A SURVEY OF INSTRUCTIONAL COMMUNICATION:
A CONTENT ANALYSIS OF COMMUNICATION EDUCATION FROM 2000 TO 2015

A Thesis

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Nino Andre Conley

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A SURVEY OF INSTRUCTIONAL COMMUNICATION:
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Department of Communication Studies
Abstract

of

A SURVEY OF INSTRUCTIONAL COMMUNICATION:

A CONTENT ANALYSIS OF *COMMUNICATION EDUCATION* FROM 2000 TO 2015

by

Nino Andre Conley

Ever since its founding in the 1970s, the field of instructional communication has regularly conducted comprehensive reviews of the research it produced to assess the discipline’s current state, quality of studies, and the merits of its contributions. Despite the importance of such reflections, no review has been conducted in the past 15 years. To close this gap in the research, a content analysis was conducted to analyze the content of *Communication Education*, the flagship journal of instructional communication. Every article published in *Communication Education* between January 2000 and July 2015 was examined in order to assess what topics are being studied and what type of research is being conducted. Results indicate that the field of instructional communication features an inconsistent use of theory, a strong preference for quantitative research methods, derives most data from college students, and displays tendencies to further explore established topics rather than expand its research agenda.

_______________________, Committee Chair
Dr. Kimo Ah Yun

_______________________

Date
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CHAPTER 1
INTRODUCTION

The subject of how to improve education in a globalized world has become a major part of political discourse and media scrutiny (Hess, Taft, Bodary, Beebe, & Valenzano III, 2015). While there is little dispute about the vital role communication plays in the field of education and the workforce (Morreale, Backlund, & Sparks, 2014), the contributions of communication scholars are less apparent. Instructional communication, the division of communication scholarship which emerged in the 1970s as a field exclusively dedicated to education (Newcomb & Allen, 1974), has created a sizeable body of research examining topics such as the dynamics of classroom interactions, teacher and student communication and behaviors, theoretical perspectives on education, and, to an extent, the use of technology in educational settings (Preiss & Wheeless, 2014). While the large body of research has been valuable in furthering academic inquiry, it is also important to define the contributions instructional communication has to offer and how these contributions are distinct from other the fields of research about education. In other words, a crucial aspect of the formation of a discipline’s identity is the ability to define itself. Therefore, it is appropriate to concisely define instructional communication as a field of study, and answer the question of how is it different from other disciplines concerned with education.

The first textbook on classroom communication, published in 1978 (Hurt, Scott, & McCroskey, 1978), sought to answer questions about the identity of instructional communication by conceptualizing teaching itself as an act of communication (McCroskey, Teven, Minielli, & Richmond McCroskey, 2014). The authors expressed the concept of teaching as a communicative act by positing that “there is, indeed, a difference between knowing and teaching, and that difference is communication in the classroom” (Hurt, et al., p. 3). More recently, the field of instructional communication has been described as the discipline that investigates the
dynamics of the teaching-learning process, especially the exchange of meanings between, and among teachers and students, situated in any context or setting, about any subject matter, of any field (McCroskey, Richmond, & McCroskey, 2002; Myers 2010; Preiss & Wheeless, 2014). The most basic definition of instructional communication, however, is the idea that the act of investigating the communicative aspect of teaching and learning lies at the heart of this field of study (Morreale et al., 2014). How to effectively create a robust body of communication literature about teaching and learning however, has been a difficult and at times a contentious subject matter. For decades scholars have had significantly differing approaches, methods, theories, and understandings of what the field of instructional communication should (and should not) entail.

**History and Development**

The emergence of instructional communication as an area of research is the direct result of the evolution of a similar, yet distinct field of inquiry: communication education (Morreale et al., 2014). While scholars in the field of instructional communication are concerned with the role of communication as part of the teaching and learning process, regardless of setting or context, the field of communication education is exclusively concerned with teaching what is traditionally known as speech, i.e., subjects of communication, such as public speaking or interpersonal communication (Frymier & Richmond, 2010; McCroskey & McCroskey, 2006). Communication education is thereby the older field of inquiry with its origin dating back to the founding of communication as an academic discipline in America, approximately 100 years ago (Eadie, 2009).

The two main journals of communication education, dedicated to better understand, improve, and provide practical tips and suggestions for teaching speech were published by the National Communication Association (NCA), as the *Quarterly Journal of Speech* and *The Speech*
Teacher, in 1915 and 1952, respectively (Morreale et al., 2014; Reid, 2002). The scope and interest of communication education scholars eventually expanded beyond the limits of teaching communication to a greater instructional mission (Preiss & Wheeless, 2014). The growing scholarly interest in the influence communication has on teaching and learning in a broader context, led the International Communication Association (ICA) to found the first Instructional communication Division in 1972 (Newcombe & Allen, 1974; Richmond & Frymier, 2010). Four years later, with a growing body of instructional communication research, The Speech Teacher evolved into the contemporary flagship journal of instructional communication, Communication Education, and was officially renamed as such in 1976 (Hendrix & Wilson, 2014; Moreale et al., 2014; Myers, 2010; Rocca, 2010, Waldeck et al., 2001). More contemporary research (Waldeck et al., 2001) has ever since suggested to rename the journal once more, from Communication Education to Instructional Communication, since the journal has not been exclusively focused on communication education, but instructional communication.

**Contention**

With the inception of instructional communication as an official field of study and the associated founding of Communication Education as an official instructional communication journal, achieving consensus about the discipline’s identity in the late 1970s and 1980s revealed itself as a contentious endeavor. Scholars engaged in debate where disagreements persisted about fundamental issues such as defining the discipline’s paradigms of inquiry and what contributions of instructional communication were useful (Eisner, 1983; Sprague, 1993). Due to the lack of guidelines or an established core identity at the discipline’s inception, researchers conducted studies independently from one another in accordance to their conception of instructional communication. Consequently, an incoherent body of work emerged which lead to further contentiousness amongst scholars. For instance, arguments ensued as to whether educational
research should be multi paradigmatic or pluralistic (Howe, 1988; Keeves, 1988; Soltis, 1984). The ongoing contentiousness was later described as "paradigm wars" (Gage, 1989), a moniker illustriously indicating the general awareness of the discipline's internal disconnect and its ambiguity relative to content, paradigms, and epistemologies.

**Contextualizing the Issue**

Being unable to achieve consensus on the basic tenants and principles of research is not an issue exclusive to the sub-division of instructional communication, but inherent to communication studies itself. The discipline has continuously become subject to criticism due to its overall disconnectedness regarding core theories, approaches, epistemologies and methods (Craig, 1999; Sprague, 1992). Even core objectives, and general lines of research remain relatively elusive by failing to define what the discipline’s unique contributions in response to salient problems shall be (Deetz & Putnam, 2001).

Scholars of the discipline further posited that there are no clear definitions about the discipline’s purpose, unlike most other disciplines in which intent and function are clearly defined, such as economics seeking to understand the marketplace or sociology addressing issues of social behavior (Deetz, 1994). Such a general lack of consensus about a discipline’s identity allows communication scholars to conduct research liberally in silos, thereby continuing the creation of an incoherent body of research.

In response to the disconnected body of work, the literature of communication studies features many different reviews. Reviews are either conducted in form of smaller scope examination of specific communication literature, or as comprehensive surveys with broad discussions about the general state of the discipline (Deetz, 1994; Reeves, 1992; Sholle, 1995; Streeter, 1995; Swanson, 1993; Waldeck et al., 2001). Continuous efforts to conduct reviews, assessments, and self-evaluative analyses indicate a general awareness of the research disparity.
Scholars see a need to understand and clarify what has been researched in their discipline. Some argue that the continuous reviews and self-evaluative, reflective articles reveal a historical and contemporary unease that demonstrates insecurity and doubt about the impact communication research has on actual communication practices and outcomes, as well as the utility of such research beyond publication in communication journals (Timmerman, 2009).

A more favorable interpretation of the large number of reviews however is the perception of a desire for reconciliation that allows for the creation of a more robust and coherent body of literature. Rather than ignoring the issue, scholars seek to understand and engage to create more consistency. Such improvement to the quality of literature is critical in order to address concerns about the discipline’s contributions and significance. Regardless of one’s interpretation, comprehensive reviews have become a tool to provide snapshots of the state of the discipline in order to address issues of internal disparity, collective contributions, and future trajectories of the discipline in a comprehensive, large-scale manner, as in Communication yearbook 24 (2001), for example.

**Issues of the Development of Instructional Communication**

Similar to inquiries about the general status of communication studies as a discipline, reviews have been conducted to provide specific insights into the sub-discipline of instructional communication in order to assess what it contributes to the field of education, what its core merits are, and how instructional communication research can contribute to enrich the process of teaching and learning that is different from other research (Sprague, 1992).

By consistently challenging the status quo of instructional communication, Jo Sprague has been one of the most proficient scholars in seeking to answer questions regarding the discipline’s state and identity. For more than two decades, Sprague has authored several articles
in which instructional communication research and the content of its associated journals has been analyzed, evaluated, and challenged.

In 1992 Sprague published an article that questioned the common practices and most prevalent topics addressed by instructional communication research. Ten years later, Sprague wrote a reflective, impressionistic essay for *Communication Education*, dedicated to reviewing the journal’s history and evaluating the state of the discipline. While the essay generally commended *Communication Education* for including a diversity of methodologies and praised its tendency to continuously readdress topics by spiraling over previous research findings, Sprague also voiced criticism towards the practice of exclusively focusing on the same research topics in ever growing detail over and over again, rather than expanding the scope of the research agenda.

The trend of pursuing greater specificity, rather than extending the breadth of instructional communication research, is not only a matter of topical choice and preferred subject matters, but also carries epistemological and methodological implications. Sprague argues that methodologies impact the process of data collection but also shape the research questions themselves by stating “the greatest problem (…) with the work in instructional communication is that it has asked a narrow set of questions derived more from the demands of a preferred research methodology than from a mission to generate helpful findings for practitioners and policy makers.” (2002, p. 342).

Sprague’s observation are echoed by more recent reviews that reflected about the tension in the discipline during the 1970s and 1980s where empirical hypothesis testing became the preferred method of inquiry with the growing influence of positivism on the formation of communication education theory (Eadie, 2011; Myers 2010).

In response to the trend of limiting the research agenda to variable analytic inquiries about the same topics in greater detail, Sprague (1992) suggested asking the following questions
as a means to fundamentally reevaluate the merits of the discipline and identify unexamined assumptions that undergird the dominant research in instructional communication: (1) why do schools exist?; (2) what do teachers do?; (3) what is the nature of development?; (4) what is knowledge and how is the curriculum established?; (5) how does language function in education?; (6) how does power function in the classroom? Asking these questions is an appeal to scholars of the discipline to reassess and reconsider what is being researched and how studies are conducted in terms of epistemology, in particular in regards to the practice of decontextualizing phenomena.

While Sprague’s fundamental questions were framed through a critical lens to address greater issues of purpose, identity, and merit, other authors have conducted studies which serve as a complimentary pieces by employing content analyses to achieve a more descriptive, quantitative findings. In other words, it allows to contextualize the state of the discipline by contrasting what the field of study should address with what it actually does address. Quantitative content analyses therefore provide the descriptive data that serves as the basis for informed, evidenced based discourse about the actual state of instructional communication.

**Surveys and Reviews**

The first comprehensive survey of research studies of instructional communication articles examined studies published in regional, SCA, and ICA yearbooks and journals \(N = 186\), published between 1974 to 1984 (Staton-Spicer & Wulff, 1984). While insightful, this review did not provide a detailed account of the methodology employed to execute the content analysis. For instance, it lacked a description of the criteria used to determine how articles were classified, as well as detailed information about the source and content of the articles reviewed. Instead, the authors relied on their own authority to code articles appropriately, using their discretion when deciding which articles to include, how to thematically group them, and determine what
overarching categories emerged from this body of work. In this sense, the article could be conceived as a latent content analysis, where quantitative data is derived through qualitative means of emerging themes and typological content grouping. Despite the lack of a detailed description of method, the article revealed six categories in which articles could be grouped (1) Teacher Characteristics; (2) Student Characteristics; (3) Teaching Strategies; (4) Speech Criticism and Student Evaluation; (5) Speech Content; (6) Speech Communication Programs.

The discussion section of the Staton-Spicer & Wulff article (1984) concluded that the literature reflected a potential for disciplinary distinctiveness from which contributions of instructional communication could be inferred. Consistent with contemporary research, it also concluded that teachers function as communicators in the classroom (McCroskey et al., 2014). However, addressing the collective body of work, results were consistent with the aforementioned concerns of instructional communication research being predominantly comprised of isolated studies that failed to create a coherent framework (Craig, 1999, Sprague, 1992, Timmerman, 2009).

