

DISSERTATION

THE CONCEPT OF ORGANIZATIONAL KNOWLEDGE  
AND ITS ASSOCIATE COMPONENT PARTS

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## ABSTRACT

### THE CONCEPT OF ORGANIZATIONAL KNOWLEDGE AND ITS ASSOCIATE COMPONENT PARTS

Within its extant literature organizational knowledge is theorized as an entity that can be created, captured, and transferred. A pragmatic and applied definition of the concept of organizational knowledge is absent in the literature. Presumptively, the concept of organizational knowledge can be defined, clarified, and articulated, the exploratory journey of which is the goal of this dissertation. This related aim is twofold. First, to begin a process of contributing to description of the concept of organizational knowledge and its associate component parts. And, second, to inform future understanding and inquiry of the concept and its associate component parts. The dissertation presents in manuscript form, three articles that inform these two study objectives. Collectively, the three-article format begins the process of advancing a definition, description, and expanded understanding of the concept of organizational knowledge and its associate component parts. The specific research design employs three distinct lenses to this end, namely, one methodological (of methods), one conceptual (of integrative literature review) and one empirical (of case study).

## TABLE OF CONTENTS

ABSTRACT.....	ii
LIST OF TABLES.....	viii
LIST OF FIGURES .....	ix
CHAPTER ONE .....	1
Dissertation Outline and Overview.....	1
Introduction.....	1
Dissertation Outline and Chapters Overview .....	4
Chapter Two: Article One (Methodological, of Methods) .....	5
Chapter Three: Article Two (Conceptual, of Integrative Literature Review) .....	6
Chapter Four: Article Three (Empirical, of Case Study).....	8
Chapter Five: Concluding Chapter .....	9
Rationale for Three Articles.....	9
Informing Inquiry Paradigm .....	12
Ontology .....	13
Epistemology .....	14
Methodology .....	16
Axiology .....	19
Researcher Perspective .....	21
Delimitations.....	23
Limitations .....	25
Summary of Chapter One .....	26
CHAPTER TWO .....	28
Article One (Methodological, of Methods) .....	28
Summary .....	28
The Qualitative Content Analysis Approach for Integrative Literature Reviews.....	28
Purpose.....	31
Qualitative Content Analysis .....	32
Using Qualitative Content Analysis for an Integrative Literature Review.....	34
Part 1: Deciding on the Research Focus .....	36

Part 2: Organizing the Literature .....	36
Collect the Literature .....	36
Determining the Unit of Analysis.....	37
Arranging the Literature .....	37
Part 3: Data Reduction .....	39
Immersion in the Literature .....	39
Preliminary Code Each Unit of Analysis .....	40
Determining Relevant Material .....	40
Part 4: Develop the Coding Scheme .....	41
Unitize the Relevant Material.....	42
Code the Relevant Material .....	43
Arrange the Codes into a Structure.....	43
Part 5: Applying the Coding Scheme.....	45
Provisional Coding with the Coding Scheme.....	45
Final Coding with the Coding Scheme.....	46
Interpret and Describe the Data.....	46
Alignment of Qualitative Content Analysis and an Integrative Literature Review Methodology	51
Implications.....	53
Implications for Practice .....	53
Implications for Research .....	53
Implications for Theory .....	54
Conclusions.....	54
CHAPTER THREE .....	56
Article Two (Conceptual, of Integrative Literature Review).....	56
Summary .....	56
The Concept of Organizational Knowledge and Its Associate Component Parts: .....	56
An Integrative Literature Review .....	56
Purpose and Structure of the Review.....	59
Methodology and Methods .....	60
Data Collection and Selection of Literature.....	61
Application of Qualitative Content Analysis to the Data .....	63
Selecting Relevant Material: Interpretive Coding Cycle One .....	64

Developing a Coding Scheme: Interpretive Coding Cycles Two and Three.....	65
Analysis and Synthesis of the Relevant Material: Interpretive Coding Cycle Four .....	66
Findings and Discussion .....	66
The Knowns of the Concept of Organizational Knowledge and Its Associate Component Parts.....	67
Definitions of Organizational knowledge.....	67
Types of Organizational Knowledge.....	69
Properties of Organizational Knowledge .....	71
Organizational Knowledge is the Enactment of Culture.....	74
Origins of Organizational Knowledge.....	75
Organization’s Capacity to Act .....	76
The Concept of Organizational Knowledge .....	76
Unknowns about the Concept of Organizational Knowledge and Its Associate Component Parts .....	77
Implications for Human Resource Development.....	78
Implications for Practice .....	79
Implications for Research .....	79
Implications for Theory .....	80
Conclusion .....	81
CHAPTER FOUR.....	82
Article Three (Empirical, of Case Study) .....	82
Summary .....	82
Organizational Knowledge in Higher Education:.....	82
A case study perspective of undergraduate academic advisors .....	82
Methodology and Methods .....	85
Research Paradigm.....	86
Rationale for the Use of a Qualitative Research Strategy.....	87
Case Study Research Approach and Methods .....	89
Data Collection .....	91
Site selection.....	93
Participants .....	93
Data Analysis.....	94
Findings.....	96

First Associate Component Part: Foundational Knowledge .....	97
Second Associate Component Part: Knowledge to Find Balance .....	98
Third Associate Component Part: Knowledge to Find Solutions.....	100
Fourth Associate Component Part: Knowledge of Processes.....	101
Fifth Associate Component Part: Knowledge of Philosophies of Practice.....	102
Sixth Associate Component Part: Knowledge About the Student Experience.....	104
Seventh Associate Component Part: Knowledge About the Advising Role .....	105
Eighth Associate Component Part: Knowledge to Do the Work.....	106
Ninth Associate Component Part: Descriptions of Organizational Knowledge.....	107
Discussion.....	109
Implications.....	112
Implications for Practice .....	112
Implications for Research .....	113
Conclusion .....	115
CHAPTER FIVE .....	116
Research Design/Conceptual Framework.....	118
Chapter Two: Article One (Methodological, of Methods) .....	119
Chapter Three: Article Two (Conceptual, of Integrative Literature Review) .....	120
Chapter Four: Article Three (Empirical, of Case Study).....	122
Discussion.....	123
The Concept of Organizational Knowledge and its Associate Component Parts.....	123
Properties of Organizational Knowledge .....	124
Origins of Organizational knowledge.....	125
Type of organizational knowledge. ....	125
Enactment of Culture and Governance of Work .....	126
Organization’s capacity to act .....	126
The Concept of Organizational Knowledge .....	127
Implications.....	127
Implications for Practice .....	127
Implications for Research .....	128
Implications for Theory .....	128
Quality Criteria .....	129

