PERCEIVED CONFIRMATION AND DISCONFIRMATION IN COMMUNITY COLLEGE
ONLINE DISTANCE-LEARNING COURSES

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Abstract

This qualitative study sought to discover how interpersonal confirmation and disconfirmation are perceived in online distance learning courses at the community college level by determining the specific communication teacher behaviors that cause confirmation and disconfirmation to be perceived by their students. The philosophical framework for this study stemmed from Martin Buber’s (1965) concept of the “interhuman.” The particular theories that grounded this study are the symbolic interactionism theory and two theories of interpersonal confirmation by Sieburg (1973) and Larson (1976). The data for this study was obtained through focus groups, individual interviews, and open-ended surveys. The results show that confirmation and disconfirmation can be perceived in a CMC context: online distance-learning course. The results also provide operationalized lists of confirming and disconfirming online teacher behaviors. The findings will further communication studies regarding confirmation and disconfirmation as it is perceived in CMC contexts, and will also serve to benefit distance-learning education research.
Table of Contents

CHAPTER 1: INTRODUCTION ........................................................................................................ 4
  The Importance of the Study .................................................................................................. 5
  Definitions of Terms Used .................................................................................................... 7
  Organization of Remaining Chapters .................................................................................. 7

CHAPTER 2: REVIEW OF LITERATURE ...................................................................................... 9
  Confirmation and Disconfirmation ...................................................................................... 9
  The Genesis of Interpersonal Confirmation ........................................................................ 9
  Philosophy of Communication ............................................................................................ 10
  Theory ................................................................................................................................ 13
  Measurement Tools and Research Studies .......................................................................... 22
  CMC .................................................................................................................................... 29
  Distance Learning ................................................................................................................ 31
  Summary of Literature and Research Question .................................................................... 34

CHAPTER 3: SCOPE AND METHODOLOGY .......................................................................... 36
  Scope of Study ...................................................................................................................... 36
  Study Population .................................................................................................................. 36
  Methodology ....................................................................................................................... 37
  Data Collection .................................................................................................................... 39
  Anonymity and Confidentiality ............................................................................................ 45

CHAPTER 4: THE STUDY ....................................................................................................... 47
  Results of the Study ............................................................................................................. 47
  Summary of Findings ........................................................................................................... 51
  Discussion ............................................................................................................................ 59

CHAPTER 5: SUMMARY AND CONCLUSIONS .................................................................... 71
  Limitations of the Study ....................................................................................................... 71
  Further Study Recommendations ....................................................................................... 72
  Conclusions ........................................................................................................................ 75

REFERENCES ......................................................................................................................... 76

APPENDICES .......................................................................................................................... 80
CHAPTER 1: INTRODUCTION

“Confirmation and disconfirmation may be the most pervasive and important aspect of interpersonal communication” (Cissna, 1976, p. 4). It is argued that in every communication encounter, there is an element of confirmation and disconfirmation taking place (p. 12). Evelyn Sieburg and Carl Larson formulated the most widely accepted definition of interpersonal confirmation and disconfirmation. They postulate confirmation as “any behavior that causes another person to value himself more,” while disconfirmation, on the other hand, refers to “any behavior that causes another person to value himself less” (as cited in Cissna & Keating, 1979, p. 49). Therefore, in nearly every human communication encounter, a person is either confirming or disconfirming the self-expression (identity) of the other person with whom he or she is communicating.

Research studies spanning fifty years across multiple disciplines show findings that explain the effects of confirmation and disconfirmation on a person’s self-experience (Buber, 1957; Cissna & Keating, 1979; Cissna & Sieburg, 1981; Dance & Larson, 1976; Ellis, 2000; Ellis, 2004; Laing, 1969; Sieburg, 1973; Watzlawick, Bavelas, & Jackson, 1967). The positive effects of confirmation range from satisfaction in marriage, increased participation in class from students, healthy family relationships, etc. (Cissna & Keating, 1979; Goodboy & Myer, 2008; Laing, 1969). The negative effects of disconfirmation range from schizophrenia, loss of identity, neglect, and poor cognitive and affective learning in the classroom (Dance & Larson, 1976; Ellis, 2000; Ellis 2004; Laing, 1969; Sieburg, 1973; Watzlawick, Bavelas, & Jackson, 1967). These wide-ranging, drastic effects that confirmation and disconfirmation can have on a person have made it a point of study among the fields of philosophy, psychiatry, speech communication, nursing, and teaching.
The foundational theoretical work regarding confirmation and disconfirmation continues to be applied to a variety of fields of study to date. However, with the growth of computer-mediated-communication (CMC), confirmation and disconfirmation have yet to be applied to this rapidly expanding medium. While CMC has been studied for several decades, the research has not focused on how confirmation and disconfirmation are perceived in the online environment.

Currently there are over 5 million college students enrolled in one or more distance learning internet-based course, and this number is expected to rise each year (Allen & Seaman, 2010). In addition to this, the 63% of the universities reporting to The Sloan Consortium claim that distance learning education is or will be a strategic necessity for their educational programs (Allen & Seaman, 2010). There is no doubt that distance learning education is a growing option among college students and universities today, and as such, research surrounding this field of education is growing.

Confirmation and disconfirmation have been studied in face-to-face classrooms but not distance learning classrooms (Ellis, 2000; Ellis, 2004; Sundell, 1972). Confirming teacher behaviors have been linked to improved cognitive and affective learning of the students (Ellis, 2000). Therefore, by researching how confirmation and disconfirmation are perceived in online distance-learning classes, the findings will further the research of confirmation and disconfirmation, while also adding to educational research and CMC research.

Importance of the Study

A search in Google Scholar on April 3, 2011, utilizing the term “online distance education” brought up 1,060,000 results, a search utilizing the terms “online distance learning education” produced 881,000 results, and yet another search with the terms “distance-learning
education” yielded 197,000 results, which supports that this is clearly a significant topic in education today. Online distance-learning education is certainly an important growing trend in today’s society, and when that is combined with the powerful effects of confirmation and disconfirmation, it is easy to see why a study linking the two is necessary.

Since a study dealing with confirmation and disconfirmation as it pertains to the online classroom has not been done, it is plausible to assume that distance-learning professors may not be aware of how their behaviors are perceived by students in this fashion (confirming or disconfirming). Disconfirmation has the potential to threaten a person’s fundamental sense of who he or she is, while confirmation is one way in which a person’s identity is solidified as a human (Stewart, 2006). With many online classes at community colleges lasting anywhere from 3 weeks to 16 weeks, this places students in an environment for an increased amount of time with a professor who is either confirming or disconfirming. This may have drastic effects on the students especially if that professor is unaware of how their behavior is affecting his or her students.

While many studies have been conducted in the context of the distance-learning classroom regarding mediated presence, teacher immediacy, and teacher caring there are not many, if any at all, that deal with confirmation and disconfirmation as perceived in the online classroom (Russo & Campbell, 2004; Ellis 2004). While this could be looked at from the relationships of the teacher-to-student, the student-to-teacher, and student-to-student, this study deals specifically with the teacher-to-student relationship, where the students would be viewed as the receivers and the teachers as the senders of the communication messages; meaning how do the students perceive the teacher’s communication behavior in online classes: confirming or disconfirming?
Definitions of Terms Used

**Confirmation**: For the purpose of this study, the definition of confirmation is a combination of the one used by R.D. Laing with the one used by Watzlawick, Bavelas, and Jackson. This study will therefore use this as the definition of confirmation, “the process through which individuals are ‘endorsed’ by others, which also implies recognition and acknowledgement of them. It is a necessary element of human communication and interaction involving a subtle but powerful validation of the other’s self-image” (Cissna & Sieburg, 1981, pp. 429-430).

**Disconfirmation**: This study will use the definition of disconfirmation used by Ellis (2000), which states that disconfirmation “negates the other as a valid message source and communicates to the other that he or she is less than human, that he or she is merely a thing, an object in the environment, valueless and insignificant as a human being” (p. 267). It also involves acts of indifference, imperviousness, and disqualification (Sieburg, 1973).

**Computer-Mediated-Communication (CMC)**: This refers to any communication that takes place via computer technology and usually refers to text-based communication.

**Online Distance-Learning Courses (DL)**: This refers to courses taught 100% online. The teacher and students log into a class website where course documents, lectures, notes, videos, public discussion posts can be viewed and utilized.

**Organization of Remaining Chapters**

This study is organized into five chapters. Chapter two is a literature review of the theoretical and philosophical concepts surrounding confirmation and disconfirmation upon which this study extends. It also briefly discusses computer-mediated-communication (CMC) and distance learning education to provide information regarding the context into which this study was conducted.
Chapter three includes the scope and methodology of this qualitative study and reasons for the choice of research methods used. Chapter four discusses the results of the study, a summary of themes that emerged from the data, and conclusions that can be drawn from this data. The fifth chapter includes the conclusions of this study and how they relate to current research being done in this field, limitations of the study, and suggestions for future research.
CHAPTER 2: REVIEW OF LITERATURE

The following section will review the literature that pertains to the topics of this study: confirmation and disconfirmation, confirmation and disconfirmation with regards to the classroom, computer-mediated-communication, and distance-learning education. The largest portion of this literature review highlights the literature on confirmation and disconfirmation because that is the foundation for this entire study. With this in mind, due to the gap in literature bridging confirmation and disconfirmation to CMC, this literature review is an exemplary review rather than exhaustive in the CMC and distance-learning course areas, as these are the contexts within which confirmation and disconfirmation were researched in this study.

Confirmation and Disconfirmation

The Genesis of Interpersonal Confirmation.

Confirmation and disconfirmation have been studied since the 1950’s. The early work done on confirmation and disconfirmation is not so much as competing or contradictory as it is adaptive. Each of the early scholars’ work provided additional information that stood upon the layers of research and findings provided by those before them. The scholars most often quoted regarding the foundational framework of confirmation and disconfirmation are Martin Buber, R.D. Laing, and the research team Watzlawick, Bavelas, and Jackson. It is upon their findings that scholars began to apply confirmation and disconfirmation to multiple areas of study.

Jewish theologian and philosopher Martin Buber first discussed interpersonal confirmation, the validation of another’s existence, during the 1950’s (Cissna & Sieburg, 1981). In his philosophical writings, Martin Buber placed a great deal of importance on what he called the “interhuman,” or in other words, “man’s personal dealings with one another” (Stewart, 2006, p. 681). According to Buber (1965), a person’s existence cannot be wholly established or
perceived unless he is in partnership or communication with another human; humans cannot fully exist without relational communication. This communication partnership (dialogue) is only genuine if both parties view each other as “beings” instead of “objects.” It is through this genuine dialogue that meaning is derived for both parties on an existential level and when this is reached, the interhuman is achieved (1965). Buber encouraged people to achieve honest, genuine dialogue that affirms the person as a being and includes a total awareness of the person with whom one communicates. It is this philosophy of communication that influenced what is now known as interpersonal confirmation.

Interpersonal confirmation is a vital aspect of the “interhuman” because without it one cannot attain genuine dialogue in the “interhuman” (Buber, 1965). Throughout his works, Buber consistently emphasizes the importance of confirmation in communication encounters and in fact, claimed that the level of “humanness” in a society is based on the extent to which its members confirm one another (Buber, 1957). Buber further expresses the importance of confirmation through his belief that the “inmost growth of self is induced by the confirmation in which one man knows himself to be ‘made present’ in his uniqueness by the other” (Friedman, 1965, p. 6). According to Buber, confirmation is achieved through “interhuman relation” (p. 6). Thus, by seeking to achieve the “interhuman”, one would also need confirmation as a means to that end.

Once Martin Buber introduced this idea of interpersonal confirmation, scholars began applying it to other areas outside of philosophy and religion. Psychiatrist R.D. Laing has also provided much foundational work in the area of interpersonal confirmation within the confines of psychiatry. He defined confirmation as “a process through which individuals are ‘endorsed’ by others, typically through recognition and acknowledgment” (Sieburg, 1973, p. 2). Laing also
determined that confirmation and disconfirmation could be experienced through visual, tactile, and auditory modes (p. 3).

While Buber mainly focused on confirmation alone, Laing sought to also study disconfirmation, which he describes as “attempts to constrain the other’s freedom, to force him to act in the way we desire, but with ultimate lack of concern, with indifference to the other’s own existence or destiny” (as cited in Sieburg, 1973, p. 3). Through his work, it was determined that disconfirmation had extremely negative effects on people, especially if experienced over long periods of time (Cissna & Sieburg, 1981). For example, Laing determined that schizophrenic people most often grew up in homes where they experienced disconfirmation on a regular basis from a parental figure (Watzlawick, Bavelas, & Jackson, 1967). He specifically describes the disconfirming experience of that child as:

one whose existence or authenticity has been subjected to subtle, but persistent, mutilation, often quite unwittingly… regardless of how he feels or acts, his feelings are denuded of validity, his acts are stripped of their motives, intentions and consequences, the situation is robbed of its meaning for him, so that he is totally mystified and alienated (as cited in Watzlawick, Bavelas, & Jackson, 1967, p. 87).

Laing’s work in demonstrating that disconfirmation can have such dire effects on a person is one of the reasons that it is of importance to study.

In Pragmatics of Human Communication, Watzlawick, Bavelas, and Jackson (1967) continued the study of confirmation and disconfirmation in the field of psychology. They used research from their psychiatric studies as well as some excerpts from counseling sessions to paint a vivid picture of confirmation and disconfirmation. According to Watzlawick et al. (1967), human communication has two levels: content and relation. Regardless of what is being
communicated on the content level, there is always a simultaneous message (meta-message or meta-communication) being communicated on the relational level too, and it is on this level where confirmation and disconfirmation have the most impact.

Watzlawick et al. (1967) also devised one of the most widely quoted formulas for describing the existential element that occurs during the metacommunicational level (the level of communication that deals with the relationship as opposed to the content) of communication encounters. This formula states:

Person $P$ may offer the other, $O$, a definition of self. $P$ may do this in one or another of many possible ways, but whatever and however he may communicate on the content level, the prototype of his metacommunication will be “This is how I see myself.” It is in the nature of human communication that there are now three possible responses by $O$ to $P$’s self-definition, and all three of them are of great importance [confirmation, rejection, or disconfirmation]. (Watzlawick, Bavelas, & Jackson, 1967, p. 84).

A confirming response by $O$ to $P$’s view of himself then suggests that $O$ acknowledged and/or accepted $P$’s existence and view of himself. This confirmation stands as the “greatest single factor ensuring mental development and stability that has so far emerged from communication studies” (p. 84). Rejection is not seen as disconfirming because to reject $P$’s view of himself, suggests that on some level this view was still acknowledged. Thus rejection can be viewed as falling in between confirming and disconfirming responses (Cissna & Keating, 1979). Rejection can serve to be negative or constructive. While rejection can be painful, there are times when it is necessary for one to reject the self-view of another, as a psychiatrist at times must do with her patients (Watzlawick, Bavelas, & Jackson, 1967).
The third response option to P’s view of himself is for O to disconfirm it. This response has the most harmful effects on a person as it usually involves a denial of one’s existence altogether. The difference between rejection and disconfirmation is that rejection suggests that P’s view of himself is wrong, whereas disconfirmation suggests P does not exist at all – there is no acknowledgement of P (Watzlawick, Bavelas, & Jackson, 1967). Disconfirmation can take the form of “total unawareness of the other, lack of accurate perception of the other’s point of view, and deliberate distortion or denial of the other’s self-attribution” (Sieburg, 1973, p. 4). The studies addressed in the latter section of this literature review deal primarily with confirmation and disconfirmation, not rejection.

