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Demystifying Theoretical and Conceptual Frameworks: A Guide for Students and Advisors of Educational Research

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ABSTRACT The meanings and operationalizations of theoretical and conceptual frameworks largely remain mystical in the minds of many (post)graduate students who continue to struggle to develop appropriate theoretical or conceptual frameworks for their studies. This is a theoretical paper that draws its evidence from a critical review of relevant literature, seeking to (a) define and clarify the respective meanings of the terms 'theoretical' and 'conceptual' frameworks, and (b) illustrate how these constructs are developed in respect of quantitative and qualitative research. The researchers hope that this paper will contribute significantly to how students and advisors of educational research engage and operationalise the two constructs of theoretical and conceptual frameworks in their problem formulation processes, and that this will happen in ways that demystify these constructs and lead to higher levels of understanding and reduced incidences of frustration, on the part the students.

INTRODUCTION

"If the apparent mysticism of theoretical and conceptual frameworks is to be debunked, then they need to be included as significant sections in publications…Novice researchers need to know that frameworks and models are there to help them and are not just another hurdle to be overcome…" (Green 2014: 38).

General Area I of the 2006 American Educational Research Association (AERA) standards for reporting empirical social science research is *problem formulation*. In sum, it states that the problem formulation of all such research should reflect: (a) a defined problem/purpose statement, (b) previous literature that supports how the study makes a contribution to knowledge, and (c) a described and explained theoretical, conceptual and methodological orientation with relevant citations (Duran et al. 2006: 34; Rocco and Plakhotnik 2009: 120-121). As scholars attempt to describe and explain these orientations in practice, it is not uncommon for theoretical, conceptual and methodological *orientations* to be condensed and translated instead into theoretical or conceptual *research frameworks*. Indeed, without these conceptual or theoretical frameworks, studies will have no proper direction, "and this explains why in every research, one is expected to present one's 'theoretical' framework" (Bello and Ufua 2018: 2). In this regard, the theoretical or conceptual framework "explains the path of a research and grounds it firmly in theoretical construct ... and should resonate with every aspect of the research process from the definition of the problem, literature survey, methodology, presentation and discussion of the ûndings as well as the conclusions that are drawn" (Adom et al. 2018: 438).

Aims

Educational researchers matriculating through graduate programs during the past two decades (including the first two authors) have been introduced to theoretical and conceptual research frameworks largely through the lenses of scholars like Miles and Huberman (1994), Robson (2002), Maxwell (2005), and Creswell (2007). While this popular scholarship has been invaluable to the field, there is paucity of articles that respond to the two fundamental questions which frame this study. The meanings and operationalizations of theoretical and conceptual frameworks largely remain unclear in the minds of many (post) graduate students. In a sense, there is some element of 'mystique' associated with these terms, as well as how they should be actualised, from the point of view of (post)graduate students who struggle to develop appropriate theoretical or conceptual frameworks for their studies. This paper, therefore, seeks to dispel this spectre of mystique and anxiety among graduate students and their su-

pervisors. The remaining text begins with a discussion of theoretical frameworks and how they are tied to the key components of theory. Then, the paper moves to a discussion of conceptual frameworks. Examples and caveats that accompany these discussions are intended to contribute to the development of defensible research frameworks for quantitative and qualitative research. The paper concludes with implications for students and advisors of educational research.

Objectives

More specifically, this paper sought to (a) define and clarify the respective meanings of the terms 'theoretical' and 'conceptual' frameworks, and (b) illustrate how theoretical and conceptual frameworks are developed for quantitative and qualitative research.

METHODOLOGY

This is a theoretical paper that draws its evidence from a critical review of relevant literature. As such, in keeping with a typical critical literature study the authors sought to provide an up-to-date critical review of what was currently known about theoretical and conceptual frameworks and offer some insights into the subject (Galvan and Galvan 2017). According to Grant and Booth (2009: 93), a critical literature study "goes beyond mere description of identified articles and includes a degree of analysis and conceptual innovation." Thus, in this study, the researchers attempted not only to describe the constructs which were the subject of the study, but also offer examples on how they could be operationalized in order to guide both students and student advisors of educational research.

