's attitude is the starting and ending point of approach and engagement and is defined by the instructor's dedication to their role, their field of practice, and their students as well as their orientation towards, and exercise of, pro-social power, i.e., referent power and expert power. These attitudes embody the behaviors that immediate instructors use and they signal approach and engagement. If students perceive their instructor as immediate, approach and engagement occurs. Students continue to observe the behaviors of their instructor and form perceptions of instructor attitudes during and after engagement. In addition to evaluating the attitudes of the instructor during engagement, students also evaluate the value gained from the interaction and form opinions as to the credibility of the instructor as an expert (expert power) as well as the attractiveness of the instructor as a field of practice role model (referent power).

were considered for recruitment in the study. This was due to 122 students being identified as being in their last semester and graduating. Graduating students are requested to complete other important surveys for the university around the same time that this study was being conducted. Therefore, in order to avoid causing them survey fatigue, those 122 students were excluded from the population. However, graduating students represent more experienced online learners and approximately 20% of the students taking online classes in a given semester. Therefore, exclusion of those students may have skewed findings. Additionally, of the 844 remaining students in the population, 422 participants were randomly selected to recruit for the study. Those who elected to participate in the study may have hidden characteristics which influenced the findings of this research project.

A second limitation to this study, related to the first, is that the research participants were all drawn from a single university and are part of fully online programs. Students in fully online programs are typically non-traditional students who do not come to campus and have no face-to-face interaction with instructors. They also tend to have different characteristics than traditional campus-based students. They tend to be older, have jobs, and have often been away from school for a long time. Moreover, instructors who teach courses for fully online courses may also have different characteristics than instructors who teach online courses that are for on-campus students. These instructors may also have different expectations for students in fully online programs and may identify with them differently. Therefore, the generalizability of these finds to other contexts and to different types of online courses is limited.

A third limitation of this study, was the use of a revised version of the CMIB scale to measure immediacy. Although McAlister's (2001) CMIB was based on earlier versions of immediacy scales that have been well-established, it was a derivative scale that has not undergone much testing. Moreover, the revised version of the CMIB scale used in this study made further revisions to the CMIB, making it a derivative of a derivative. While these are concerns, the changes McAlister made to his CMIB were necessary to make the immediacy scales relevant to the online learning context. Likewise, the additional revisions made to the CMIB scale in this study were necessary to make it more relevant to the online learning context of today and to better align it with the original immediacy scales. Factor analysis of the revised-CMIB suggested strong construct validity and internal consistency and these were consistent with previous results for the NIB, VIB, and CMIB scales. Despite this, one should take caution in using this instrument without further testing.

A fourth limitation of this study is related to the themes derived in the second phase of this study. Due to the nature of qualitative research, the results may have been influenced by my own personal biases and idiosyncrasies, which may call into question their validity. My initial interest in this study was based on observations that students seemed to appreciate the way I supported them in their learning through timely feedback and responsiveness. These are, perhaps not coincidentally, two of the major findings of this research. In order to mitigate my biases, I consciously attempted to bracket out my own personal beliefs to avoid leading participants. Moreover, I attempted to let theory guide my interpretation of results. One recent dissertation (Spiker, 2014) conducted a similar study, but opposite in many ways. Spiker looked at factors that influence instructor

immediacy from the instructor's perspective. Moreover, he used a sequential exploratory study which started with a qualitative phase and was followed with a quantitative phase. He first developed themes and then used those to create and test an immediacy instrument. I did not discover this dissertation until near the end of my study. However, reassuringly and interestingly, the themes that he identified from the instructor's perspective are quite similar to those identified from the student perception in my study. So, while this is reassuring, one should still be cautious in making any broad generalizations about the findings of this study.

Despite the limitations of this research project, the findings of this study do offer some insight into how verbal immediacy and nonverbal immediacy influence learning and what factors may contribute to student perceptions of instructor immediacy. While not conclusive, the findings of this study can be used to guide future research for both practice and theory development.

Concluding Thoughts and Implications

The findings of this study coincide with and build upon current literature and theory concerning the relationship between instructor immediacy and student learning. The results of this study make three contributions. First, it extended the research of instructor immediacy in online education by focusing on students in fully online programs, and found that both verbal and nonverbal immediacy behaviors are associated with student learning as well as course satisfaction. Moreover, it provided evidence that nonverbal immediacy not only contributes to perceptions of instructor immediacy in online learning, but that it may have a bigger impact than verbal immediacy. Second, it identified specific instructor behaviors that contribute to student learning in online higher

education from the students' perspective. From a practice perspective, narrative accounts provided in Chapter Four and an Engagement and Interaction Cycle Immediacy Checklist in Appendix F can be used by instructors to guide their communication decisions throughout a course. These can also be used to prescribe strategies instructors can use to improve their immediacy in practice. Third, it provided evidence for a combined model of instructor immediacy directly influencing student learning, both affective and cognitive, as well as indirectly through student motivation. Moreover, it extended Richmond et al.'s (1987) argument that Bloom's (1956) conception of affective and cognitive learning is not one of mutual exclusion. Fourth, it presented a model of immediacy as a process which occurs through active co-construction occurring through engagement and interaction between instructors and their students, rather than as a linear and didactic model. Additionally, it elaborated on Mehrabian's (1972, 1981) description of immediacy as a complex of three dimensions of implicit communication that contribute to approach: arousal, power, and responsiveness.