The foundations of confirmation and disconfirmation are due primarily to the work of the scholars mentioned above: Buber, Laing, Watzlawick, Bavelas, & Jackson. Out of their work two theories of confirmation have been developed, as have several tools for measuring confirmation and disconfirmation in a variety of settings. In addition to this, many studies have been conducted bringing the principles of confirmation and disconfirmation to other fields of study. The remaining section of this literature review will discuss the relevant aspects of these developments beginning with the Symbolic Interactionism Theory and two theories of confirmation as developed by Evelyn Sieburg and Carl Larson.

Theory

One communication theory that seems to be accepted in assisting with the explanation of interpersonal confirmation is the Symbolic Interactionism Theory. This theory aligns with Buber’s beliefs that meaning is created through communication with others, and it helps to explain how and why confirmation and disconfirmation are perceived the way they are by each individual (Sieburg, 1973). One of the main themes of symbolic interactionism is that through
social interaction, humans assign meaning to the people and things they encounter in their lives, and this assigned meaning affects how they behave, especially in relationships (Blumer, 1986).

How one interprets the symbols (words, actions, etc) that a person projects at them during communication affects their self-image. If the symbols are interpreted and assigned a meaning of disconfirmation, this can have a harmful affect on one’s self-image, as noted by Laing (1969). If the symbols are interpreted and assigned a meaning of confirmation, it has the potential to strengthen one’s value and self-image. After all, “humans act toward people or things on the basis of the meanings they assign to those people or things,” and this can be both good and bad (p. 60).

While the Symbolic Interactionism Theory is quite helpful in understanding how one interprets communicative behaviors and assigns meaning to those behaviors (i.e. confirmation and disconfirmation), there also exist two specific theories of interpersonal confirmation. It is around these theories that the studies regarding confirmation and disconfirmation revolve. Both theories stand on the foundational literature presented above, and are strikingly similar while being distinctive enough to stand on their own.

Evelyn Sieburg created the first theory of interpersonal confirmation specifically for the speech communication field and she has refined it over the years (Cissna, 1976; Sieburg, 1973). Carl Larson created the second theory of confirmation, and though it was not initially designed as a theory on interpersonal confirmation, due to its similarities to previous confirmation research, it has been accepted and utilized by those studying confirmation and disconfirmation (Cissna, 1976). Dr. Kenneth Cissna (1976) wrote an excellent review discussing both theories in great detail. His review was utilized in the summaries of those theories below.
Sieburg’s Theory

Though studies had been conducted in the speech communication field that were similar to confirmation and disconfirmation, Evelyn Sieburg was the first scholar to directly apply the research of confirmation and disconfirmation to the speech communication field (Cissna, 1976; Sieburg, 1973). Prior to Sieburg’s work, confirmation and disconfirmation had primarily been discussed in the realm of theology, philosophy, and psychiatry (Buber, 1957; Laing, 1969, & Watzlawick, Bavelas, & Jackson, 1967).

Through her research, Sieburg composed a list of forty known possible responses in human communication as found in clinical studies in the psychiatry and speech communication fields. This list was then refined from forty responses down to twenty-four responses, as duplicate responses were eliminated, and a survey was created and distributed to determine which types of responses were preferred (confirming) and which were not preferred (disconfirming).

The results of the survey showed that confirming responses consisted of “direct response, agreement, clarification, supportive response, and expression of positive feelings” (agreement was removed from the list as Buber (1957) and Laing (1969) both proved agreement and disagreement did not necessarily equate to confirmation and disconfirmation), and the disconfirming responses consisted of “imperviousness, interruption, irrelevant response, tangential response, and unclear response” (Sieburg, 1973, p. 7).

These responses were then grouped into four clusters, which represent the four ways a person could respond to another person during a communication encounter. Essentially what Sieburg did was expound upon/revise the work of Watzlawick, Bavelas, and Jackson’s (1967) three ways of responding (confirmation, rejection, disconfirmation). Sieburg dropped rejection, kept
confirmation but called it dialogue, and then broke disconfirmation into three categories of indifference, disqualification, and imperviousness (Sieburg, 1973). Sieburg’s (1973) four response clusters and their communication descriptions are as follows:

1. Indifference Response (disconfirmation) – denies existence, involvement, or rejection of communication through silence when a reply is expected, monologue, absent or inappropriate nonverbal responses, disruptive interjections, interruptions, avoidance of self-expression or eye contact, physical distancing.

2. Impervious Response (disconfirmation) – denies the self-experience of the other through a lack of awareness of another’s perceptions, distortion of another’s self-image or emotional expression, interpretation, and evaluation

3. Disqualification (disconfirmation) – inhibits communication through irrelevant response, tangential responses, unclear communication, ambiguity, and contradictions

4. Dialogue (confirmation) – recognizes or endorses the other, acknowledges communication, accepts other’s self-experience, seeks involvement/relation, speaks when reply is expected, listens without interruption, responds relevantly and directly, uses personal language, shares self-experience, congruent verbal and nonverbal behavior

(Later, Sieburg and Cissna revised these into the three clusters of confirmation: recognition, acknowledgement, and endorsement) (Cissna & Sieburg, 1981, pp. 432-437; Sieburg, 1973, p. 23)

Sieburg then focused on the four meta-messages or metacommunication that are found within confirming and disconfirming responses. Essentially, she described the underlying relational messages contained within confirming responses and then states their corresponding disconfirming response. Cissna (1976) eloquently summarizes them as follows:
1. The first confirming meta-message is “You exist,” and the corresponding disconfirming meta-message is “You do not exist.”
2. The second confirming meta-message is “You are worthwhile,” and the corresponding disconfirming meta-message is “You do not matter.”
3. The third confirming meta-message is “I accept your way of perceiving,” and the corresponding disconfirming meta-message is “I deny your way of perceiving.”
4. The fourth confirming meta-message is “We are relating,” and the corresponding disconfirming meta-message is “We are not relating” (Cissna, 1976, p. 6).

In Sieburg’s original theory, she identified three aspects of self-experience that could be influenced positively or negatively by the meta-messages contained within the interaction with others. Sieburg (1973) believed that the most confirming response is one that confirms a person on all three levels of self-experience. Later, Cissna and Sieburg (1981) further developed them into four aspects of self-experience:

1. The element of existence (the individual acknowledges self as existing)
2. The element of relating (the individual sees self as a being-in-relation with others)
3. The element of significance, or worth
4. The element of validity of experience (p. 431)

Though Sieburg managed to create a theory that defines the “what” aspect of confirmation and disconfirmation, she did not discover the “why.” In an effort to explain why people perceive certain actions as confirming and certain actions as disconfirming, Sieburg (1973) utilized the symbolic interactionism theory, which claims that people assign their own meaning (feelings) to symbols (another’s actions). Through her research, it was determined that although each person to some extent assigns meaning to the symbols around them, there are “certain symbolic cues
that are consistently interpreted by most people” (p. 9). These consistently interpreted cues are those that provoke feelings of confirmation and disconfirmation.

As Sieburg’s research validated the consistency of the response clusters and the confirming and disconfirming behaviors, she compiled the findings into four primary themes of confirmation. These themes stand as “assertions” regarding the nature of confirming responses being more desirable and disconfirming responses being more undesirable. Sieburg (1973) goes into great detail explaining each theme and the effects these behaviors may have on one’s self-experience. The four themes are:

1. It is more confirming to acknowledge another person’s existence than to treat him as nonexistent.
2. It is more confirming to accept another’s feelings than to deny, modify, interpret, or evaluation them.
3. It is more confirming to respond relevantly than irrelevantly or tangentially.

Sieburg’s (1973) goal in constructing this theory was to describe confirmation and disconfirmation by categorizing and classifying all of the aspects surrounding them. Her focus on the meta-messages (relational aspects of communication) implicit in every confirming and disconfirming response helped bring confirmation and disconfirmation to an interpersonal communication level. Sieburg’s (1973) theory has been widely accepted and her findings are quoted in almost every single study regarding confirmation and disconfirmation. Thus, her work on confirmation and disconfirmation within the speech communication field has proven to be invaluable.
Larson’s Theory

Carl Larson inadvertently developed the second theory of confirmation through his own work and his work with Frank Dance (Cissna, 1976). Dance and Larson (1976) intended to describe and determine the “aspects of the ‘linking function’ in human communication at the interpersonal level” (Cissna, 1976, p. 8). The linking function referred to the way in which “humans ‘link’ themselves to others through establishing a relationship between one’s self and others” (p. 8). They also sought to determine the way “in which individuals perceive themselves and others communicating different levels of acceptance and rejection in their interpersonal relationship” (Stumpe, 1992, p. 9). Though Larson uses the term “rejection” it does not resemble “rejection” as dealt with by Watzlawick, Bavelas, & Jackson (1967), but instead most closely aligns with Sieburg’s (1973) definition of “disconfirmation.” Larson and Dance’s (1976) research findings so closely resembled the aspect of human communication that Sieburg (1973) dealt with regarding confirmation and disconfirmation, that it is now viewed as the second theory of confirmation (Cissna, 1976, p. 8).

Larson’s theory stems from the idea that risk is involved with communication acts because most communication acts involve degrees of disclosure (Cissna, 1976). This risk is due to the fact that when one self-discloses in a communication act, it is met with either acceptance (confirmation) or rejection (disconfirmation) of one’s self-image. However, Larson does not believe that every communication act involves acceptance or rejection of one’s self-image (Cissna, 1976). Larson’s (1976) theory suggests that acceptance or rejection of one’s self-image only occurs when responses cause “an orientation shift away from the content of a message and toward an evaluation of either one’s own or the other’s self” (Cissna, 1976, p. 12). In that sense,
Larson’s theory is similar to Sieburg’s theory in that they both deal with the meta-messages of a communication act.

As in Sieburg’s (1973) theory, Larson also creates a list of possible responses that occur at the meta-message level of communication act. His theory focuses more on the perspective of the receiver of the message – the person’s whose self-image may be either accepted or rejected. Larson’s (1976) list of four possible responses and their communication behaviors include:

1. Explicit rejection – negative evaluation of a person or overt dismissal of communication content
2. Implicit rejection – interruptions, imperviousness, irrelevant responses, or tangential responses
3. Explicit acceptance – positive evaluation of a person or communicative content
4. Implicit acceptance – clarifying responses, expressions of positive feelings, or direct response (Cissna, 1976, pp. 9-10)

The next section of Larson’s (1976) theory deals with the impact that acceptance or rejection can have on the receiver. If acceptance is perceived, then the receiver and the communication act will continue as normal. If rejection is perceived, then there are three possible reactions that a receiver most typically performs. The first impact that may occur is for the receiver to reevaluate the other person. This option involves the receiver evaluating the other person instead of making changes or evaluating his own self-image (Cissna, 1976). The second impact option is if the receiver amplifies the aspect of his self-image that is being rejected by the other person. The receiver’s goal in amplifying the rejected aspect of her self-image is typically to cause the other person to change their rejection to acceptance of that aspect (Cissna, 1976). The third impact option of the receiver is that she can salvage any remaining aspects of her self-
image that are left. This option usually occurs when a particular aspect of one’s self-image is consistently rejected by multiple people, thus resulting in the receiver modifying their own self-image (Cissna, 1976). Whichever impact option a receiver chooses to employ largely depends on “the certainty of one’s self-image, the importance of the other person, and the consistency of the others’ responses” (p. 13).

Though Larson and Dance (1976) deal with the same concepts as Sieburg (1973), acceptance (confirmation) and rejection (disconfirmation), the two theories differ in a way that prevents redundancy and allows for the two theories to coexist through enhancement of relevant aspects of interpersonal confirmation and disconfirmation. Sieburg (1973) explores the characteristics, levels, and meta-messages of confirmation and disconfirmation through grouping them into clusters, whereas Larson (1976) focuses on what responses cause shifts to take place in the conversation that invoke feelings of acceptance and rejection, along with descriptions of the three types of impacts that acceptance and rejection can have on the receiver. Sieburg (1973) believed confirmation and disconfirmation could occur in varying levels, whereas Larson (1976) believed there are no degrees of confirmation or disconfirmation (Cissna, 1976).

Sieburg (1973) also saw every communication message as being confirming or disconfirming, while Larson (1976) disagreed, believing that only the messages that cause a shift on the relational level could contain confirming or disconfirming messages (Cissna, 1976). In regard to this notion, Laing (1967) and Cissna (1976), align more with Sieburg’s stance. According to Laing (1967), every interpersonal action “is either predominately validating, confirming, encouraging, supportive, enhancing, or it is invalidating, denying, discouraging, undermining and constricting,” (p. 34). Cissna (1976) found that all speech communication
captured during the audio recordings of married couples did on some level contain varying
degrees of either confirming or disconfirming messages (Cissna, 1976).

Regardless of the differences, Sieburg and Larson’s theories of confirmation are both
continually utilized in studies of confirmation today. They provide the theoretical framework
needed to navigate the early foundations provided by Buber, Laing, Watzlawick, Bavelas, &
Jackson, thus allowing for relevant studies to be conducted bringing confirmation and
disconfirmation to new avenues of human communication contexts resulting in a continued
growth in the depth of knowledge regarding the phenomena of confirmation and disconfirmation.

**Measurement Tools and Research Studies.**

Once the groundwork was laid by the scholars above, measurement tools were then
created to measure confirmation and disconfirmation in a variety of settings, and several studies
have been conducted applying confirmation and disconfirmation to a variety of disciplines. A
relatively large amount of the work on confirmation and disconfirmation has come from the
University of Denver and unfortunately much of that work is unpublished (Cissna, 1976; Jacobs,
1973; Sieburg, 1973; Sundell, 1972). Through these studies more has been learned about the
nature and impact of confirmation and disconfirmation, and several tools have been designed to
measure them.

There are two ways in which confirmation and disconfirmation are measured: (1) through
observational coding of communication encounters and (2) through identifying the degree to
which one perceives confirmation and disconfirmation (Cissna, 1976). The first method allows
the researcher to watch and code the utterances made during communication acts, thus
determining extent to which each party confirms or disconfirms the other. This method also
requires that the coders be trained extensively on the types of confirmation and disconfirmation
behaviors to ensure accurate coding. Two popular measurements tools used in this method are
the Interpersonal Responsiveness Category System created by Sieburg (this system has been
revised from its original concept) and the Confirmation and Disconfirmation Rating Instrument
(CDRI) created by Garvin and Kennedy (1986).

In an effort to stress the importance of accurate and reliable statistical tests in
confirmation coding, Cissna, Garvin, and Kennedy (1990) discuss five potential problems faced
by researchers who seek to use observational coding in their studies of confirmation and
disconfirmation. These problems range from unitizing reliability, reliability of the categories
(lack of category-by-category measures), and study data reliability (1990). Cissna (1990)
conducted a study intentionally to demonstrate the correct and valid way a confirmation coding
study should be conducted.

The second method for measuring confirmation and disconfirmation is to determine
whether or not an individual is experiencing or perceiving confirmation and disconfirmation in a
variety of settings and relationships. Again, Sieburg (1973) has developed one of the most
widely used measurement tools for this type of method as well. The Perceived Confirmation
Scale is a six-item Likert scale in which participants answer questions regarding specific
communication encounters with individuals. The questions range from “He/she is aware of me,
he/she isn’t at all interested in what I have to say, he/she accepts me,” etc. (Cissna, 1976,
Sieburg, 1973). Several other studies have been conducted confirming the validity and test/retest
nature of this measurement tool as well.

The measurement tools and foundational framework of confirmation/disconfirmation
have enabled scholars to research confirmation/disconfirmation in a variety of settings such as
family, marital relationships, supervisor/subordinate relationships, nurse/doctor relationships,
and student/teacher relationships. Though each study deals with a specific relationship element in human communication, the findings also expound on the nature of confirmation/disconfirmation as well. The studies of confirmation and disconfirmation across a variety of fields and relationships further support the pervasiveness of the confirmation construct.