RESEARCH FRAMEWORKS

A research framework can be described as the structure guiding educational researchers while central thesis questions are refined, methods are selected, and analyses are planned (Imenda 2014). At the end of a study, the research framework can be used to check for the existence of discrepancies and wherever discrepancies exist, "a question is asked as to whether or not the framework can be used to explain them" (Imenda 2014: 188). Moreover, theoretical and conceptual research frameworks have emerged out of the well-established research tradition of conducting critical literature reviews to support the crucial problem formulation stage of scholarly research (Boote and Beile 2005; Callahan 2014; Levy and Ellis 2006; Maxwell 2006). Without a research framework from which the history and big ideas of an area are discussed, a paper can drift away from its central phenomenon of interest. Unfortunately, the cacophony of uses and explanations of research frameworks in relation to literature reviews are confusing to the point of even being equated to "apparent mysticism" (Green 2014: 38). It is not unusual to find educational researchers using theoretical frameworks and conceptual frameworks interchangeably or using them without naming them, but instead embedding them within the scholarship (Green 2014).

One point of contention among scholars is rooted in the assumption that there is no place for such research frameworks in the problem formulation qualitative studies, because they are often inductive (Rocco and Plakhotnik 2009: 121). The emergence of inductive research methods such as grounded theory, in which theory generation comes from collected data, went against the widely accepted social science wisdom of the early 1960s, which asserted that a study should have a formal theory before it begins (Green 2014: 35). Yet, by the AERA 2006 standards, even qualitative studies using grounded theory methodology to nurture theory are expected to be connected to a body of literature and theoretical, conceptual or methodological orientation (which, in practice, tends to be translated into theoretical or conceptual frameworks, as noted above). Also, in practice, inductive and deductive research methods rely upon different logics of inquiry and as a result, theoretical and conceptual frameworks play different roles in each. Still, some challenges exist for students learning to identify and apply these roles in their own research and advising teams pressured for time, may ignore the role differences or to "give short shrift to [them in] discussions…" (Anfara and Mertz 2006: xx). For example, the researchers have advised frustrated graduate students of educational research by saying, "It seems that what you call a theoretical framework is more indicative of a conceptual framework." Responses to this advice have been too

often words that either reflected or alluded to the common US phrase, "same difference." Accompanying these smug responses, were challenges advising graduate students toward developing defensible research frameworks. It can become even more challenging to advise large numbers of undergraduate students to develop an appropriate framework, and thus, it also can become "a critical missing link in successful [undergraduate] student empirical research" (Shields and Tajalli 2006: 313). Moreover, discerning a meaningful difference between the two frameworks can challenge students and advisors of educational research.

Components of Social Theory

It is important to begin describing what social theory does and why it is useful. In this regard, one may refer to Vygotsky's popularized sociocultural theory, as it provides a rationale for attending to language use in the classroom and for analyzing that use for specific kinds of linguistic interactions. Another example of popularized social theory is critical race theory, which is concerned with issues of power, authority, privilege and penalty in a racialized society (Few-Demo 2014; Harper et al. 2018; Negrete et al. 2018). Ultimately, social theory provides a rationale for attending to how specific policies influence access of individuals to positions of power, authority, privilege and penalty in social and socio-political life (Du Plessis and Van der Westhuizen 2018; Chowdhury 2019). Broadly construed, theories are useful because they focus upon specific features of complex phenomena of interest. Social theory has been also equated to pottery, it cracks, it breaks down, only to be rehydrated and replaced by an innovative version of it to explain a new time (Noblit 1999). This point is not arguing against the idea of generative knowledge, but instead, it is arguing against grand theories. Quantitative and qualitative thought today, is perhaps closer than ever to the notion that theory is not fact, but historicism – an explanation of human experiences told in its own relative present time, about the past for the future. The historicism argument, by default, challenges researchers to revisit the basic building blocks of theory. A particularly useful model of the "building blocks of theory" developed by Anfara and Mertz (2006: xiv) provides the basis for the researchers' discussion of theoretical frameworks.