This study used a revised version of McAlister's (2001) immediacy instrument, the CMIB. McAlister developed the CMIB because existing immediacy measures at the time had been designed for classroom use and did not reflect the experience of online learners. In this study, the CMIB was revised further to make it more reflective of current online teaching technologies. Factor analysis of the revised version of the CMIB used in this study found strong internal consistency as well as strong construct validity. However, the results of the qualitative study indicate that additional revisions are necessary. Another researcher, Spiker (2014), also conducted a research study and developed a new immediacy scale for online learning for the same reason McAlister did. In his study,

Spiker explored instructor immediacy behaviors from the instructor's perspective using a sequential exploratory. He devised an entirely new immediacy scale based on the results of the qualitative portion of the study. Unfortunately, he was not able to validate the scale due to a very low response rate. However, many of the items on the scale represent similar themes that were identified in this study which are not measured on existing immediacy scales. The findings of his research compliment the findings of this study which could both be used to develop a new immediacy scale. Moreover, the findings of this study are relatively consistent with previous findings (e.g., Andersen, 1971; Gorham, 1988; Richmond et al, 1987; Witt et al., 2004).

One measure that should be included on a future immediacy measure is one related to timeliness of response. Spiker (2014) included an item regarding timeliness of instructor responses in his scale due to it being the third highest coded theme in his study. In the present study, timeliness of response had a significant relationship with perceptions of instructor immediacy, particularly nonverbal immediacy. Moreover, it was the code with the highest number of references in the qualitative analysis. A future immediacy measure should include a question regarding timeliness of instructor response.

In addition to timeliness of response, future immediacy measures should include items related to the way instructors communicate with students. Spiker focused on asynchronous communication in the survey items on the instrument he developed, as have other online immediacy studies (e.g., Arbaugh, 2001; Fahara & Castro, 2015; Ghamdi et al., 2016). However, in the present study, the use of synchronous communication channels such as video conferencing and telephoning were strongly related to student perceptions of instructor immediacy. Moreover, the total number of

channels that instructors used to communicate with students had a significant relationship with perceptions of instructor immediacy. McAlister's original CMIB included an item related to inviting telephone calls. However, video-conferencing and other semi-synchronous technologies such as texting and instant messaging are not included on any of the most commonly used current instruments. Future immediacy instruments should include an item that measures the variety of communication technologies used, ranging from asynchronous to synchronous.

Current immediacy scales measure supportive behaviors of instructors such as praise, smiling, encouragement, and being friendly or pleasant. One of the findings of this study that is consistent with past research (e.g., Thomas et al., 1994) and Mehrabian's (1972, 1981) theory of immediacy is that instructor immediacy is not just related to being nurturing and supportive. Immediate instructors are also challenging and assertive. A measure for instructor assertiveness should be included on future studies.

In addition to developing an improved immediacy measure for online learning, future researchers are recommended to further investigate the difference between instructor immediacy and instructor social presence. There is currently a need to more clearly define the difference between the two constructs (Lowenthal, 2009; Richardson & Lowenthal, 2017). Short et al. (1976) described social presence as related to three things: (a) the effect of the presence of others on task performance; (b) the degree of salience of the other that is required, or perceived to be required, to successfully accomplish a task; and (c) the effect of the medium to transmit socio-emotional cues on the level of social presence that can be achieved. They distinguished social presence from immediacy saying, in essence, that immediacy is related to feelings of like while social presence is

not. While this distinction may seem small, it is quite significant. Immediacy is related to the transmission of implicit socio-emotional cues that elicit feelings of like, being valued or important, and being autonomous. Social presence, according to Short et al. (1976) is related to the degree of salience a situation requires in order to achieve a desired effect. In order to understand social presence, it is essential to recognize that high proximity, either physical or psychological, which provides “salience of the other” is not always intended to provide a positive and warm social interaction. For example, a law enforcement officer provides a high degree of social presence as she patrols a street in order to thwart deviant behavior. Conversely, a peace officer provides a high degree of social presence while walking through a neighborhood in order to protect and serve the community. While each of these two people are using the same objective communication medium, and the same degree of proximity, the nature of their task is different and the attitude of each is different as well. In one case, the attitude is of a more assertive nature while in the other the attitude is of a more supportive/responsive nature. This attitude difference is the difference between social presence theory and immediacy theory.

Currently, the meaning of social presence is quite different than what Short et al. (1976) originally described. Researchers have developed instruments to measure social presence based on a proposition that social presence is related to the existence of community-building behaviors and include items that refer to positive and nurturing attitudes and behaviors such as, supportive, caring, trust, belonging and other affirmative community-oriented behaviors (e.g., Arbaugh et al., 2008; Gunawardena & Zittle, 1997; Swan, 2003; Swan, Richardson, Ice, Garrison, Cleveland-Innes, & Arbaugh, 2008). However, these are all behaviors that are similarly related to immediacy. Moreover, they

represent only one type of social presence that could be afforded. Future research should look to distinguish between immediacy, social presence, and community building practices.

The findings of this research also have implications for online education practitioners. This study focused on identifying the behaviors of highly immediate instructors. The behaviors identified and described in Chapters Four and Five, as well as the checklist in Appendix F can be used by online instructors to guide and evaluate their approaches to instruction. These descriptions can also be used to train online instructors on how to more effectively teach their courses. In addition, online course designers might consider ways that they can build in support for instructors to develop their immediacy. For example, instructor guides can encourage instructors to send out announcements frequently and provide examples of language that would be perceived as immediate. Instructor videos can also be encouraged, particularly for high enrollment courses where it may be more difficult for instructors to provide extensive feedback to students individually.