Trustworthiness Criteria.....	129
Plausibility .....	129
Transferability .....	130
Dependability and Confirmability .....	130
Authenticity Criteria .....	131
Fairness.....	131
Ontological authenticity .....	132
Educative Authenticity .....	132
Catalytic Authenticity.....	133
Tactical Authenticity .....	133
Description of the Research Instrument.....	134
Responsiveness .....	134
Adaptability.....	135
Holistic emphasis.....	135
Knowledge Base Expansion .....	136
Processual Immediacy .....	136
Opportunities for clarification and summarization .....	137
Opportunity to explore atypical or idiosyncratic responses.....	137
Conclusions.....	138
REFERENCES .....	140
APPENDIX A.....	155
Recruitment Email .....	155
APPENDIX B.....	156
Informed Consent.....	156
APPENDIX C .....	160
Student Consent .....	160
APPENDIX D.....	161
Interview Protocol.....	161
APPENDIX E .....	163
Demographic Survey .....	163



## LIST OF TABLES

Table 1: Summary of the Three Articles: Titles, Purposes, and Research Questions.....	11
Table 2: Application of Qualitative Content Analysis to an Illustrative Case.....	50
Table 3: Categories and Sub-categories Constructed from the Third Interpretive Coding Cycle.....	66

## LIST OF FIGURES

Figure 1: Conceptual model: Qualitative Content Analysis Approach for an Integrative Literature Review.....	35
Figure 2: Qualitative Content Analysis Approach to an Integrative Literature Review, Part 2: Organize the Literature and subprocesses.....	39
Figure 3: Qualitative Content Analysis Approach to an Integrative Literature Review, Part 3: Data Reduction and subprocesses.....	41
Figure 4: Part 4: Developing the Coding Scheme, Example Coding Structure.....	44
Figure 5: Qualitative Content Analysis Approach to an Integrative Literature Review, Part 4: Developing the Coding Scheme and subprocesses.....	45
Figure 6: Qualitative Content Analysis Approach to an Integrative Literature Review, Part 5: Apply the Coding Scheme and subprocesses.....	47
Figure 7: Four Interpretive Coding Cycles and Outcomes within the Three Outputs of Qualitative Content Analysis.....	65
Figure 8: The Boundedness of the Empirical Case Study.....	92
Figure 9: Conceptual Model of Undergraduate Academic Advisors' Organizational Knowledge and its Nine Associate Component Parts.....	109
Figure 10: Three Perspectives (methodological, conceptual, and empirical) That Inform Understanding of the Concept of Organizational Knowledge and its Associate Component Parts.....	123

## CHAPTER ONE

### **Dissertation Outline and Overview**

#### **Introduction**

How do organizations remain competitive in the knowledge economy? One answer lies in the extant literature that argues organizations with an understanding of their organizational knowledge will likely have competitive advantage (Nonaka, 1994). This advantage is due in part to the idea that organizational knowledge is considered a corporate asset (Kakihara & Sorenson, 2002). It is thought to have origins both internal and external to the organization. Externally, it is the integration of stakeholders (e.g., suppliers and customers) knowledge resources with internal organizational knowledge (DeCarolis & Deeds, 1999). Internally, organizational knowledge originates from the integration of individual organization member's specialist knowledge with one another (Grant, 1996). This idea of knowledge as a corporate asset is associated with the knowledge-based theory of the firm which posits knowledge as a strategically important resource of the firm (Grant, 1996; Spender, 1996). This knowledge-based theory of the firm is in turn a derivative of the resource-based theory of the firm, a theory that proposes that the primary goal of management is to deploy and maximize resources for competitive advantage, including organizational knowledge.

While the concept of knowledge has been debated for decades (Cook & Brown, 1999), the concept of organizational knowledge is a more recent phenomenon. Through advancement of computing capabilities (e.g., decision support systems, corporate intranets) able to capture and disseminate the "right" knowledge for decision making, firms were motivated to understand their organizational knowledge. Consensus in the informing literature on the concept of organizational knowledge is that organizations have two knowledge types often referenced as explicit and tacit

knowledge (Decarolis & Deeds, 1999; Nonaka, 1994; Spender, 1996). Explicit knowledge is taken to be knowledge that can be communicated and made objective. Explicit knowledge is an organization's policies, procedures, or processes written and communicated in employee manuals and repositories such as libraries and corporate intranets. Tacit knowledge, on the other hand, is considered implicit, rooted in action, heuristic, and inseparable from its creation and application (Nonaka, 1994; Spender, 1996, Trevealen & Sykes, 2005). Tacit knowledge is an individual employee's knowledge of how to complete task, an employee's insights and expertise (Holsapple & Joshi, 2001). Tacit knowledge is the nuance in a process or task that is not easily explained and is intuitively known by employees (Nonaka, 1994; Spender, 1996, Trevealen & Sykes, 2005).

In practice, explicit and tacit knowledge are understood as a component of human action and observed in organizational work. Tacit understandings are often explicated in generalized statements to be understood by organizational members (Tsoukas & Vladimirou, 2001). Generalized statements are considered explicit knowledge because they are communicable, easily shared, and guide the action of the organization and its members (Tsoukas & Vladimirou, 2001). Further, explicit and tacit knowledge types are used in organizational work to develop relationships and partnerships with suppliers and customers, to implement services, and in product development. The practicality of tacit and explicit knowledge can be demonstrated through a case of organizational training. For instance, in the case of academic advising, it would be inefficient for a seasoned academic advisor to share their knowledge with each new advisor. An effective means of sharing one's knowledge is to convert their tacit understanding of the advising process into explicit rules and procedures accessible to a new advisor through a learning management system. The seasoned advisor does not lose tacit understanding of advising by

making it explicit, and new advisors develop tacit understandings of their own by enacting explicit rules and procedures.

While organizational knowledge is conceptualized as tacit and explicit knowledge, it is also characterized in the extant and related literature as organizational knowing, organizational resources, and knowledge in organizations (Cook & Brown, 1999). Each of these characterizations (i.e., organizational knowing, organizational resources, and knowledge in organizations) is concerned conceptually with what organizations know, how they know, and the processes and mechanisms for acquiring, creating, and transferring knowledge within organizations. Yet, despite such characterizations there remains an incomplete understanding of what constitutes the concept of organizational knowledge and its associate component parts. Instead, presuppositions about the creation, sharing, and transfer of organizational knowledge persist.