All theories are grounded in the experiences of individuals. In education, the *events* in the lives of students, practitioners, school leaders, administrators, and policy makers are the concrete foundation of theories. Common examples of such events include students learning, teachers leading, assigning, and assessing. Such events are categorized into *concepts* like written compositions in order to differentiate among them. A concept is a complex mental formulation of experience. Examples of concepts include, instructional, pedagogy, leadership, proficiency, management, curriculum, and opportunity (Chinn and Kramer 1999: 252). Related experiences and concepts can be aggregated into *constructs*, like *instructional leadership, curriculum management*, and *opportunity to learn* (Milner and Tenore 2010). *Propositions* describe relationships among two or more constructs. For example, researchers may observe and report a previously unrecorded relationship between instructional leadership and classroom management. Finally, *theories* comprise related propositions. Theories are at the top of the pyramid and as such, they are the farthest from experience. Consider the following hierarchy of abstraction: Events → Concepts → Constructs → Propositions → Theory (Anfara and Mertz 2006: xv). Thus, according to Anfara and Mertz (2006), from one's experience concepts emerge in the person's mind in association with some related constructs – and the relationships between and among these constructs lead to propositions, out of which a theory is created. In this regard, a theoretical framework is based on the current state of theory and theoretical traditions surrounding the phenomenon of interest. A literature review enables the researcher to identify gaps in what is already known and exposes potential areas for study by focusing on the highest level of the theory-experience hierarchy (Adom et al. 2018).

Formal Theory vs. Substantive Theory

It is important here to compare and contrast briefly, *formal* and *substantive theories* (Glaser and Strauss 1967; Backman and Kyngäs 1999; Du Plessis and Van der Westhuizen 2018). Both substantive and formal theories can emerge from constant comparative analysis of qualitative data and quantitative data can be used to generate

qualitative grounded theory (Glaser and Strauss 1967; Pettigrew and McKechnie 2001; Urquhart et al. 2010; McCann et al. 2018). Both types of theorizing involve "propositions that are grounded in extensive research; they have been tested and are accepted as [published] explanations of particular phenomena" (Rossman and Rallis 2012: 123). However, there are two important differences. First, Glaser and Strauss (1967) remind us that formal theory tends to be developed for *general areas of inquiry* such as stigma, socialization, cognition and coping – while substantive theory tends to be developed for *specific areas of inquiry* like special education, Christian education, and others. Second, formal theory tends to be larger in scope and is developed after substantive theory has been established. Examples of formal theory include, but are not limited to, Piaget's theory of human development, Howard Gardner's theory of multiple intelligences (Rossman and Rallis 2012: 123) and Spencer's (1995) phenomenological variant of ecological systems theory (PVEST). On the other hand, substantive theories tend to be narrower in scope and involve formulating hypotheses that question the subordinate propositions within formal theories. Examples of substantive theories include the work toward a *grounded theory of disproportionality in special education* (Harry et al. 2005), and the recent grounded theory work *Toward a Christian-identity response theory* (Garcia 2014).

Theoretical frameworks (both substantive and formal) can provide maps of the current state of knowledge about a problematic phenomenon being studied and offer evidence-based explanations for why the particular problem(s) connect to particular phenomena. Therefore, theoretical frameworks can be essential in preparing a research proposal irrespective of one's choice of quantitative methods versus qualitative methods. One could argue that both formal theory and substantive theory as described by Glaser and Strauss (1967) are more akin to theories classified as middle range theories (Smith 2008). Middle range theories are comprised of concepts and propositions that are empirically measurable (Imenda 2014). Such theories are seen as middle range, because they are bigger than individual concepts, but narrower in scope than grand theories and are composed of a limited number of concepts that relate to a specific aspect of the world (Smith and Leihr 1999; Imenda 2014: 188). In practice, it is ultimately the perspective of the researcher and the disciplinary traditions to which s/he adheres or critiques that determine how "theory" is to be framed in a given project.

Theoretical Framework

The theoretical framework is constituted by the "specific perspective which a given researcher uses to explore, interpret or explain events or behavior of the subjects or events s/he is studying" (Imenda 2014: 188). Considered broadly, the *theoretical framework* can make connections between the problem of the study, specific research questions, data collection and analysis techniques, as well as, how one will interpret her/his findings (Merriam 2009: 67; Du Plessis and Van der Westhuizen 2018). These connections are made evident in the narrative that accompanies the mapping and illustrations of research frameworks. Within such narratives is information about the concepts, constructs and/or propositions highlighted via illustration, as well as, in-depth information about the specific direction of the investigation. Theoretical frameworks tend to include at least the following four steps:

a) State the theory or theories that inform the formulation of the problem to be studied;
b) Map the significant concepts, constructs, and propositions of the theory;
c) Illustrate on the map whether the constructs are distinct or overlap (that is, showing links or the lack thereof with lines, arrows, geometric shapes, open spaces between shapes, etc.);
d) Construct a narrative that accompanies the illustration: (i) to identify literature sources from pioneers, proponents, and opponents of each theory (including, relevant primary and secondary sources); and (ii) to speak in-depth about components of the theoretical framework that are under investigation.