Studies of confirmation and disconfirmation have proven the beneficial nature of confirmation and the harmful/negative effects of disconfirmation. For example, Sieburg (1969) proved, through coding the communication of small groups, that effective groups used confirming behaviors while the “dysfunctional” groups tended to use more disconfirming behaviors (Cissna, 1976). This research coincides with the findings of Laing (1969) that showed most schizophrenics came from dysfunctional homes, further supporting the idea that dysfunctional communication contains aspects of disconfirming behaviors.

Some studies have tested the earlier work of Sieburg, which lead to some revisions in Sieburg’s initial confirmation construct (Cissna, 1976; Jacobs, 1973). For example, the earlier work of Sieburg showed that confirmation behaviors existed on a hierarchy with the most confirming behaviors on top and the least confirming on the bottom. However, through simulated interviews, Jacobs (1973) was able to show that people do not experience confirmation on varying hierarchical levels (although imperviousness did show to have a higher level of disconfirmation than the other behaviors). While people do respond differently to confirming behaviors than disconfirming behaviors, there is not a significant difference in how people respond from confirming behavior to confirming behavior, or within disconfirming behaviors (Jacobs, 1973).
Clarke (1973), Cissna (1976), and Keating (1979) explored the applications of confirmation and disconfirmation in the realm of marital relationships (Cissna, 1976; Cissna & Keating, 1979). Through Clarke’s work it has been determined that perceived confirmation accounts for a significant amount of the satisfaction-attraction in marriages, while self-disclosure plays an insignificant role (Cissna, 1976). Cissna and Keating (1979), on the other hand, focused on the effect of facilitative communication (empathy, respect, genuineness) of one marriage partner and the extent to which the other marriage partner felt confirmed. Through their work it was determined that females were confirmed by the facilitative communication of males, yet there was no significant relation between female communication and the males’ feelings of being confirmed (Cissna, 1976; Cissna & Keating, 1979). Thus suggesting that the variables that invoke feelings of confirmation were different for males and females.

The medical field has also employed the use of confirmation/disconfirmation in an effort to analyze the relationship between nurses and doctors (Garvin & Kennedy, 1986). The study conducted by Garvin and Kennedy (1986) does not provide further information regarding the confirmation/disconfirmation phenomenon, however it is useful in analyzing their methods for future confirmation/disconfirmation studies. Garvin and Kennedy (1986) used a simulated environment where a nurse and doctor (who did not normally work together) met to discuss a medical issue not related to their jobs. Their study found that 87% of the communication between the nurse and doctor pairs contained confirming behaviors. However, they note that this is contradictory to most research regarding nurse-doctor relationships and suggest their study may have differed due to the simulated environment, the fact that the nurse and doctor did not know each other, and the topic was not related to their jobs (Garvin & Kennedy, 1986).
It is not clear whether the simulated environment of Garvin and Kennedy’s (1986) study that did not reflect the actual work environment of the nurses and doctors resulted in inaccurate levels of disconfirmation and confirmation. However it does serve to show that if researchers want to determine the level of confirmation/disconfirmation occurring in relationships of any kind, the experiment should most accurately reflect the real work environment of the participants. For instance, when Cissna and Keating (1979) studied confirmation and disconfirmation in marital relationships, they used actual married people, not men and women who had never met, and they had the married couples discuss an aspect of their own choice that related to their marriage. Also, when Ellis (2000, 2004) studied confirmation/disconfirmation in classroom settings, she had students rate their actual teachers from classes in which they were currently enrolled. For a confirmation/disconfirmation study to stray too far from the actual environment of the area being studied, there is a risk that the results may not accurately reflect the levels of confirmation/disconfirmation coded or perceived by the participants.

**Confirmation, Disconfirmation, and the Classroom**

As discussed above, confirmation and disconfirmation have been applied to several areas such as psychiatry, speech communication, family relationships, nursing, etc. One such area that relates most closely to this study is the classroom. Because of its relevancy to this study, the following section will be devoted solely to literature related to teaching and confirmation.

To date, a limited number of studies have been conducted in face-to-face classroom settings regarding confirmation and disconfirmation. Sundell (1972) and Leth (1977) conducted the earliest studies of confirmation and disconfirmation as it occurs in the classroom. The studies were not competing or contradictory, as both studied a different aspect of the phenomena affect in the classroom.
Sundell’s (1972) findings showed that content agreement was tied to the perception of teacher confirmation, and this response most often set the confirming teachers apart from the disconfirming ones (Cissna & Keating, 1979). Another important finding from Sundell’s (1972) research dealt with the possibility of confirmation being “contagious,” as confirming teachers tended to have confirming students while disconfirming teachers tended to have disconfirming students (Cissna, 1976). Leth’s (1977) research focused on perceived confirmation in the classroom and found that perceived confirmation contributed to positive teacher-student relationships (Ellis, 2000). Leth (1977) also found that “female public speaking instructors were perceived as more confirming than male teachers” (Ellis, 2000, p. 267).

Most recently, Ellis (2000, 2004) and Goodboy and Myers (2008) have studied the effects that confirmation has on students’ participation, learning, and feelings of confirmation. Ellis (2000) has also designed a tool (Teacher Confirmation Scale) that measures perceived confirmation of teacher behavior. Her tool has been proven statistically valid and passed the test/retest requirement. One of the benefits of the TCS is that it transforms vague confirmation traits (e.g. respect, acceptance, trust) into specific teacher behaviors that can be measured and acknowledged by students (Ellis, 2000).

These studies have proven valuable for confirmation/disconfirmation studies as well as educational fields. For example, confirmation has been directly linked to improved levels of student learning (Ellis, 2000). Ellis (2000) provided statistical data showing that cognitive learning is directly linked to affective learning and affective learning is directly linked to teacher confirmation – thus showing an indirect link between teacher confirmation and cognitive learning.
Confirming teacher behaviors have also been linked to increased feelings of confirmation within students (Ellis, 2004). In an effort to determine if the confirming teacher behaviors actually invoke feelings of confirmation in students, Ellis (2004) surveyed 295 college students in regard to the professor of the course they had most recently attended that day. Students were given Sieburg’s (1973) Perceived Confirmation Scale, and Ellis’ (2000) Teacher Confirmation Scale. 60% of the students surveyed showed that their feelings of confirmation were related to the confirming behaviors demonstrated by their professor (Ellis, 2004).

The survey results also demonstrated that there was not a hierarchy of confirmation behaviors exhibited by professors, as any perceived confirming teacher behavior lead to a high feeling of confirmation within the students (2004). It would be of worth to determine if perceived disconfirming teacher behaviors do not have a hierarchy either. Especially because that is where Sieburg (1973) and Larson (1976) disagreed. Sieburg believed disconfirming responses had varying degrees with imperviousness being the most disconfirming, whereas Larson believed that all disconfirming responses were equally disconfirming.

Perceived confirming teacher behaviors have also been linked to lower levels of receiver apprehension (RA) in students and higher levels of classroom participation and quality of relating with an instructor (Ellis, 2004; Goodboy & Myers, 2008). Goodboy and Myers (2008) believe that because studies regarding teacher caring closely relate to the characteristics of confirmation, it is not surprising that many of these benefits stemming from teacher confirmation are also seen in studies surrounding teacher caring.

From the few studies performed on confirmation and disconfirmation as it relates to the classroom, many valuable findings have surfaced regarding student learning and participation, student-teacher relationships, and the affects of teacher behavior. The research in this area is
limited and thus warrants future studies to be conducted regarding confirmation/disconfirmation in the classroom. For example, how does student confirmation affect teachers, what is the effect of confirmation/disconfirmation between students, or as this study seeks to determine, what teacher behaviors are perceived as confirming or disconfirming in the online classroom?

**CMC and Distance Learning**

The ultimate focus of this study is to bring the current information surrounding confirmation and disconfirmation to the online classroom setting, specifically to discover what communication behaviors are perceived as confirming and disconfirming. While the main focus and framework involves confirmation and disconfirmation, it is necessary to devote a small section of this literature review to CMC and distance learning as it relates to interpersonal communication. As mentioned in the introduction, current enrollment in distance learning internet-based courses exceeds 5 million, thus demonstrating its current relevancy, which led to its use in this study.

**CMC**

Many theories and studies have been conducted regarding computer-mediated-communication (CMC), however for the purpose of this study, only that which deals with the interpersonal nature of CMC will be acknowledged. For decades scholars have debated whether or not interpersonal relationships can be maintained through CMC and whether or not face-to-face communication is preferred for interpersonal communication as opposed to CMC (Griffen, 2009).

The early beliefs of CMC reflect the views of it being primarily technical and inferior to face-to-face communication regarding interpersonal exchanges (Walther, 1995). Due to the lack of facial, verbal, and nonverbal cues in CMC, many scholars see it as a hindrance for forming
and maintaining interpersonal relationships (Tidwell & Walther, 2009). This view is evident in the early CMC theories such as social presence theory, lack of social context cues theory, and media richness theory (Walther, 1995).

However, more work is being done that challenges this line of thinking to show that while communication cues differ between face-to-face and CMC, there is no reason to suggest that interpersonal communication cannot exist in CMC (Griffin, 2009; Tidwell & Walther, 2002; Walther, 1995). For example, through his social information processing theory, Walther showed that relationships will develop and grow in CMC as the parties involved learn more about each other, however, with CMC people need more time for this to occur than in face-to-face settings (Griffin, 2009). Early studies did not allow for participants to have extended periods of time to gain information about the other, thus leading to the belief that interpersonal communication does not occur during CMC (Griffin, 2009; Walther, 1995). Yet when Walther later conducted studies with CMC test groups, he allowed extended to time for the relationships to grow among participants. At the conclusion of the studies, participants reported to have experienced a level of interpersonal communication that was comparable to the face-to-face medium, it just occurred at a slower rate (Griffin, 2009).

Much work has been done by Joseph Walther (1995, 2002; Griffin, 2009) to defend CMC as a valid medium for experiencing interpersonal communication. He has shown that through CMC, people reinvent or form new communication cues to replace lost face-to-face cues (Griffin, 2009). This is what sparked the design of this study: if some face-to-face communication cues change once on CMC, will that then affect how confirmation and disconfirmation are perceived in online environments? Since confirmation and disconfirmation behaviors have been mapped out in the face-to-face realm, will they change or be perceived in
new or different ways during CMC encounters? These are the questions this study seeks to answer.

**Distance Learning**

Distance-learning education first developed as teaching through correspondence in 1833 in Europe (Schlosser & Anderson, 1994). In the late 1800’s academic degrees began to be awarded to people who had been educated through correspondence instruction, and in the early 1900’s Illinois Wesleyan offered bachelor, master, and doctoral degrees to correspondence students (Schlosser & Anderson, 1994). In the U.S., the growth of electronic and media technology, allowed for radio stations to be utilized for distance-learning in the 1920’s, and between the 1930’s and 50’s, televisions were implemented in distance-learning (1994). The 1980’s saw satellites being used to further distance learning and in the late 60’s the first distance-learning universities began popping up (1994). Today, distance-learning education has grown to become a normalcy in education and the technological advancements (internet, email, chat, video, etc.) have increased the quality with which distance learning can be facilitated. Multiple distance learning universities exist and many brick-and-mortar schools are now offering distance learning courses and degrees as well.

What started simply as correspondence courses has now grown into an impressive educational system. While the definition and elements of distance learning varies, most scholars (Keegan, 1988; Garrison, and Shale, 1987) agree that distance learning must include (1) the physical separation or distance between the teacher and the student, (2) the use of technology to facilitate the communication and instruction, and (3) two-way communication between the teacher and student, where either party has the ability to instigate communication with the other (as cited in Schlosser & Anders, 1994).
Allen & Seaman (2010) also note that distance learning has varying degrees: (1) traditional courses are those where 100% of the course is face-to-face, (2) web facilitated courses are those where 1%-29% of the course uses web-based technology to assist in the instruction, (3) blended/hybrid courses are those where 30%-79% of the courses uses web-based technology to facilitate instruction blended with face-to-face instruction, and (4) online courses are distance-learning courses where 80% - 100% of the course is facilitated through the use of web-based technology. For the purpose of this study, only the online distance-learning courses will be used, primarily those where 100% of the course is facilitate through online web-based technology.

Distance learning scholar, Keegan grouped the existing distance learning theories into three categories: (1) theories of independence and autonomy, (2) theories of industrialization of teaching, and (3) theories of interaction and communication (as cited in Schlosser & Anderson, 1994). The theory most applicable to this study is “guided didactic conversation” developed by Borje Holmber (1994, p. 17). Part of this theory postulates that emotional involvement and personal relation between the teacher and the student would contribute to students’ learning pleasure (1994). Relating is an element of confirmation, and as Ellis (2000, 2004) research showed, teachers that exhibit confirming behaviors improve students’ cognitive and affective learning. Therefore, it would be worth conducting a future study to determine if distance-learning teachers exhibit confirming behaviors in online courses, would it also contribute to student learning.

Several studies conducted regarding the validity of distance learning show that “instruction is neither improved nor denigrated by delivery methods” (face-to-face vs online) (Maushak & Ellis, 2003, p. 131). While technology does play a role in the success of distance learning, a great part of the responsibility it is placed on the teachers as well (Schlosser &
Anderson, 1994). A widely quoted statement from Clarke (1983) regarding this view claims, “the best current evidence is that media are mere vehicles that deliver instruction but do not influence student achievements any more than the truck that delivers our groceries causes changes in nutrition” (as cited in Maushak & Ellis, 2003, p. 131). This suggests that we cannot rely on the method of distance learning to teach students, but that teachers must learn to adapt to this new mode of instruction to ensure that learning will still occur in this medium (Schlosser & Anderson, 1994). Because distance learning is a different format than face-to-face instruction and students learn on a more independent level, university administrators are encouraged to offer pre-service and in-service training for teachers preparing them for distance learning teaching styles, as well as technological training to heighten their technology competency (1994).

As Ellis (2000, 2004) has shown, confirmation does lead to increased student learning in face-to-face environments, it is only natural that teachers be trained on the confirming communication behaviors that are perceived by students in the online environment as well. Discovering these perceived online confirming communication and disconfirming behaviors is the objective of this study. While the main focus of this study is regarding confirmation and disconfirmation, this findings from this study would not only add to the confirmation and disconfirmation research, but would hopefully prove beneficial to the distance-learning education field as well, especially if future studies are done to determine whether or not Ellis’ (2000, 2004) findings are indeed transferrable to the online classroom. The findings of this study would thus pave the way for future studies regarding confirmation and disconfirmation as it relates to CMC and as it relates to distance learning education.
Summary of Literature and Research Question

If meta-messages with the power to confirm or disconfirm the self-experience of an individual exist during all or most face-to-face communication encounters, and it is possible to engage in interpersonal communication through the use of computer-mediated-communication, then it is not unfounded to expect to find confirming/disconfirming meta-messages in computer-mediated-communication (CMC) (Buber, 1957; Cissna, 1976; Cissna & Sieburg, 1981; Griffin, 2009; Laing, 1969; Sieburg, 1973; Walther, 1995; Watzlawich, Bavelas, & Jackson, 1967). And if these meta-messages do exist in CMC, it is expected that they might be communicated with different behaviors than they are during a face-to-face communication encounter simply because communication cues in CMC can differ from face-to-face communication cues (Griffin, 2009; Walther, 1995; Walther & Tidwell, 2009).

Furthermore, due to the numerous studies applying confirmation and disconfirmation to specific contexts within face-to-face encounters such as nursing and teaching, one could infer that confirmation and disconfirmation could also be perceived and applied to specific contexts within CMC, such as online distance-learning classes (Ellis, 2000; Ellis 2004; Garvin & Kennedy, 1986). Therefore, this study expected to discover the communication behaviors that lead to the perception of confirmation and disconfirmation during CMC within the specific context of online distance-learning classes, and that while the same confirming and disconfirming meta-messages are expected to be communicated in CMC, the perceived behaviors that carry the meta-messages may vary slightly from the face-to-face behaviors because of the difference in communication cues for each medium.