Empirical studies related to the concept of organizational knowledge include a conceptual typography of organizational knowledge resources (Holsapple & Joshi, 2001), a framework for the existence and formation of organizational subcultures and knowledge shared within the subcultural groups (Sackmann, 1992), organizational knowledge creation (Nonaka, 1994), and description of the relationship between knowledge stocks (stored knowledge) and knowledge flows (new knowledge sources) of organizational knowledge on firm performance (DeCarolis & Deeds, 1999). Unclear in the empirical research and literature on the concept of organizational knowledge is an articulation of the concept and its associate component parts. As a result of the indistinct definitions and description of the concept of organizational knowledge and its associate component parts, its utility in practice is limited, as is its presumed impact related to an organization's competitive advantage.

Presumptively, the concept of organizational knowledge can be defined, clarified, and articulated, the exploratory journey of which is the goal of this dissertation. This related aim is twofold. First, to begin a process of contributing to description of the concept of organizational knowledge and its associate component parts. And, second, to inform future understanding and inquiry of the concept and its associate component parts. The dissertation presents in manuscript form, three articles that inform these two study objectives. Together they enable this inquiry to define, clarify, and articulate the concept of organizational knowledge and its associate component parts. They also enable the address of the driving research question, namely, *what is the concept of organizational knowledge and its associate component parts?* An outline and overview of the dissertation and its constituent chapters is presented next.

### **Dissertation Outline and Chapters Overview**

This dissertation is organized into five chapters. It has an introductory chapter (Chapter 1), three manuscripts (Chapters 2, 3, and 4) and a concluding chapter (Chapter 5). Chapter one (Introduction) describes the need and rationale for the study, the dissertation format and the informing inquiry paradigm. Chapters two through four (i.e., the three manuscripts) are stand-alone articles, each of which advances a definition and description of the concept of organizational knowledge and its associate component parts. Chapter five describes the accumulated conclusions and implications for future research, practice, and theorizing. Described next are the three stand-alone articles together which represent this dissertations' Chapters 2, 3, and 4. Each article is described in terms of type, purpose, and driving research questions.

## **Chapter Two: Article One (Methodological, of Methods)**

A viable literature review underlies all empirical research (Boote & Beile, 2005; Marshall & Rossman, 2009; Rocco & Plathotnik, 2009). An exploration of the extant literature on the concept of organizational knowledge for the purposes of an integrative literature review, may be the first step in describing the concept and its associate component parts. This literature is diverse and includes both empirical and non-empirical literature. Also, the concept is addressed by different disciplines (e.g., information science, management, computer science, organization science, etc.). Thus, this diversity in the literature necessitates a literature review methodology that is inclusive of theoretical as well as empirical research (Whittemore & Knafl, 2005). An integrative literature review meets this necessity and is fit for the purpose of describing the knowns and unknowns of the concept of organizational knowledge and its associate component parts.

An integrative literature review “is a form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated” (Torraco, 2005, p.7). Although the methodology of an integrative literature review calls for a clear description of an inductive and systematic data analysis method that grounds interpretations in the data (Torraco, 2016), description of such methods, and detailed instruction on how to employ such methods for an integrative literature review are lacking (Onwuegbuzie & Weinbaum, 2017; Torraco, 2016). To this end, I explored methods used to analyze literature such as a meta-analysis, systematic, and scoping reviews (Ganong, 1987; de Souza et al., 2010; Whittemore & Knafl, 2005) and the data analysis method of qualitative content analysis was chosen to address the need for an inductive and systematic data analysis method for use with integrative literature reviews.

Chapter two (article one) presents a methodological (of methods) article titled, “The Use of Qualitative Content Analysis for the Execution of an Integrative Literature Review” and informs this dissertation’s overall inquiry on the concept of organizational knowledge and its associate component parts. The purpose was to describe a systematic and rigorous data analysis method for use with integrative literature reviews. The use of qualitative content analysis enabled me to access the extant literature on the concept of organizational knowledge and its associate component parts. The research question was, *how might qualitative content analysis be used in the execution of an integrative literature review?* The article’s assumed value is that it makes transparent the data analysis method of qualitative content analysis for purposes of conducting an integrative literature review. The article was submitted for peer-review, accepted, and presented at the 2018 Academy of Human Resource Development International Conference in America. The manuscript will be revised and submitted for publication in an identified Academy of Human Resource Development peer-reviewed journal.

### **Chapter Three: Article Two (Conceptual, of Integrative Literature Review)**

Broadly used in the extant literature is the concept of organizational knowledge without clear description. What is described are specific types of knowledge, such as explicit and tacit, the ideas that organizational knowledge is internal and external to an organization, and it is applied in practice through human action (Cook & Brown, 1999). Absent is the integration of these ideas into a conceptual understanding of the concept of organizational knowledge and its associate component parts (Spender, 1996). The execution of an integrative literature review methodology using qualitative content analysis enabled the identification of gaps in the literature on the concept of organizational knowledge and its associate component parts to inform a more robust description of the phenomenon.



This integrative literature review (conceptual) manuscript aimed to synthesize related ideas from multiple bodies of literature of empirical research and theoretical frameworks to advance understanding on the concept of organizational knowledge and its associate component parts (Callahan, 2010; Rocco & Plakhotnik, 2009). The article is presented as a conceptual article specifically because it aims to “make connections between multiple bodies of literature” (Callahan, 2010, p. 302) and “relate concepts, empirical research and relevant theory to advance and systematize knowledge” about the concept of organizational knowledge and its associate component parts (Rocco & Plakhotnik, 2009, p. 128).

Chapter three (article two) is a conceptual (of integrative literature review) article, titled “The Concept of Organizational Knowledge and its Associate Components Parts: An Integrated Literature Review.” The purpose was to analyze and synthesize recent theoretical, conceptual, and research literature on the concept of organizational knowledge and its associate component parts. Three research questions informed the study. Two questions were used to inform and guide the integrative inquiry of the literature, (a) *what is known in the informing literature about the concept of organizational knowledge and its associate component parts?* And (b) *what is not known (the unknowns) in the informing literature about the concept of organizational knowledge and its associate component parts?* And a third question informed by the first two research questions, namely, *what are the implications of the knowns and unknowns of the concept of organizational knowledge and its associate component parts for related practice, research, and theory?* The original article was the recipient of the “Cutting Edge Award” given to the top 10 outstanding scholarly (peer-reviewed) papers at the 2017 Academy of Human Resource Development International Conference in America. The manuscript will continue to be further refined for upcoming submission to a peer-review scholarly journal.