Theoretical Framework Caveats

Scholars undertaking grounded theory qualitative research are developing the theory from the ground up. For these scholars, theoretical framework development tends to come at the end of the study once data have been collected and

analyzed because researchers employing a grounded theory approach must bracket their theorizing about the phenomenon of interest until the end of data collection and analyses. The goal of this bracketing is to prevent grounded theory researchers from prematurely positing a theory based more on their pre-existing judgments about the phenomenon of interest rather than from the data at hand.

Conceptual Frameworks

For educational researchers, "conceptualizing your study is the most important step in your research process, because it directs the kind of data you will collect and where and how, and it guides your analysis" (Rossman and Rallis 2012: 121). The conceptual framework is often described as a system of concepts, assumptions, expectations, beliefs and theories that support and inform one's research (Miles and Huberman 1994; Robson 2002; Adom et al. 2018). Other common descriptions of the conceptual framework refer to it as a visual or written product that explains, either geographically or in narrative form, the main things to be studied (that is, the key factors, concepts, or variables) and the presumed relationships among them (Maxwell 2005; Creswell 2007). Conceptual frameworks can "act like maps that give coherence to the enterprise" (Shields and Tajalli 2006: 313; Bendassolli 2013). In addition, a conceptual framework can connect all aspects of empirical inquiry, including problem definition, purpose, literature review, methodology, data collection, and analysis (Shields and Tajalli 2006: 313). In sum, the function of the conceptual framework is understood to inform the rest of one's design, to help one assess and refine her/his goals, to help develop realistic and relevant research questions and select appropriate research methods (Maxwell 2005; Creswell 2007). While these general understandings about conceptual frameworks are important and useful, there are still at least four major, yet often ignored, distinctions to consider to further demystify conceptual frameworks from theoretical frameworks:

a) A conceptual framework is based primarily upon the remaining lower levels of the theory-to-experience hierarchy, the experiences, concepts, constructs, and propositions.
b) Conceptual frameworks determine how a given researcher formulates his/her research problem – and how s/he goes about investigating the problem, and what meaning s/he attaches to the data accruing from such an investigation (Imenda 2014: 185). Thus, it is important for the conceptual framework to include the nature and source of the data.
c) A conceptual framework may also be characterized as a set of ideas that are linked to phenomena of interest, identification of subjects, and research parameters (Ravitch and Riggan 2012). Yet, it involves a consideration of the *theoretical* perspective(s) from which one approaches the construct (for example, student development theory, student identity theory, critical race theory) and provides a lens for understanding. In that sense, it can build upon the theoretical framework. It informs not only the development of the research design while helping the researcher decide what to study and what not to study, but it can also help student researchers justify those decisions to dissertation committees. Essentially, it puts everyone on the same page.
d) While theoretical frameworks are formulated similarly for quantitative and qualitative research, conceptual frameworks may be formulated differently according to the central methodology of the study. Thus, they should be described and displayed separately as demonstrated in the text and illustrations below.

Conceptual Framework: Quantitative Research

An extended metaphor developed by Shields and Rangarajan (2013: 1) aptly describes conceptual frameworks as akin to plays in sports, "conceptual frameworks are like plays. They are abstract, directive and depend on the situation on the ground." There are at least eight steps to consider when developing a conceptual framework for quantitative educational research:

a) Critical review of quantitative research literature relevant to the formulation of the problem to be studied;

b) State the theories being considered, their proponents, opposition, and disciplinary basis (primary and secondary sources);
c) Illustrate relevant concepts and constructs in an initial concept map;
d) Indicate literature sources of concepts and constructs (if appropriate for illustration);
e) Distinguish between dependent, independent, confounding, and control variables that either measure or reflect the concepts and constructs;
f) Identify the propositions, or relationships among constructs being investigated;
g) Construct a narrative that accompanies the illustration: (i) to identify literature sources from pioneers, proponents, and opponents of each relevant concept/construct (including relevant primary and secondary sources); and (ii) to speak in-depth about components of the conceptual framework that are under investigation;
h) Modify concept map after preliminary and subsequent statistical analysis as warranted (with accompanying narrative, as noted above).