Almost two decades later, a similar study was published, covering instructional communication literature published between 1990 and 1999 (Waldeck et al., 2001). While this review mirrored the previous comprehensive survey (Staton-Spicer & Wulff, 1984) in many respects, the researchers conducted a more extensive analysis. While not establishing a priori criteria for categorization, each of the identified areas in this survey featured multiple subcategories. In this regard, the content analysis produced a more detailed overview and quantification of the research conducted in the field by allowing for more nuance and distinction.

The reviewed articles were published in 23 different journals, between the year 1990 – and 1999. The vast majority of instructional communication studies (47%) was published in Communication Education, identifying it as the flagship journal of the discipline by contributing
to almost half of all the instructional communication articles published. The second greatest contributor was the *Communication Research Reports* (N = 31, 17%), followed by *Communication Quarterly*. The following 12 journals combined only contributed a total of 44 articles (< 23%), with the remaining eight communication journals making no contribution to the field of instructional communication.

In this study, six general areas of studies were identified: (1) student communication; (2) teacher communication; (3) mass-media effects on children; (4) pedagogical methods / technology use; (5) classroom management; (6) teacher-student interaction. Each of these overarching categories featured multiple sub-topics to more accurately describe the content of research. Some studies were referenced in multiple categories, inflating the number of articles categorized (N = 186) from reviewed articles (N = 271).

In addition to the summary of topics, the most prevalent theories of the discipline were identified: arousal theory, Keller’s model of instructional design, French and Raven’s bases of power; attribution theory, expectancy or learned helplessness, arousal valence model, approach-avoidance, information-processing theory, social cognitive/learning theory, cultivation theory, and general theories of child development.

The conclusions drawn from this study were consistent with those reported by the previous comprehensive study. It posited that the preference for variable-analytic studies in the field and the lack of systematic efforts to build programs of research around specific issues is at least partially responsible for the incoherent body of work in instructional communication literature (Waldeck et al., 2001). Finding also challenged the general heuristic value of instructional communication research by mirroring historic concern about the absence of a general consensus regarding core theories, concepts, and frameworks (Stanton-Spicer & Wulff, 1984).
Both of the comprehensive surveys explicitly state the need for every discipline to periodically reflect, scrutinize, and examine of the body of work it creates as a critical step to legitimize and advance its cause. Reviews and collective introspection also helped identify challenges and ways to improve shortcomings, as well as establish a disciplinary identity (Kahl & Lederman, 2009; Nerone, 2006).

Despite the established importance of introspective reviews, reflections, and self-assessments, no comprehensive study reviewing instructional communication literature has been conducted in over a decade. This gap in the literature will be addressed in this thesis by conducting a comprehensive survey of instructional communication literature. A content analysis of all articles published in the Communication Education journal, from January 2000 to the present (July, 2015) is conducted. The Communication Education journal has been selected as due to the general consensus of it being the flagship journal of the discipline (Waldeck et al., 2001; Rocca, 2010; Sprague, 2002).

The objectives of this thesis are two-fold. The first is to conduct a comprehensive overview of articles published in Communication Education in similar fashion to previous surveys to determine what is being researched in the discipline. The second is to go beyond the questions of “what is being researched” by drawing implications about the epistemological nature of instructional communication research by examining the employed methodologies, determine what theories guide the research (or lack thereof), and how author productivity may influence instructional communication research.
CHAPTER 2
LITERATURE REVIEW

Communication Theory

Theories can be described as conceptual resources created to help better understand, explain, and investigate communication problems (Craig, 1999). The purpose of a theory is to explain phenomena, organize knowledge, predict outcomes, focus research, and excite further inquiry (Frey, Botan, & Kreps, 2000). The functions of an effective theory can be assessed by evaluating a variety of components that collectively comprise a theory. Theories can thereby be evaluated by examining the following criteria: (1) Explanation, which seeks to clarify and account for the subject matter, theoretical scope, validity, and parsimony of the theory; (2) Prediction, the criteria concerned with the extent to which theories can foretell outcomes; (3) Control, the extent to which a phenomena could be potentially manipulated; (4) Heuristic value, which describes the potential of how worthwhile and promising it is to further test, develop, and refine a theory; (5) Communicative value, the factor to which a theory stimulates discussion and debate; (6) Inspiration, the extent to which it motivates future research and increases interest in the subject matter (Barnlund, 1968; Bross, 1953; Dance, 1982; Hall & Lindzey, 1970; Hawes, 1975; Kaplan, 1964; Kuhn, 1970; Littlejohn, 1996; Poole, 1990).

Pluralism and Incoherence in Instructional Communication Theory

With its origins in the 1970s, instructional communication is a relatively young field of research. The development of a new branch of research should yield to, and be driven by, new theoretical frameworks to specifically address the unique questions the new area of research it seeks to address. The necessity to found a new branch of research in itself should, by definition, be predicated on the fact that existing theories no longer suffice to explore the problems at hand.
New modes of explanation therefore arise whenever existing modes of explanations no longer offer compelling guidance to help examine, and understand social issues (Deetz, 1994).

The development of communication theory, however, differs from the trajectories of most other disciplines when conceiving theory. Where most disciplines develop theory based on clearly defined research strands that trace back to a collectively conceived theoretical foundation, the origins of communication theory are more fragmented. This fragmentation is likely due to communication being an inherent part of many disciplines and thus, theory was not exclusively developed by scholars of the discipline, i.e., communication theorists who operated in a relatively isolated field (Craig, 1999). Instead, communication theory, as it is known to date, has emerged as an amalgam of many different academic disciplines with contributions stemming from diverse areas such as mathematics, literature, engineering, psychology, and sociology (Littlejohn, 1982; Peters, 1986). Consequently, each discipline explored phenomena of communication relative to its own, specific disciplinary needs, contexts, and objectives. Despite these vastly differing conceptualizations of communication and the distinct approaches to developing communication theories in several disciplines, all contributions nominally identifiable as theories concerned with some aspect of communication were grouped under the umbrella of communication theory, resulting in the creation of an incoherent body of work (Craig, 1999; Budd & Ruben, 1972). As a result of this fragmented, multidisciplinary origin, the existing medley that nominally comprises communication theory has been regarded as incommensurable by some (Kuhn, 1970).

The lack of disciplinary self-regulation was evident from the inception of the discipline, and even extended as far as failing to attain a consensus about semantics, including the definition of what the term communication should entail (Dance & Larson, 1976). For instance, a review at the early inception of instructional communication revealed that there were 95 published definitions of communication (Dance, 1970). Attempts to reconcile, integrate, and reduce the
number of definitions to create a more cohesive field were futile (Fisher, 1978; Murphy, 1991), thus leading to the conclusion of an incommensurable body of literature. Researchers eventually accepted the fragmentation of communication theory in the field as a political reality and an inevitable result of the discipline’s pluralistic background, thereby directing their focus to their primary area of interest, and thus, forming a cluster of different areas of study that only collaborate if an opportunity happens to arise (Van Maanen, 1995).

Issues that prevented the formation of a coherent theoretical basis have also been affirmed and illustrated through quantitative inquiries. A review of the content of seven communication theory textbooks was conducted to quantify and assess the extent of incoherence and disconnect in the field of communication theory (Anderson, 1996). Results revealed an astoundingly high number of theories referenced in those seven textbooks by identifying 249 different theories. The most obvious testament to a lack of coherence in the field, however, was the finding that only 7% of all theories were referenced in more than three of the seven textbooks. The results illustrate a general disjointedness in communication theory on the most basic level. The conclusion drawn from this data was consistent with previous assessments; the literature features an abundance of self-identified communication theories that seldom reference each other, build upon each other, or challenge less robust theories to create a more cohesive theoretical framework. Such practices are detrimental to any area of study, as research should be guided by theory to derive credible results.

In addition to the issues of a lack of cohesion, it should also be noted that very few communication theories are original products of communication scholars who place a communication perspective at the heart of the explanation. (Craig, 1999; Deetz, 1994; Sigman, 1995). Instead, communication scholars continue to transplant theories from other disciplines into the realm of communication in lieu of creating original communication theories, a practice that
some attribute to the desire of attaining more legitimacy and credibility as a new discipline (Peters, 1986). Transplanting theories from other academic disciplines continues the trend of isolated research and unregulated influx of disconnected theories, since anyone can introduce a slightly modified theory from any area of study and present it as a legitimate communication theory.

**Importance of Reviewing Theory**

To properly evaluate the state of the discipline, it is important to examine if a lack of cohesion is also a prevalent issue in contemporary instructional communication literature. Quantifying the number of theories in a manner similar to previous reviews (Anderson, 1996) would provide insights into how many different theories were referenced in the literature over the past 15 years and allow for drawing inferences about the (lack of) cohesion of instructional communication theory.

The practice of addressing and scrutinizing issues related to a discipline’s theories is an important matter as theories conceptually reconstruct communication practices within relatively abstract, explicitly reasoned, normative idealizations of communication; They function as a critical prerequisite to advance and cultivate communication in society and create a type of practical utility that makes a contribution to the real world (Craig, 1989, 1996; Craig and Tracy, 1995). This notion pertaining to real world utility and useful application of theory (Craig, 1999) is particularly important in the realm of instructional communication where research seeks to improve the process teaching and learning through communicative means.

Therefore, asking how many studies in contemporary instructional communication research reference theory can provide valuable insights into the extent of connectedness and cohesion. The more that researchers acknowledge, reference, cite, criticize, and further develop a core set of theories, the less isolated the research, and the greater the cohesion of the discipline’s
content. Findings will also determine what theories are more frequently referenced to establish a hierarchy of instructional communication theories, thereby providing insights into discipline’s research foci and inform what theoretical frameworks instructional communication is based upon. Given the discussion about addressing the lack of cohesion in instructional communication theory literature, the following questions arise:

RQ1: How many different theories have been referenced in *Communication Education* from 2000-2015?

RQ2: What are the most frequently referenced theories in *Communication Education* from 2000-2015 and how often were they referenced?

**Methods in Communication Research**

Research methods are instruments of systematic inquiry, designed in accordance to their corresponding paradigms. Methods are “practical technologies of philosophical systems, about the nature of reality and about how that reality may be known.” (Lindlof & Taylor, 2011, pp. 4). Methods can be regarded as the extension of paradigms and theories, as they are derived from a priori beliefs about ontology and epistemology. The sequential, systematic approach to investigating a phenomenon is predicated on selecting an appropriate method of its corresponding paradigm. The data that is collected by applying a particular method is subsequently analyzed to draw inferences and gain a better understanding of the phenomenon or in a practical sense, help facilitate the creation of solutions to problems. For instance, communities may work with researchers to address a particular social problem at hand as a collective effort to systematically resolve an issue (Argyris, Putnam & Smith, 1985; Heron & Reason, 1997; Reason, 1994). Communication phenomena are usually broad and complex and require a diversity of methods that serve different functions. Dependent on the ontological assumptions that precede the inquiry and the type of research questions asked, an appropriate method must be chosen by the
The nature of research can be separated into three distinct, epistemological approaches which ideally should fulfill complimentary functions: quantitative research, qualitative and research, and mixed/multiple method approaches in which several methods are applied in one study.

**Quantitative Research**

Following principles of applied mathematics, quantitative research uses numeric data and statistical data analysis to draw inferences and systematically test hypothesis (Frey, Botan & Krebs, 2000). Statistics can be broadly separated into the subcategories of descriptive and inferential statistics. Descriptive data analysis seeks to produce descriptions about the characteristics of a particular set of data by assigning numerical indicators in order to extrapolate descriptive information. Inferential statistics describe the process in which sets of data are systematically analyzed in order to draw inferences and conclusions (Cowles, 1989). More specifically, inferential statistical data analysis serve two practical functions: (1) generalize findings derived from a sample to estimate characteristics of a particular population and (2) conduct significance testing, a process which seeks to find significant statistical differences between groups or significant statistical relationships between variables (Frey, Botan, & Krebs, 2000). Derived from the natural sciences, quantitative methods are based on the paradigms of positivism and post-positivism, two related epistemological approaches based on particular assumptions that differ from the paradigms of qualitative research.

**Paradigms of Quantitative Methods**

Positivism and Post-Positivism paradigms have been the most dominant epistemological approach in communication research for many decades (Anderson, 1996). Social scientists, including communication scholars, have adopted the positivist paradigm from the natural sciences, arguing that it is a robust and valid tool to investigate human interaction (Lindlof &
Taylor, 2011). This approach to social scientific research applies in particular to explaining communication through external and psychological causes, where experiments and surveys are utilized to examine how communication affects human behavior. Quantitative research methods are therefore a direct extension of positivist assumptions.