Specifically, the purpose of this qualitative inquiry is to investigate and determine what teacher communication behaviors are linked to student perceptions of confirmation and
disconfirmation during computer-mediated-communication in online distance learning courses at the community college level. There is one objective included in this research study:

1. Determine the online teacher communication behaviors that students perceive to affect their self-experience either positively (confirming) or negatively (disconfirming) in the following areas:
   a. Their element of existence
   b. Their element of relating
   c. Their element of significance or worth
   d. Their element of validity of experience
CHAPTER 3: SCOPE AND METHODOLOGY

Scope of this Study

Though the initial question that sparked this study was, “how is confirmation and disconfirmation perceived in the realm of CMC,” the scope of this study is narrower. Because CMC is a rather broad context, this study was conducted under the belief that it is best to start with a small facet of CMC in order to learn more about it as a whole. Therefore, the scope of this study is how confirmation and disconfirmation are perceived specifically in distance-learning online courses offered at the community college level. The relationship context of this study focused on the teacher and student: how teacher behaviors were perceived as confirming or disconfirming by their students. It was for this reason that it proved best to follow a qualitative research design for this study, as qualitative research “seeks illumination, understanding, and extrapolation to similar situations through the use of context specific settings” (Golafshani, 2003, p. 600).

Study Population

Purposive sampling was used because the goal of this study was to gain insight into the confirmation/disconfirmation phenomenon as perceived through individuals in online courses (Onwuegbuzie & Leech, 2007). This sampling method along with the qualitative research approach was believed to offer a maximized richness of data to be collected through the context at hand (Andenoro, 2005). Through this purposive sampling, there was only two criteria required of each sample member: (1) must be 18 years of age or older, (2) must be enrolled in or have completed an online distance-learning course at a community college, where the course was taught 100% online. These criteria allowed for the participants to possess an intimate knowledge of the online distance-learning classroom, thus enabling them to discuss the specific teacher
behaviors they experienced in those online classes and how those behaviors were perceived (confirming/disconfirming). Overall, there were 36 participants in this study, and the majority of them came from a community college in Houston, TX, and a community college in southern CA.

The age, ethnicity, gender, and grade level were collected through a handout (see Appendix A) for the purpose of collecting any biographical information that may play a part in how one perceives confirming and disconfirming behaviors. The participants consisted of 23 Caucasians, 8 Hispanics, 1 African-American, 1 Asian, 1 Cuban, 1 Puerto Rican, and (1 N/A). The median age of all participants was 23.86, and the male to female ratio was 11:25. The diverse community college population is evidence by the variety of college levels present in this population. The grade level ranged from college freshman to master’s degree graduate (2 master degree graduates, 4 graduate students, 5 bachelor degree grad, 5 college seniors, 7 juniors, 9 sophomores, 3 freshmen, and 1 N/A).

The number of hours each participant spent using CMC per week, and the number of online distance-learning courses each participant had completed were also collected with the same handout in order to see if there was any correlation between CMC experience and perception of confirmation and disconfirmation. The CMC usage ranged from 5 hours per week to 88 hours per week, with the total average being 17.91 hours per week. The number of online distance-learning courses completed ranged from 1 to 13, with the total average being 2.92 (30% had only taken 1 course and 70% had taken 2 or more DL classes).

Methodology

The methodology for this qualitative study closely resembled that of Ellis’ (2000) study as she utilized focus groups, individual interviews, and content analysis to determine the confirming and disconfirming teacher behaviors perceived in face-to-face classrooms (this
current study also included open-ended question surveys). The general methodology used for the Ellis (2000) study proved valid as it provided the necessary data for determining confirming and disconfirming teacher behaviors in the classroom. It also proved valid for this study as similar information was sought, yet in a new location and medium: the online distance-learning classroom.

Trustworthiness

With a qualitative study, the researcher is heavily involved in the research process and must ensure the trustworthiness of the research conducted and the data collected. For interpretivist qualitative studies, trustworthiness is typically determined by: credibility, transferability, confirmability, and dependability (Carcary, 2009; Shenton, 2004).

Credibility was established for this study by utilizing research methods and questions that have been used by previous studies of a similar concept. This study relied on the Ellis (2000) study for how best to collect the data being sought, as that study also looked at what teacher behaviors student perceived to be confirming or disconfirming. Credibility was also established through keeping the research process transparent, acknowledging limitations of the study, and by utilizing triangulation through the use of different methods to collect data: focus groups, interviews, and surveys.

Transferability was addressed through purposive sampling and through expanding the sample sites to multiple community colleges, primarily the community college in Houston and the community college in southern CA. This allowed for insight to be collected from participants who experienced the same context of online distance-learning courses, yet at different colleges with different teachers allowing for diverse experiences. Transferability was also addressed by providing “thick description of the phenomenon under investigation to allow readers to have a
proper understanding of it, thereby enabling them to compare the instances of the phenomenon described in the research report with those that they have seen emerge in their situations” (Shenton, 2004, p. 70).

Confirmability was addressed by constant comparative analysis of the participant responses to ensure that their intended meaning was accurately captured and that the data was accurately being used to create the lists of confirming and disconfirming teacher behaviors. The use of three different data collection processes (focus groups, interviews, and surveys) along with the use of participants from multiple community colleges helped to ensure that triangulation was included in this study. Comparative analysis and triangulation improve confirmability in that they help to make certain that “as far as possible, the work’s findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher” (Shenton, 2004, p. 72).

To address dependability, the research methods, context, and participant information is given in detail. This enables a “future researcher to repeat the work, if not necessarily to gain the same results, and/or to assess the extent to which proper research practices have been followed” (Shenton, 2004, p. 71).

Data Collection

The data for this study was collected through the use of three methods: focus groups, individual interviews, and open-ended online surveys. The focus groups were held via Skype video chat with students from a community college in southern CA – the focus groups were recorded with the participants’ consent. The individual interviews were held in person or over the phone with individuals who had completed or were currently enrolled in online classes at a community college in Houston or the community college in southern CA. Individuals who had
completed or were currently enrolled in online classes at community colleges throughout the United States completed the open-ended online surveys. The exact same questions were used for the individual interviews and open-ended online surveys.

Though the focus group questions were different from the interview and survey questions, all were created with Flanagan’s (1954) critical incident approach in mind, as it served useful in the Ellis (2000) study to assist students with the incident recall process as they discussed behaviors that caused them to feel confirmed or disconfirmed in class. The Flanagan approach suggests the wording of the question be the same every time it is asked because adjusting even one word may result in completely different responses (Flanagan, 1954, p. 16). It also advises that the questions refer to the general aim of the study, while also specifically stating the type of behavior the participant is being asked to recall. This was taken into consideration during the creation of the focus group, interview, and survey questions.

The Flanagan critical incident approach was also beneficial in that it is typically used to “gather important facts about behaviors in a defined situation” by asking participants to recall specific incidents regarding the topic of research at hand (Flanagan, 1954, p. 9). If participants give a vague answer, it is presumed that they do not have a clear recollection of the incident they are describing and it may contain incorrect information (p. 14). Whereas specific, detailed responses are more likely to show that the participant clearly recalls the incident. Also, prior to conducting the individual interviews, group interviews, and surveys, the facilitator is encouraged to explain to the participants the purpose of the study, who or what it is being conducted for, key definitions, the type of people who are being asked to participate, and the anonymity of the participants. All of this was done when conducting the research for this study.
For the focus groups, interviews, and surveys, the students were not required to give examples solely from the online distance-learning course they were currently registered in, but could also include examples from any online distance-learning course they had completed in the past.

Because time was more of a luxury during the focus groups, those questions incorporated the four aspects of self-experience that can be positively or negatively impacted during communication with others, as this assisted in establishing a more detailed categorization of perceived confirming and disconfirming behaviors in the online medium and context of distance-learning classrooms. However, the interviews and surveys used shortened, modified questions without going into the four aspects of self-experience, just as the Ellis (2000) study did.

Not only did this research method establish a list of confirming and disconfirming behaviors in an online classroom, but by acknowledging and utilizing these four aspects of self-experience during the content analysis and categorization processes this method also provided insight into what specific areas of experience a particular communication behavior may affect (existence, relating, significance, validity of experience).

**Focus Groups**

With support and assistance from their professors, an email was sent to students who were enrolled in online distance-learning courses at a community college in Houston requesting their assistance with this study. Originally, the plan was to conduct four in-person focus groups with distance-learning students on the community college campus in Houston. However, in spite of the instructors’ help and the flyers that were posted about the focus groups on campus, no one showed up. Due to an unforeseen delay with the research approval at the community college in Houston, there was not enough time to attempt different strategies to bring distance-learning
students to campus for in-person focus groups. Therefore, it was decided to attempt the Skype focus groups with students at the community college in southern CA, because the contact at that school had already obtained student interest in the study.

The southern CA participants were able to meet at one location, where two focus groups were conducted. The first focus group had 6 participants and the second focus group had 5 participants. Each focus group consisted of a variety of ethnicities, college majors, and college levels. The age range was between 19-25. The participation of the focus group members was confidential and voluntary, and they all signed and faxed their consent forms (Appendix D). For each focus group, one facilitator was present and the Skype video session was recorded, per consent from the participants.

Similar to the Ellis (2000) study, at the start of each focus group, the facilitator explained the purpose of this study and gave a brief overview of confirmation and disconfirmation, including the four areas where self-experience can be positively or negatively impacted as detailed by Cissna and Sieburg (1981). The participants expressed an understanding of the concepts being studied and agreed to provide their insight. During the focus groups, the facilitator asked a set of predetermined questions (see Appendix B) in an effort to encourage the students to discuss and share what teacher behaviors they perceived to be confirming and disconfirming during their online distance-learning courses. The focus groups allowed for rich data to be collected as visual and verbal cues could be seen through the Skype video technology, dialogue took place between the participants regarding the topic, and the participants had an intimate knowledge and experience of online distance-learning courses.
Individual Interviews

Individual interviews were conducted in-person or on the telephone. An email was sent to staff members at a local community college in Houston, who were currently registered in or who had recently completed an online distance-learning course at a community college, requesting their assistance with this study. The staff members who replied affirmatively were then interviewed in-person (see Appendix C for the interview questions).

With support and assistance from their professors, an email was also sent to distance-learning students at the community college in Houston, who had already received the focus group email request, asking for participation in individual phone interviews. Through the contact at the southern CA community college, two students, who were not able to participate in the focus group but who were able to participate in a phone interview, were contacted. The students interviewed had not participated in the focus groups.

As with the focus groups, the individual interviews were voluntary, anonymous, and confidential. At the commencement of the interview, the purpose of this study was made known to the interviewee, and confirmation and disconfirmation along with the four aspects of self-existence were also briefly explained. Ten individual interviews were completed and the participants varied in ethnicity, college level, and college major. The age range was from 21-57.

The purpose of the individual interviews was to ask each student a more generalized set of questions regarding how confirmation and disconfirmation were perceived in his/her online distance-learning class(es) (see Appendix C). These questions were adapted from the interview questions used by Ellis (2000) but were slightly adjusted in order to align with the distance-learning nature of this study. Though the interview questions differ from the focus group questions, during the content analysis process, the interview responses were compiled and
reviewed within the same frame that the focus group questions were reviewed. The individual interviews allowed for rich data collection, as the researcher was able to have the interviewees expound on comments to ensure for correct interpretation of the comments made, and also because the interviewees had an intimate knowledge and experience with online distance-learning course.

Surveys

In an effort to reach more distance-learning students, a survey with open-ended questions was also created utilizing the same biographical handout used for the focus groups and interviews. The open-ended survey questions used were the exact same questions used in the individual interviews (Appendix C). According to the Flanagan incident approach, there are situations where sending a questionnaire (survey) is appropriate (e.g. when participants will carefully read the instructions and give contemplative answers) and these questionnaires will usually produce results that are similar to those captured by the interview method (Flanagan, 1954, p. 18). As the Flanagan method suggests, the open-ended questions asked in the surveys were exactly the same as those asked in the interviews, and the surveys even included an introductory paragraph explaining the concept of this study and definitions of the key terms: confirmation, disconfirmation, and online distance-learning courses (p. 18). There were a total of 15 surveys collected and the participants varied on ethnicity, college major, and college level. The age range was from 18 – 35.

The surveys allowed for rich data collection due to the open-ended questions used that gave participants a chance to give long, detailed answers to the questions, and also due to the participants intimate knowledge and experience with online distance-learning courses. However, the limitation of the survey method stemmed from the inability of the researcher to request the
participants to elaborate or further explain their comments, which opens the door to potential misinterpretation of the participant responses. To help prevent this, the researcher scrupulously reviewed the survey comments multiple times to ensure the intended meaning of the comment was captured to the best of her ability.

**Anonymity and Confidentiality**

To ensure confidentiality of all participants, each participant was coded by number and their names will not appear in this study. For the focus group members, this study used the coding format of F1R1 (focus group1/respondent 1, etc.), the interview participants received the coding format of P1 (interview participant 1, etc.), and the survey participants were coded as S1 (survey 1, etc.). Also, a consent form (Appendix D) was given to and signed by each participant, acknowledging their willingness to participate in this study and notifying them that their names will remain confidential.

**Content Analysis**

Through constant comparative analysis, each participant response was counted and then coded based on the category the response fell into (confirming or disconfirming). Initially there were 214 responses (100 confirming and 114 disconfirming) along with an additional 23 general comments and/or suggestions. These responses were then analyzed for recurring themes and patterns and narrowed down to the most frequently cited responses to create the final list of behaviors (Ellis, 2000; Sieburg, 1973). Then, the responses were categorized based on their disconfirming or confirming affect on the students. After constant comparative analysis, the final result was a list of specific behaviors categorized based on their perceived confirming or disconfirming affect with the appropriate confirmation/disconfirmation subgroup and aspect of self-experience listed next to it. (Appendix E).
Detailing each response in this way provides the necessary information needed for further studies in this context, especially for the purpose of developing a confirmation measurement tool for online distance-learning courses similar to the Perceived Confirmation Scale (Sieburg 1973) designed for face-to-face communication encounters and the Teacher Confirmation Scale (Ellis, 2000) designed for face-to-face classrooms.
CHAPTER 4: THE STUDY

Results of the Study

Thirty-six current and/or former online distance-learning students participated in this study. Three methods of research were utilized to collect the data: two focus groups (11 participants), individual interviews (10 participants), and open-ended surveys (15 participants). Participants were asked open-ended questions requesting that they describe specific teacher behaviors in their answers. Upon completion of the research, 214 responses were collected along with 23 comments or suggestions.

The responses were meticulously reviewed numerous times and then categorized as either disconfirming or confirming. The results were then separated into two lists of responses: confirming responses (100) and disconfirming responses (114). Each list was reviewed and refined by grouping the responses into common themes and removing duplicate responses, just as Sieburg (1973) and Ellis (2000) had done for their studies. Once this was accomplished, each response was then viewed in relation to the confirming or disconfirming cluster it related to, as well as the area of self-experience it affected.

The final confirming list (Appendix E) shows 12 confirming teacher behaviors and next to each of the 12 behaviors is shown the confirmation cluster it relates to (recognition, acknowledgment, or endorsement) along with the area of self-experience it affects (existence, relating, significance, or emotional experience). The final disconfirming list (Appendix G) shows 14 disconfirming teacher behaviors and next to each of the 14 behaviors is listed the disconfirming cluster it relates to (indifference, imperviousness, or disqualification) along with the area of self-experience it affects (existence, relating, significance, or emotional experience).
To determine which confirming or disconfirming cluster a behavior related to, the definitions used by Cissna and Sieburg (1981) were compared with each behavior to determine which cluster aligned with each behavior. When determining which area of self-experience was affected by each of the behaviors, the focus group answers were used to categorize all of the responses because the areas of self-experience were already separated for each focus group question in advance. For example, the first focus group question asked students to think of an incident when their professor exhibited behaviors that caused them to experience validation of their existence or presence. Therefore, the answers provided for that question clearly affect the “existence” area of self-experience, per the students’ own responses. This method was used for each of the focus group questions.