Conceptual frameworks for quantitative educational research reflect a unique research question, problem, and literature review. Figure 1 illustrates the first step in a conceptual framework for a quantitative study.

These quantitative scholars performed a preliminary statistical analysis that found that some of the correlations were not statistically significant. Accordingly, Figure 2 contrasts the statistically significant constructs in bold with the grayed-out concepts that were not statistically significant.

Finally, the authors estimated a structural equation model showing specific directional relationships (Fig. 3). A sample of the in-depth narratives that accompany the illustrations is not within the scope of this article, however these narratives can be located at: **(**Wolf and Davis 2014).

Typically, the conceptual framework is developed deductively from a generalization (theory) to more specific concepts which are then related to each other in the form of a proposition (hypothesis) which is testable statistically (Bendassolli 2013). The results of the statistical testing can then be reflected back against the conceptual framework to see which conceptual relationships are supported (that is, those that yielded statistically significant results) and which ones are not. Thus, the concepts whose relationships hold are then retained in the model (or conceptual framework) while those which make no significant contribution to the model are discarded. Bendassolli (2013: 1) describes this process as follows:

A scientific hypothesis is based on a background theory, typically assuming the form of a proposition whose validity depends on empirical

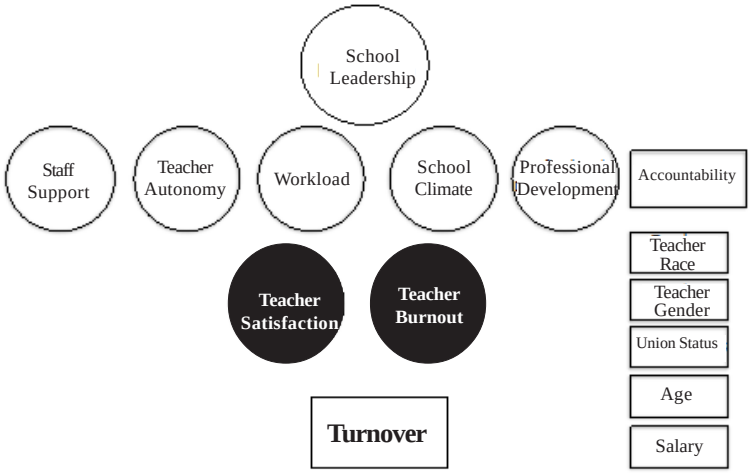

Fig. 1. Initial concept map toward a quantitative study
Source: Wolf R and Davis TE 2014

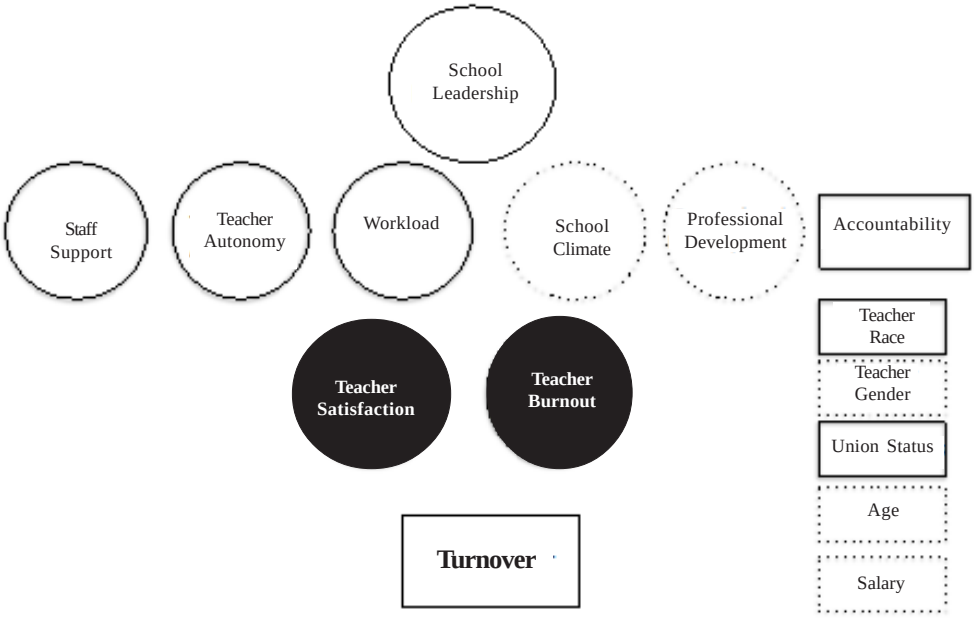

Fig. 2. Modification of the concept map after a preliminary statistical analysis
Source: Wolf R and Davis TE 2014