The following characteristics were defined as positivist claims which form the base of quantitative methods: (1) reality is singular, a priori, objective and exists independently of the knower; (2) knowledge arises from observation of empirical phenomena, stemming from tangible evidence; with some modification, basic concepts and methods of the natural sciences can be applied to the social sciences; (3) (instruments of) quantitative methods need to be continuously updated and refined in order to most accurately reflect and capture the complexity of the nature of reality; (4) phenomena should be examined in ways that seek to isolate as many variables as possible in order to better account for associations and (causal) relationships; (5) measurement, quantification, and the use of statistical tools is the ideal form to express empirical observations and obtain evidence; (6) researchers should seek to investigate and understand causality of human behavior; (7) relationships between variables should be examined by carefully investigating samples of populations with specific traits, characteristics, or behaviors in aggregate, as opposed to individuals; (8) Results of successfully tested hypothesis should be incorporated into existing theory to further develop theory by deductive means (Anderson, 1987, 1996; Lincoln & Guba, 1985). These items form the basis and prerequisites for quantitative research methods.

**Quantitative Methods**

In the broadest sense, quantitative methods in communication research can be categorized as surveys, experiments, and (quantitative) meta- and content analyses. While these methods all rely on quantification of data and some form of statistical analysis, they all serve related, yet
distinct functions, dependent on the research questions asked and the objective the study seeks to accomplish.

Surveys are the most prevalent method published in communication research (Anderson, 1987, 1996; Potter, Cooper, & Dupagne, 1993). Continuously developed in variety of fields such as statistics, political science, psychology, and sociology (Groves, 1987), surveys are ideal to gather information about a population’s beliefs, attitudes, and behaviors by directly asking participants who serve as representatives of a population of interest (Frey et al, 2000). Surveys are usually constructed in accordance to a correlational design, relinquishing the type of control enacted in experimental designs, to assess non-causal relationships between variables. Surveys alone, however, do not suffice as a method of inquiry if the researchers seek to gain insights about causality.

The only method that can provide insights about causal dynamics and relationships between two variables are carefully designed experiments. Causality is best described as an event or condition that will always follow a given antecedent, or, in accordance to statistical laws, a certain percentage of time, predicted within specific limitations (Bowers & Courtright, 1984). To ensure that outcomes were caused by the manipulation of the independent variables, the researcher seeks to control and account for all conceivable interfering factors (e.g. lurking variables, the environment) in order to conclude that changes in dependent variable cannot be attributed to any factors other than the manipulated, independent variables (Kerlinger, 1973).

Generally, experimental designs can be separated in three categories with varying degrees of control: (1) full experiments in which the dependent variable is manipulated and participants are assigned to multiple conditions; (2) quasi experiments in which the dependent variable may be manipulated and observed, and there may be one or more conditions created by pre-tests instead of randomization; and (3) pre-experiments in which the independent variable is
manipulated or observed and there is neither randomization, nor pretests conducted for one or more conditions. (Frey et al., 2000; Campbell & Stanley, 1963). Experiments in communication research usually seek to address how certain types of communication interact to affect attitudes, perceptions and behaviors.

Quantitative content analyses constitute a method in which hypotheses is systematically tested through the process of selecting an artifact, determining the units to be coded, developing categories, training observers to code the units, and subsequently analyze the derived data (Frey, et al., 2000). Content analysis allows for a systematic and replicable examination of communication and the analysis of relationships through the use of statistical methods to describe various inferences (Riffe, Lacy, & Fico, 1998). This approach to investigating communication has several benefits: (1) it is unobtrusive, since it examines already existing artifacts; (2) it allows for the examination of unstructured material as opposed to interviews and questionnaires that inherently may influence or limit responses; (3) data in content analysis in context, as opposed to an isolated, controlled, experimental setting; (4) content analysis can process large amounts of data, in particular through electronic processing.

**Qualitative Research**

Qualitative methods define the core interest of communication scholarship by studying human symbolic interaction in relation to subjective perception and situational context of its performance (Cronkhite, 1986). In context of this epistemological approach, the term “performance” describes communication acts that are not conceived as a mere transfer of information between two or more monads, but an event that carries significance due to various qualities that are inherently contained in human exchanges and interactions (Bauman, 1986). Communication from this perspective is conceived as more than the sum of its parts by involving external factors such as circumstance, context, power dynamics, and subjective perception of the
communication event, as a part of the interaction. Qualitative research pursues insights, knowledge and understanding of subjective truths in a real-life setting (as opposed to a controlled environment) by asking questions such as: (1) what is taking place in a particular setting?; (2) What is being accomplished by whom?; (3) how do research subjects carry out specific tasks?; (4) how do activities change, depending on who is doing it, and when, and where?; (5) how do the research subjects understand and justify their actions?; (6) how do the research subjects relate to the researcher and perceive themselves?; (7) how is gaining subjective insights of value to researchers, professionals, and the general public? All of these question reflect a context bound nature, as well as the value placed on subjectivity and immersion of the researcher (Lindloff and Taylor, 2011) which are characteristics based on the paradigms of Interpretivism and Naturalism.

Paradigms of Qualitative Research

Interpretivism/Naturalism could be conceptualized as the complimentary paradigm to positivism and its quantitative methods. Some researchers argue that qualitative methods account for shortcomings of quantitative methods insufficiently equipped to investigating situated and/or reflexive social action (Deetz & Putnam, 2001). Interpretivism has been developed from the convergence of several nineteenth- and twentieth-century intellectual traditions, such as German idealist philosophy, phenomenology, hermeneutic philosophy, and American pragmatism and is based on the epistemological assumptions of multiple, subjective realities, with human beings engaging in sense-making by social constructs and the interpretation of symbols, (Lindloff & Taylor, 2011; Taylor, 2005). Qualitative research methods are thereby a direct extension of interpretivist assumptions, equivalent to quantitative methods being an extension of positivist assumptions.

The following characteristics define positivist claims: (1) the human sciences are inherently different than the natural sciences, as humans engage in the complex use of symbols,
sense-making, and choice making. Methods must account for the complexity of human interaction and symbolic interpretation; (2) realities and truths are unique, plural, simultaneous, and local phenomenon. They are collaborative in nature and emerge through interpretation and expression; (3) research should seek to understand contextualized human actions, motives, feelings, use of symbol systems, and the creation of shared meaning; (4) research should be immersive, with the researcher becoming the instruments; (5) subjectivity should be preserved, and biases, knowledge claims, should be reflected on and accounted for; and (7) Theory should be developed by inductive means (Arnett, 2007; Cheney 2000; Guba & Lincoln, 2005). Qualitative research methods are therefore designed to gain insights into the subject, context bound perceptions and qualities of individuals engaging in human interaction.

Qualitative Methods

Qualitative research methods are instruments of interpretivist/naturalistic inquiry in which the researcher seeks to extrapolate data from context-specific phenomena and gain insights about multiple, subjective realities and perceptions of all participants (Guba & Lincoln, 1994). Pursuant to this function, there are three general assumption that underlie the immersive approach of naturalistic inquiry defining qualitative methods: (1) naturalism, which describes the belief that phenomena should be investigated in their natural context; (2) phenomenology, which describes the practice of conducting a study without any preconceived notions or a priori expectations; (3) interpretive nature, which recognizes the researchers’ subjective accounts as valuable, rather than distorting (Porter, 1996). These three basic assumptions pose a contrary approach to positivism and quantitative methods, particularly the aspect of the researcher becoming part of the study and serving as an instrument by openly disclosing any norms, values, and ideological beliefs (Anderson, 1987).
While there is a great number of methods with nuanced differences to conduct a qualitative study, many of which use multiple methodology, qualitative methods can be generally categorized into interviews; ethnographies, and textual analysis/rhetorical criticism.

Interviews are a broad, popular, and omnipresent method of inquiry in academia as well as everyday life, making it a familiar tool to gain information (Lindlof & Taylor, 2011). Due to the vast use of interviews, there are many definitions to describe this common method. For instance, interviews were defined as a social technique for the public construction of the self (Kavale & Brinkman, 2009), as means to develop a view of something between people, reflecting a social practice (Brenner, 1985), and the perhaps most basic, yet suitable conception relative to an academic context: interviews are conversations with purpose (Bingham & Moore, 1959). At the most basic level, interviews serve to systematically understand a phenomenon through ongoing dialogue in which two people co-create meaning by engaging in a dynamic of asking questions and sharing knowledge. Interviews thereby become a reflexive approach in which knowledge accumulates through an evolving conversation with many turns at talks (Paget, 1983). The purpose of a qualitative interview is its referential function to better understand people, setting, events, and behaviors (Briggs, 1986) and to gain witness information from a sound source that provides insights in a particular setting (Hammersley & Gomm, 2008).

There are different types of interview methods that serve different function and are more appropriate under certain circumstances. For instance, there are ethnographic interviews, which can be regarded as situational conversations to gain a better understanding of an ongoing occurrence which is being observed in the field (Schatzman & Strauss, 1973). Focus groups on the other hand, are the most popular form of group interviews and used in the social sciences and communication studies for decades, in order to gain insights about group perceptions, opinions, and reactions (Frey & Fontana, 1991; Morrison, 1998). While differing in practice and approach,
all types of interviews generally seek to specifically fulfill the following major purposes (1) understanding the social actor’s experience and perspective through stories, accounts, and explanations; (2) gathering information about things or processes that cannot be observed by other means; (3) inquiries about the past; (4) verifying or commenting on information from other sources (Lindloff & Taylor, 2011).

**Tension between the Quantitative and Qualitative Paradigms**

Despite the prevalence of positivism and consequently, the use of quantitative research methods in communication studies in general, as well as in the field of instructional communication, there has been constant criticism towards its use as a tool for social scientific inquiry. For instance, critics argue that positivist assumption lack coherence due to it being comprised of conflicting traditions (Corman, 2005). More specific criticism posits that the paradigm of post-positivism emerged as a response to the criticism towards the extent to which quantitative methods reduce complex, value-driven, human interaction to simple isolated variables of interest (Lindloff & Taylor, 2011). Critics further assert that a positivist approach in which methods of natural sciences are applied to investigate human interaction may be insufficient due to human interaction being complex, subjective experiences (Corman, 2005).

In light of the tension between quantitative and qualitative paradigms, the following items display the potential for reconciliation of quantitative and qualitative methods to create a more comprehensive approach: (1) while ontology and realist truth exists independently of the knower (under the positivist paradigm), subjective human beliefs about phenomena are nevertheless complex, diverse, and manifest themselves in actual behavior; (2) even if positivist criticism which claims that value-free, objective inquiry being unattainable is true, bias, subjectivity and interpretation can still be reduced by the use of quantitative methods. (3) The dominance of and regard for quantitative methods as being a superior tool of inquiry in
communication studies is ill-advised (Corman, 2005; Lincoln, & Guba 1985; Miller, 2002). The underlying idea of this list is that both quantitative and qualitative methods are both legitimate, useful tools of inquiry. It is therefore not the use, but the dominance of quantitative method that should be subject to appraisal, as the lack of qualitative inquiry in the discipline may be detrimental to communication research as a whole.

In the greater context of research, methods become more than a tool of inquiry. Dependent of which methods are utilized and perhaps even preferred, particular type of answers are being generated while certain insights about phenomena may remain neglected. As more instructional communication research is published, it is therefore important to assess what type of answers, insights and knowledge are being derived. In other words, by investigating what methods are used one can draw inferences about the nature of questions that are being asked, what type of research is being conducted in a broader sense, and conclusions can be drawn about how instructional communication phenomena are generally approached. Evaluating methods thereby becomes an important component of any comprehensive review. In a more recent review study, Mazer and Graham (2015) surveyed and evaluated 21 instruments that were used in instructional communication research over the past decade, arguing that “periodic assessment and scrutiny of the discipline’s measurement practices, instruments, and research findings are necessary to provide clarity and direction by revealing what we know, how we know it, and where the knowledge gaps exist (pp. 204).

Examining what methods are used and what paradigms are more prevalent in the research are therefore important questions to ask when seeking to assess the state of the discipline. The ration between qualitative and quantitative studies published in instructional communication literature would allow to identify the dominant research paradigm the discipline has ascribed to, and thus help define the identity of the discipline by quantifying its epistemological preference.
RQ3: What is the ratio of quantitative research articles to qualitative research to mixed method articles in *Communication Education* between 2000 and 2015?