How much immediacy is appropriate for a course also needs to be considered. Researchers have pointed out that most instructors are probably already moderately immediate (Richmond et al., 1987) and that moderate levels of immediacy may be sufficient in most cases (Christensen & Menzel, 1998). With relatively low enrollment courses, such as the ones looked at in this study, may allow for a high levels of engagement with the instructor. However, high enrollment courses may need to use other strategies to develop instructor immediacy, or even accept that moderate levels of instructor immediacy are the most that can be achieved. One approach could be the use of

teaching assistants who are trained to provide high levels of immediacy and engagement with students. For example, Arizona State University used undergraduate instructional assistants (IAs) to reduce instructor load and provide high levels of feedback on assignments in a high enrollment, lower-division, writing course. The IAs were trained for a semester and then received internship credit in the course while also gaining teaching experience. According to the authors of the study, “Although students still maintained interaction with the instructors, the IAs gave them additional individualized attention” (Bouelle, Bouelle, & Rankins-Robertson, 2015). Students worked on multiple drafts of their papers and received peer-feedback on the first draft, IA feedback on the second and third drafts, and instructor feedback on the final draft. Such an approach is potentially an effective solution to providing high levels of instructor immediacy in high enrollment courses.

In closing, there are three broad findings of this study regarding student perceptions of instructor immediacy. First, students must perceive that the instructor is committed to their role and cares about the student’s success. Second, instructor behaviors reflect their attitudes toward students and their role; therefore, instructor behaviors must demonstrate that they are committed to their role and that they care about student success. Third, in order to demonstrate that they are committed to their role and that they care about student success, instructors must engage continuously and consistently in interaction with their students. Looking at the student accounts of instructor immediacy and the key findings of this study, I speculate that there are likely three types of instructors with different attitudes towards their role, their course, and the

students: The Advocate at My Side, the Guide on the Side, and the Administrator. A description of these can be found in Appendix G.

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APPENDIX A

Initial Email Cover Letter

Hi, (Student's name). My name is Anthony Saba, and I am an online student at Boise State University, just like you. I am doing research for my dissertation as the final step in completing my online Boise State degree. I am investigating student perceptions of instructor communication behaviors in online courses. I'm hoping you will help me out by filling out this short survey (5-10 minutes). Your feedback can help to improve the educational experience of online students like us! Of course, instructors will not be given reports on your responses.

In order to show my thanks for your help, I will email you a \$5 Amazon gift card for a valid survey response. If you are willing to help, just send me a quick email saying, YES and I'll send you the survey link via our BSU email accounts.

Participation is voluntary. You must be at least 18 years old to take this survey.

This study involves no foreseeable serious risks. If you agree to take the survey, I ask that you try to answer all questions; however, if there are any items that make you uncomfortable or that you would prefer to skip, please leave the answer blank. Your responses will be de-linked from the data after analysis is complete.

Sincerely,
Anthony Saba, Boise State Doctoral Candidate
Department of Educational Technology

Approved by Boise State Institutional Review Board
Supported by Office of Institutional Research

Survey Link Email Cover Letter

Hi, (Student's name). Thank you for your willingness to help with my study. For your promise to help, I've already sent you \$5 Amazon Gift card which you should be able to find in your Boise State email. Thanks again for your offer to help! It means a great deal to me.

To take the survey on a computer or smart device, {1://SurveyLink?d=please follow this link}

Or, copy and paste the URL below into your internet browser
{1://SurveyURL}

Sincerely,
Anthony Saba, Boise State Doctoral Candidate
Department of Educational Technology

Approved by Boise State Institutional Review Board
Supported by Office of Institutional Research

Informed Consent

Thank you for your participation in this survey. Your participation is voluntary. The survey will take approximately 5-10 minutes to complete. You must be at least 18 years old to take this survey.

This study involves no foreseeable serious risks. I ask that you try to answer all questions; however, if there are any items that make you uncomfortable or that you would prefer to skip, please leave the answer blank.

Reasonable efforts will be made to keep the personal information in your research record private and confidential. Any identifiable information obtained in connection with this study will remain confidential and will be disclosed only with your permission or as required by law. The members of the research team and the Boise State University Office of Research Compliance (ORC) may access the data. The ORC monitors research studies to protect the rights and welfare of research participants.

Your name will not be used in any written reports or publications which result from this research. Data will be kept for three years (per federal regulations) after the study is complete and then destroyed.

In the unlikely event that some of the interview questions make you uncomfortable or upset, you are always free to decline to answer or to stop your participation at any time. Should you feel discomfort after participating and you are a Boise State University student, you may contact the University Health Services (UHS) for counseling services at (208) 426-1459. They are located on campus in the Norco Building, 1529 Belmont Street, Boise ID, 83706.

If you would prefer not to participate, please do not fill out the survey.
If you consent to participate, please complete the survey.

Survey Instructions

Please answer this survey based on the last class you completed in your current online degree program (not a course you are currently taking). If you were enrolled in more than one class at the same time, answer this survey based on the course that had the higher course number. For example, if the classes you took last semester had the course numbers 302 and 304, answer for the 304 course.

Please answer every question to the best of your ability.

Once you complete the survey, you will receive a message that says, "Your response has been submitted. Thank you for completing this survey."

Survey Questions

1. Overall, how satisfied were you with the course you are responding for? 1, 2, 3, 4, 5

PART TWO: Learning and course satisfaction

[Affective Learning]

On the following questions, note that sometimes “7” is positive, and sometimes “7” is negative.