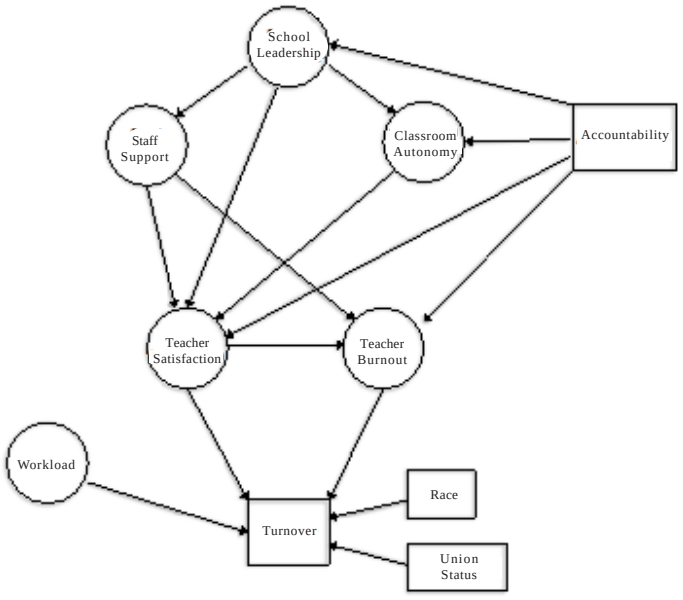

Fig. 3. Final modified conceptual framework for a structural equation model of teacher turnover
Source: Wolf R and Davis TE 2014

confirmation. Otherwise, a hypothesis is nothing but an imaginative conjecture. Moreover, when researchers do not obtain empirical confirmation for their hypothesis, the theory in question (or part of it) may not be able to predict relevant aspects of the phenomenon under investigation.

Accordingly, induction is one of the most serious issues in quantitative research, as it relates to how researchers distinguish between what can be deemed to be valid and what not. Induction signifies the importance and centrality of empirical evidence in the process of developing scientific laws and theories; it is the epistemological window through which the relationship between empirical reality and its theorization can be ascertained.

Apart from being based on a theory, it is possible that a quantitative study can also be based on a conceptual framework constructed from literature review. In this case, a researcher brings constructs/concepts together from various sources, in an inductive manner, and constructs a model (theoretical framework) which is then used to guide the study. In this regard, the researchers present a study by Chi (2009) as an example of a study based on a conceptual framework constructed from a review of literature on the characteristics, observable overt activities, and underlying learning processes related to *active*, *constructive*, and *interactive* learning (Chi 2009: 90). The conceptual framework consisted of a taxonomy which suggested that "interactive activities might be better than constructive activities, which in turn might be better than active activities, which would be better than passive activities" (Chi 2009: 98). On the basis of this conceptual framework the researcher formulated a testable hypothesis which stated that overall, "active is better than passive, constructive is better than active, and interactive is better than constructive" (Chi 2009: 98). Subsequently, she developed a research methodology for the study and the hypothesis was tested (Chi 2009). The conceptual framework then served in this instance, as a basis for data analysis, interpretation and discussion of results and findings, as well as drawing of conclusions and recommendations.

Conceptual Framework: Qualitative Research

For qualitative research, the conceptual framework is only necessary, when pursuing either a new or an underdeveloped area of research. Yet, as with quantitative conceptual frameworks, great care is taken to generate qualitative conceptual frameworks as researchers configure and reconfigure information from the critical literature review, pilot research findings (if available) and previous experiences related to the phenomenon of interest. The conceptual framework not only "ensures that the approach and methods are coherent and flow logically from the framework," but it can also work in some studies to begin establishing a tool that "provides a map for analyzing the data" (Rossman and Rallis 2012: 121). There are at least eight steps to consider for developing a qualitative conceptual framework:

a) Critical review of qualitative research literature relevant to the formulation of the problem to be studied;
b) State the theories being considered, their proponents, opposition, and the disciplinary basis (primary and secondary sources);
c) Based on the critical literature review, and theories being considered, decide whether a conceptual framework is necessary due to the new or underdeveloped area(s) of study;
d) If necessary, illustrate relevant constructs/concepts in a concept map;
e) Indicate sources (citations) for concepts and constructs (if appropriate for illustration);
f) Illustrate the relationships (or lack thereof) between concepts/constructs being investigated;
g) Construct a narrative that accompanies the illustration: (i) to identify literature sources related to pioneers, proponents, and opponents of each relevant concept/construct (including relevant primary and secondary sources); and (ii) to speak in-depth about components of the conceptual framework that are under investigation;
h) Modify the concept map after preliminary and subsequent qualitative analysis, as warranted (with accompanying narrative, as noted above).