## **Chapter Four: Article Three (Empirical, of Case Study)**

Noted from the execution of the integrative literature review on the concept of organizational knowledge and its associate component parts were few empirical studies (DeCarolis & Deeds, 1999; Holsapple & Joshi, 2001; Nonaka, 1994; Sackmann, 1992). Empirical studies within the literature associated with the concept of organizational knowledge have studied the creation of organizational knowledge (Nonaka, 1994), associated stocks and flows of organizational knowledge (DeCarolis & Deeds, 1999), leveraging one kind of organizational knowledge (Stenmark, 2000) and organizational knowledge resources (Holsapple & Joshi, 2001). Only one article explicitly defined the concept of organizational knowledge, appropriately titled “What is Organizational Knowledge?” (Tsoukas & Vladimirou, 2001). Additionally, these studies were conducted in specific organizational contexts like the biotechnology industry (DeCarolis & Deeds, 1999), a bread company (Nonaka, 1994) and a call center (Tsoukas & Vladimirou, 2001). Not evident in the extant and related literature was an empirical study specifically about the concept of organizational knowledge and its associate parts nor in the context of higher education.

This dissertation’s empirical study aims to extend empirical support for understanding the concept of organizational knowledge and its associate components parts and expand the organizational contexts for which the concept is explored, namely, higher education. The specific context was selected because such ideas as competitive advantage, the creation and transfer of organizational knowledge, and knowledge as an organizational asset may have implications in the context of higher education (Rowley, 2000). The intended outcome is to add to the empirical research related to the concept of organizational knowledge and its associate component parts, such that new understandings might emerge from this inquiry.

Chapter four (article three) is an empirical (of case study) article that employed a qualitative case study approach, titled, “An Illustration of the Concept of Organizational Knowledge and its Associate Components Parts: Perspectives of Undergraduate Academic Advisors.” The purpose of the study was to explore an instance of the concept of organizational knowledge and its associate components parts in a selected organizational context using a case study research approach. The inquiry sought to answer the research question, *what is the concept of organizational knowledge and its associate component parts from the perspective of participating undergraduate academic advisors within a selected context of a higher education institution in the mid-western United States?* Submission of the resulting empirical manuscript to an appropriate peer-review journal will ensue on completion of the dissertation.

#### **Chapter Five: Concluding Chapter**

Finally, chapter five includes a discussion on how collectively Chapters 2, 3, and 4 advance a clearer and more developed understanding of the concept of organizational knowledge and its associate component parts. Chapter five also discusses the broader implications and conclusions about the concept of organizational knowledge and its associate component parts; as well as possible implications for related research, theorizing, and practice. Although the presentation of this dissertation will not adhere to the conventional five-chapter dissertation format, all the traditional elements of a dissertation are included namely, a comprehensive literature review, methodology and methods, and rationale and design of an empirical research study.

#### **Rationale for Three Articles**

Collectively, the three-article format begins the process of advancing a definition, description, and expanded understanding of the concept of organizational knowledge and its

associate component parts. The specific research design was therefore chosen to inform and improve the construction of the concept by employing three distinct lenses to this end, namely, one methodological (of methods), one conceptual (of integrative literature review) and one empirical (of case study). The method of qualitative content analysis addressed a quality concern of an integrative literature review, that is, the conceptual reasoning used to conduct such a review. The use of the method was a focused analysis of the extant and related literature on the concept of organizational knowledge and its associate components parts.

The integrated literature review sought to locate, analyze, and synthesize the literature related to how organizational knowledge was explicit and tacit, was created, a result of shared understandings, associated with competitive advantage and actions of organizational members. Due to the fact that ideas about the concept of organizational knowledge were repeated and articulated differently, I wanted to know how these ideas were related and about the interconnections between the different literature sources. The literature review helped me understand what was known and unknown about the concept of organizational knowledge and its associate component parts. Furthermore, through exploration of the extant literature a conceptual understanding was developed that builds on, informs, and connects the disparate understandings and associations in the literature about the concept of organizational knowledge and its associate component parts.

As such, this conceptual understanding informed the need for an empirical study of the concept of organizational knowledge and its associate component parts in an organizational setting. The empirical study aimed to extend the theorizing of the concept of organizational knowledge and its associate component parts insomuch that theoretical and conceptual frameworks describe the concept of organizational knowledge without empirical support in

organizational settings and without descriptive specificity. Learned from the literature is that the concept of organizational knowledge is explored theoretically and conceptually in divergent and overlapping disciplines. Nonetheless, the concept of organizational knowledge and its associate parts are non-descript. Instead an entire corpus of literature, models, and frameworks have been built without attention to empirical testing. Thus, through case study research in an organizational setting the study seeks to avoid additional conjecture about the concept of organizational knowledge and its associate component parts. Outcomes from a case study intend to inform the current discourse related to the concept of organizational knowledge and also provide an informed and nuanced understanding of the concept and its associate component parts. Table 1 following provides an overview of each article for the dissertation study including its type, title, purpose, and research questions.

**Table 1**  
*Summary of the Three Articles: Titles, Purposes, and Research Questions*

Overall Research Question: What is the concept of organizational knowledge and its associated component parts?			
Article Type	Title	Purpose	Research Questions
Chapter Two (Article one) Methodological (of Methods)	The Use of Qualitative Content Analysis for the Execution of an Integrative Literature Review	To describe a systematic and rigorous data analysis method for use with integrative literature reviews.	How might Qualitative Content Analysis Be Used in the Execution of an Integrative Literature Review?
Chapter Three, (Article Two) Conceptual (of Integrative Literature Review)	The Concept of Organizational Knowledge and its Associate Component Parts: An Integrative Literature Review	To analyze and synthesize recent theoretical, conceptual, and research literatures on the concept of organizational knowledge and its associated component parts	What is known in the informing literature about the concept of organizational knowledge and its associate component parts?  What is not known (unknowns) in the informing literature about the concept of organizational knowledge and its associate component parts?