Please indicate your judgement or evaluation of **the course content** – answer each line:

2. Good 1, 2, 3, 4, 5, 6, 7 Bad
3. Worthless 1, 2, 3, 4, 5, 6, 7 Valuable
4. Fair 1, 2, 3, 4, 5, 6, 7 Unfair
5. Positive 1, 2, 3, 4, 5, 6, 7 Negative

Please indicate your judgement or evaluation of the **instructor** – answer each line:

6. Good 1, 2, 3, 4, 5, 6, 7 Bad
7. Worthless 1, 2, 3, 4, 5, 6, 7 Valuable
8. Fair 1, 2, 3, 4, 5, 6, 7 Unfair
9. Positive 1, 2, 3, 4, 5, 6, 7 Negative

Please indicate your judgement or evaluation of the **behavior recommended in the course** – answer each line:

10. Good 1, 2, 3, 4, 5, 6, 7 Bad
11. Worthless 1, 2, 3, 4, 5, 6, 7 Valuable
12. Fair 1, 2, 3, 4, 5, 6, 7 Unfair
13. Positive 1, 2, 3, 4, 5, 6, 7 Negative

If time and schedule permitted and there was another course related to this one, please indicate the likelihood of your taking it:

14. Likely 1, 2, 3, 4, 5, 6, 7 Unlikely
15. Impossible 1, 2, 3, 4, 5, 6, 7 Possible
16. Probable 1, 2, 3, 4, 5, 6, 7 Improbable
17. Would 1, 2, 3, 4, 5, 6, 7 Would not

[Perceived Cognitive Learning – learning loss measure]

18. Please rate how much you learned in comparison to other classes you had taken:
0, 1, 2, 3, 4, 5, 6, 7, 8, 9

19. Please rate how much you could have learned from the ideal instructor: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9

Please indicate how often your instructor did the following:

Use the scale: 0= never, 1=rarely, 2=occasionally, 3=often, 4=very often

PART THREE: Immediacy

[Verbal Immediacy]

20. Used personal examples or described experiences she/he had outside the course.
21. Asked questions or encouraged students to respond.
22. Got into discussions based on something a student brought up even when it didn't seem to be part of his/her plan.
23. User humor in the course.
24. Addressed students by name.
25. Addressed me by name.
26. Communicated with individual students beyond coursework.
27. Initiated communication with me beyond coursework.
28. Referred to course as "our" course or what "we" were doing.
29. Provided feedback through comments on my individual work.
30. Asked students questions even if they had not indicated they wanted to respond.
31. Inquired how students felt about an assignment, due date, or discussion topic.
32. Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something.
33. Asked question that solicited a viewpoint.
34. Praised student's work, actions or comments.
35. Had discussions about things unrelated to class with individual students or with class as a whole.
36. Was addressed by his/her first name by students.

[Nonverbal Immediacy]

37. Seemed distant personally.
38. Used creative means of emphasis and expression to communicate.
39. Used the same monotone/flat style of communicating all of the time.
40. Paid attention to students.
41. Was pleasant and friendly with entire class not just individual students.
42. Communicated in a tense manner.
43. Used physical metaphors in communicating, like "let me extend a helping hand" or "a pat on the back to Joe for a good answer."
44. Used a variety of communication approaches in the course.
45. Seemed passive.
46. Was inattentive to students.

47. Was formal in his/her approach.
48. Had a very relaxed style of communicating.
49. Expressed friendliness to individual students.
50. Used a variety of tones in communicating.

PART FOUR: Other questions

51. How quickly did your instructor respond to your questions in the course?
Never responded, Very slowly, slowly, quickly, very quickly
52. How quickly did your instructor provide feedback on assignments you submitted in the course?
Didn't provide feedback, Very slowly, slowly, quickly, very quickly
53. The instructor used the following technologies to communicate in this course (Check all that apply):
 - Email
 - Announcements
 - Discussion forums
 - Comments/Feedback on assignments
 - Telephone calls
 - In-person meetings
 - Instructor Videos posted in the course
 - Text messaging (Cellphone SMS)
 - Mobile Texting apps (e.g., Whatsapp, Snapchat, Facebook Messenger, etc.)
 - Instant messaging (e.g., Google Hangouts chat, Yahoo messenger, etc.)
 - Video conferencing (e.g., Skype, Google Hangouts, Collaborate)
 - Social Media (e.g., Facebook, Twitter, Instagram, etc.)
54. In a few sentences, please describe what, overall, the instructor that you are reporting on did in the course that either contributed to or detracted from developing a sense of psychological closeness and approachability with you and how that contributed to or detracted from your learning:
(Paragraph entry field)
[Question regarding willingness to participate in a follow-up interview]
55. The researcher will be contacting some participants who completed this survey and acknowledged a willingness to participate in a follow up interview. Would you be willing to participate in a follow-up interview? (I will interview 8-12 students, each of whom will get a \$15 Amazon gift card for a 30-45 minute interview).
 - a. Yes
 - b. No

APPENDIX B

Interview Protocol Questions

1. How approachable do you feel your instructor was? Why? How did this affect your learning in the course? Why?
2. Instructor immediacy is defined as instructor behaviors that increase psychological closeness between instructors and students. What behaviors did your instructor use that contributed to (or detracted from) your sense of psychological closeness with him/her?
3. How do you feel your perceptions of your instructor as being close and approachable (or distant and unapproachable) affect your motivation to participate in and succeed in the course? What communication technologies, if used by your instructor, would give you a greater sense of them being close by, available and there for you?