Regardless of the care taken in formulating the conceptual framework, students should remember that qualitative conceptual frameworks can be informed, critiqued, and challenged by one's findings from qualitative research (that is, similar to the process of developing quantitative conceptual frameworks). For example, a former doctoral student of the first author, Liu (2012), collected and

analyzed qualitative data from the field and found that some of the concepts and constructs from the original map did not emerge as relevant influences on their phenomenon of interest. In fact, it is not unusual for the authors' doctoral students to present before and after conceptual frameworks, which can show important contrasts from dissertation proposal to the final dissertation – leading to an updated, post-data conceptual framework arising out of a rearrangement of prior concepts and integration of new ones. Indeed, this is one important essence of qualitative research being theory-building, that is, constructs and concepts that emerge from collected data must inform the *a priori* model by improving it on the basis of new evidence. This is the sense in which Chowdhury (2019: 100) contends that "qualitative studies can yield richer results in the social science disciplines."

Conceptual Framework Caveats

First, conceptual frameworks can include theory (Shields and Tajalli 2006); however, theory tends to be applied to the framework, only as part of an overall tentative explanation of the problem. Second, it is imperative for researchers engaging in phenomenology or grounded theory qualitative research to recognize that (a) it is also appropriate to start data collection without any prior conceptualization, and that in such cases, the conceptual framework can still guide the researcher's sampling and data collection choices, and (b) conceptual frameworks can also come at the end of a study once data have been collected and analyzed.

DISCUSSION

This paper was framed around two central questions: (a) What is the difference between a theoretical framework and a conceptual framework? (b) How are they developed for qualitative and qualitative research? The first question was the main motivation for the study because there are so many examples of established researchers using the terms interchangeably that the authors felt that a clear delineation was warranted. The second question emerged as the researchers began to respond to the first and noticed similarities in applications of theoretical frameworks across quantitative and qualitative research methods, but differences in applications of conceptual frameworks across the two methods. Table 1 gives a concise summary of the answers to the two research questions framed for this study.

From Table 1, we are reminded that each framework does have particular characteristics that make it more conducive than its counterpart for a particular role in educational research projects. As mentioned, theoretical and conceptual frameworks both come with important caveats that novice researchers and advisors should consider. This information when considered in tandem provides substantial evidence to reframe the framework discussion not as just another one that supports the "same difference" critique, but as one that demonstrates how research frameworks work *similarly* and *differently* across traditional quantitative and qualitative methodological boundaries.

As earlier stated, although conceptual frameworks are mostly used in qualitative research, an example was given showing how quantitative research may also be based on a conceptual framework. The origin of this is that ontologically, most quantitative research was conducted in the natural sciences around the notion of verification and/or falsification of propositions based on particular theories (Du Plessis and Van der Westhuizen 2018). The re-emergence of qualitative research has also been associated with an ontological shift with regard to the nature of reality. In particular, the acceptance of the view about multiple realities has led to qualitative research being considered to be valuable "because of the benefits of theory building from the bottom up, and on account of the fact that grounded theory works inductively, is less theory bound, often conducted in local languages, and can capture real life experiences and narratives" (Du Plessis and Van der Westhuizen 2018: 2). Alongside this ontological shift has been the insinuation that there was something wrong with erstwhile practices of knowledge production in educational research characterised by the dominance of paradigms and methodologies that promoted cognitive injustice (Du Plessis and Van der Westhuizen 2018: 5). As Du Plessis and Van der Westhuizen (2018) point out, there is a call "to integrate into the current body of knowledge, knowledge that is part of livelihoods and local, indigenous and community knowledge, which should not to be subjugated but be allowed to

Table 1: Comparison of the genesis and purposes of theoretical versus conceptual frameworks