While asking questions about the underlying paradigm, a more detailed investigation of specific methods used provides further insights into the state of the discipline. As previously established, the different methods of each paradigm are used to answer specific types of differing questions. A comparison of what specific methods are deployed in relation to one another could therefore provide an idea about the type of data that is created to draw conclusions about a given topic. For instance, if the number of surveys, experiments, content analysis, interviews, ethnographies, and critical approaches are relatively even, it may be indicative of instructional communication being a well-balanced discipline that takes a comprehensive approach to answer a diversity of questions, perhaps even favoring breadth over depth. Conversely, if an analysis of methods applied revealed a ratio in which 90% of all studies are non-experimental surveys, with all other methods combined sharing the remaining 10% percent, it could be concluded that instructional communication is a field of study which conceives its prime objective and most valuable contribution as uncovering associations. In this example, it would indicate that associations are deemed as the most promising mode of explanation to reveal insights into the dynamic of communication in the process of teaching and learning. In addition to exploring the ratio among methods used, it may also be insightful to draw inferences about the most and least frequently applied methods and the underlying implications thereof.

In order to gain a holistic understanding of a phenomenon, it is not only important to identify the methods used to collect data, but it is also crucial to examine who the participants in these studies were. Where the methods function as the tool to derive data, participants function in studies as the source of information. It is therefore crucial to identify the source as differing participants will most likely produce differing results. In a greater sense, revealing the
distribution of participants used as a source of data provides significant insights into where scholars are getting their information form and what groups are more frequently consulted than others. Identifying participants therefore provides insights into research foci by revealing whether or not scholars seem to focus on certain demographics more than others. For instance, does the literature prefer the student perspective to the instructors’ perspective? With instructional communication being a field of study dedicated to a general, universal approach to teaching and learning, how often are insights derived from participants that do not belong to a university demographic, such as business professionals or children? Such questions carry significant epistemological implications since it drives the type of knowledge created in the literature.

In order to obtain a comprehensive impression of how knowledge, insights, and understanding of instructional communication phenomena are derived, the following questions arise:

RQ4: What is the most frequently applied method in Communication Education between 2000 and 2015?

RQ5: In Communication Education between 2000 and 2015, what is the percentage of individual methods applied? What methods are most frequently applied? What methods are least frequently applied?

RQ6: Who were the participants in studies in Communication Education between 2000 and 2015?

**Instructional Communication Topics**

At the inception of instructional communication as a field, scholars argued about what topics should be researched and what unique contributions instructional communication could make that are distinct from other disciplines (Eisener, 1983; Howe, 1988; Soltis, 1984). The creation of a new sub-discipline itself implies that there was a need or benefit to ask new, distinct questions, present new perspectives, and focus on problems that other areas of study have either
neglected or failed to address entirely. The underlying question that arises is what is being researched in instructional communication that justifies it as a unique field of research?

To understand which topics were being studied in the instructional communication, Staton-Spicer and Wulff (1984) conducted the first comprehensive review of instructional communication literature, in which they argued for the importance of disciplines to examine their product and scrutinize their contributions. In addition to reviewing instructional communication research published between 1974 and 1984, the article also provided an overview and critique of previous reviews, which attempted to summarize, categorize, evaluate and define certain aspects thereof the literature. This analysis of previous instructional communication review is indicative for a general acknowledgement of the importance of assessing the state of the discipline as well as providing insights about what topics were being researched. For instance, Feezel (1974), Galvin and Cooper (1981), Newcomb & Allen (1974), and Scott and Wheeles (1977) all created different type of surveys that, despite the shortcomings, sought to examine different aspects of instructional communication research.

Researchers also conducted targeted reviews to yield insights into more specific instructional communication topics such as the use of traditional and non-traditional strategies, classroom interaction, instructional objectives, the relationship between learning theory and instructional communication, as well as communication development (Daily & Korinek, 1980; Galvin & Cooper, 1981; Kibler, Bassett & Byers, 1978; Lashbrook & Wheeles, 1978; Van Kleek and Daily, 1982; Wheeles & Hurt, 1979).

While inquiries into specific instructional communication objectives and practices comprise the foundation of many strands of contemporary instructional communication research, it is important to note that these reviews were conducted throughout the 1970 and early 1980s. During this time period, instructional communication, as a stand-alone area of research, was still
in its infancy, with a relatively small body of work to review. Its purpose, approach, perspective and the topics it should comprise were still subject to debate and speculation. Decades later, a consensus about the discipline’s identity and topical focus was still not found, despite an extant body of literature. Nevertheless, over several decades hundreds of articles have been published in the name of instructional communication research, despite persistent disagreement. Due to this development, the debate about what topics should be researched in instructional communication has lost its merit as it is no longer a question of ideals or speculation.

The new questions that must be asked to successfully review, evaluate and assess the state of the discipline is no longer what should be researched, but what has been researched in contemporary instructional communication literature. The question shifted from what the discipline’s identity should be, to what is actually has become, based on the topics that were researched.

Over 15 years ago, another comprehensive study, similar to the one of Stanton-Spicer and Wulff (1984), sought to answer what was being researched in instructional communication research by reviewing and categorizing articles published between 1990 and 1999 (Waldeck, et al., 2001). Based on the topics presented in the literature, several categories were derived by grouping various subject matters, thereby creating a comprehensive overview the discipline’s research focus.

In the most recent review study of instructional communication, a qualitative approach was taken to evaluate the content of literature. As in this study, the instructional communication flagship journal *Communication Education* was reviewed to draw conclusions about the research conducted in the field (Hendrix & Wilson, 2015). The article reviewed all studies published between 2000 and 2013 by scanning the title and the abstract of each study, for keywords and phrases, which in accordance to a qualitative, typological study, were thematically grouped to
form different the categories of teacher/instructor-to-student communication, public speaking, technology, and identity. While the goal of the study was predominantly aimed at revealing a disparity of articles dealing with diversity, race, and identity in *Communication Education*, and less to create a snapshot of the content as the aforementioned reviews, it nevertheless illustrated an important aspect relevant to the discussion. The study exemplified the purpose and utility of conducting comprehensive reviews. Surveying the topics addressed in the literature revealed a dearth of articles related to the issue of race and ethnicity. Comprehensive surveys therefore do not only serve as a means to satisfy the curiosity of scholars or help explain theoretical models, but they also have a practical application consistent with the function of revealing knowledge gaps (Mazer & Graham, 2015). Thus, conducting periodic surveys of content and conduct are critical aspects for a healthy discipline.

Since no such comprehensive survey has been conducted in over a decade, it is prudent to reassess by asking what changes, if any, have occurred over the last 15 years, and thus gain a better understanding of what topics and concerns were addressed.

RQ7: How many different topics have been researched and/or addressed between 2000 and 2015 in *Communication Education*?

RQ8: What are the most researched topics between 2000 and 2015 in *Communication Education*?

**Author Productivity**

In order to properly assess the state of the discipline, it is crucial to take a comprehensive approach by considering many differing factors that influence the content of instructional communication research. Pursuant to this approach of gaining a holistic impression about trends, preferences, research foci, and influences, it is not only important to determine what is being published, but also who is contributing to the content. For decades, assessing and evaluating author productivity has been a common practice in academia, in particular communication
studies, when reviewing the content of an area of research (Barnett, Danowski, & Feeley, & Stalker, 2010; Hickson, Stacks, & Amsbary, 1989; Hickson, Self, Johnston, Peacock, & Bodon, 2009).

Review studies that revolve around author productivity and the implications thereof have been published with great frequency (Hickson, et al., 1989, 1992, 2004, 2009) to track and draw conclusions about individual scholarly output. The importance of individual author productivity is attributed to several different factors. Reasons justifying the need to examine author productivity range from a desire to measure trends and ascertain normative rates of publishing (Bolkan, 2012, Griffin, Linn, Holmgren, & Hickson, 2012) to inferences that can be drawn about the most prolific scholars’ impact on the greater field of study.

Implications of proficient scholarly output is also associated with personal benefits for those who are being published such as receiving grants, getting hired, promoted, and obtaining tenure (Allen, 1996; Feeley, LaVail, & Barnett, 2010). In addition to personal gain, high author productivity also reflects favorably on the researcher’s department, in particular the perception of the programs quality and reputation. Being able to present a productive faculty therefore becomes a crucial factor for departments in times where comparative analysis of academic programs, reputational studies, and the resulting widely publicized college rankings have a real-life impact on university programs, as they affect the perception of public and the prospective student candidate pool (Ehrenberg, 2002; Stephen, 2008). It is important to note, that there are many ways to measure productivity in the context of reputational studies, university rankings, and the assessment of program quality (Kramer, Hess, Reid, 2007). However, author productivity and research merit are most commonly measured by the mere quantity of articles published (Levine, 2010).
The practice of evaluating author productivity solely based on the number of articles published as well as the resulting implications thereof have often become subject to controversy and criticism (Erikson, Fleuriet, & Hosman, 1993; Farrell & van der Werf, 2007).

Conceptualizing author output as a desirable trait has raised concerns in a variety of ways. Critics have posited that researchers may be incentivized to prioritize publishing as many papers as possible at the cost of being dedicated teachers as well as producing creative, insightful quality research that advances the research agenda in a meaningful way (Bolkan et al., 2012). In particular the argument regarding the issue of how to evaluate and equate the quality of research as opposed to the quantity of research articles published has been an ongoing discussion raised decades ago (Erickson et al., 1993). Despite years of persistent criticism, quantifying author productivity and using it as an inferential metric has been a common practice in the past (Hickson, Stacks, Amsbary, 1992) and remains a tool of inquiry to attain a variety of noteworthy conclusions in contemporary literature (Bokan et al. 2012; Hickson, Self, Johnston, Peacock, & Bodon, 2009). The number of citations, published articles, and directed dissertation are all desired attributes for researchers to be considered effective, prolific faculty members, relative to their personal reputation as well as the overall assessment of their communication program (Stephen, 2008). Thus, in order to provide a comprehensive snapshot of the current state of instructional communication as a field of study, the factor of scholarly productivity should also be accounted for in this review of Communications Education.

As posited in the aforementioned reviews, quantifying productivity may help draw inferences about the extent to which individual scholars influence the content of the instructional communication flagship journal. For instance, if the 10 most prolific scholars account for a significant proportion of all articles published in the journal, it may be favorable for the reputation and careers of those individual researchers, but, conversely, it may also raise questions
and spark further dialogue about the merits of frequent publication and the associated implications for the general research agenda and journal content.

RQ9: What is the percentage of articles the most proficient scholars have collectively contributed to the journal’s content between 2000 and 2015?

RQ10: Who were the most contributing scholars to *Communication Education* between 2000 and 2015?
CHAPTER 3

METHODOLOGY

A manifest content analysis was conducted to answer the research questions of this study, since it allows for systematic quantification, description, and evaluation of artifacts, messages, or any other form of manifested and recorded communication. (Berelson, 1952; Kolbe & Burnett, 1991).

Content analysis is a frequently applied research method especially in communication studies to explore a wide range of topics such as analyzing news content and programming (Jacobson, 2010; Magee, 2013), research trends in communication (Macias, Springston, Weaver-Lariscy, & Neustifter, 2008; Morreale, Backlund, Hay, & Moore, 2011), as well as mediated health messages (Jarlenski & Barry, 2013; Stefanik-Sidener, 2013; Johnson, Sionean, & Scott, 2011). Furthermore, and most relevant to this study, content analyses are commonly used to examine academic journal content in fields such as journalism and mass communication (Matthes, 2009), health communication (Nazione, Pace, Russell, & Silk, 2013), and instructional communication (Waldeck, et al., 2001).

Data Source

The journal’s articles were the unit of analysis in this study. All issues of *Communication Education* published between January 2000 and July 2015 were reviewed in this comprehensive survey. During this time period, 57 issues were published, containing a total of 450 articles. All 450 articles, were sorted by type and placed in one of the following categories: (1) research articles, (2) thematic and analytical essays, (3) book reviews, and (4) “other”.

Definition of Article Types

Research articles are defined as studies in which a replicable, empirical method was applied to derive findings based on systematic inquiry, testing, and observation to obtain
objectively derived results in accordance to qualitative and quantitative methods of their respective research paradigms. The different components of the research study are described in great detail with respect to participants, the employed method, procedures, and other factors that comprise the description of a systematic, traditional study. Examples of research articles include studies about student’s orientation toward school (Tibbles, Richmond, & McCroskey, 2008), the relationship of teacher clarity and immediacy with student apprehension, affect, and cognitive learning (Chesebro & McCroskey, 2001), instructor credibility (Wheeless, Witt, Maresh, Bryand, & Schrod, 2011), and how students’ perceived understanding mediates the effects of teacher clarity, immediacy and empowerment (Finn & Schrod, 2012).