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			What are implications of the knowns and unknowns about the concept of organizational knowledge and its associate component parts for related practice, research, and theory?
Chapter Four, (Article three) Empirical (of Case Study)	An Illustration of the Concept of Organizational Knowledge and its Associate Component Parts: Perspectives of Undergraduate Academic Advisors	To study an instance of the concept of organizational knowledge and its associate component parts in a selected organizational context.	What is the concept of organizational knowledge and its associate component parts from the perspective of participating undergraduate academic advisors in a selected context of a higher education institution in the mid-western United States?

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### **Informing Inquiry Paradigm**

Researchers bring a particular lens to the inquiry, and that lens is the informing paradigm. This lens includes how one views the world and what makes for reality in that world (ontology); what makes for knowledge in that reality and how that knowledge comes to be known (epistemology). It also includes how one should go about studying and acquiring knowledge of said reality (methodology), and the role of values in inquiry (axiology; Lincoln & Guba, 2013, p. 37). Together, ontology, epistemology, methodology, and axiology are assumptions about the nature of inquiry and function collectively as a paradigm. Hence, a paradigm is “a basic set of beliefs” a worldview that the researcher brings to the inquiry that guides and informs the study (Guba & Lincoln, 1989, p. 80). The paradigm of choice for this dissertation study is constructivism.

Foundational to the constructivist paradigm, ontology or reality is un governed by natural laws and consists of multiple socially constructed realities that co-exist. Epistemologically, the relationship between the knower and knowable is personal, each interacts to influence the other

in a specific context (Lincoln & Guba, 2013). The methodology of constructivism assumes a hermeneutic and dialectic approach. Hermeneutics is an interpretive explanatory method that assists with understanding the sense-making activities of both inquirer and participants. Further, dialectics as a methodology enables the confronting, comparing, and contrasting of the multiple constructions of the inquiry (Lincoln & Guba, 2013). The axiology of constructivism assumes that values are inherent in any human inquiry, including the values of the inquirer, participants, and the context in which the research is conducted (Lincoln & Guba, 2013).

Therefore, constructivist inquiry has a relativist ontology, transactional/subjectivist epistemology, and a hermeneutic and dialectic methodology (Lincoln & Guba, 2013). What follows is an expanded description of the assumptions of the constructivist paradigm and explanations of how the basic beliefs, ontology, epistemology, methodology, and axiology were implemented in the dissertation study across the three articles.

## **Ontology**

Reality is a construction by individuals as they interact with nature and attempt to make sense of their experiences (Lincoln & Guba, 2013). Individuals' prior knowledge and understanding inform constructions. Thus, relativism is the basic ontological assumption in the constructivist paradigm (Lincoln & Guba, 2013). Specifically, in this inquiry multiple constructions of realities were attended to. Chapter two, article one (methodological, of methods) in the dissertation study posits that Qualitative Content Analysis (QCA) is a data analysis method useful in the execution of integrative literature review. It does not conclude that QCA is the best, nor the only data analysis method fit for the purpose of conducting an integrative literature review. Rather it is suggestive that many data analysis methods may have use for an integrative literature review.

Chapter three, article two (conceptual, of integrative literature review) utilized an integrative literature review methodology to explore the extant and related literature on the concept of organizational knowledge and its associate component parts. An integrative literature review methodology limns with the ontological position of the constructivist paradigm insomuch that it is inclusive of multiple types of literature. Afforded was the inclusion of a diverse array of literature representing multiple constructions associated with the concept of organizational knowledge and its associate component parts. Finally, chapter four, article three (empirical, of case study) is an empirical study which includes more than one source of data (interview, observations, and documents) used to inform the construction of the concept of organizational knowledge and its associate component parts. Hence, the three articles, i.e., methodological (of methods), conceptual (of literature review), and empirical (of case study) holistically (Lincoln & Guba, 1985) together inform the construction of the concept of organizational knowledge and its associate component parts. From these three distinct perspectives, in alignment with the constructivist paradigm, this construction of the concept of organizational knowledge and its associate component parts is but one represented co-constructed reality.

### **Epistemology**

Ontology informs the epistemology of inquiry. Ontologically, if reality is relativist and constructed of multiple mental constructions, then epistemologically this reality is “dependent on a transaction between the knower and the ‘to-be-known’ in the particular context in which the encounter takes place...mediated by the knower’s prior experience and knowledge, and the knower’s interpretation (construction) of the contextual surround” (Lincoln & Guba, 2013, p. 40). Thus, knowledge is created and exists in the context for which it is created as a result of the



interaction between the knower (i.e., researcher) and the knowable (i.e., phenomenon). How does the epistemological assumption of interactivity inform the dissertation's three articles?

In chapter two, article one (methodological, of methods), Qualitative Content Analysis was an iterative process with successive cycles of coding that helped with the analysis and synthesis of the data (i.e. literature sources). In this dissertation the data were the extant and related literature associated with the concept of organizational knowledge and its associate component parts. I, the inquirer through successive coding cycles interacted with the knowable, that is, the method of qualitative content analysis and the literature while executing an integrative literature review. It was through the application of the method that I gained knowledge and understanding about the method and its use. And, I as the inquirer, for the conduct of an integrative literature review, constructed utility for qualitative content analysis.

Chapter three, article two (conceptual, of integrative literature review) is an integrative literature review on the concept of organizational knowledge and its associate component parts. Through a continuous unfolding series of iterations (Lincoln & Guba, 1985, p. 100) interaction between the knower (researcher) and the knowable (extant and related literature) guides data collection. Thus, informing understanding of the phenomenon, that is, “the direction that the data gathering will take next is acutely dependent upon what data have already been collected, and in what manner” (Lincoln & Guba, 1985, p. 100). I made several choices to ground the review of literature in the methodology of an integrative literature review. The methodology provided context and informed decisions related to the search for and retrieval of literature, purposive sampling, and inclusion and exclusion criteria. Through a series of informed choices, the final data sample was identified. What I found in the literature informed the actions and decision taken next in terms of data collection. For instance, through exploration of the extant and related

literature the years 1985-2019 were used to identify relevant literature. An outcome of reviewing the literature found through the search process, it was decided that the literature sources would be sorted by the number of citations. Through a continuous unfolding series of iterations, the integrative literature review on the concept of organizational knowledge and its associate component parts was executed.