Frameworks	*Genesis*	*Purposes*	*Caveats*
Theoretical Framework (Applied synthesis of formal and/or substantive theory) Conceptual Framework (Applied synthesis of relevant concepts, constructs, and propositions)	• Derived from previously established theories • Fixed theories illuminated by literature on them Adopted • Adopted from pre-existing theories or theoretical perspectives • Newly stablished (emergent, tentative) • Created by the researcher from a variety of theories, or parts of theories, evolving during the literature review • Links future research from the theories in the literature review to field data and eventually analysis	• Connects relevant elements of the theories found during literature review to the specific formulation of the research problem(s); and it is presented *a priori* in most empirical research (quantitative and qualitative) • Helps the researcher see clearly the main theory or theories, and how they relate to the phenomenon of interest (quantitative and qualitative) • Allows the researcher to identify gaps in the literature and motivates the research questions (quantitative and qualitative) • Map and test concept-based, and construct-based hypotheses (quantitative); and map and guide new or underdeveloped areas of study (qualitative) • Helps the researcher see clearly the main variables (quantitative); and the main concepts, constructs, and propositions (quantitative and qualitative). • Guides the researcher in the collection, interpretation, and explanation of the data (quantitative and qualitative) • Provides the researcher with more specific approaches to picking a methodology and formulating a research design (quantitative and qualitative)	• Theoretical frameworks for grounded theory, phenomenology or other inductive qualitative research approaches, is more of an idea map to help guide the researchers' data collection and sampling techniques without biasing the analysis and interpretations • Conceptualframeworks for phenomenology or grounded theory can either, (a) guide the researchers' sampling and data collection choices at the beginning; or (b) come at the end of the study once data have been collected and analysed

grow without duress." This would be in line with the realisation that "we live in times when education needs to promote fairness and justice and move beyond the Western, European modernistic science of truth" (Du Plessis and Van der Westhuizen 2018: 5). The view is that this can be achieved through qualitative research approaches, such as grounded theory, because of their transformative value and the need to decolonise knowledge in educational research.

A conceptual framework can expand the scope of the theoretical framework to include methodology and research design. One can think of a conceptual framework as an application of some pertinent theories and other related concepts of the literature review, constructed in the absence of a theoretical framework that could adequately guide a particular study. Thus, a conceptual framework is not fixed but emergent – and its life span is limited to the study it has been constructed to guide. Miles and Huberman (1994) claim that naming the constructs and explaining how they relate will "lead you to a conceptual framework." Once we understand what kind of thing something is, we can begin to consider what kind of data we will need to analyze it from the time that we begin the problem formulation stage of our research.

CONCLUSION

The researchers set out to demystify conceptual and theoretical frameworks across quantitative and qualitative boundaries in educational research. Ultimately, the researchers' intent was to inform the academic audience and speak back to the common frustrations among students and advisors (including ourselves), when applying theoretical and conceptual frameworks, as if they are completely interchangeable. Peripherally, the researchers intended to answer critics of educational research by showing the distinct roles that theoretical and conceptual frameworks play in their work. The detailed information presented here does not intend to muddy the waters of the frameworks

in order to make them appear deeper, but to extend the understanding that each framework does have particular characteristics that can render it more conducive than its counterpart for a particular role in problem formulation for educational research projects. Thus, the researchers hope that this paper will remind students and advisors of educational research to revisit *how* advising occurs about theoretical and conceptual frameworks, and with *what* breadth and depth it occurs, en route to demystifying the framework development portion of the problem formulation process.

RECOMMENDATIONS

While both theoretical and conceptual frameworks are derived from the literature, a theoretical framework is more fixed and stable. Theories can be used in whole or in part but, ultimately, they are tailored to the specific aspects of the research problem. A theoretical framework presents a summary of relevant theories found in the literature review, applicable to a particular research problem. It also connects concepts, constructs, and propositions found within a given theory and related literature to a specific research problem. In some cases, it may be logical to place a theoretical framework at the conclusion of the literature review, especially in situations where it represents not only the pertinent concepts from the theory but also constructs that have emerged from empirical studies on the application of the theory. In addition, the authors recommend that students construct an illustration of the theoretical framework in order to map out the concepts /constructs immediately applicable to the study. The act of arranging the applicable constructs from theories in an illustrative conceptual model forces students to contemplate how they are related in a concrete way.

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