APPENDIX C

Immediacy Survey Questions

| Immediacy Type | Original Survey Items | CMIB | Present Study |
|----------------|--|---|---|
| Verbal | Uses personal examples or talks about experiences she/he has had outside of class. | Used personal examples or wrote about experiences she/he had outside the course. | Used personal examples or described experiences she/he had outside the course. |
| Verbal | Asks questions or encourages students to talk. | Asked questions or encouraged students to respond. | Asked questions or encouraged students to respond. |
| Verbal | Gets into discussions based on something a student brings up even when this doesn't seem to be part of his/her lecture plan. | Got into discussions based on something a student brought up even when it didn't seem to be part of his/her plan. | Got into discussions based on something a student brought up even when it didn't seem to be part of his/her plan. |
| Verbal | Uses humor in class. | Used humor in course. | Used humor in course. |
| Verbal | Addresses students by name. | Addressed students by name. | Addressed students by name. |
| Verbal | Addresses me by name. | Addressed me by name. | Addressed me by name. |
| Verbal | Gets into conversations with individual students before or after class. | Communicated with individual students beyond coursework. | Communicated with individual students beyond coursework. |
| Verbal | Has initiates conversations with me before, after or outside of class. | Initiated communication with me beyond coursework. | Initiated communication with me beyond coursework. |
| Verbal | Refers to class as "our" class or what "we" are doing. | Referred to courses as "our" course or | Referred to courses as "our" course or what "we" were doing. |

| | | | |
|--------|--|---|--|
| | | what “we” were doing. | |
| Verbal | Provides feedback on my individual work through comments on papers, oral discussions, etc. | Provided feedback on my work through comments on papers, or in discussion. | Provided feedback through comments on my individual work. |
| Verbal | Calls on students to answer questions even if they have not indicated that they want to talk.* | Asked students questions even if they had not indicated they wanted to respond. | Asked students questions even if they had not indicated they wanted to respond. |
| Verbal | Asks how students feel about an assignment, due date, or discussion topic. | Inquired how students felt about an assignment, due date, or discussion topic. | Inquired how students felt about an assignment, due date, or discussion topic. |
| Verbal | Invites students to telephone or meet with him/her outside of class if they have questions or want to discuss something. | Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something. | Invited students to telephone, meet, chat or otherwise communicate outside formal course structure if they had questions or wanted to discuss something. |
| Verbal | Asks questions that solicit viewpoints or opinions. | Asked questions that solicited a viewpoint. | Asked questions that solicited a viewpoint. |
| Verbal | Praises students’ work, actions or comments. | Praised students’ work, actions or comments. | Praised students’ work, actions or comments. |
| Verbal | Will have discussions about things unrelated to class with individual students or with the class as a whole. | Had discussions about things unrelated to class with individual students or with class as a whole. | Had discussions about things unrelated to class with individual students or with class as a whole. |

| | | | |
|-----------|---|--|--|
| Verbal | Is addressed by his/her first name by the students. | Was addressed by his/her first name by students. | Was addressed by his/her first name by students. |
| Nonverbal | Sits behind desk when teaching.* | Seemed distant personally. | Seemed distant personally. |
| Nonverbal | Gestures when talking to the class. | Used creative means of emphasis and expression to communicate. | Used creative means of emphasis and expression to communicate. |
| Nonverbal | Uses monotone/dull voice when talking to the class.* | Used the same writing tone (formal, informal, etc.) all the time even for different purposes like syllabus and feedback to students. | Used the same monotone/flat style of communicating all of the time. |
| Nonverbal | Looks at the class when talking. | Gave specific attention to students. | Paid attention to students. |
| Nonverbal | Smiles at the class as a whole, not just individual students. | Was pleasant and friendly with entire class not just individual students | Was pleasant and friendly with entire class not just individual students. |
| Nonverbal | Has a very tense body position when talking to the class.* | Communicated in a tense manner. | Communicated in a tense manner. |
| Nonverbal | Touches students in the class. | Used physical metaphors in communicating, like "let me extend a helping hand" or "a pat on the back to Joe for a good answer." | Used physical metaphors in communicating, like "let me extend a helping hand" or "a pat on the back to Joe for a good answer." |
| Nonverbal | Moves around the classroom when teaching. | Used a variety of approaches. | Used a variety of communication approaches in the course. |

| | | | |
|-----------|---|--|--|
| Nonverbal | Sits on a desk or in a chair when teaching.* | Seemed passive. | Seemed passive. |
| Nonverbal | Looks at board or notes when talking to the class.* | Was inattentive to students. | Was inattentive to students. |
| Nonverbal | Stands behind podium or desk when teaching.* | Was formal in his/her approach. | Was formal in his/her approach. |
| Nonverbal | Has a very relaxed body position when talking to the class. | Had a very relaxed style of communicating. | Had a very relaxed style of communicating. |
| Nonverbal | Smiles at individual students in the class. | Expressed friendliness to individual students. | Individually expressed kindness to students. |
| Nonverbal | Uses a variety of vocal expression when talking to the class. | Used a variety of tones in writing. | Used expressive variety in communicating.” |