Finally, chapter four, article three (empirical, of case study) construction of the concept of organizational knowledge and its associate component parts was constructed by “interaction of the knower with the already known and the still knowable or to-be-known” (Guba & Lincoln, 1989, p. 143). The transactional subjectivity of constructivism’s epistemology states that through interactivity the “knower and known are inseparable” (Lincoln & Guba, 1985, p. 37). Throughout the research study I interacted continuously and intensively with the phenomenon, namely, through analysis of interviews, observations, and documents. I conducted several rounds of coding to become familiar with the ensuing construction of the concept of organizational knowledge and its associate component parts. In the inquiry both the inquirer and the inquired-into influence one another and the construction is a creation of the inquiry process. Knowingly, my presence during advising appointments shaped the observation and influenced what could be known. During the interviews I and the participants influenced one another. Essentially, the questions I asked, shaped the answers provided by respondents, their response influenced my actions and nonverbals, which influenced how they may have engaged in the interview session.

### **Methodology**

Inquiry in the constructivist paradigm is “inherently dialectical, reflecting conflicts and contradictions in constructions” (Guba & Lincoln, 1989, p. 100). The human investigator is the instrument and as such I brought my own subjective experiences to the inquiry, which may have

been in contradiction to known constructions of the concept of organizational knowledge and its associate component parts. Yet, the dialectic as part of the constructivist paradigm requires that I meaningfully explore and interact with conflicts and contradictions within the inquiry. In doing so, I work toward reaching my full potential as the human instrument. And as the instrument engaged with these conflicts and contradictions I engaged in an act of interpretation of the method, methodology, and collected data. Constructivism is “hermeneutic because it is interpretive in character, and dialectic because it represents a comparison and contact of divergent views with a view to achieving a higher-level of synthesis of them all...” (Guba & Lincoln, 1989, p. 149). Accordingly, I employed the hermeneutic-dialectic methodology across the three inquiries toward a more sophisticated understanding of the concept of organizational knowledge and its associate component parts.

Chapter two, article one (methodological, of methods) adheres to the methodology of constructivism in that the data (literature as data) were searched for meaning using an iterative process with multiple coding cycles for interpretation. The method of qualitative content analysis enabled me to “tease out” the various constructions of the concept of organizational knowledge and its associate component parts. The reflective process of qualitative content analysis attends to the methodology of the constructivist paradigm in that one engages in a hermeneutic dialectic process. Through the continuous process of coding and recoding from initial impressions to final code development, I consistently compared my interpretations. I compared the parts with the whole for alignment through all phases of the analysis.

Chapter three, article two (conceptual, of integrative literature review), through the inclusion of multiple literary sources, offers an integrated literature review of the concept of organizational knowledge and its associate component parts. The first step of the hermeneutic

dialectic circle is to identify an initial construction to investigate and evaluate (Guba & Lincoln, 1989). The first article was reviewed for its construction of the concept or organizational knowledge and its associate component parts. Using qualitative content analysis as a data analysis method the literature were explored for a pattern of interconnectedness, for the hermeneutic dialectic methodology is not to “justify one’s own construction...but to form a connection between” all constructions (Guba & Lincoln, 1989, p. 149). Thus, article two is a reconstruction of the concept of organizational knowledge and its associate component parts, connecting the divergent constructions, toward the development of an integrative literature review informed by the hermeneutic dialectic methodology of the constructivist paradigm.

In chapter four, article three (empirical study, of case study) the hermeneutic dialectic methodology was employed in an empirical study that constructed the concept of organizational knowledge and its associate component parts from the perspective of undergraduate academic advisors in a selected higher education institution. Constructivist methodology is to be conducted such that “holders of different constructions are able to offer their own constructions, and to offer criticism of the constructions of others, meaningfully” (Guba & Lincoln, 1989, p. 150). Construction of the concept of organizational knowledge and associate component parts is a joint construction which includes the construction of the participants and researcher. The process of member checking informed the construction enabling the inclusion of not only etic perspectives, but also emic perspectives (Guba & Lincoln, 1989). The aim was toward “consensus” and at the very least “expose and clarify the several different views” of the concept of organizational knowledge and its associate component parts (Guba & Lincoln, 1989).

## **Axiology**

Further, the researcher cannot separate their values from the inquiry. Instead the inquiry is always shaped by human values and it is neither objective nor value-free. Values influence inquiry when choices are made related to the problem, inquiry paradigm, and theory used to guide data collection, analysis, and interpretation or findings (Lincoln & Guba, 1985, p. 38). Values have centrality in human inquiry for values “provide the basis for ascribing meaning and reaching understanding” (Guba & Lincoln, 1989, p. 102).

Chapter two, article one (methodological, of methods) is influenced by values in two ways. The value of the researcher and that of the inquiry paradigm. First, important to me as a novice researcher was a data analysis method that would help me execute an integrative literature review. I experienced that while there are publications that discuss how to complete an integrative literature review “most cover critical analysis of the literature in a cursory way by only listing what the critique should accomplish without describing how to critically analyze the literature...” (Toracco, 2016, p. 108). Second, I valued a data analysis method that would align with the chosen research paradigm, that is, allow for multiple constructions of reality and considers context as important. Qualitative content analysis aligns with the chosen research paradigm, namely, constructivism. Qualitative methods, although not exclusively, are the methods of choice for the constructivist paradigm. Additionally, the constructivist paradigm aims for understanding through interpretation (Lincoln & Guba, 1989) and qualitative content analysis “is an option if you have to engage in some degree of interpretation to arrive at meaning of your data” (Schreier, 2012, p. 2).

Chapter three, article two (conceptual, of integrative literature review) is valuable inasmuch that it “generates new knowledge about the topic reviewed” (Toracco, 2016, p. 404).

It's important that writers of integrative literature reviews demonstrate how they analyzed and synthesized the literature to inform new understandings of a phenomenon (Torraco, 2016). In accordance with an integrative literature review methodology I used qualitative content analysis, a method that details the analysis and synthesis of text. As a researcher, it was important to me that I was able to ground the constructions of the concept of organizational knowledge and its associate component parts in the literature. I wanted to avoid existing presumptions about the concept of organizational knowledge and its associate component parts in the extant and related literature. I used specific inclusion and exclusion criteria to select literature. Thus, these criteria highlight what was valued in the process of conducting the integrative literature review, e.g., the words "organizational knowledge" as a search term.