Thematic and analytical essays are subjective accounts that address issues and explore ideas relative to a general subject matter, usually in form of a type of review, statement, or precursor to subsequent studies or the journal’s thematic content. Examples for subjective and analytic essays are editorials, author reflections, literature reviews, future speculations, best practices, and narratives. Specific examples of articles that were coded as thematic and analytical essays include: an editorial dedicated to making predictions about the future of Communication Education (Witt, 2012), reflections of a former Communication Education editor (Roberts, 2002), reflections on the history and development of Communication Education (Brown, 2002), and exploring thematic questions such as “Raising the Question #1: Is the rush to provide on-line instruction setting our students up for failure?” (Allen, 2006) and “Raising the Question #6: What do communication trainers do?” (Beebe, 2007).

Book reviews are brief, evaluative, analytical, or critical reviews of the content of a text book thematically revolving around education, instruction, communication, or pedagogy. Examples of articles that will be coded as book reviews include: Reviews of books such as Robert Sylwester’s *A biological brain in a cultural classroom*, John T. Warren’s *Performing*
purity: Whiteness, pedagogy, and the reconstitution of power and Robert V. Smith’s *The elements of great speechmaking: Adding drama & intrigue* (Kinser, Bodary, Treinen, & Hamilton, 2005).

The fourth category “other” captures all that does not fall into any of the aforementioned categories. Examples of articles that fell in the “Other” category include items such as corrigenda, editorial review board listings, and tributes to deceased scholars.

**Distribution of Article Categories**

The 450 published articles were categorized as followed: 304 articles (67%) were research studies and therefore included for review. One hundred nineteen articles (26%) were thematic and analytical essays and therefore included for review. Twenty-one (5%) were books reviews, and 6 articles (1%) were categorized as “other”. Book reviews and articles categorized as “other” were not included in this study as the content does not address what is being researched in the discipline and does not address original instructional communication content, i.e. instructional communication scholars’ contributions to *Communication Education* literature.

**Coding Scheme**

Coding was conducted for all variables investigated in this study. Coders were tasked with identifying and recording variables in the following categories (1) theory, (2) method, (3) topics, and (4) author productivity.

**Coding for Theory**

For the variable of theory, all articles were reviewed, i.e., empirical research articles, and thematic and analytic essays. Coders recorded the names of the referenced theories as well as the total number of referenced theories (including the lack of mentioning any theory). Coders scanned for specific theory names, e.g., attribution theory, communication theory, uncertainty reduction theory, etc. Coders did not simply scan for the word theory. Coders were tasked to decide, based on context, if the word theory was used as a general noun, or described a specific
theory, i.e., used a proper noun. For instance, the sentence “it is an important aspect of balance theory to evaluate all variables equally” is a valid reference of a specific theory (“balance theory”) and should be recorded because balance theory is contextually used as a proper noun. However, the sentence “It is important to balance theory with all variables equally” should not be recorded because no particular theory name was referenced. The statement only indicates the importance to balance theory (theory as a general term) with variables. The word balance in this example is used as a verb and is not part of a proper noun/name.

**Coding for Method**

For the variable of method, only research articles (empirical studies) were reviewed, as thematic and analytic essays, by definition, do not employ an empirical method to collect original data. Coders identified and recorded the following variables relative to the variable of method: the overarching paradigm (quantitative/qualitative/mixed method), and the method employed (survey, experiment, manifest content analysis, meta-analysis, interview, ethnography, focus group, open-ended survey, latent content analysis, rhetorical criticism).

**Coding for Topics**

For the variable of topics, all articles were reviewed, i.e., research articles and thematic and analytic essays. In order to identify the subject matter/topic of an article, coders recorded all keywords describing the content of the article, listed on page 1, usually following the abstract of each article. Investigating keywords to assess article content is an approach that has been done in a recent journal content review (Hendrix & Wilson, 2014). The advantage of examining keywords as a reliable measure for article content is predominantly due to keywords being explicitly labeled as such. In other words, there is no interpretive element to identifying the keywords and by extension the content. This approach reduces ambiguity and allows for a more objective approach to assess what the article is about. Coders do not have to subjectively judge or
draw inferences about the content of the article. Instead, the proclaimed topic(s) covered in the article are clearly identified by keywords that were most likely provided by the author(s) to best describe the topic of their article.

In this study, coders were solely tasked with copying the listed keywords. Most articles feature multiple keywords as descriptors, which indicates that multiple, thematically similar topics may be addressed simultaneously. For instance, a study seeking to investigate how teacher immediacy interacts with the use of technology to affect student empowerment would be tagged with the keywords immediacy, use of technology, and student empowerment.

While recording multiple keywords will result in some double-counting of topics, it nevertheless remains a sound way to identifying and categorizing the vast number of topics that are of interest in the discipline in a consistent and objective manner. Assessing what is being researched will not be obscured by subjective interpretation or skewed/limited through the establishment of a priori criteria. Coding for keywords will reduce ambiguity, avoid semantic issues, and provide a concise measure to reflect what phenomena authors of instructional communication seek to address.

**Coding for Author Productivity**

For the variable of author productivity, all articles were reviewed, i.e., research articles and thematic and analytic essays. Coders recorded the names of all authors, regardless of order. This is based on the assumption that it is impossible to ascertain the contribution of each author relative to another. In the collaborative effort that is co-authorship, a first author may have contributed 80% in one study, whereas another first author may have only contributed 50% in another, comparable study with a more equitable work distribution between first and co-authors. Such variation contains the potential for inconsistency that could affect the validity of subsequent conclusions and inferences drawn about the meaning of first, second, and subsequent authorship.
Also, in many cases, the first author could conceivably be a protégé of a second or third author, in which the first author may be influenced by the mentors, thereby creating a study that is still significantly shaped by the second, third, and subsequent authors. For instance, in a recent article Linda McCroskey et al., illustrates and speaks of the impact James C. McCroskey had on the discipline of instructional communication and list the number of publications of over 30 of James C. McCroskey’s students (McCroskey et al., 2014). This example demonstrates the influence one single scholar can have on a discipline and how that influence extends to mentees, making it irrelevant if the scholar is listed as the only author, a first author, or a co-author.

With no established standards for first and subsequent authorship, an inability to verify contributions, and inconsistencies between studies, coding for the names of all authors is a more comprehensive approach to capture the overall influence of all scholars published in Communication Education. It proactively negates any differing opinions about the meaning and significance attributed to the hierarchy of authorship.

**Coding for Reliability**

The author functioned as the primary coder who coded all articles. Since establishing inter-coder reliability is a critical aspect of a content analysis in order to attaining objective, valid, and credible results (Neuendorf, 2002; Tinsley & Weiss 2000), the primary coder’s reliability first needed to be established by correlating the primary coder’s results with those of trained coders for each variable.

**Establishing Inter-Coder Reliability**

To answer the research questions, the following variables were coded: (1) theory, (2) method, (3) topics, and (4) author productivity.
**Inter-coder Reliability for Theory**

The variable of theory was coded for the total number of theories referenced in *Communication Education* between 2000 and 2015 and the names of all unique theories mentioned in order to assess the prevalence of theory in the literature. An online random number generator available on the website Random.org was used to create a randomly selected sample of 105 articles (25% of all eligible articles for the variable of theory).

The primary coder and a trained coder separately counted the number of theories referenced in the sample and recorded the names of all counted theories. After coding the articles, the primary coder and trained coder discussed any discrepancies. After discussion, the agreement between primary and trained coder was 100%. This high level of agreement is due to the lack of any subjective or interpretive element in coding. The coders could jointly verify that theory numbers and names were recorded correctly.

**Inter-coder Reliability for Method**

The variable of method was coded for the paradigm (quantitative, qualitative, mixed/multiple method), the method used (survey, experiment, manifest content analysis, meta-analysis, interview, ethnography, focus group, open-ended survey, latent content analysis, rhetorical criticism) and the participants in the study.

An online random number generator offered by the website Random.org was used to create a randomly selected sample of 105 articles (35% of all eligible articles for the variable of method). The primary coder and a trained coder separately coded for the paradigm, applied method(s), and participants. After coding the articles, the primary coder and trained coder discussed any discrepancies.

For the variable of paradigm, the primary and trained coder did not reach 100% of agreement due to the interpretive element of coding for paradigm. Therefore, Scott’s Pi was
chosen as the index to determine the inter-coder reliability. Scott’s Pi achieved an inter-coder reliability of .98, which constitutes a sufficient level of agreement.

For the variable of applied method(s), the primary and trained coder did not reach 100% of agreement due to the interpretive element of coding for method. Therefore, Scott’s Pi was chosen as the index to determine the inter-coder reliability. Scott’s Pi achieved an inter-coder reliability of .92, which constitutes a sufficient level of agreement.

For the variable of participants, the agreement between primary and trained coder was 100%. This high level of agreement is due to the lack of any subjective or interpretive element in coding for participants. Coders could jointly review articles where disagreements occurred and verify that participants were recorded correctly.

**Inter-coder Reliability for Topics**

The variable of topics was coded for the total number of unique keywords referenced in *Communication Education* articles published between 2000 and 2015 and the names of all unique keywords listed as descriptors in order to identify how many unique topics were addressed and to identify the most researched topics. The primary and a trained coder reviewed all key words in this study.

The primary coder and a trained coder separately counted the number of unique keywords listed as descriptors and recorded the names of all listed keywords. After coding the articles, the primary coder and trained coder discussed any discrepancies. After discussion, the agreement between primary and trained coder was 100%. This high level of agreement is due to the lack of any subjective or interpretive element in recording the number and names of listed keywords. The coders could jointly review articles where disagreements occurred, and verify that all keywords were recorded correctly.
Inter-coder Reliability for Author Productivity

The variable of author productivity was coded for the listed author names who published an article in *Communication Education* between 2000 and 2015. All articles (100% of articles eligible for the variable of author productivity) were reviewed by the primary and a trained coder.

The primary coder and a trained coder separately identified all author names. After coding the articles, the primary coder and trained coder discussed any discrepancies. After discussion and online inquiries to verify a scholars’ names, the agreement between primary and trained coder was 100%. This high level of agreement is due to the lack of any subjective or interpretive element in recording the names of listed authors. The coders could jointly verify that all author names were recorded correctly in addition to looking up the author online to ensure the correct spelling, or order of names.
CHAPTER 4
RESULTS

Article Types

A total of 450 articles were published between January 2000 and July 2015. The articles were categorized into four different categories (see Table 1):

<table>
<thead>
<tr>
<th>Article Type</th>
<th>Number of Articles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thematic/Analytical Essays</td>
<td>119</td>
<td>26%</td>
</tr>
<tr>
<td>Research Articles</td>
<td>304</td>
<td>68%</td>
</tr>
<tr>
<td>Book Reviews</td>
<td>21</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>1%</td>
</tr>
</tbody>
</table>

To determine if the most frequent article type, empirical studies (68%) was significantly different from the other articles, a Chi-square analysis was conducted. The category “other” was excluded from this Chi-square analysis since it does not contain any comparable academic content. Results indicate an uneven distribution $\chi^2 = 501.6, p = <.0001, df = 2$. An additional comparison was conducted to examine the differences between the two articles types that are subject to review to in this survey: Thematic/analytical essays and empirical research articles. Results revealed a statistically significant difference between the total number of empirical studies and thematic/analytic essays $\chi^2 = 80.4, p = <.0001, df =1$.

Theory

Research question 1 asked “How many different unique theories have been referenced in Communication Education from 2000-2015?” To answer this question, a total of 423 articles (304 studies and 119 thematic/analytical essays) were reviewed for the total number of unique theories, as well as the name of each theory. Of the 423 reviewed articles, 166 did not mention any unique
theory. Of the remaining 257 articles that mentioned at least one unique theory, a total of 236 unique theories were referenced.

To determine if there was an equal distribution between the number of articles with a reference to at least one unique theory and the number of articles that refrained from making any reference to a unique theory, a chi-square analysis was performed. Results indicate a statistically significant difference between articles that referenced at least one unique theory and articles that did not reference a unique theory $\chi^2 = 19.14, p = < .0001, df = 1$.