APPENDIX D

Verbal and Nonverbal Immediacy Survey Items Based on Revised CMIB

| Variable Name | Survey Item |
|---------------|---|
| V1 | Used personal examples or described experiences she/he had outside the course. |
| V2 | Asked questions or encouraged students to respond. |
| V3 | Got into discussions based on something a student brought up even when it didn't seem to be part of his/her plan. |
| V4 | Used humor in the course. |
| V5 | Addressed students by name. |
| V6 | Addressed me by name. |
| V7 | Communicated with individual students beyond coursework. |
| V8 | Initiated communication with me beyond coursework. |
| V9 | Referred to course as "our" course or what "we" were doing. |
| V10 | Provided feedback through comments on my individual work. |
| V11R | Asked students questions even if they had not indicated they wanted to respond. |
| V12 | Inquired how students felt about an assignment, due date, or discussion topic. |
| V13 | Invited students to telephone, meet or communicate outside formal structure if they had questions or wanted to discuss something. |
| V14 | Asked question that solicited a viewpoint. |
| V15 | Praised student's work, actions or comments. |
| V16 | Had discussions about things unrelated to class with individual students or with class as a whole. |
| V17 | Was addressed by his/her first name by students. |
| NV1R | Seemed distant personally. |
| NV2 | Used creative means of emphasis and expression to communicate. |
| NV3R | Used the same monotone/flat style of communicating all of the time. |

| | |
|-------|--|
| NV4 | Paid attention to students. |
| NV5 | Was pleasant and friendly with entire class not just individual students. |
| NV6R | Communicated in a tense manner. |
| NV7 | Used physical metaphors in communicating, like “let me extend a helping hand” or “a pat on the back to Joe for a good answer.” |
| NV8 | Used a variety of communication approaches in the course. |
| NV9R | Seemed passive. |
| NV10R | Was inattentive to students. |
| NV11R | Was formal in his/her approach. |
| NV12 | Had a very relaxed style of communicating. |
| NV13 | Expressed friendliness to individual students. |
| NV14 | Used a variety of tones in communicating. |

APPENDIX E

First Cycle Codes in Phase Two Qualitative Analysis

Name

Ability to Explain-make clear
 Acknowledging Student Work and Personalization
 Advocate - Partner
 Always Available
 Answers in the time needed
 Ask the Professor
 Balancing Formality and Relaxed Style
 Body language and gestures
 Building a Connection
 Challenging students - go deeper
 Clarity Organization and Preparation
 Communicating Beyond Coursework
 Confidence Building and Reassuring
 Course Content
 Discussion Forum Presence
 Email communication
 Encouragement and Praise
 Engaging in Dialogue
 Flexible
 Frustration
 Great Feedback
 Happy to Help
 High Expectations
 Humor
 Inspired and motivated
 Instructor Cares about Student Success
 Instructor Initiated Communication
 Instructor Inviting Feedback on Course and Assignments
 Instructor Personal Life Transparency
 Instructor Personal Stories
 Instructor Videos
 Instructor Willing to Put in the Time - Dedicated
 Jumping Through Hoops
 Leadership
 Multiple and Diverse Channels of Communication
 non-immediacy behaviors
 Openly communicate with Professor
 Pays Attention to Students
 Phone Calling with Instructor

Positive and Optimistic
Professionalism
Regular Communication and Guidance
Service Oriented
Setting Expectations for Communication
Texting
Tone of Communicating
Treated as Professional
Trusting
Understanding and Compassion
Using First Names
Valued and Respected
Vicarious Instructor Immediacy
Video Conferencing
Warmth

Second Cycle Themes and Categories from Phase Two Qualitative Analysis

Themes and Categories

1. Commitment to their Role

- Inspiring and motivating
 - Leadership
 - Not Just Jumping Through Hoops
- Organized and Prepared
- Provides Clarification
- Willing to Put in the Time

2. Student Advocate

- Builds Relationship
 - Balancing Formality and Relaxed Style
 - Communicating Beyond Coursework
 - Instructor Personal Experience Examples
 - Instructor Personal Life Transparency
 - Using First Names
- Cares about Student Success
 - Empathy and Compassion
 - Flexible
 - High Expectations and Challenging Students
- Collegiality
 - Instructor Inviting Feedback on Course and Assignments
 - Openly communicate with Professor
 - Treated as Professional

3. Accessible and Responsive

- Available
 - Happy to Help
- Diverse Channels of Communication
 - Ask the Professor
 - Email
 - Phone Calling
 - Texting
 - Video Conferencing
 - Body language and gestures
- Timely Support and Clarification

4. Extensive Guidance and Feedback

- Attentive to Students
- Growth Oriented
 - Instructor Videos
- Interactive and Engaged
 - Discussion Forum Participation

Setting Expectations for Communication

Notifications and Reminders

Personalized, Thorough and specific

5. Encouraging and Reassuring

Confidence Building

Encouragement and Praise

Humor

Positive Tone

Positive and Optimistic

Valued and Respected

Warmth

Definitions of Codes

Commitment to their Role

Inspiring and motivating: displaying enthusiastic and dedicated engagement with students and concern for their success.

Leadership: Perceived as actively leading the course and students.

Not Just Jumping Through Hoops: Instructor's attitude of engagement attributed to relating to students caring more about coursework.

Organized and Prepared: Perceived as having organized course materials and prepared to teach it.

Provides Clarification: Able to effectively answer questions both reactively and proactively.

Willing to Put in the Time: Instructor perceived as willingly investing extensive time and effort into course instruction, support, and feedback activities.

Student Advocate

Builds Relationship: Instructor actively used behaviors that invited a relationship with the student.

Balancing Formality and Relaxed Style: Instructor communicated in a way that was neither overly formal nor overly friendly.

Communicating Beyond Coursework: Instructor communicated with students regarding issues that were not directly related to the course activities or materials.

Instructor Personal Experience Examples: Instructor described experiences from their personal and professional life that were relevant to course materials.

Instructor Personal Life Transparency: Instructor opened up about personal life such as family, interests, or events that were occurring in their life at present.