Along with the condensed confirming and disconfirming lists created for this study, detailed lists were also created in which additional specific behaviors are listed below each of the 12 confirming behaviors and each of the 14 disconfirming behaviors (Appendix G and Appendix I). While the condensed lists provide the necessary confirming and disconfirming teacher behaviors, the detailed lists were created as a reference tool in an effort to expound upon and provide behaviors that further operationalize the confirmation and disconfirmation in online distance-learning classes.

**Confirming Teacher Behavior Results**

As mentioned above, the 114 confirming responses were whittled down to 12 confirming teacher behaviors. This final list contained 4 overall themes: Professor teaching style, Professor response to students’ questions and emails, Professor communication, and Professor expectations. Table 1 shows the 12 confirming teacher behaviors along with the confirmation cluster and area of self-experience that each behavior affects. The number in parenthesis next to
each teacher behavior represents the total number of student responses that related to or specifically mentioned that teacher behavior. The detailed confirming teacher behavior list is included in Appendix F.

Table 1.

<table>
<thead>
<tr>
<th>Confirming Behavior</th>
<th>Confirmation Cluster</th>
<th>Affected Self-Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor actively teaches content and engages with students (not just a class host) (74)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor gives guidance and feedback (31)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Emotional Experience</td>
</tr>
<tr>
<td>Professor responds to emails and questions timely and relevantly (25)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance</td>
</tr>
<tr>
<td>Professor creates an interactive and welcoming learning environment (25)</td>
<td>Recognition, Acknowledgement, and Endorsement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor utilizes multiple types of technology to teach and communicate with students (23)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor communicates personally (20)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor instigates communication with students (19)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is accessible (15)</td>
<td>Recognition, Acknowledgement, and Endorsement</td>
<td>Existence</td>
</tr>
<tr>
<td>Professor is flexible (14)</td>
<td>Acknowledgement</td>
<td>Existence &amp; Significance</td>
</tr>
<tr>
<td>Professor participates in the class discussions (13)</td>
<td>Recognition, Acknowledgement, and Endorsement</td>
<td>Existence, Relating, Significance</td>
</tr>
<tr>
<td>Professor clearly communicates the expectations of how the class will be run (6)</td>
<td>Recognition</td>
<td>Existence</td>
</tr>
<tr>
<td>Professor clearly communicates the expectations for assignments and tests (6)</td>
<td>Recognition</td>
<td>Existence</td>
</tr>
</tbody>
</table>
Disconfirming Teacher Behaviors Results

The final list of 14 disconfirming teacher behaviors contained the same 4 overall themes found in the confirming responses: Professor teaching style, Professor response to students’ questions and emails, Professor communication, and Professor expectations. Table 2 shows the 14 disconfirming teacher behaviors along with the disconfirmation cluster and area of self-experience that each behavior affects. The number in parenthesis next to each teacher behavior represents the total number of student responses that related to or specifically mentioned that teacher behavior. The detailed disconfirming teacher behavior list is included in Appendix I.

Table 2.

<table>
<thead>
<tr>
<th>Disconfirming Behavior</th>
<th>Disconfirmation Cluster</th>
<th>Affected Self-Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor is not actively involved: does not actively teach content or interact with students (89)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is not personable and does not communicate in a personal tone (71)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor does not recognize students individually (55)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance,</td>
</tr>
<tr>
<td>Professor does not give guidance or feedback (45)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is not interactive and involved with class discussions (33)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is not approachable or accessible (31)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor does not instigate communication with students (31)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance,</td>
</tr>
<tr>
<td>Professor does not create an interactive or welcoming learning environment (29)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor does not respond to emails or questions (26)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Description</td>
<td>Confirming Behaviors</td>
<td>Disconfirming Behaviors</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>Professor does not utilize multiple types of technology (21)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor does not clearly communicate the expectations of how the class</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance</td>
</tr>
<tr>
<td>will be run (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor is not knowledgeable in the subject or DL (17)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance</td>
</tr>
<tr>
<td>Professor does not clearly communicate the expectations for assignments</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence &amp; Significance</td>
</tr>
<tr>
<td>and tests (12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor is not flexible (8)</td>
<td>Indifference, Imperviousness</td>
<td>Existence, Relating, Emotional Experience</td>
</tr>
</tbody>
</table>

Summary of Findings

The results indicate that it is possible for online distance-learning students to perceive their teacher’s behavior as confirming or disconfirming, and the results also produced specific confirming and disconfirming teacher behaviors that have helped to operationalize this phenomenon for the online classroom. Further, in some instances, there were similarities and correlations between the confirming list of behaviors and the disconfirming list of behaviors (i.e. many of the confirming behaviors’ reciprocal behavior was seen as disconfirming by the participants).

The students’ responses can be categorized into four themes: professor teaching style, professor response to students’ questions and emails, professor communication, and professor expectations. The themes include a collection of the responses that affect students on all three confirming clusters and disconfirming clusters, as well as, all four areas of self-experience: existence, relating, significance, and emotional experience. The next section will briefly describe the confirming and disconfirming teacher behaviors that fall under each of the four themes. Some of the behaviors are relevant to more than one theme.
Theme 1: Professor Teaching Style

The majority of participants’ responses, both confirming and disconfirming, dealt with the concept of the professor’s teaching style, more specifically that the professor is actively teaching course content and engaging with the students. Students felt more confirmed by teachers who were engaging in the online class as opposed to teachers who simply posted content to read and their final grades.

From the confirming list, this represented many different teaching behaviors such as, “uses a variety of technology to teach concepts – not just reading text” (S1, S3, S7, S11, S13, S14, P1, P3, P7, P10, F1R2, F1R3, F1R5, F2R1, F2R3, F2R5), “uses a variety of teaching techniques and/or involvement – not just reading assignments” (S1, S3, S5, S7, S9, S10, S11, S13, S14, P1, P2, P3, P7, P9, P10, F1R1, F1R3, F1R5), “allows students to contact him/her in multiples ways” (S11, S13, S14, P1, P3, P6, P10, F1R5), “promptly gives helpful comments and feedback” (S7, S9, S10, S11, S13, S14, P1, P2, P3, P4, P5, P8, F1R2, F1R3, F1R5, F2R3, F2R5), “personal interaction with students” (S1, S3, S4, S7, S8, S9, S11, S13, S14, S15, P1, P2, P3, P4, P6, P7, P10, F1R2, F1R3, F1R5, F2R1, F2R2, F2R3, F2R5), “attentive to and involved with students’ progress” (S2, S5, S7, S9, S11, S13, S14, P1, P3, P4, P6, P7, P10, F1R2, F1R3, F2R1, F2R2, F2R5), and “responds to students’ emails and questions” (S1, S3, S4, S11, S13, S14, S15, P1, P2, P3, P6, P7, P10, F1R3, F2R1, F2R2, F2R5).

Similarly, from the disconfirming list, students reported feeling disconfirmed when professors did not actively teach the course content or interact with students. Disconfirming teacher behaviors related to “teaching style” included behaviors such as, “does not participate in discussion boards” (S9, P3, S12, F1R5, F1R3, F2R1, F2R2), “does not respond (or takes a long time to respond) to students’ questions or emails” (S4, S9, S11, S12, S14, P1, P3, P6, P8, P9,
P10, F1R2, F1R3, F1R5, F1R6, F2R2, F2R3, F2R5), “only assigns reading based homework” (P7, F1R4, F1R6, F2R1, F2R3, F2R5), “does not use a variety of teaching techniques – feels self-taught” (S8, S12, P2, P7, F1R3, F1R4, F2R1, F2R3, F2R5), “does not give helpful comments or feedback and/or the majority of the feedback is negative and/or late” (S3, S4, S8, S10, P1, P2, P3, P4, P8, F1R5, F2R1, F2R4, F2R5), “grades are late and/or does not review grades with students” (S4, S9, S11, P1, P10), “does not allow students to contact him/her in a variety of ways – not approachable” (F1R5, F1R6, F2R5), “is not organized or knowledgeable about the subject or distance-learning” (P1, P3, F1R2, F1R4), etc.

Therefore, the results suggest that one of the most prevalent ways in which students feel confirmed is by professors who take an active role in teaching an online distance-learning course, and that one of the most prevalent ways students feel disconfirmed is by professors who do not take an active role in teaching the course and interacting with students. Students noted that they preferred their teachers to be engaged in the course, as opposed to acting more as though they were simply a class host only posting grades and information to read.

**Theme 2: Professor Responds to Students’ Questions and Emails**

The second theme refers to the professor’s response to students’ questions and emails. This manifested in a variety of facets surrounding professors’ responses, such as whether or not the professor actually responds, how frequently the professor responds, the tone of the professor’s response, the timeliness of the professor’s response, the relevancy of the professor’s response, the accessibility or approachability of the professor, and the communication media used by the professor to respond.

According to the participants’ responses, some of the confirming behaviors related to this theme consisted of the following: “responds timely and frequently to my questions and emails”
“the professor’s response is relevant to my question” (S1, S11, P6, F2R2, F2R5), “the professor responds personally, encouragingly, and positively to my questions and emails” (S4, S11, S14, F1R3, F1R5, F2R2), “the professor offers multiple ways for us to contact him/her (email, phone, discussion boards, on campus office hours, online office hours, etc.)” (S11, S13, S14, P3, P6, P10, F1R5, F2R1, F2R3, F2R5), “if I leave a voice message, the professor will respond by calling me, instead of just emailing” (S11, F1R3), “the professor encourages questions and emails from the students - approachable” (P6, F2R1), and “the professor is available, especially during test and assignment deadlines” (S13, P3, P6, P7, F1R3).

Some of the disconfirming teacher behaviors for this theme consisted of the following responses: “the professor does not respond to student emails or questions” (S4, S9, S11, S12, S14, P1, P6, P8, F1R2, F1R5, F2R2, F2R5), “the professor does not respond to student emails or questions promptly and frequently” (S11, S12, P3, P9, P10, F1R3, F2R3), “the professor gives impersonal, tangential responses or completely avoids the initial question all together” (S1, P3, F1R2, F1R5, F2R5), “the professor is not approachable or open to student emails – tells them to only email when there is an emergency or just refers them to the syllabus” (P10, F1R2, F1R5, F1R6, F2R5), “the professor will not discuss questions about grades” (S4, P3, P10, F2R5) and “the professor does not offer multiple ways for students to contact him/her” (F1R5, F1R6, F2R5).

Therefore, being able to ask questions to one’s professor through a variety of technological options and receive a prompt, polite, relevant answer is seen as confirming teacher behavior, whereas the negative reciprocal of this is seen as disconfirming to students. Simply having the professor respond to an email or question was the most frequently stated response for
the teacher behavior that confirms one’s existence, thus showing its importance. However, the responses show that simply responding is not enough. The tone of the professor’s response, the relevancy of the professor’s response, the accessibility of the professor, and the number of ways to contact the professor are also important teacher behaviors to take into consideration for this theme for their confirming and disconfirming qualities.

**Theme 3: Professor Communication**

The third theme that emerged from the data was the overall communication style of the professor. For the confirming aspect of this theme, students shared responses such as, “the professor instigates communication with the students” (S7, S9, S10, S13, S14, P1, P2, P3, P4, P5, P8, F1R2, F1R3, F1R5, F2R1, F2R2, F2R3, F2R4, F2R5), “professor gives timely, helpful feedback, guidance, and encouragement to students” (S7, S9, S10, S13, S14, P1, P2, P3, P4, P5, P6, P8, P9, F1R2, F1R5, F2R2, F2R3, F2R5), “professor communicates personally and individually with students (including sharing personal anecdotes, getting to the know the students on a personal level, using the students’ first name, etc.)” (S4, S5, S9, S11, S13, S14, P3, P4, P6, P7, P8, F1R2, F1R3, F1R5, F2R1, F2R2, F2R3, F2R5), “professor participates in class discussions” (S9, S13, S14, P2, P10, F1R2, F1R3, F1R5, F2R1, F2R2, F2R3, F2R5), “professor communicates clearly” (S3, S5, F2R1, F2R2), “the professor communicates timely and/or frequently (including sending student updates, frequently joining in the class dialogue, etc.)” (S4, S7, S9, S11, S13, S14, S15, P1, P2, P3, P4, P6, P7, P10, F1R2, F1R3, F2R1, F2R2, F2R3, F2R5).

The disconfirming responses showed teacher behaviors such as, “professor does not recognize students as individuals – only acknowledges them as a collective” (S1, S8, S12, P2, P5, P7, F2R1, F2R2), “professor does not give guidance or feedback” (S3, S4, S8, S10, P1, P2, P3, P4, P8, F1R5, F2R1, F2R4, F2R5), “professor is not involved with the class discussions”
“professor does not instigate communication with students” (S8, S9, S12, F1R5, F1R3, F2R1, F2R2), “professor uses negative, profane, rude, demeaning, impersonal language, and/or publicly criticizes and embarrasses students” (S3, S14, P3, P4, P5, P7, F1R5, F1R6, F2R5), “professor does not encourages students as they work on projects” (S8, S12, P3, P4, P7, F2R1, F2R2, F2R5), “professor does not communicate aside from posting grades or course assignments” (S8, S12, P3, P4, P7, P10, F1R5, F1R6, F2R1, F2R3, F2R4), and “professor appears to not be knowledgeable in the subject of the class and/or in the distance-learning technology” (P1, P3, F1R2, F1R3, F1R4).

The communication of a professor is a far-reaching teacher behavior that can affect students deeply on their perceptions of confirmation and disconfirmation. Many of the participant responses dealt with professor communication, and most of them easily recalled the behaviors that left them feeling disconfirmed on all levels of their self-experience. Within the responses regarding communication, the most common dealt with the professor being actively involved with class discussions, the professor communicating in a personal manner, and the professor providing helpful, timely feedback.

One thing to note, is that while most of the confirming and disconfirming responses tended to be reciprocals of one another, there were two responses dealing with professor communication that were only given during the disconfirming questions: (1) professor does not recognize students individually and (2) professor is not knowledgeable in the subject or distance-learning environment. Of the two extra disconfirming responses, the first was shared 55 times throughout the surveys, interviews, and focus groups. The data suggests that when professors do not recognize students on an individual level it is extremely disconfirming to students. The participants noted that this specific behavior disconfirms them on all four levels of their self-
experience and on all three clusters of disconfirmation, suggesting that the effect of a distance-learning professor not recognizing their students individually is powerful.

**Theme 4: Professor Expectations**

The fourth theme revolved around teacher behaviors that relate to professor expectations. The three areas within this theme deal with (1) the professor’s expectations for the class: independent study vs. interactive, (2) the professor’s expectations for assignments, and (3) the professor’s feedback and guidance. Feedback and guidance are included here because participants noted that through feedback they are made aware of their professors’ expectations moving forward.

Regarding these three areas, students found the following teacher behaviors to be confirming: “professor clearly discloses the expectations for how the distance-learning course will be taught: independent study format or interactive similar to a face-to-face course” (P5, F1R3, F2R5), “professor asks students if they understand the directions, expectations, and class concepts instead of just assuming they understand” (P1, S7, S14, P3, P10, F2R1), “professor gives constructive, helpful feedback on each assignment and test so that the students know what the professor expects moving forward” (S7, S9, S10, S13, S14, P1, P2, P3, P4, P5, P6, P8, P9, F1R2, F1R5, F2R2, F2R3, F2R5), “feedback and assignment expectations are clear, detailed, and specific” (S1, S3, S5, S9, S14, P3, P4, P9, F1R2, F1R3, F2R1).