Table 2 Distribution of Theories

<table>
<thead>
<tr>
<th>Theory Name</th>
<th>Number of References</th>
<th>Percentage of Articles with at least one Theory reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Theory</td>
<td>53</td>
<td>21%</td>
</tr>
<tr>
<td>Grounded Theory</td>
<td>19</td>
<td>7%</td>
</tr>
<tr>
<td>Expectancy Violation Theory</td>
<td>18</td>
<td>7%</td>
</tr>
<tr>
<td>Rhetorical Theory</td>
<td>16</td>
<td>6%</td>
</tr>
<tr>
<td>Attribution Theory</td>
<td>16</td>
<td>6%</td>
</tr>
<tr>
<td>Emotional Response Theory</td>
<td>14</td>
<td>5%</td>
</tr>
<tr>
<td>Learning Theory</td>
<td>13</td>
<td>5%</td>
</tr>
<tr>
<td>Systems Theory</td>
<td>11</td>
<td>4%</td>
</tr>
<tr>
<td>Politeness Theory</td>
<td>11</td>
<td>4%</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>65%</td>
</tr>
</tbody>
</table>

Research question 2 asked “What are the most frequently referenced theories in Communication Education from 2000-2015 and how often were they referenced?”

The most frequently referenced theories were communication theory, grounded theory, expectancy violation theory, rhetorical theory, attribution theory, emotional response theory, learning theory, systems theory, and politeness theory (see Table 2). They were cited a combined total of 171 times which constitutes 65% of all referenced unique theories. However, it is
important to note that the by far most referenced theory, the all-encompassing theory of “Communication Theory” factored into this total. By eliminating Communication Theory form the count due to its broad semantic meaning, the total for the remaining eight most cited theories is adjusted to 118 (46%) of all referenced unique theories.

To determine if there was an equal distribution between the total number of the 9 most frequently referenced unique theories (of the 257 articles that referenced at least one unique theory) and the remaining unique theories, a chi-square analysis was performed. Results indicate a statistically significant difference between the total number of the 9 most frequently referenced theories and the remaining 227 unique theories $\chi^2 = 46.72, p = < .0001, df = 1$.

**Methods**

Research question 3 asked “What is the ratio of quantitative research articles to qualitative research articles to mixed method articles in Communication Education between 2000 and 2015?” To answer this question, a total of 304 research articles (empirical studies) were reviewed for the variable of paradigm by sorting the corresponding articles by study type. Articles were placed into one of three categories: quantitative studies, qualitative studies, and mixed method/multiple method studies (see Table 3).

<table>
<thead>
<tr>
<th>Table 3 Distribution of Research Paradigms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Paradigm</td>
</tr>
<tr>
<td>Quantitative Studies</td>
</tr>
<tr>
<td>Qualitative Studies</td>
</tr>
<tr>
<td>Mixed/Multiple Method</td>
</tr>
</tbody>
</table>

To determine if there was an equal distribution among paradigms a chi-square analysis was conducted. Results indicate an unequal distribution among paradigms. $\chi^2 = 111.3, p = < .0001, df = 2$. An additional comparison was conducted to examine difference between the
number of quantitative studies and the combined number of qualitative and mixed/multiple method studies. Results indicate a statistical significant difference between quantitative studies and the combined number of qualitative and mixed/multiple method studies $\chi^2 = 16.58, p = < .0001, df = 1$. There was no statistically significant difference between the number of qualitative studies and mixed/multiple method studies $\chi^2 = 111.26, p = < .0001, df = 2$.

Research question 4 asked “What is the most frequently applied method in Communication Education between 2000 and 2015?” To answer this question, a total of 304 research articles (empirical studies) were reviewed for the variable of methods applied. Articles were placed into one of 10 method categories (see Table 4). Since mixed/multiple method studies apply several methods, the total number of identified applied methods exceeds the number of studies reviewed.

**Table 4 Distribution of Research Methods**

<table>
<thead>
<tr>
<th>Research Method</th>
<th>Number of References</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>154</td>
<td>42%</td>
</tr>
<tr>
<td>Experiment</td>
<td>66</td>
<td>18%</td>
</tr>
<tr>
<td>Content Analysis (manifest)</td>
<td>25</td>
<td>7%</td>
</tr>
<tr>
<td>Meta-Analysis</td>
<td>6</td>
<td>2%</td>
</tr>
<tr>
<td>Interview</td>
<td>19</td>
<td>5%</td>
</tr>
<tr>
<td>Ethnography</td>
<td>25</td>
<td>7%</td>
</tr>
<tr>
<td>Focus Group</td>
<td>12</td>
<td>3%</td>
</tr>
<tr>
<td>Open-ended Survey</td>
<td>39</td>
<td>11%</td>
</tr>
<tr>
<td>Content Analysis (latent)</td>
<td>18</td>
<td>5%</td>
</tr>
<tr>
<td>Rhetorical Criticism</td>
<td>3</td>
<td>&lt; 1%</td>
</tr>
</tbody>
</table>

The distribution indicates a preference for quantitative methods with survey (154, 42%) being the most frequently applied method. To determine if there was a significant statistical
difference between the use of surveys and all other methods, a chi-square analysis was conducted. A statistically significant difference between the number of articles using surveys as the method and the number of all other methods combined. \( \chi^2 = 9.16, p = .0025, df = 1 \).

Research question 5 asked “what is the percentage of individual methods applied? What methods are most frequently applied? What methods are least frequently applied? A count revealed that surveys were by far the most applied method, whereas focus groups (12), meta-analysis (6), and rhetorical criticism (3) were the least frequently applied methods with a combined percentage of < 6%. (Table 4).

**Participants**

Research question 6 asked “Who were the participants in studies in *Communication Education* between 2000 and 2015?” To answer this question, a total of 304 research articles (empirical studies) were reviewed for the variable of study participants. Of the 304 reviewed articles, 281 featured participants and 23 applied a method in the study that examined an artifact, instead of obtaining data from participants, i.e., content analyses, rhetorical criticism, meta-analysis. Participants were placed into one of eight categories (see Table 5).

<table>
<thead>
<tr>
<th>Participant Group</th>
<th>Number of Studies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Students</td>
<td>207</td>
<td>74%</td>
</tr>
<tr>
<td>Teachers/Professors/Faculty/Instructors</td>
<td>27</td>
<td>10%</td>
</tr>
<tr>
<td>K-12 Students</td>
<td>11</td>
<td>4%</td>
</tr>
<tr>
<td>College Students and Instructors</td>
<td>10</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>26</td>
<td>9%</td>
</tr>
</tbody>
</table>

To determine if there was an equal distribution among participant groups, a chi-square analysis was conducted. Results indicate an unequal distribution among participants. \( \chi^2 = 510.37, \text{p} = .0025, df = 1 \).
An additional comparison was conducted to examine the difference between the largest participant group, college students, (207, 74%) and the combined number of all other participant groups. Results indicate a statistical significant difference between the number of studies using college students as participants and the combined number of all other participant groups $\chi^2 = 16.58, p = < .0001, df = 1$.

Topics

Research question 7 asked “How many different topics have been researched and/or addressed between 2000 and 2015 in Communication Education?” To answer this question, a total of 423 articles (304 studies and 119 thematic/analytical essays) were reviewed to assess what topics were researched in the literature by recording the total number of unique keywords that describe the content/topics of the article. Of the 423 reviewed articles, 50 articles did not feature any keywords. In the remaining 373 articles that did feature at least one keyword, there were a combined total of more than 1000 unique keywords listed to describe the content/topic(s) of the articles.

Research question 8 asked “What are the most researched topics between 2000 and 2015 in Communication Education? The most frequently appearing unique keywords/topics were: Affective learning, public speaking, teacher immediacy, cognitive learning, communication apprehension, pedagogy, communication competence, communication across the curriculum, teacher clarity, teacher credibility, and motivation (see Table 6).

It is important to note that, except for communication across the curriculum, each of the most frequently appearing unique keywords/topics is part of a larger topic group of closely related or modified keywords. The most frequently appearing keywords/topics have been identified individually to avoid any distortion due to double counting of keywords. For instance, one single article could conceivably feature the keywords immediacy, teacher immediacy, and
instructor immediacy. This would inflate the counts of the keyword immediacy threefold, compared to an article that only lists one keyword. However, to further answer the research question “What are the most researched topics between 2000 and 2015 in Communication Education?” it is nevertheless insightful to see the diversity and variation of similar/related topics that are being addressed, without making any inferences about quantities. For instance, the topic group of competence/incompetence is comprised of 9 different variations of the keyword competence, such as speaking competence, student competence, and teacher incompetence.

The largest topic groups were public speaking, pedagogy, competence, communication apprehension, credibility, and immediacy. It may also be noteworthy that, not controlling for double counts, immediacy would be the most researched topic area with a total of 42 keywords listed (Table 6). Also, 946 unique keywords only appeared one single time.

<table>
<thead>
<tr>
<th>Unique Keyword(s)</th>
<th>Number of References</th>
<th>Total number of references including all variation of keyword(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Learning</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>Teacher Immediacy</td>
<td>16</td>
<td>42</td>
</tr>
<tr>
<td>Cognitive Learning</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Communication Apprehension</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>Communication Competence</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Communication across the Curriculum</td>
<td>11</td>
<td>n/a</td>
</tr>
<tr>
<td>Teacher Clarity</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Teacher Credibility</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Motivation</td>
<td>9</td>
<td>22</td>
</tr>
</tbody>
</table>
Author Productivity

Research question # 9 asked “What is the percentage of articles the most proficient scholars have collectively contributed to the journal’s overall content between 2000 and 2015?” To answer this question, a total of 423 articles (304 studies and 119 thematic/analytical essays) were reviewed to determine the total number of authors who contributed to Communication Education from 2000 to 2015. A total of 616 authors contributed to 423 articles. The 10 most proficient authors contributed a total of 99 articles, or 23% of all articles.

Table 7 Author Productivity

<table>
<thead>
<tr>
<th>Author Name</th>
<th>Number of Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Myers, Scott A.</td>
<td>16</td>
</tr>
<tr>
<td>Schrodt, Paul</td>
<td>14</td>
</tr>
<tr>
<td>Goodboy, Alan K.</td>
<td>14</td>
</tr>
<tr>
<td>Witt, Paul L.</td>
<td>13</td>
</tr>
<tr>
<td>Mazer, Joseph P.</td>
<td>12</td>
</tr>
<tr>
<td>McCroskey, James C.</td>
<td>11</td>
</tr>
<tr>
<td>Mottet, Timothy P.</td>
<td>11</td>
</tr>
<tr>
<td>Martin, Matthew M.</td>
<td>10</td>
</tr>
<tr>
<td>Dannels, Deanna P.</td>
<td>10</td>
</tr>
<tr>
<td>Finn, Amber N.</td>
<td>10</td>
</tr>
</tbody>
</table>

To determine if there was an equal distribution between the 99 articles contributed by the 10 most proficient authors and the combined total number of articles contributed by all remaining authors, a chi-square analysis was performed. There was a statistically significant difference between the contributions of the most proficient authors and the contribution of all other authors combined $\chi^2 = 118.62, p = < .0001, df = 1$. 
Research question 10 asked “Who are the most contributing scholars to *Communication Education* between 2000 and 2015?” The most contributing authors were identified as listed in Table 7.
CHAPTER 5

DISCUSSION, LIMITATIONS, FUTURE RESEARCH, AND CONCLUSION

Discussion

The results of this comprehensive study provides a snapshot of the current state of the instructional communication discipline, as well as an overview of what the field of study has primarily focused on over the course of the last 15 years. While this study covered paradigmatic and epistemological aspects of the research, the majority of this inquiry was conducted in the same tradition of previous content analyses on this topic (Stanton-Spicer & Wolff, 1984; Waldeck et al., 2001). While some areas of interest have shifted in the research over the span of several decades, the core foci of the literature have remained the same.

Theory

Results pertaining to how theory has been applied revealed that instructional communication research utilizes theories in the same manner as general communication literature. Many theories are applied in an inconsistent manner, while a great number of studies avoid any reference to theory. In 423 articles, 236 different theories were referenced with 166 (39%) articles not mentioning, testing, or applying any theory.

This result is similar to the findings of Anderson (1996) almost two decades ago, who reviewed seven communication textbooks and identified 249 nominally mentioned communication theories, of which only seven percent were referenced in more than three textbooks. Where most disciplines have a finite number of generally agreed upon fundamental theories, findings of this content analysis, like Anderson’s study, affirm that the use of theory remains rather incoherent.

The number of referenced theories also suggests that many authors may profess to have developed an entire theory, even though, due to its specificity and limited utility for application,
should be regarded as more of a concept, rather than a theory. This practice can most likely be attributed to the previously discussed multidisciplinary origin of the discipline. Researchers enjoy a lot of freedom when conceiving theory or transplanting theories from other disciplines, two practices which have manifested themselves in instructional communication literature.

The two most frequently referenced theories, “communication theory” and “grounded theory” were referenced a total of 53 (13%) and 19 (4%) times in 423 articles, respectively. It is important to note that “communication theory” and “grounded theory” are broad, generic terms, describing more of a general overarching theoretical framework, rather than theories developed to explore a specific type of communication problem. Accounting for these two generic theories, the most frequently referenced theories were: expectancy violation theory, attribution theory, and emotional response theory. These theories however, were referenced in fewer than 4% of all articles and thus can hardly be considered fundamental core theories of instructional communication literature.