Chapter four, article three (empirical, of case study), the "values of the inquirer, the various systems of the research participants, and the values that inhere in the context" each influenced the shared and co-created construction of the concept of organizational knowledge its associate component parts (Lincoln & Guba, 2013, p. 41). For the empirical study on the concept of organizational knowledge and its associate components parts the participants organizational role as influenced by their background and experiences influenced constructions. The units that participants worked for and the institutional context were of importance. As a researcher I valued one role, i.e., academic advisors over other roles that might inform the construction of the concept of organizational knowledge and its associate component parts. I also chose the case study approach to understand the phenomenon from the perspective of participant interviews, the conduct of observations and the analysis of documents. A variety of research approaches could have been employed for this inquiry, however, I sought to understand the phenomenon holistically (Lincoln & Guba, 1985)

Indeed, the constructivist paradigm that informs the inquiry has been articulated throughout the dissertation study. Further, assumptions brought to this research are made evident in the outlined researcher's perspective.

### **Researcher Perspective**

The aim of articulating the researcher's perspective is to make explicit the values that influence this inquiry. The articulation of the perspective is in alignment with the methodology of the constructivist paradigm which espouses no inquiry is value-free (Lincoln & Guba, 2013). Knowledge and its associated definitions, types, and applications are important to me inasmuch that my experiences personally and professionally led me to want a more informed understanding about knowledge. Personally, as part of my doctoral program I completed a research foundations course in which we studied epistemology, or the theory of knowledge

within various research inquiry paradigms, namely, positivist, post-positivist, critical, and constructivist. An online certificate program in university housing assessment introduced me to Bloom's Taxonomy of Educational Objectives as articulated in the revised and updated taxonomy for Learning, Teaching, and Assessment. This book described the original cognitive processes of Bloom's Taxonomy and aligned these with specific knowledge types (i.e., factual, conceptual, procedural, and meta-cognitive). I studied this book because I sought to apply the principles in the book in my role as instructor and trainer. This taxonomy and knowledge framework guided my instructional plans for classroom and training purposes.

As a professional in higher education, I observed that some employees were able to succeed where others did not, despite having the same level of training. Informed by my understanding of knowledge types, I wondered how employees acquired, processed, and applied job knowledge and planned to explore this phenomenon for my dissertation study. Subsequently,

I decided to read the extant and related literature on knowledge acquisition, transfer, and application. Throughout the literature review, consistently used was the concept of organizational knowledge. Organizational knowledge was said to be transferrable, existing in two forms (i.e., explicit and tacit) and created. However, lacking was a descriptive definition of the concept and its associate component parts. Consequently, based on my experiences and readings I believe in a concept of organizational knowledge that consists of specific and discernable parts.

Further, my experiences as an organizational member informs my desire to understand the concept of organizational knowledge and its associate component parts from an organizational perspective. In my organizational experiences, knowledge that is shared repeatedly in announcements, meetings updates, publications and included with such phrases as “did you know” or the “organization values” has presumed importance for the organization. I believe that some knowledge has more salience than others, and knowledge that is used within and across organizational departments to be organizational. Additionally, after accounting for systemic differences (i.e. social, political, and financial) organizations that have identified their knowledge assets (organizational knowledge) are more likely to thrive (Nonaka, 1994). Throughout varied work contexts, I have experienced differences in this know-how. I was first introduced to this difference while reading the book “Good to Great” authored by James C. Collins (2001). Further, identification of the concept of organizational knowledge and associate component parts may have the potential to answer the question of why some organizations are more successful than others.

Central to the constructivist paradigm of research is the concept of the human as instrument. The constructivist paradigm asserts that only the human instrument can understand



the nuances of human experience (Guba & Lincoln, 1989). Certainly, the interpretations and constructions from this dissertation study are informed by the perspective I bring to the research. And have helped me understand the nuances within the research method of qualitative content analysis, understanding and interpreting literature, and study of the human experience of academic advisors. My personal and professional experiences in higher education influence and inform implementation of the research. And although I came to the inquiry with a particular experience, throughout the inquiry as the instrument I have become more sophisticated in understanding the nuances of human experience (Lincoln & Guba, 2013). As the human instrument I was refined throughout the process as I reflected on my own values, interests and growing insights and developed a greater depth of knowledge related to understanding and description of the concept or organizational knowledge and associate component parts. Additionally, my skills related to the conduct of inquiry improved.

### **Delimitations**

There are delimitations associated with each article of this dissertation study. Choice of paradigm influenced the intended outcome of the overall research study, to inform understanding of the concept or organizational knowledge and its associate component parts. Consequently, the dissertation does not aim to investigate cause or effect (i.e., positivist or post-positivist inquiry), nor does the inquiry make a critique (i.e., critical inquiry) of the concept of organizational knowledge and its associate component parts (Lincoln & Guba, 2013). Delimitations and limitations are part of every research study (Roberts, 2010). The following paragraphs describe the limitations and delimitation of the dissertation study.

Chapter two, article one (methodological, of methods) is delimited by choice of method. Qualitative Content Analysis (QCA) guided by the research question was chosen for analyzing

the data (literature as data). The chosen research question *how might qualitative content analysis be used in the execution of an integrated literature review?* guided the inquiry. The question influenced how the literature was reviewed, and what was constructed as the concept of organizational knowledge and its associate component parts. A different research question may have resulted in a different interpretation of the literature. Indeed, the focus of this inquiry is, the concept of organizational knowledge and its associate component parts. The inquiry is delimited by the inquiry's inclusion and exclusion criteria for textual data. For chapter two, article one (methodological, of methods) these criteria are realized in the identification of relevant and irrelevant data.

Chapter three, article two (conceptual, of integrative literature review) is delimited by choices made by me, as the researcher. In an integrative literature review it is important to define the boundaries of the review to delimit the inquiry. I chose to use an integrative literature review methodology to analyze and synthesize the extant and related literature on the concept of organizational knowledge and its associate component parts. To identify the literature, I searched available selected databases for literature, using inclusion and exclusion criteria I developed. The literature was sampled and inclusive of literature in English only, limited to specific years (i.e., 1985-2019) and were required to have "organizational knowledge" in the title. The integrative literature review is delimited by the scope of databases used to search for the literature. Use of academic databases that differ from the ones used in this inquiry may yield different results. Additionally, the choice to use qualitative content analysis in the analysis and interpretation of the literature influenced its interpretations.

Chapter four, article three (empirical, of case study) is delimited by the methods used to learn more about the concept of organizational knowledge and its associate component parts. The

site, participants, research strategy and approach delimit the inquiry. The study was conducted at a research university in the midwestern United States. I had interest in exploring the concept of organizational knowledge and its associate components parts from the perspective of undergraduate academic advisors and I excluded anyone who did not meet this criterion. Lastly, I chose the context of higher education to conduct the inquiry and a case study approach to explore the phenomenon.