Using First Names: Instructor invited students to use his/her first name and also used first names to address students.

Cares about Student Success: Students described feeling that the instructor cared about them and their success in the course.

Empathy and Compassion: Students described instructor as being understanding when they had either personal or academic difficulties.

Flexible: Instructor was described as allowing extensions on deadlines and resubmission of assignments, and not being rigid or strict.

High Expectations and Challenging Students: Instructor was described as encouraging students to think differently, consider new ideas, retry assignments, and seek growth.

Collegiality: Instructor described as treating students as equal partners.

Instructor Inviting Feedback on Course and Assignments: Instructor described as open to and welcoming of feedback from students on assignment and course design.

Openly communicate with Professor: Instructor described as easy to communicate with and welcoming of interaction and student opinions.

Treated as Professional: Instructor described as treating students as professionals and respecting their ideas.

Accessible and Responsive

Available: Instructor perceived as being open to communicate with and welcoming of contact.

Happy to Help: Instructor described as enthusiastic and willing to provide support.

Diverse Channels of Communication: Instructor described as being flexible and available to communicate via multiple forms of communication technology.

Ask the Professor: Instructor made use of question and answer forums to communicate with students, typically called “Ask the Professor” forum in program courses.

Email: Instructor communicated via email.

Phone Calling: Instructor communicated via telephone or cell phone.

Texting: Instructor communicated via SMS or app-based text messaging technology.

Video Conferencing: Instructor communicated via synchronous video-based communication technology.

Body language and gestures: Instructor body language was described by students who had experience communicating with the instructor during a video conference.

Timely Support and Clarification: Instructor was described as effectively responding to questions about the course quickly and within the timeframe that help was needed.

Extensive Guidance and Feedback

Attentive to Students: Students described feeling that the instructor paid attention to them and/or other students throughout the course.

Growth Oriented: Instructor was described as interested in seeing the student grow and not just complete assignments.

Instructor Videos: Videos produced by the instructor.

Interactive and Engaged: Instructor was described as being interactive with students and engaged with them throughout discussions and other course activities.

Discussion Forum Participation: Instructor was described as actively participating in forums with students.

Setting Expectations for Communication: Instructor was described as clearly describing how they expected students to communicate with them around feedback on assignments.

Notifications and Reminders: Instructor was described as contacting students to notify them of a due date or reminding them that an assignment was due or past due.

Personalized, Thorough and specific: Instructor feedback was described as being individualized for each student, referencing specific aspects of their work, and being extensive.

Encouraging and Reassuring

Confidence Building: Students described instructor feedback as making them feel more confident.

Encouragement and Praise: Instructor described as using extensive encouragement and praise in their feedback to students.

Humor: Instructor was described as being funny, joking, or having humility.

Positive Tone: Instructor language that was friendly, warm, encouraging, reassuring, caring and respectful.

Positive and Optimistic: Instructor described as having a positive and/or optimistic attitude towards students.

Valued and Respected: Instructor communication behaviors were described as making students feel that they were valued and respected.

Warmth: The instructor was described as being warm.

APPENDIX F

Engagement and Interaction Cycle Checklist

Initiation Stage: Indicate Immediacy

In syllabus and other introductory materials:

- Welcome students to the course. Let students know you are excited to teach the course and that you are passionate about the topic. Let them know that you are growth oriented and that you care about their success. Explain that while the course will be challenging, you will be there to guide them through. Assure students you will remain attentive to individual needs.
- Provide Contact information including email, office phone number, and possibly cell phone number.
- Invite students to contact you via a variety of communication channels: email, phone calls, video conference, and text messaging.
- Let students know you will respond to questions within 24 hours, often sooner.
- Assure students you will be available to support them. Say things like “don’t hesitate to contact me” or “Please feel free to reach out to me”
- Encourage students to come to you with questions. Say things like, “I’m happy to help” “Please let me know if you have any questions”
- Provide a schedule of times you will be available to talk. Include a variety of times that will suit different schedules. Consider sharing an electronic calendar with times available to be contacted and let students know they can fill in a timeslot to meet with you.
- Create a welcome video which is focused on setting a positive and caring tone. Focus on inspiring the students and demonstrating that you care about them, are dedicated to your role and enjoy the topic being learned.
- Set up a self-introduction forum and include an initial post from you.
- Invite students to address you by your first name, if they are comfortable doing so.
- Be empathetic and allow for some flexibility; for example, allow for one “free pass” on a late assignment or allow a three-day grace period for submitting assignments after a deadline.
- Foster accountability. Provide a description of how late assignments will be handled and the timeframe within which feedback will be provided, e.g., within one-week of submission or the deadline.

First Stage: Encourage Approach

- Send out an announcement with an overview of the first module. Express that you are accessible, available, and welcoming of questions
- Participate in self-introduction forum. Post replies within 24 hours of student posts. Respond to specific details of student posts and connect those to your own personal experiences, interests, etc. Keep track of personal details students disclose and refer to these later in the course in communication. If students reply to you, reply back.
- Hold required or optional video-conference. Offer several timeslots students can join that accommodate different days of the week and different times of the day.

- Send individualized message to each student letting them know you are happy to have them in the class and that you welcome contact.