The teacher behaviors that caused feelings of disconfirmation to be perceived by students include the following: “professors do not immediately disclose their expectations for how the class will be set up: independent study vs interactive” (P1, P3, P5), “professor does not give feedback or expectations on assignments therefore students do not know what they should do to improve their work” (S3, S4, S8, S10, P1, P2, P3, P4, P8, F1R5, F2R1, F2R4, F2R5), “feedback,
expectations, and/or assignment instructions are vague” (P1, P2, P3, F2R5), “feedback and expectations are not timely or helpful” (S11, S12, P1, P3, P4, P10), and “professor does not check for student understanding, and when students ask the professor to elaborate, he or she simply refers them to the syllabus” (S8, P3, F1R2, F1R5, F1R6, F2R5).

These results had some similarities with Ellis’ (2000) study with face-to-face classes, in that the TCS scale includes items such as “checks on students’ understanding before moving on to the next point” and “gives oral or written feedback.” However, with Ellis’ (2000) study it does not appear that students mentioned the professors’ expectations for how the course would be taught or professors’ expectations for assignments because both are not listed on the TCS. Perhaps suggesting that in an in-person class, students receive these expectations on a normal basis to where they did not think to attribute them as confirming or disconfirming teacher behaviors.

For this study, the area where most of the disconfirmation was perceived stemmed from the incongruent expectations that students and professors had for distance-learning classes. Many of the participants expected the distance-learning course to be interactive with an involved professor who actually taught the content through a variety of communication technologies, but when they ended up in a distance-learning course where the professor thought distance-learning should be more of a self-taught, independent study set-up, the students found the professors lack of interaction, lack of feedback and guidance, lack of personal response, and so on to be disconfirming. This also happened with the reverse situation where the student expected the self-taught experience, but instead had an interactive one.

The data suggests that because there are mixed expectations of how a distance-learning course should be taught, among both the students and professors, the students would find it
important and confirming for the professors to be upfront with their expectations, so that the students will know immediately what to expect. The students experienced feelings of disconfirmation and frustration when their expectations did not align with how the course was taught. Most often this was experienced when students who expected an interactive course with an accessible professor would not receive responses to their communication or would find the professor to not be accessible or approachable.

Discussion

Based on the findings, several implications can be drawn in relation to students’ perception of confirmation and disconfirmation in online distance-learning courses. As Buber noted, confirmation and disconfirmation “exist to some degree in every relationship,” and based on the results, that would certainly include the student-teacher relationship in online-distance learning courses (Stewart, 2006, p. 428). The results have helped to operationalize this phenomenon so that our understanding and awareness of how online teacher behaviors affect students can be deepened in a way that produces change for the better. The next section will discuss some of the main implications that have resulted from the findings of this study.

Implications for Interpersonal Confirmation/Disconfirmation and CMC

The major implication for interpersonal confirmation and disconfirmation is that it can be perceived in an online communication medium (distance-learning courses). Relationships that occur online or have an online communication component to them are subject to perceptions of confirmation and disconfirmation because they have the key components needed for confirmation and disconfirmation to take place: relationship and communication (Stewart, 2006). This study captured proof that this interpersonal phenomenon does in fact occur in the online
realm of distance-learning classes, so the transferability of this to other online contexts seems probable and worth looking into.

Laing (1967), Cissna (1976), and Sieburg (1973) believed that on some level, confirmation and disconfirmation occurred in every communication message, whereas Larson (1976) believed it only occurred when the conversation drifted and caused a shift on the relational level. The belief of these theorists combined with the results of this study show that it is very plausible for confirmation and disconfirmation to occur in CMC. Wherever (face-to-face or CMC) a communication message occurs there is a good chance that it will contain confirming or disconfirming meta-messages. This study has now helped to operationalize this for the online classroom, and further studies could help to do so for other CMC contexts. Acknowledging that communication messages in online contexts can contain confirming and disconfirming meta-messages will help to bring an awareness regarding the power of communication messages on others and guidance on how best to communicate in confirming ways online.

The findings also help to support the idea that interpersonal relationships are viable in the CMC realm, and as such can be affected by certain interpersonal experiences felt by those in face-to-face relationships, such as confirmation and disconfirmation. For example, when asked “think of a specific incident during your online distance-learning class when your professor exhibited behaviors that caused you to view yourself as being in-relation with him or her,” F2R2 stated, “My professor is always writing back immediately. She gives detailed responses and engages with me regarding class work. I can tell that she is interested in what I am asking and what I am saying to her.” In this situation, the teacher behaviors of prompt, detailed, frequent responses that appear to have had a personal, caring tone caused the student to feel confirmed in the self-experience area of relating.
In some way, the steady, frequent communication between the teacher and this student had a positive affect on the student’s self-experience, and it led the student to believe that she and the teacher were relating to one another. This perhaps is best explained through the social information processing theory (SIP) and the symbolic interactionism theory. The symbolic interactionism theory helps to explain why F2R2 interpreted the symbol or teacher’s behavior of constant, engaging communication as confirming, while SIP helps to explain how the medium of CMC in an online distance-learning class could allow for this relationship to develop. SIP states that over time, online communicators “adapt their relational behaviors to the remaining cues available in CMC such as content and linguistic strategies, as well as chronemic and typographic cues” (Walther & Tidwell, 2002, p. 319). Therefore, it is confirming for teachers to engage one-on-one with students throughout the semester, or at least for an extended period of time to allow for the interpersonal relationship to develop and in doing so this behavior will most likely confirm the student on their self-experience level of relating.

More than anything, the implications of this study regarding interpersonal confirmation/disconfirmation and CMC are simply that of a starting point for future research into this matter. The study suggests that confirmation and disconfirmation can transcend the face-to-face realm and be found in CMC as well. However, more studies must be done to further develop these findings to help establish measurement tools, transferability to other CMC contexts, and potential theoretical variables not addressed in this study.

Implications for Distance-Learning

Due to the fact that this study focused primarily on online distance-learning courses, the implications are most specific for this area. Below are three of the main implications this study raised for distance-learning education in regards to confirmation and disconfirmation.
**Professor’s response**

In the CMC realm of distance-learning courses, students covet a teacher’s acknowledgement and response to their emails and questions, and when they do not receive that the students feel disconfirmed. Throughout the surveys, interviews and focus groups, 25 responses related to the notion of students feeling confirmed when the professor responds to their questions and emails. It offers the students recognition and acknowledgement and positively confirms them on their levels of existence, relating, and significance.

However, 26 participant responses show that to send an email or question to a professor and not receive a response is incredibly disconfirming to students and negatively affects them on their levels of existence, significance, and emotional experience. Professor’s who take on the task of teaching an online distance-learning course must make it a top priority to respond to questions and emails that students send to them. It is just one way that professors can and should confirm their students through acknowledgement and recognition.

However, as the results show, it is not enough to simply respond to the emails and questions that students have. The response time of the professor and the content of the professor’s response are two important factors that also bring confirming or disconfirming perceptions. As detailed in Chapter 4, students specifically noted they felt disconfirmed when a professor took an exceptionally long time to respond to their emails or questions (S11, S12, P3, P9, P10, F1R3, F2R3). In the second focus group, F2R3 stated, “It’s easier to ask questions in a face-to-face class. The online professors take too long to respond to my questions, and by the time they respond their answer is almost irrelevant because I have moved on by then.”

It appears that with distance-learning courses, there is a risk of professors not having an awareness of the urgency that is inherent when students ask questions. As F2R3 mentioned, it is
easier for a student to receive a direct response in a face-to-face class because both the teacher and student are present at the time the question is asked. In an online distance-learning course, this is not always the case, which is why it is imperative that online professors check their email and respond to students in a timely manner, or as some participants suggested, have online synchronous chat sessions or office hours where students can ask questions and receive immediate answers. Waiting three weeks to answer a student’s question or to not answer it at all is appalling and clearly expresses disconfirming indifference to the student who asked the question.

The content of the professor’s response is also worth noting for the purpose of learning what teacher behaviors cause students to feel confirmed or disconfirmed. When the professor’s response was personal, relevant, and prompt, the participants’ indicated they felt perceptions of confirmation. However, when the professor’s response was impersonal, tangential or completely avoided the initial question all together (simply referring them to the syllabus instead of providing the answer in the email), the participants’ claimed to feel perceptions of disconfirmation (S1, P3, P10, F1R2, F1R5, F1R6 F2R5).

Simply responding to a student’s question or email is just the first part of the process. Ensuring the response is personal, relevant, and timely are also variables that are just as important in order to help produce perceptions of confirmation in distance-learning students. The participants seemed to especially express frustration when they would reach out to the professor and he or she would completely ignore their initial question to instead point them back to the syllabus. For example, F2R5 shared this example of a disconfirming teacher behavior he experienced regarding the area of existence: “I emailed the professor and asked him to explain
our assigned paper in more detail, and yet the professor just told me to read the syllabus again. He was not helpful at all.” Similarly, F1R5 shared a disconfirming experience she had:

I emailed a question to my professor, and he responded telling me to contact him at a different email address. I was frustrated that he did not also include the answer to my initial question. However I obliged his request and emailed my question again but this time to the new email address he gave me, but then he never responded. I feel like he never cares about me or wants me to succeed.

Not responding or responding in an irrelevant manner leaves the students feeling disconfirmed and not supported by their professor. Unfortunately, the participants were able to give many examples of disconfirming experiences related to how the professor responded or did not respond to their emails and questions (23% of the disconfirming responses dealt specifically with teacher responses). Appropriate response times and content definitely need to be addressed during distance-learning training sessions for professors who are assigned to teach an online distance-learning class.

**Professor’s communication**

The findings produced several important implications surrounding the communication style of the distance-learning professor. First, students are confirmed when professors are actively involved with class discussions, communicate personally, and provide helpful comments or feedback. The results indicated that students feel confirmed when professors engage in communication with them, and students want that communication to be personal and helpful.

Feedback was vastly important to the participants of this study. It was the second most commented on behavior for the confirming teacher behaviors and the fourth most commented regarding the disconfirming behaviors. A total of 76 responses related to feedback and guidance
provided by professors. When professors provide constructive, encouraging feedback, participants felt confirmed on their levels of existence, relating, and emotional experience. It was a way in which they felt recognition and acknowledgement from their professors, as well as a way for them to know what the professor expected of them regarding their work in the class.

Ellis’ (2000) Teaching Confirmation Scale (TCS) for face-to-face classes also included an item regarding feedback, “Gives oral or written feedback on students’ work” (p. 270). Feedback translates as a confirming teacher behavior from the face-to-face classroom, however, the participants in this study noted that it was not enough to receive feedback; they wanted to ensure that the feedback was constructive, positive, encouraging, and personal. When professors provided negative feedback too often, or the feedback was not helpful or personal the students felt disconfirmed. Participant F2R2 shared that in spite of her professor giving the students 100% on every single assignment, she still felt disconfirmed due to the lack of feedback. She stated, “My professor never commented on our papers. He just gave us 100% on everything. It showed me that he did not really care about relating to me.” Similarly, participant S10 shared that “lack of feedback is always a way to feel isolated on your educational progress.” The implication from all of this is that professors will confirm their students if they provide positive, timely, constructive feedback on assignments, and professors will disconfirm students if they do not.

The disconfirming responses provided two additional behaviors that the confirming responses did not: (1) professor does not recognize students individually and (2) professor is not knowledgeable in the subject or distance-learning. Whether or not a professor recognizes students individually made up 48% of the disconfirming responses. Participant S12 stated, “my professor gave the impression that our value was only found as a whole class and not as
individuals.” Participant P5 stated, “My professor only sent group emails; never personalized ones. There was no personalization in the class. I felt like I was just a number on a roster.” The implication here is that in an online class, students want to be recognized individually, the way that they would in a face-to-face class. The professor needs to be aware of this and make an effort to comment directly on individual posts referring to each student by their first name and by sending individual emails to students.

The tone of the professor’s communication is also important to note. Students feel confirmed when the professor communicates positively, encouragingly, and personally, yet they feel disconfirmed when the professor communicates in a negative, demeaning, condescending manner. Participant P4 stated, “My professor was mean throughout the class. He was very profane and ripped the students’ work constantly. He had a bad attitude and ego problem that came through very strong, even via CMC.” In regard to what teacher behaviors caused her to feel disconfirmed in the area of emotional experience, participant F1R5 stated, “My professor demeaned a student in front of the whole class. He makes rude comments on our posts in front of everyone. It’s embarrassing.”

This type of behavior was also noted on Ellis’ (2000) Teacher Confirmation Scale with items such as “belittles or puts down students when they participate in class,” “talks down to students,” “is rude in responding to some students’ comments or questions during class,” “displays arrogant behavior,” and “embarrasses students in front of the whole class.” This implies that the tone of the professor’s communication also transfers to the online classroom as behavior that can either confirm or disconfirm the students.
Teaching style and Expectations of distance-learning

The implications regarding the distance-learning professor’s teaching style and expectations of distance-learning are somewhat related so they will be discussed together. The teaching style responses regarding whether or not a professor is actively involved in the course outnumbered the other responses, which suggests that the students are possibly most affected by the behaviors in that category. Of the total responses and comments 69% dealt with the confirming or disconfirming perceptions stemming from whether or not the professor is actively involved in teaching the content and interacting with students. Nineteen percent of the total responses related to whether or not the professor gave clear expectations in the class. Though the number of responses relating to the expectations of a professor is a lot lower than the teaching style responses, the two categories seem to be related because it appears that due to incongruent expectations for how distance-learning courses should be taught (independent study vs. interactive), students may perceive the chosen teaching style of a professor as disconfirming.

The results indicated that most students were confirmed by professors who were actively involved in teaching the course and participating in class discussions (S1, S3, S5, S7, S9, S10, S11, S13, S14, P1, P2, P3, P7, P9, P10, F1R1, F1R3, F1R5). Respectively, most students were disconfirmed by professors who were not actively involved in teaching the course, but who instead took the approach of simply being a class host to an independent study format (S8, S9, S12, P2, P3, P7, S12, F1R3, F1R4, F1R5, F2R1, F2R2, F2R3, F2R5). Therefore, the students who had expectations of the class being interactive similar to a face-to-face class were disconfirmed when the professor did not have the same expectation for how a distance-learning course should be run.
The fact that the results of this study indicate that most of the participants had expectations that the course would be similar to the interactivity found in a face-to-face course aligns with the findings of other distance-learning studies. For example, Brandt found that “many students have expectations that online courses will mirror face-to-face classes in providing opportunities for interaction, idea generation and confirmation associated with constructivist learning” (as cited in Russo & Campbell, 2004, p. 217). Furthermore, the notion that students therefore felt disconfirmed when the teaching style did not match their expectations align with the findings of Yager, who noted that “students who thrive on the social aspects of the classroom may be challenged in online learning (as cited in Russo & Campbell, 2004, p. 217). While the affects of disconfirmation on students in an online asynchronous distance-learning course have not yet been studied, the effects of students who desire interaction and do not receive it have been found to experience frustration from a lack of interaction which may lead to a physical withdrawal from the course, or failing to finish it, or psychological withdrawal, in which the student does the minimum to complete the course, but does not engage with the material or the other participants (Russo & Campbell, 2004, p. 217).

It would be worth looking into the part that disconfirmation may play into the students’ feeling of frustration with lack of interaction in online classes to see if the same effects would take place in disconfirmed students.

Though the studies above were not specifically looking at disconfirmation in students, it is plausible that it was in fact present and may have led to the feelings of frustration and withdrawal. The participants in this current study showed similar feelings of frustration when they experienced professors who were not involved. The participants’ responses in this study
indicated that they felt disconfirmed on all four areas of self-experience (existence, relating, significance, and emotional experience) and in all three subcategories of disconfirmation (indifference, imperviousness, and disqualification) when the professor did not actively teach the course content or interact with the students. Participant F1R6 stated that he felt disconfirmed on the level of significance when his professor:

just put the information on the class website and said do not email him unless there is an emergency. It was very impersonal. His general persona was not very approachable. He wanted the students to do everything on their own and not use him at all.