It is also notable that the most prevalent theories identified in this study are not the same as the major theories identified in the last comprehensive review, i.e., arousal theory, Keller’s model of instructional design, French and Raven’s bases of power; attribution theory, expectancy or learned helplessness theory, arousal valence model, approach-avoidance theory, information-processing theory, social cognitive/learning theory, cultivation theory, and general theories of child development (Waldeck, et al., 2001). This finding may indicate a shift in research focus, but the larger issue of the general use of theory remains.

Overall, the results of this study indicate the repetition of many patterns that were previously questioned and often criticized by many different scholars (Anderson, 1996; Craig, 1999; Kuhn 1970; Sprague, 1996, Van Maanen, 1995). Many theories could potentially be reconciled, combined, as well as tested and rejected to create a more cohesive and robust body of
communication theory in order to create a more coherent theoretical framework. The founding of such a framework could constitute a step towards a more clearly defined identity for the discipline which produces reasoned knowledge claims based on defined standards that still allow for plurality.

**Method**

Results pertaining to applied methods reveal that most research in the literature were quantitative studies (67%) versus qualitative (20%), and mixed/multiple method (18%) studies. This distribution, dominated by studies based on the positivist paradigm at 67%, is a conservative depiction, as most mixed/multiple method studies were predominantly quantitative studies with some qualitative elements added as a minor part of the study. A large portion of the mixed/multiple method research consisted of quantitative surveys that allowed participants to provide some supplemental information in short answer format.

In previous research, surveys were identified as the most prevalent method published in communication research (Anderson, 1987, 1996; Potter, Cooper, & Dupagne, 1993). Two decades later, this findings also holds true for instructional communication research. Surveys remain the most frequently utilized method of inquiry (42%), followed by experiments (18%). Despite following different research designs, there is not too great of a distinction to be made between surveys and experiments in this context in terms of epistemological approach. Most experiments were designed such that participants were presented with one of several hypothetical written scenarios to which they responded by completing the same instruments used in surveys to derive results, e.g., measures of cognitive learning, affective learning, credibility, apprehension, and immediacy scales.

Qualitative methods, which only comprised a total of 20% of methods used, featured open-ended surveys and ethnographies as the most frequently applied methods with 11% and 7%,
respectively. Interviews and focus groups, which generate more in-depth data from participants, only made up a combined 8% of all research. This may be an unexpected finding since the prevalence of survey data indicates a value placed on self-reported data. Interviews and focus groups are methods that pursue such data only in greater depth and breadth and are quite similar in terms of epistemology, as they pursue knowledge about perceptions, attitudes, and other subjective accounts. It is a fair assumption to pose that opinions, perceptions, competencies, and sentiments have certainly changed for many students, teachers, business professionals, parents, and other research participants over the course of 15 years. It is therefore surprising that not more interviews and focus groups were conducted to gain insight into changing perceptions, attitudes, and understanding of participants involved in the process of teaching and learning.

College students were by far the most utilized participant group (74%). Most data which instructional communication research presents in *Communication Education* is therefore based on the perceptions, opinions, attitudes, and perspectives of American college students. Instructors comprised 10% of all participants. This completely skewed distribution towards students as the primary source of inquiry is unreasonable under the premise of teaching and learning being a dynamic process in which teachers and learners interact. Miscellaneous participant groups such as athletic coaches, clergy, workforce professionals, as well as parents comprised approximately 9% which may also be a relatively low number considering that the field of study is not limited to exploring academic learning environments only.

The implications of these findings in aggregate provide a strong impression of the actual type of knowledge, insights, and understanding that is generated in the studies published in *Communication Education*. With surveys being the most prevalent research method and college students the most utilized participant group, it can be concluded that the majority of contributions stemming from the field of instructional communication are predominantly associations and
correlations derived from self-reported data of college students who self-assess their perception towards hypothetical communication issues. In terms of epistemology, this means that either scholars of the field regard associations about student perceptions as the most promising path to gain greater understanding about teaching and learning, or it indicates that there is an inherent preference for variable-analytic approaches, methods, and research questions as suspected by Sprague (1999).

Reliance on self-reported data, in particular measuring perception, in the context of teaching and learning, may cause concerns of general validity due to the potential discrepancies between participants’ perceptions and the actual phenomenon that is being investigated. For instance, the research literature on immediacy (which incidentally has been most likely the most researched subject in the history of instructional communication) has often been questioned and criticized in terms of validity. Researchers posited that the literature does not contain data about observed (teacher) immediacy behaviors, but students’ perceptions thereof, which could be affected by lurking variables such as halo effect biases, and thus not accurately reflecting actual immediacy behaviors (Smythe & Hess, 2005; Rubin, 2002). This finding is not limited to instruments assessing immediacy. Many measures used in instructional communication research are subject to praise in many aspects, but also criticism due to persistent issues in terms of practical application and general concepts (Mazer & Graham, 2015).

**Topics**

Results pertaining to the variable of topics revealed a great number of subject areas that are of interest to instructional communication scholars. Over 1000 unique keywords were listed to describe the content of the articles which reflects the diversity and breadth of research. However, considering that 946 keywords were listed only once is also an indicator for a dispersed body of research, reflecting previously discussed concerns of research silos in which many instructional
communication scholars with differing conceptions of instructional communication research pursue their personal research agenda independently from others, further contributing to the incoherence of the collective body of literature. Examples for unique keywords that only appeared once were acculturation, mobile telephony, nagging, bullying, neoliberalism, regret, and smoking. It is therefore crucial for the identity of the field of study to manage a balancing act between featuring diversity, and also having common core objectives, theories, and interest that form a cohesive whole.

Unlike the variable of instructional communication theories, however, the variable of topics does feature core foci and prevalent topics that occupy the research agenda noticeably more than other topics, despite the vast number of infrequently appearing, miscellaneous subjects. Measuring variables such as immediacy, credibility, motivation, clarity, cognitive and affective learning, communication apprehension, public speaking aspects, and the many variations thereof, comprise the majority of the core literature. This constitutes a direct continuation of the research strand of previous decades where comprehensive reviews and content analysis revealed that the focus of instructional communication research was dedicated to exploring the same or similar variables and research topics (Waldeck et al., 2001; Mazer & Graham, 2015).

In 2002, Sprague described a spiraling dynamic through which scholars of the field revisit previous research findings to gain new insights or readdress issues. While this is a reliable way to conduct thorough research, it is also important to consider potential downsides of such an approach. More concisely, there is a thin line between revising promising topics to produce new findings in a heuristic manner, and simply replicating previous research with minor variations. For instance, the concept of immediacy, in particular teacher immediacy, has been lauded as a powerful, promising, and important research topic and crucial communicative aspect in the process of teaching and learning (Chesebro, 2003, Chesebro & McCroskey, 2001; Finn &
Schrodt, 2012). The topics concerned with the value, function, validity, reliability, effect, usefulness, and application of this concept have been explored over several decades in many articles (Smythe & Hess, 2005). While such repeated investigation of a concept is part of rigorous inquiry, it is also important to determine when a concept has been sufficiently examined in order to allow for opportunities to explore new avenues of research.

An important aspect to consider is the opportunity cost for revisiting the same topics in the research. Every study published in Communication Education about already extensively studied topics, occupies the space and therefore the opportunity to pursue new research topics. For instance, over the last decade the inception of technology has played a major role in the classroom and inspired conversations about re-conceptualizing teaching, learning, and education in a general sense. Despite this seismic shift taking place in education caused by the ubiquitous influence of technology on traditional instruction, redefining the ways teaching and learning is taking place, the research of Communication Education remains dedicated to topics that have been well explored over the past 25 years. The majority of recent research published in in Communication Education focused on issues such as non-verbal teacher immediacy, dissent, use of humor, student anxiety, communication apprehension, instructor misbehaviors, and other well-explored topics.

The continued focus on well-explored topics does not mean that Communication Education is entirely stagnant. The use and implications of technology in the classroom (and other comparably less explored topics), for instance, is not completely absent in Communication Education. However, the ratio between new, less explored topics and research strands, and well-explored topics is unevenly distributed. This assertion is also based on the explicit statements made in the majority of literature reviews of studies of well-explored topics. The literature reviews often begin with an opening statement announcing that the concept that is about to be
explored in the study has a long standing tradition and has been extensively researched in the discipline (and is therefore a worthwhile topic for even further examination).

The continued practice of revisiting past research concepts is a testament to scholars of the field being aware and seeing value in contributing to an already robust body of research that allows for little surprises or counter intuitive results. Consequently, the content of *Communication Education* follows a consistent pattern. Some topics are being explored from many angles in minute detail, while others, despite contemporary relevance, remain at the fringes.

Given the greater context of this study and the issue of incoherence and the lack of the field’s identity, it is unexpected that not more scholars are fundamentally rethinking its purpose, contributions, and means by which it produces data to make knowledge claims.

**Author Productivity**

Results pertaining to the variable of author productivity revealed a variety of insights into the extent to which authors may shape the content of *Communication Education*. 616 authors contributed to 423 articles (304 studies and 119 thematic/analytic essays) which reflects diversity of voices and perspectives. However, this diversity is limited to only 77% of all articles reviewed, as the remaining 23% were contributions of the 10 most proficient authors in terms of numbers of articles published. This proportion may appear unusually high since 10 individuals created almost a quarter of all content published over the last 15 years.

The implication of this finding is not a concern of bias or quality, but a concern about the potential lack of diverse voices, influences, and perspectives. Authors typical have an area of expertise with specific interests, as well as a preference for particular methodologies. This may create a culture where a journal could stifle its own growth in new areas by reinforcing a self-fulfilling publishing ethos. As a result, the content of a journal could become over proportionally influenced by articles from the same familiar voices and perspectives and methodologies which
may also set the tone for the other scholars and future research. This assertion is supported by the citations in the literature review sections. The most productive authors usually refer to an extensive body of work which they themselves have previously created. This entails the danger of tautological reasoning where knowledge claims are made based on previous research, and current research affirms the continued relevance and quality of previous research.

A general concern that could arise from any journal being heavily influenced by a relatively small number of authors is that a false notion is generated. Readers may assume that insights, knowledge, and understanding of instructional communication concepts as well as their meaning, importance, and application are collectively derived and rigorously inspected and tested by a great number of scholars. In reality however, these knowledge claims may be better described as the result of a few like-minded voices that engage in constant, mutually beneficial reaffirmation of each other’s closely related research. This, of course, is a hypothetical concern that is not substantiated in this study. However, what this content analysis does achieve is quantify the contribution of authors and thus provide insights about ratios and distribution of potential influence.

Conclusions drawn about the findings of author productivity in this study do not intend to imply that authors should be denied publication on the basis of already having met a predesignated quota of articles to avoid having too much influence on the field of study. Research merit and the value of contributions should remain the deciding factors for publication. Conversely, however, authors should also have no incentive to echo or mirror existing research that reinforces the existent body of literature in order to better the odds of publication.

While this study is unable to answer if these concerns apply to Communication Education, it does illustrate the importance of conducting comprehensive reviews of the research
that is being published and the potential issues and concerns about emergent patterns, regarding
voice, perspectives, and influence.

Limitations

While comprehensive reviews are important tools to gain snapshots of the state of a
discipline, it is important to understand their limitations as well in order to properly contextualize
findings and refrain from drawing unsubstantiated conclusions.

This study sought to capture four variables of which only one, author productivity, could
be captured in a concise manner with the greatest amount of validity and reliability, since the
research question could be answered by simply counting the frequencies of which an author’s
name appeared on an article. The other three variables (theory, method, and topic) however
required a set of a priori criteria and the need to operationalize fairly large concepts to enable
coding. The reduction of vast concepts to their essential parts entails the potential for a loss of
some validity. In aggregate, however, these individual issues are mitigated.

Theory

Theories were identified by scanning the articles for the word “theory” in order to
identify the reference of a unique theory. An a priori criteria was that the word “theory” also
needed to be utilized as part of a name or proper noun, generic references of “theory” were not
captured. It is conceivable that an author described or made a referenced to an implied theory,
without using the actual word “theory”. In such a case due to syntax or the use of synonyms the
unique theory referenced by the author would have not been captured. Also, the study did not
validate whether or not a referenced theory actually fulfills the criteria of being considered a
theory. The only criteria of inclusion was if the author explicitly identified a theory as such.
Method

Methods usually include different elements of analysis in order to generate useful information. This study only focused on the methodological aspect of data gathering, not the analysis or evaluation portion thereof. For instance, an interview is a process in which raw data is gathered by systematically asking participants’ questions. Once the interview is transcribed, a second process takes place such as a typological identification of emergent themes, or a content analysis of the provided answers. This second, analytical process converts the raw data into a certain type of useful information. Despite the second part of the interview, the data analysis element, being a crucial aspect of the method, it was not taken into consideration as it would render the method of interview as an inherently mixed method/multimethod approach, which subsequently would lead to a conflation between the qualitative paradigm and mixed/multi method paradigm. This potential for conflation also applies to other methods. Therefore, in this study, the variable of method was only partially explored to capture general insights.