Second Stage: Engage and Interact

- Send out additional announcements throughout module. Remind students of deadlines, provide tips, and direct students to interesting and relevant resources related to topic and assignments. Reiterate welcoming of questions and being available to students.
- Respond quickly to student questions throughout the module. Respond within 24 hours to questions. If a student has a need for high-touch, offer to hold a phone call or one-on-one video conference.
- In your communication with students, include friendly and welcoming language. Use emoticons, images, and other cues that demonstrate warmth, caring, respect and an overall positive tone. Be sure to use the student's name. Consider referring back to personal details that the student has shared, e.g., "how's your golf game going these days?" or "Did you find that resource I sent you helpful?"
- Encourage students to submit drafts of assignments early for feedback, and get back to them quickly. In your feedback, acknowledge what the students got right, praise their effort, and focus on strengths first. "Cushion" critical feedback. Also encourage your students to think from different perspectives, ask thought provoking questions, and direct them to specific resources that may help.
- Participate in discussion forums. Check in several times throughout the module. Refer specifically to content that has been discussed. Acknowledge the ideas that students are contributing. Avoid giving your opinions; rather, ask thought provoking questions and direct students to relevant resources. If the conversation is getting off-task or going in an unproductive directions, guide the conversation, gently using questions or ask students to consider alternative thoughts.
- Regularly monitor student activity. Check discussion forum and login frequency in the LMS. Reach out to individual students to "check in" with them asking how things are going. Let them know you noticed they haven't been active and that you are concerned. Ask them to respond to you and offer options to communicate via a variety of channels. Encourage a phone call if necessary.
- Be flexible with students, to a degree, if they have problems achieving a deadline. Use a caring and supportive tone. Give them a specific plan of action to complete an assignment and move forward. Ask them to confirm the plan of action and/or suggest an alternative plan of action. Engage them in a discussion. Focus on growth, but balance that with accountability.
- Consider holding video conferences during a module to check in with students, clarify concepts and expectations.
- Invite feedback from students on the course and activities. Ask for suggestions for improvements.

Third Stage – Fulfill Immediacy Proposition

- Alert individual students that may have failed to submit an assignment by a deadline. Encourage them to submit it and/or to contact you to discuss any problems they are

- having. Offer the option to hold a phone call or video conference with them if necessary.
- Provide thorough, individualized, and personalized summative feedback, on assignments based on clear criterion (e.g., a rubric). Provide feedback within 3-5 days.
 - Consider alternative feedback approaches. If feedback needs to be detailed, cognitive, and task oriented, use text. If feedback needs to be more global and affective, use video or voice feedback. If feedback needs to be both, hold a synchronous session, particularly for group feedback.
 - “Cushion” critical feedback. In your feedback, acknowledge what students got right, praise their effort, and focus on strengths first. Encourage your students to think from different perspectives, ask thought provoking questions, and direct them to specific resources to review and/or bolster their assignment.
 - Let students know what you have learned through your review of their assignment. Describe how your engagement with them has helped you to grow as well.
 - Alert students that feedback has been provided via email or an announcement.
 - If you are going to be late in providing feedback, let students know in advance. Explain when you will be able to provide feedback by. Provide some broad details as to why you will be late, such as a family emergency or a business trip. Be careful not to provide excessive or inappropriate disclosure.
 - Offer students an opportunity to hold a discussion regarding their feedback. If you ask questions when providing feedback, respond to any replies to your questions.
 - Offer opportunities to resubmit assignments.
 - Send out a summarizing announcement or email highlighting key points from the module. Acknowledge and praise the class for their efforts. Specifically cite things that were discussed in forums or done on projects. Direct students to additional resources and/or encourage further investigation of a topic. Consider using a video announcement.

APPENDIX G

The Advocate at my Side

The advocate provides "great feedback" and is always present, available, and cares about student success. They are flexible and proactive. They go out of their way to help students whose success is the instructor's success. Their tone is positive, encouraging, reassuring. They are flexible and understanding. They answer quickly and thoroughly and provide clarity and direction. They engage in a dialogue about feedback and challenge students to go deeper. They are present in the discussion boards guiding and challenging students with questions. They challenge the students to go further. They encourage the students to submit first drafts for formative feedback and then they encourage students to resubmit assignments. They are not only focused on the students getting through the course, but rather they want to see the students really understand the material and they want to see them grow. They are inspiring and lead through example. They view their role not as being time-bound, but rather as being success oriented and they are flexible and available all of the time and across multiple channels of communication. These instructors are there to learn as much as they are there to teach and encourage. They are focused beyond student success in the course. They are focused on bringing the student into a community of practice and helping them to develop long-term as a peer and professional in the field.

The Guide on the Side

The Guide on the side instructor is dutiful. They provide "good" and "appropriate" feedback. Their course is clear. They provide instructional support such as lecture videos and synchronous sessions and point the group towards resources. They are timely in their responses. They make sure the students are submitting assignments on time. They provide feedback with enough time for students to incorporate that feedback into new assignments. While they are dutiful, they do not necessarily go the extra mile. They want to see their students successfully complete the course, but they are not focused as much on growth. They manage the course well, but they are not necessarily passionate leaders. They are encouraging and praise student work, but they don't necessarily build deep relationships with their students. Much of what they do is focused on managing the group and encouraging the group. They often use canned feedback that is not particularly unique to any one student. They are available during business hours and will be sure to get back to you when convenient. These instructors are there to teach you as well as possible and to provide you with resources that help you to understand the concepts. They are focused on you doing well in the course.

The Administrator

The administrator is not involved in the course other than marking off the submission and completion of assignments. They do not see themselves as being responsible for answering student questions or for supplementing the course materials. They believe the materials and course instructions should speak for themselves. This is an online class and they believe that it should be the student involved with the materials. They are there to receive your materials, process them and approve or reject them without much clarity as

to why. They don't want to be bothered by the students and try to pass off as much as possible to the system or to assistants.