Similarly, participant F2R5 claimed to feel disconfirmed on the level of existence when his professor told the distance-learning students to “just figure things out on their own because they are older. They chose to take the course online so now they need to figure it out on their own.”

The fact that students are disconfirmed and feel frustrated when the professor does not want to actively teach the course content or interact with them adds to the research being done with distance-learning education. However, the consistency with incongruent expectations needs to be addressed as a possible way to prevent these feelings of disconfirmation and frustration. Some of the participants in this study claimed that it would be beneficial if the professor noted up front how the class would be taught: independent study vs. interactive because then they would know up front what to expect and could mentally prepare for that.

However, that is just part of the answer. The other part lies with the distance-learning professors and colleges. If studies are finding that students prefer interactive online distance-learning courses and they experience frustration and emotional withdrawal when that does not happen, perhaps an effort could be made to make distance-learning courses more interactive especially as more research is being done in this area and more technology is being developed
that can be used in the online distance learning courses (chat sessions, video conference, etc.).

Even offering in-person office hours for the students who live close to the campus would be beneficial, or offering online office hours where students can have a synchronous chat session with the professor. Of course there is always the telephone as well. Colleges should also offer in-depth training sessions to prepare distance-learning professors in utilizing the technology that is available to them and to encourage them to be more interactive in the online classroom. By better preparing professors for the demands of teaching an online classroom and explaining student expectations, perhaps the students’ feelings of disconfirmation may subside. Whatever the case, something needs to be done to help balance the difference in expectations that currently exists regarding how a distance-learning course should be taught/experienced.
CHAPTER 5: SUMMARY AND CONCLUSIONS

Limitations of Study

Though this study was conducted with the effort to collect credible, trustworthy data there are areas within this study that provided limitations. First, time was an issue. The initial plan was to begin the research with 7 weeks to collect and analyze data. However, due to an incredibly long and unnecessary delay with the research committee at the community college in Houston, the research was delayed 5 weeks resulting in a very short time-span to collect the data and a change from the originally desired research methods. Initially, the plan was to attempt to hold in-person focus groups with distance-learning students, however when the first round of focus groups provided no participants, there was not enough time left to create different techniques to bring students to campus. Therefore, the method of video conferencing focus groups was used and online open-ended surveys were added to capture more data. These video conferencing focus groups and individual interviews allowed for the necessary data to be collected and allowed for discussion with the researcher to check for understanding of the participant responses. The online open-ended surveys did provide helpful data as well, however, it is suggested that research methods in which the researcher can have a dialogue with the participants may be more fruitful in that it allows for elaboration and helps to ensure that the intended meaning in the participants answer is captured. Allowing for more time to recruit participants would have increased the ability to hold more focus groups and interviews instead of having to rely on open-ended online surveys too.

Second, this study only focuses on the students’ perspective. To create a successful online environment where students are confirmed, it may prove beneficial to also look at other relational dynamics in an online distance-learning course in regards to confirmation and
disconfirmation. For example, how do the teachers feel confirmed and disconfirmed by student behaviors, or how do students feel confirmed or disconfirmed by their fellow students. While this study does provide useful information in learning more about how confirmation and disconfirmation translate to the CMC realm of distance-learning courses, looking into other relationships in the online classroom may allow for a more rich understanding of how confirmation and disconfirmation are perceived in online classrooms.

Third, only one person completed the constant comparative analysis of this study. While this study was completed with the upmost integrity with the effort to take effective notes and present transparent data and research methods, when only one person is completing the analysis there is room for unintentional errors. Having a team analyze the data and discuss implications may provide a more grounded and trustworthy analysis of the results.

Future Research

Though distance-learning courses are just one small facet of CMC, because confirmation and disconfirmation can take place here, it is strongly suggestive that it may take place in other facets of CMC (i.e. emails, social networking sites, text messaging, etc.) and is therefore worth looking at in future research. For this study, future research is suggested in the areas of (1) distance-learning education and (2) confirmation/disconfirmation and CMC.

Distance-Learning Research

As mentioned above, distance-learning courses could be further analyzed by looking at other relational dynamics in the online classroom such as how the professor perceives confirmation and disconfirmation from student behaviors, or how students perceive confirmation and disconfirmation from their classmates. Other communication studies looking into the dynamics of online distance-learning courses, such as Russo & Campbell’s (2004) study of
mediated social presence, have looked into these other relationships too, so it seems reasonable to do the same with the confirmation and disconfirmation phenomenon.

Also, it is suggested that future research be completed to create an online classroom confirmation measurement tool similar to Ellis’ (2000) Teacher Confirmation Scale (TCS). Of the 27 items on the TCS, only 19 translate to the online classroom based on the results of this study. And of the 19 that translate to the online classroom, slight changes would need to be made to meet the findings of this study. For example, on the TCS, item 6 states, “gives oral or written feedback on students’ work” (Ellis, 2000, p. 270). However, for the online classroom, the word oral obviously needs to be removed and based on the findings of this study, feedback needs to be elaborated. Participants in this study noted that while it was confirming to receive feedback, the type of feedback was crucial as well. An online teacher confirmation scale would need to include an item that addresses the teachers’ feedback as positive, constructive, and personal.

Similarly to the Ellis (2000; 2004) studies, it is suggested that the effects of confirmation and disconfirmation on students’ affective and cognitive learning be researched. According to Ellis’ (2000; 2004), confirmation and disconfirmation have a direct effect on students affective learning, and students affective learning has a direct link to students’ cognitive learning, thus showing an indirect link from confirmation and disconfirmation to students’ cognitive learning. Because many of the confirming and disconfirming behaviors translated to the online classroom, it is plausible that the effects may translate as well, however that cannot be validated without research specifically looking into it.
Confirmation, Disconfirmation and CMC

Regarding confirmation, disconfirmation, and CMC, there are many areas available for future research based on these findings. Now that one context of CMC has shown to produce perceptions of confirmation and disconfirmation, research needs to be done to look into the other facets of CMC to see where and if confirmation and disconfirmation can be perceived there as well, and if so in what ways? For example, this study only looked at the dynamics of online distance-learning courses, however, more research could be done to see how confirmation and disconfirmation is perceived through online communication in the organizational world. With international business and many people telecommuting for work, it would be beneficial to look into the organizational relationships that are conducted via CMC to see where and how confirmation and disconfirmation are perceived from an organizational standpoint.

Another context of CMC that is prevalent in today’s society is online social networks or dating services. Facebook, though just one online social networking site, has 500 million active users. According to the Facebook statistics page, at least 50% of its users log on every day, the average user has 130 “friends,” and people spend over 700 billion minutes per month using facebook. With the potential for interpersonal relationships taking place in this online social network site, comes the potential guarantee that those who use the site perceive confirmation and disconfirmation on a regular basis. It would be worthwhile to research how people perceive confirmation and disconfirmation in these online social networking sites. With the potential harm that can come from disconfirmation and potential fulfillment that can come from confirmation, looking into how it is perceived in these areas would prove beneficial if it would bring an awareness to people for how their communication behaviors could be confirming or disconfirming to others.
Conclusion

The results of this study provided two major findings: (1) confirmation and disconfirmation can be perceived in the CMC facet of online distance-learning classes and (2) operationalized lists of confirming online teacher behaviors and disconfirming online teacher behaviors. Through focus groups, individual interviews, and open-ended online surveys, participants indicated what teacher behaviors they perceived as confirming and disconfirming in the areas of self-experience (existence, relating, significance, and emotional experience) and the subcategories of confirmation (acknowledgement, recognition, endorsement) and disconfirmation (indifference, impervious, disqualification). These detailed responses allowed for in-depth analysis as to why certain teacher behaviors were viewed as confirming or disconfirming in the online classroom. The results also produced four themes: professor teaching style, professor response to emails and questions, professor communication, and professor expectations.

These findings are beneficial to the study of confirmation and disconfirmation, CMC, and distance-learning education. They help to further the research being done in these areas by providing a deeper look into each area, regarding the effect of teacher communication behaviors on the students’ self-experience in the online classroom. The findings can also be added to the growing literature in related areas such as teacher caring, teacher immediacy, teacher misbehaviors, mediated presence in online classes, etc. Many of the behaviors noted in these studies would fall under or relate to confirming and/or disconfirming behavior categories. The findings of this study along these related studies, collectively serve to provide deeper understanding into the communication dynamics and interactions within CMC and the online classroom.
References


Holt, Rinehart, and Winston.


Sundell, W. (1972). *The Operation of Confirming and Disconfirming Verbal Behavior of*


Appendix A

Biographical Information Handout

This is the handout that the all participants completed in order to collect biographical information about each member.

<table>
<thead>
<tr>
<th>Category</th>
<th>Student Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
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<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>School Year</td>
<td></td>
</tr>
<tr>
<td>(Freshman, Sophomore, Junior, Senior, Grad, Post Grad, etc.)</td>
<td></td>
</tr>
<tr>
<td>Hours per week spent using CMC</td>
<td></td>
</tr>
<tr>
<td>Number of online distance-learning courses completed to date</td>
<td></td>
</tr>
</tbody>
</table>
## Focus Group Questions

The following questions were used for the focus groups. In the domain block for each question, the specific aspect of self-experience is listed along with the subcategories of confirmation and disconfirmation for coding purposes. Also, the questions are phrased in a way to utilize the critical incident approach (Flanagan, 1954).

<table>
<thead>
<tr>
<th>Domain</th>
<th>Questions</th>
</tr>
</thead>
</table>
| **Element of existence:**  
Confirmation by recognition / Disconfirmation by indifference | Think of a specific incident during your online distance-learning class when your professor…  
Exhibited behaviors that caused you to experience validation of your existence or presence. Please explain and provide examples of these situations.  
Exhibited behaviors that caused you to not experience validation of your existence or presence. Please explain and provide examples of these situations. |
| **Element of relating:**  
Confirmation by recognition / Disconfirmation by indifference | Think of a specific incident during your online distance-learning class when your professor…  
Exhibited behaviors that caused you to view yourself as being in-relation with him or her. Please explain and provide examples of these situations.  
Exhibited behaviors that caused you to view yourself as not being in-relation with him or her. Please explain and provide examples of these situations. |
| **Element of significance or worth:**  
Confirmation by acknowledgment / Disconfirmation by disqualification | Think of a specific incident during your online distance-learning class when your professor…  
Exhibited behaviors that caused you to feel significant or worthy. Please explain and provide examples of these situations.  
Exhibited behaviors that caused you to not feel significant or worthy. Please explain and provide examples of these situations. |
| **Element of validity of experience:**  
Confirmation by endorsement / Disconfirmation by imperviousness | Think of a specific incident during your online distance-learning class when your professor…  
Exhibited behaviors that caused you to feel validated in your experiences or emotions? Please explain and provide examples of these situations.  
Exhibited behaviors that caused you to not feel validated in your experiences or emotions. Please explain and provide examples of these situations. |
Appendix C

Interview and Survey Questions

The following questions were used for the individual interviews and online surveys. These questions are the same questions used by Ellis (2000) for her individual interviews only slightly adjusted to account for the online aspect of this study (p. 269).

Questions:

1. What does your online distance-learning professor do that communicates to you that you are a valuable, significant individual?

2. What does your online distance-learning professor do that does not communicate to you that you are a valuable, significant individual?
Appendix D

Consent Form

EXAMINING PERCEIVED CONFIRMATION AND DISCONFIRMATION IN ONLINE DISTANCE LEARNING COURSES

I have been asked to participate in a research project examining communication practices in online distance-learning courses. I was selected to be a possible participant because of my expertise and intimate knowledge of online distance-learning courses. A total of 25-30 individuals have been asked to participate in this study. The purpose of this study is to:

1. Determine the teacher communication behaviors that students perceive to affect their self-experience either positively (confirming) or negatively (disconfirming) in the following areas:
   a. Their element of existence
   b. Their element of relating
   c. Their element of significance or worth
   d. Their element of validity of experience

If I agree to be in this study, I will be asked to answer a variety of questions asked by the principal investigator (Carissa Simmons) that will be conducted via face-to-face focus groups, online surveys, or individual interviews. The focus group session will last approximately 30 minutes, the interviews will last approximately 10 minutes, and the surveys should take approximately 5 minutes to complete. The focus groups and interviews will be an informal discussion regarding the effect of teacher communication behaviors on students’ self-experience/identity in online distance-learning courses. After the conclusion of the conversation, I will have the opportunity to review the dialogue from the conversation and make suggestions or comments. There are no risks associated with this study. There are no benefits of participation. This study is confidential and voluntary. Comments shared in the focus groups, surveys, and interviews will be coded to allow confidentiality. The records of this study will be kept private. No identifiers linking me to the study will be included in any sort of report that might be published. Research records will be stored securely and only Mrs. Simmons will have access to the records.

My decision whether or not to participate will not affect my current or future relations with my school. If I decide to participate, I am free to refuse to answer any of the questions that may make me uncomfortable. I can withdraw at any time without my relations with the college, my courses, or my grades being affected.

I can contact Mrs. Carissa Simmons (carissa.simmons@sccd.edu OR csimmons3@zagmail.gonzaga.edu) with any questions about this study. This research study has been reviewed by the Institutional Review Board, Gonzaga University.

I have read the above information. I have asked questions and have received answers to my satisfaction. I have been given a copy of this consent document for my records. By signing this document, I consent to participate in the study.

Signature: ____________________________ Date: ______________

Signature of Investigator: ____________________________ Date: ______________
## Appendix E

### Response Coding Form

#### Confirmation

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Cluster: Recognition, Acknowledgment, Endorsement</th>
<th>Aspect of Self-Expression: Existence, Relating, Significance, Validity of Expression</th>
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#### Disconfirmation

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Cluster: Indifference, Imperviousness, Disqualification</th>
<th>Aspect of Self-Expression: Existence, Relating, Significance, Validity of Expression</th>
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Appendix F

Confirming Teacher Behaviors – Condensed List

<table>
<thead>
<tr>
<th>Confirming Behavior</th>
<th>Confirmation Cluster</th>
<th>Affected Self-Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor actively teaches content and engages with students (not just a class host) (74)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor gives guidance and feedback (31)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Emotional Experience</td>
</tr>
<tr>
<td>Professor responds to emails and questions (25)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance</td>
</tr>
<tr>
<td>Professor creates an interactive and welcoming learning environment (25)</td>
<td>Recognition, Acknowledgement, and Endorsement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor utilizes multiple types of technology to teach and communicate with students (23)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor communicates personally (20)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor instigates communication with students (19)</td>
<td>Recognition and Acknowledgement</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is accessible (15)</td>
<td>Recognition, Acknowledgement, and Endorsement</td>
<td>Existence</td>
</tr>
<tr>
<td>Professor is flexible (14)</td>
<td>Acknowledgement</td>
<td>Existence &amp; Significance</td>
</tr>
<tr>
<td>Professor participates in the class discussions (13)</td>
<td>Recognition, Acknowledgement, and Endorsement</td>
<td>Existence, Relating, Significance</td>
</tr>
<tr>
<td>Professor clearly communicates the expectations of how the class will be run (6)</td>
<td>Recognition</td>
<td>Existence</td>
</tr>
<tr>
<td>Professor clearly communicates the expectations for assignments and tests (6)</td>
<td>Recognition</td>
<td>Existence</td>
</tr>
</tbody>
</table>
## Appendix G