Topics

In some cases, identifying topics by keywords may raise validity concerns. It is conceivable that many keywords have been supplied by the author with the primary goal to tag the article such that it can be easily found in databases, not necessarily to accurately reflect the topical content. Inferring the topic from the supplied keywords also relies on the assumption that authors supply keywords in a thoughtful manner rather than as a quick and general identifier.

Other Limitations

Another general limitation is the fact that one primary coder coded all articles for the variable of method and theory. Despite the high inter-coder reliabilities that have been established for the primary coder, having multiple coders review all articles may have led to a more robust and reliable result.
Future Research

Aside of continuing the practice of creating comprehensive reviews in regular temporal increments to assess what is being researched in the field of study as a type of quality control and assessment tool, each variable could be further explored in multiple ways. For instance, a closer evaluation of the variable of applied methods could focus on what percentage of research utilizes designs where participants are asked to respond to written scenarios. Such methodological inquiries could provide further epistemological insight into how much knowledge in the literature was generated through perception based research as opposed to knowledge generated through observations and measurements of actually occurring dynamics and events. Further research could focus on the implications of an unequal distributions of methods applied, in particular the reasons for not having more qualitative contributions.

The variable of referenced theories and topics could also be investigated in greater detail. Future scholarships could focus on trends, purpose, and heuristic value of each. Why are some theories more frequently used than others? What theories and topics have become of greater focus over a given number of years and why? What theories and topics have experienced a decline? What are the reasons for shifting trends and how do they affect associated research? Such questions could move towards identifying a shared telos of the field and thus contribute to a formation of a disciplinary identity.

Author productivity could also be further explored in terms of the influence that is being enacted on the content of the discipline. Going beyond the number of contributions individual authors have made to instructional communication literature, future research could seek to identify larger trends, patterns, and streams of influence. Are there academic institutions that shape the content of the literature more than others? Are there patterns that reveal a connection between authors based on relationships, institutional memberships, or connecting philosophies?
Are there competing schools of thoughts in the literature that can be traced to institutions or prominent individuals? Such insights could be valuable additions to the ranking data about schools and effectiveness of faculty that is regularly published in order to create a more holistic impression.

**Conclusion**

**Contextualizing Results**

This survey has reaffirmed an extant pattern that has persisted for decades. Reviews, editorials, meta-analysis, and other reflective pieces identify shortcomings of the field of study and subsequently express a need for, desire to, and the benefit of expanding the research agenda to open new avenues of academic inquiry in which a variety of diverse topics, perspectives, and methodologies are welcome. Such fundamental shifts however, do not seem to have manifested themselves in the content of instructional communication research, aside of small incremental changes. Proponents of the current research published in *Communication Education* will perceive this finding as continuity and consistency, while critics perceive it as stagnation and just more of the same research.

**Comparison to Previous Reviews**

The previous comprehensive review (Waldeck, et al., 2001) concluded that despite the high quality of instructional communication research, few significant, far-reaching knowledge claims had not been generated from the body of instructional communication literature. It further asserted that research findings were usually only of interest to communication scholars, not other fields of education, an issue that other scholars have also addressed in more contemporary research (Nussbaum & Friedrich, 2005; Timmerman, 2009).

The issue has been attributed to several reasons. One of the main reasons causing criticism and tension in the discipline has been the a great focus on variable analytic research
(Eadie, 2011; Myers, 2010) which to an extent impedes theory building and causes general confusion due to the conflation and overlap of many concepts and closely related constructs (Waldeck et al., 2001, Nussbaum & Friedrich, 2005). The general shortcomings and concerns were not only identified in retrospect by previous reviews which were able to reflect with the wisdom of hindsight. The issues addressed in the reviews were also raised in articles at the time, published in the late 1980s and early 1990s (Sprague, 1992, 1993; Craig, 1989).

Reviewing the recommendations and suggestions for future research of previous comprehensive reviews and critical pieces of the time allows for an evaluation of what proposed changes have been made and actually manifested themselves in the research. In other words, by looking back and identifying what has been proposed in the past and comparing it to what has been subsequently researched, it is possible to draw inferences about the trajectory, development, and evolution of the research. To this point, this survey has revealed that little change has occurred. Neither has there been a significant shift in terms of paradigms, preferred methods, nor the topics that are of core interest. Positivism is still the dominant paradigm, while critical and interpretative articles, i.e. qualitative studies, are published infrequently. In general, topics still revolve around the same familiar concepts about teacher and student behavior, such as communication apprehension, immediacy, credibility, misbehavior, and competence, often in conjunction with desired outcomes of affective and cognitive learning. In particular the absence of a significant rise in studies dedicated to the use of computer mediated communication in instructional setting is noticeable.

Even the prevalence of college students as the main participation group surveyed in the vast majority of studies remains the same. This may have multiple reasons, including the factor of convenience sampling, (Rubin, 2005), but the result remains the same. Most data generated by instructional communication literature is primarily based on insights provided by college
students. Despite the benefits of increasing the developmental continuum relative to education (Nussbaum & Friedrich, 2005) the research continues to rely on the same narrow demographic to extrapolate greater knowledge about teaching and learning.

**Persistent Issues of Identity**

Many reflective studies in the past posited that instructional communication literature features a great number of disconnected theories and research topics (Craig, 1999; Sprague 1992; Anderson 1996) which is indicative for a lack of coherence, guidelines and boundaries. These persistent issues existed since the inception of instructional communication and continued into contemporary literature as indicated by the findings in this study and other contemporary research (Eadie, 2011).

As cited repeatedly in this study, the field’s multidisciplinary background, the common practice of transplanting theories from other disciplines into a communication context, and the diverse conceptions of what constitutes communication research, are all reasons why it is difficult to draw clear boundaries, and agree on guidelines, definitions, and objectives which subsequently leads to the described contention and lack of unifying identity. Due to communication research being an inherent part of most disciplines, an overlap and occasional conflation is inevitable and it is impossible to draw clear distinctive, rigid lines to demark instructional communication research from related fields of study (Rubin, 2005). Still, flexible boundaries and the lack of strict parameters determining what can and cannot pass as instructional communication research does not mean that greater cohesion, common research objectives, and the movement towards governing theoretical frameworks cannot be achieved to improve the quality of the collective body of research.

Quite the contrary, by focusing on the communication aspect of many different subjects related to teaching and learning, in addition to being a more malleable field that allows for a
discussion about identity, paradigms, and research agenda, is an advantage, as it allows the field to adapt to changing research needs and address gaps in educational research beyond the realms of communication literature. There should be no reason for the paradox of importing so many theories from other disciplines is common in the field, while communication scholars developing original communication concepts and theories is a rare occurrence.

**Finding an Identity**

The formation of identity can only take place if meaningful action is made. The reason for the continued trends that are identified in this survey are most likely due to a lack of articles that fundamentally question, challenge, and explore the field of study beyond the familiar parameters. Sprague (1992) is one of the few scholars who challenged the discipline to rethink its foundation, purpose, and established practices to generate knowledge claims. Only few articles published in *Communication Education* have engaged in meaningful discourse about identity and explored ideas that challenge the fundamental ways in which research is conducted in this field of study. Ruben and Lee (2006) for instance, sought to provide some answers to the fundamental questions posed by Sprague, such as “why schools exist?” by seeking to provide an answer from a critical perspective. Such research may serve as a valuable addition in a complimentary manner to the variable-analytic research that test proposed ideas, concepts, and theories derived from qualitative research.

**Expanding the Research Agenda**

The variables investigated in this survey addressed various factors that drive the formation of an identity and associated research product. Sprague argued in her collection of articles, about instructional communication research, that issues of methodology, theory, research focus, telos, and identity are all related. Expanding the research agenda in order to be more diverse, inclusive, but also more reflective and critical of the work that is being produced is
therefore a means to advance the research agenda to form a unique identity. It can be inferred from Sprague’s research that expansion means advancement.

To achieve this goal scholars could also look to other disciplines for context and structure. If it is common practice in communication research to appropriate and transplant theories from other disciplines, it should also be considered to consult outside research about general disciplinary frameworks and the relation fields of research have to one another. For instance, literature in the field of educational sociology has extrapolated over many years how intellectual fields structure educational knowledge (Bourdieu, 1988, 1992; Bernstein, 1990, 1996). Structuring knowledge therefore carries significant implications on the formation of truth claims, as well as relations to other fields of education (Maton, 2000). The process of structuring educational knowledge inherently carries significant implication in terms of differing communicative aspects. Exploring this type of research could therefore facilitate growth into new promising directions as the research agenda is expanded, while providing reflective tools to assess patterns of epistemology, topical focus, paradigms, language of legitimation, truth claims, and thus identity.

The results of this comprehensive survey indicate that most research, while nominally featuring a great diversity of topics, continues to focus on issues that are similar in nature under the same framework. In other words, studies of teacher and student behaviors such as immediacy, misbehaviors, credibility, and competence, as well as frequently applied concepts such as affective and cognitive learning, or communication apprehension, do not question how educational knowledge is structured. Instead, new studies often emulate existent studies in a circular dynamic of reaffirmation. Topics that pursue more basic aspects of the field of study such as determining what legitimizes knowledge in an instructional communication context, how different knowledge structures relate to one another, how to structure educational knowledge in a
sound manner, what role communication plays in how disciplines relate to one another, and how internal disciplinary structures are constructed to generate knowledge and truth claims, could help scholars pursue research strands beyond the familiar boundaries of the field of study in order to conceive new paths of instructional insights.

The structuring significance of educational knowledge for intellectual fields has thereby useful implications for the formation of an identity of instructional communication as a field beyond discussions of the impact of variable-analytic research and the criticism thereof. It could assist with carving out an academic space for the field to occupy in order to generate unique contributions from a distinct perspective. The formation of an identity could thereby serve as a way to legitimize knowledge claims, and legitimate knowledge claims in return could reaffirm the field’s identity in a reciprocal dynamic.

The internal contention that has occupied instructional communication since its inception and its resulting lack of identity is predominantly due to the field’s capacity to potentially combine many differing research approaches because dynamics of teaching and learning are vast and complex. Where disciplines such as physics or economics can almost exclusively rely on variable-analytic research, while artistic disciplines rely on authority to construct truth claims, instructional communication occupies a space in between disciplines, where paradigms may have shifting legitimacies under varying on circumstance. This may be the source of why past research has brought forward claims that the literature was incommensurable (Kuhn, 1970), or subject to ongoing contention (Eadie, 2011; Myers, 2010; Budd & Ruben 1972; Craig, 1999). Instead of acknowledging the malleability of the discipline, there has been an implicit insistence of scholars asserting that legitimate knowledge claims are an inherent part of their preferred framework, paradigm, topic focus, and methodology.
While the formation of an acceptable identity and the path to reconciliation of differing conceptions of instructional communication may never be resolved to the satisfaction of all, attempts to move away from the status quo could help challenge established convictions and help move the discipline into a direction of greater insight, cohesion, and knowledge. To this end, it takes the courage of scholars to deviate from the familiar path in pursuit of new avenues of research that may turn out as fruitful at the risk of being futile. Regardless of the outcome, however, daring to make fundamental changes in an attempt to expand the research agenda and advance the discipline has inherent merit and justifies the means.

It may be the safe path to look to the past through the lens of comprehensive reviews and either replicate what has been done before in order to be in lock step with the established body of research or resort to making idealistic suggestions for the future. But it takes daring conviction to actually deviate from the known, safe path for the sake of opening new avenues of research that can advance our knowledge and understanding of teaching and learning. Hopefully future research will reflect a change towards greater adherence to theory, greater inclusion of diverse topics, and a true multitude of perspectives and methods to create a holistic understanding of teaching and learning under the umbrella of instructional communication research. The results of the next comprehensive review in a decade from now will be a testament of how successful the ambitions of today were in shaping the research of tomorrow for the better.
Works Cited


Sprague, J. (1993). Retrieving the research agenda for Communication Education: Asking the pedagogical questions that are “embarrassments to theory.” *Communication Education, 42*, 106-122.