### Confirming Teacher Behaviors – Detailed List

<table>
<thead>
<tr>
<th>Confirming Behavior</th>
<th>Behavior Subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor actively teaches content and engages with students (not just a class host) (74)</td>
<td>Uses a variety of technology to teach concepts (does not just assign reading)</td>
</tr>
<tr>
<td></td>
<td>Uses a variety of teaching techniques (not just reading)</td>
</tr>
<tr>
<td></td>
<td>Allows for students to contact him/her in a variety of ways</td>
</tr>
<tr>
<td></td>
<td>Gives helpful comments and feedback to students</td>
</tr>
<tr>
<td></td>
<td>Personal interaction with students</td>
</tr>
<tr>
<td></td>
<td>Attentive to and involved with students' progress</td>
</tr>
<tr>
<td></td>
<td>Responds to student emails and questions</td>
</tr>
<tr>
<td><strong>Behavior:</strong></td>
<td></td>
</tr>
<tr>
<td>Professor gives guidance and feedback to the students (31)</td>
<td>Gives feedback on each test and piece of work submitted (including discussion board posts)</td>
</tr>
<tr>
<td></td>
<td>Grades and feedback are prompt, timely, detailed, and specific</td>
</tr>
<tr>
<td></td>
<td>Feedback is constructive and critical, while at the same time positive and encouraging</td>
</tr>
<tr>
<td></td>
<td>Feedback is personal and in-depth</td>
</tr>
<tr>
<td></td>
<td>Gives positive public feedback</td>
</tr>
<tr>
<td></td>
<td>Feedback acknowledges why a score is low and then offers ways to improve</td>
</tr>
<tr>
<td><strong>Behavior:</strong></td>
<td></td>
</tr>
<tr>
<td>Professor responds to emails and questions (25)</td>
<td>Frequently</td>
</tr>
<tr>
<td></td>
<td>Promptly</td>
</tr>
<tr>
<td></td>
<td>Relevantly</td>
</tr>
<tr>
<td></td>
<td>Personal and Positive Tone</td>
</tr>
<tr>
<td><strong>Behavior:</strong></td>
<td></td>
</tr>
<tr>
<td>Professor creates interactive and welcoming learning environment (25)</td>
<td>Addresses the main student learning styles: visual, audio, kinesthetic</td>
</tr>
<tr>
<td></td>
<td>Encourages (requires) student interaction (e.g. comment on each other's posts, give advice on each other's homework assignments, chat sessions, etc.)</td>
</tr>
<tr>
<td></td>
<td>Gives positive feedback on public posts</td>
</tr>
<tr>
<td></td>
<td>Encourages questions</td>
</tr>
<tr>
<td>Behavior:</td>
<td>Joins in the discussion post conversations</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Professor utilizes multiple types of technology to teach and communicate with students (23)</strong></td>
<td>Personal and encouraging communication with students</td>
</tr>
<tr>
<td></td>
<td>Introduction posts from students and professor</td>
</tr>
<tr>
<td></td>
<td>Professor is approachable and welcoming</td>
</tr>
<tr>
<td></td>
<td>Field trips to get students away from the computer</td>
</tr>
</tbody>
</table>

| Behavior: | Uses video to explain assignments |
| "Professor communicates personally (20)" | Has online office hours |
|  | Uses email, phone, synchronous chat, avatars, discussion boards, blogs, etc. |

| Behavior: | Uses the phone and video to communicate, rather than relying solely on text |
| "Professor instigates communication with students (19)" | Calls students back when they leave voice mails |
|  | Gives personal feedback to each student |
|  | Check on students individually (doesn't just send group emails) |
|  | Shares personal anecdotes |
|  | Uses students' first names when communicating them |

| Behavior: | Emails students who are struggling to check on them and offer assistance |
| "Professor is accessible (15)" | Sends personal comments and updates to each student |
|  | Comments on discussion board posts |
|  | Encourages students while they work on projects |
|  | Asks to use students work as examples for future classes |
|  | Constant communication via email and online posts |
|  | Offers feedback to students |

| Behavior: | Tells students he/she is open to emails from the students |
| "Professor is accessible (15)" | Professor is available (phone/email) during tests and assignment deadlines |
|  | Encourages students to ask questions |
|  | Offers multiples ways for the students to contact him/her (email, phone, discussion posts, online office hours via chat, on campus office hours, etc.) |
### Professor is flexible (14)

<table>
<thead>
<tr>
<th>Behavior:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Makes changes based on student feedback</td>
<td></td>
</tr>
<tr>
<td>Understands when technical difficulties occur</td>
<td></td>
</tr>
<tr>
<td>Understands students' busy work and life schedules and when they are sick</td>
<td></td>
</tr>
<tr>
<td>Adjusts teaching style based on each class audience</td>
<td></td>
</tr>
<tr>
<td>Offer make-up opportunities</td>
<td></td>
</tr>
<tr>
<td>Offers multiple ways for the students to contact him/her</td>
<td></td>
</tr>
</tbody>
</table>

### Professor participates in the class discussion (13)

<table>
<thead>
<tr>
<th>Behavior:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives direction</td>
<td></td>
</tr>
<tr>
<td>Personal interaction with students</td>
<td></td>
</tr>
<tr>
<td>Comments on discussion board public posts</td>
<td></td>
</tr>
<tr>
<td>Uses synchronous chats</td>
<td></td>
</tr>
</tbody>
</table>

### Professor clearly communicates the expectations of how the class will be run (6)

<table>
<thead>
<tr>
<th>Behavior:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professors are upfront with how the course will be run and what the students should expect: self-taught/independent study vs. interactive like a face-to-face course</td>
<td></td>
</tr>
<tr>
<td>Asks students if they understand the expectations to ensure understanding</td>
<td></td>
</tr>
</tbody>
</table>

### Professor clearly communicates expectations for assignments and tests (6)

<table>
<thead>
<tr>
<th>Behavior:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gives feedback on assignments so the students know how to improve and what the professor expects moving forward</td>
<td></td>
</tr>
<tr>
<td>Give clear instructions and expectations for each assignment (no vague directions)</td>
<td></td>
</tr>
<tr>
<td>Provide a review and study materials for each test</td>
<td></td>
</tr>
<tr>
<td>Tell students what sections to emphasize for their textbook readings</td>
<td></td>
</tr>
<tr>
<td>Ask students if they understand the instructions and expectations - don't assume everyone understands</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix H

### Disconfirming Teacher Behaviors – Condensed List

<table>
<thead>
<tr>
<th>Disconfirming Behavior</th>
<th>Disconfirmation Cluster</th>
<th>Affected Self-Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor is not actively involved: does not actively teach content or interact with students (89)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is not personable and does not communicate in a personal tone (71)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor does not recognize students individually (55)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance,</td>
</tr>
<tr>
<td>Professor does not give guidance or feedback (45)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is not interactive and involved with class discussions (33)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor is not approachable or accessible (31)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance,</td>
</tr>
<tr>
<td>Professor does not instigate communication with students (31)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance,</td>
</tr>
<tr>
<td>Professor does not create an interactive or welcoming learning environment (29)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor does not respond to emails or questions (26)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Professor does not utilize multiple types of technology (21)</td>
<td>Indifference, Imperviousness, &amp; Disqualification</td>
<td>Existence, Relating, Significance, Emotional Experience</td>
</tr>
<tr>
<td>Issue</td>
<td>Phenomenon</td>
<td>Psychological Concept</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Professor does not clearly communicate the expectations of how the class will be run (20)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance,</td>
</tr>
<tr>
<td>Professor is not knowledgeable in the subject or DL (17)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence, Relating, Significance,</td>
</tr>
<tr>
<td>Professor does not clearly communicate the expectations for assignments and tests (12)</td>
<td>Indifference &amp; Disqualification</td>
<td>Existence &amp; Significance</td>
</tr>
<tr>
<td>Professor is not flexible (8)</td>
<td>Indifference, Imperviousness</td>
<td>Existence, Relating, Emotional Experience</td>
</tr>
</tbody>
</table>
## Appendix I

### Disconfirming Behaviors – Detailed List

<table>
<thead>
<tr>
<th>Disconfirming Behavior</th>
<th>Behavior Subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professor is not actively involved: does not actively teach content &amp; does not interact with students (89)</strong></td>
<td>Does not participate in discussion boards&lt;br&gt;Does not instigate communication with students&lt;br&gt;Does not respond to student emails or questions at all or in a timely manner&lt;br&gt;Only assigns reading homework - does not teach to all types of learning styles&lt;br&gt;Just pushes work onto the students&lt;br&gt;Does not allow students to post rough drafts for review&lt;br&gt;Does not allow students to contact him/her in a variety of ways&lt;br&gt;Does not use a variety of teaching techniques&lt;br&gt;Gives little input&lt;br&gt;Does not review grades or wrong answers with students&lt;br&gt;Does not give helpful comments or feedback to students in a timely manner</td>
</tr>
<tr>
<td><strong>Behavior:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Professor is not personal and does not communicate in a personal tone (71)</strong></td>
<td>Only posts info to read or listen to - no personal communication&lt;br&gt;Does not call students back when they leave voice mails&lt;br&gt;Does not respond to emails or questions at all or in a personal tone&lt;br&gt;Does not comment on posts at all or in a personal tone&lt;br&gt;Only gives rude and negative feedback or no feedback at all&lt;br&gt;No personal interaction with students&lt;br&gt;Uses demeaning, condescending language&lt;br&gt;Is closed off emotionally&lt;br&gt;Does not respond personally to the biography intro posts&lt;br&gt;Has a bad attitude, is arrogant, insensitive, or apathetic&lt;br&gt;Does not give the students any encouragement</td>
</tr>
<tr>
<td><strong>Behavior:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Professor does not recognize students individually (55)</strong></td>
<td>Does not give individual, personal feedback on tests, assignments, or posts&lt;br&gt;Does not reach out to individual students who may be struggling to offer assistance&lt;br&gt;Does not send personal updates to each student&lt;br&gt;Does not allow for individuals to shine – students are lumped together&lt;br&gt;Aside from receiving a grade, students are not even sure the professor knows they exist</td>
</tr>
<tr>
<td>Behavior:</td>
<td>Professor does not give guidance or feedback to the students (45)</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Only addresses the class as a whole, but never individual students</td>
</tr>
<tr>
<td></td>
<td>Does not respond to individual emails or questions</td>
</tr>
<tr>
<td></td>
<td>The only personal responses given are when students’ assignments are late</td>
</tr>
<tr>
<td></td>
<td>Does not attempt to understand where students are in their lives</td>
</tr>
<tr>
<td>Behavior:</td>
<td>Professor is not interactive and involved with the class discussion (33)</td>
</tr>
<tr>
<td></td>
<td>Does not give timely grades and feedback on each test and piece of work submitted</td>
</tr>
<tr>
<td></td>
<td>Feedback is not prompt, timely, detailed, and specific</td>
</tr>
<tr>
<td></td>
<td>Does not give feedback on discussion post comments</td>
</tr>
<tr>
<td></td>
<td>Feedback is vague and is not constructive and critical</td>
</tr>
<tr>
<td></td>
<td>Feedback is negative and rude and not supportive</td>
</tr>
<tr>
<td></td>
<td>Gives negative public feedback</td>
</tr>
<tr>
<td></td>
<td>Gives low grades without explaining why so that we can learn for the future</td>
</tr>
<tr>
<td>Behavior:</td>
<td>Professor is not approachable and accessible (31)</td>
</tr>
<tr>
<td></td>
<td>There is no personal communication or interaction with the students</td>
</tr>
<tr>
<td></td>
<td>Does not give clear direction</td>
</tr>
<tr>
<td></td>
<td>Does not comment on discussion board (public) posts discussions</td>
</tr>
<tr>
<td></td>
<td>Does not use synchronous chats (e.g. avatars, chat rooms)</td>
</tr>
<tr>
<td></td>
<td>Minimal input from the professor</td>
</tr>
<tr>
<td></td>
<td>Only writes negative comments on the discussion posts</td>
</tr>
<tr>
<td></td>
<td>Class just feels like an independent study course / self-taught</td>
</tr>
<tr>
<td>Behavior:</td>
<td>Professor does not instigate communication with the students (31)</td>
</tr>
<tr>
<td></td>
<td>Does not respond to students’ emails</td>
</tr>
<tr>
<td></td>
<td>Bad attitude, rude, profane, huge ego, insensitive, closed off, passive, demeaning</td>
</tr>
<tr>
<td></td>
<td>Will not discuss grades with the students</td>
</tr>
<tr>
<td></td>
<td>Tells students to figure things out on their own</td>
</tr>
<tr>
<td></td>
<td>Tells students not to email him/her unless it is an emergency</td>
</tr>
<tr>
<td></td>
<td>Shows irritation or annoyance when students request to meet in (offers minimal ways to contact him/her)</td>
</tr>
<tr>
<td>Behavior:</td>
<td>Professor is not approachable and accessible (31)</td>
</tr>
<tr>
<td></td>
<td>Does not email students who are struggling to check on them and ask if there’s anything the professor can do to help</td>
</tr>
<tr>
<td></td>
<td>Does not send personal updates and comments to each student</td>
</tr>
<tr>
<td></td>
<td>Does not comment on discussion board posts</td>
</tr>
<tr>
<td></td>
<td>Does not offer encouragement to students as they work on projects</td>
</tr>
<tr>
<td></td>
<td>Only gives grades – no other communication occurs</td>
</tr>
<tr>
<td></td>
<td>Only uploads information to read – no communication with the students (feels self-taught)</td>
</tr>
</tbody>
</table>
| Behavior: | Students must instigate communication or the professor will not communicate with them  
| Does not provide feedback  |
| Professor does not create an interactive and welcoming learning environment (29) | Does not use supportive or encouraging language  
| Only gives negative feedback  
| Does not join in the discussion boards  
| Professor is mean, rude, profane, demeaning, insensitive, or impersonal  
| Only assigns reading homework/projects  
| Professor makes rude, negative, and embarrassing comments publicly on student posts  
| Professor does not post a picture of himself/herself  
| No personal communication  |
| Professor does not respond to students’ emails and questions (26) | Does not respond frequently  
| Does not respond promptly  
| The professor’s response is tangential or not relevant to the student’s initial email  
| The professor’s response avoids the question or just refers students to the syllabus with no direct answer to the original question (e.g. “tells students to figure it out on their own”)  
| The tone of the professor’s response is impersonal, negative, or rude  
| Only responds via email even when students reach out via phone  |
| Professor does not utilize multiple types of technology to teach & communicate with the students (21) | Only uses podcasts and posts tests  
| Only uses one type of communication medium (no variety)  
| Rarely, if ever, uses email  
| Rarely, if ever, uses the telephone  
| Never uses chat forums or synchronized chatting  
| Never uses visuals  
| Uses text and reading only  
| Does not have online office hours  |
| Professor does not clearly communicate the expectations for the DL class: Self-Taught/Independent Study vs. | If students’ expectations do not align with the professor’s expectations for how the DL class will be run, it is possible that some students will experience teacher behaviors that they will then perceive as disconfirming  
| Doesn’t treat students with the same quality and attention that the face-to-face classes get |
| Involved/Similar to Face-to-Face class (20) | Class just feels like an independent study course – there is no involvement from the professor  
Little input, communication, or participation from professor |
| --- | --- |
| Behavior: | Lack of organization  
Vague announcements and directions  
Does not provide a clear course layout  
Does not know subject matter well  
Posts incorrect information  
Notes are not conducive to DL environment: too many bullet points with no explanation or audio voice-over.  
Does not utilize the full technological potential of a DL class (text only) |
| Professor is not knowledgeable in subject or DL (17) | Doesn’t give feedback when grading assignments so students don’t know how to improve  
Professors should be up front and clear about their expectations for each assignment (no vague directions)  
Gives vague announcements and directions  
Does not provide a clear course layout  
Does not give detailed requirements for assignments |
| Behavior: | Does not make time to meet with students in-person  
Does not make time to discuss particular questions or issues with students  
Insensitive – does not try to understand where students are in their lives or what they might be going through  
Disregards students concerns and feedback  
Will not take the extra step to help struggling students  
When the entire class does poorly on an exam, the professor does not investigate it or make changes |
| Professor does not clearly communicate expectations for assignments and tests (12) | |