### **Limitations**

Chapter two, article one (methodological, of methods) limitations include the interpretations of qualitative content analysis as a method. Qualitative content analysis is a data reduction method in that not all data were used to inform the interpretations of the extant and related literature. It is a method limited by the inquiry aim, in that the use of qualitative content analysis was not explored for other types of literature reviews, i.e., systematic and/or meta-analyses. In alignment with the constructivist paradigm the aim is not generalization, thus, the aim was to explore qualitative content analysis' utility in context, that is the informing context of integrative literature review methodology. The extant and related literature on the method of qualitative content analysis is limited. As the researcher I engaged with the literature, even connecting with the author of a popular text to unravel the method.

Chapter three, article two (conceptual, of integrative literature review) is limited by the databases used to search for literature. Within each database there are specific criteria unknown to the researcher. What is known is that each database provided a list of literature relevant to its internal criteria. Thus, the integrative literature review may not be inclusive of all the extant and related literature on the concept of organizational knowledge and its associate components parts. Aiming to gain a more informed and sophisticated understanding of the extant and relevant

literature, I compared the relevant search results across databases. In accordance with the constructivist paradigm consensus was sought and through comparison and contrast the aim was to bring divergent search results into consensus.

Chapter four, article three (empirical, of case study) has limitations in that the interpretation of the data are influenced by the values of the researcher. Thus, I have articulated the values I bring to the inquiry and my researcher perspective. Further, quality was informed and assessed by the authenticity criteria intrinsic to the constructivist paradigm. I may have influenced the participants and their responses. To minimize this limitation, I allowed the participants to choose the time of day and location of the interviews and observations. The aim of the research according to the inquiry paradigm is understanding not generalization.

### **Summary of Chapter One**

Chapter one has provided an overview of the dissertation study. It provided background information on the concept that is the focus of this study, namely, organizational knowledge and its associate component parts, together with the need for the study. The different chapters of the dissertation are explained as is the rationale for each chapter (i.e., article). Further, chapter one (introduction) described the overarching inquiry paradigm that informs this dissertation study and the researcher's perspective. The remainder of this dissertation is a presentation of each of the three articles that compile this dissertation study on the concept of organizational knowledge and its associate component parts. Chapter two, article one (methodological, of methods) and chapter three, article two, (conceptual, of integrative literature review) present the first two articles in their finished forms that were submitted for peer-review and revised accordingly. Chapter four, article three, presents an empirical research study on the concept of organizational knowledge and its associate component parts from the perspectives of participating

undergraduate academic advisors in a selected higher education institution in the mid-western United States. Chapter five presents the findings from the overall dissertation study in a synthesis of findings across articles one (methodological, of methods), two (conceptual, of integrative literature review), and three (empirical, of case study); chapters two, three, and four, respectively. Thus, the three articles collectively inform the construction of the concept of organizational knowledge and its associate component parts. Chapter five also includes implications for related future theory, research, and practice.

## CHAPTER TWO

### Article One (Methodological, of Methods)

#### Summary

Integrative literature reviews are germane to research inquiry. Reviews provide a framework that informs the inquiry by connecting it to previous research on a phenomenon. An integrative literature review is a form of review that has been cited to have importance for evidence-based practice. Yet, integrative literature reviews lack in quality because the conceptual reasoning used to implement the review are rarely understood. Although, the processes for data collection in integrative literature reviews are pronounced, less clear are methods of data analysis. This paper describes a systematic and rigorous data analysis method for use with integrative literature reviews, namely, Qualitative Content Analysis (QCA). To this end, the following research question is explored, *how might qualitative content analysis be used in the execution of an integrative literature review?* The research question is derived from the extant literature on integrative literature reviews, in which underscored is a need for sound data analysis methods for integrative literature reviews. To demonstrate the use of inductive qualitative content analysis, a previously completed integrated literature review on the “Concept of Organizational Knowledge and its Associate Component Parts” is used as an example to show the application of the method.

Keywords: *qualitative content analysis, methods, integrative literature reviews*

#### **The Qualitative Content Analysis Approach for Integrative Literature Reviews**

Whether qualitative, quantitative, or mixed-methods inquiry literature reviews are of importance to all empirical studies (Rocco & Plathotnik, 2009). Literature reviews identify gaps in the literature and provide a framework for a study, support the need for a study, and situate the study in relation to other studies (Marshall & Rossman, 2009; Rocco & Plathotnik, 2009).

Known approaches for conducting a literature review include systematic reviews, methodological reviews, and integrative reviews of literature, each with an intended purpose (Whittemore & Knafl, 2005). Though each type of literature review has purpose, an integrative literature review methodology has the potential to play a greater role in evidence-based practice because an integrative literature review allows for the inclusion of experimental and non-experimental research and broadens the breadth of knowledge for a phenomenon of interest (Whittemore & Knafl, 2005). Accordingly, the focus of this manuscript is specific to integrative literature reviews.

An integrated literature review is a “form of research that reviews, critiques, and synthesizes representative literature on a topic in an integrated way such that new frameworks and perspectives on the topic are generated” (Torraco, 2005, p. 356). Integrative literature reviews can be used to define concepts, review theories, analyze methodological issues of a particular topic, address omission or deficiencies in existing literature on an issue, address contradictory evidence in a field of study, or to review new research that emerges in different fields (Broome, 1993; Torraco, 2005; Whittemore & Knafl, 2005). An integrative literature review can and should be as rigorous as other types of research (Ganong, 1987; Torraco, 2005; Yorks, 2008), that is, it should include a clear description and articulation of the research design (Rocco & Plathotnik, 2009). Similar to empirical research, integrative literature reviews warrant a research purpose, research question(s), articulated methods of data collection and analysis, findings, and implications (Broome, 1993; Torraco, 2005; Whittemore & Knafl, 2005; Yorks, 2008). In other words, choices made during the review process are to be transparent to enhance the value of the review (Wolfswinkel et al., 2013).

Transparent in the extant literature on the methodology of integrative literature reviews is the process for data collection (Broome, 1993; Callahan, 2014; Rocco & Plathotnik, 2009; Torraco, 2005; Torraco, 2016; Whittmore & Knafl, 2005; Yorks 2008). Integrative reviews should provide information on the logic of the search or the systematic process used to search for the literature. Reviewers should address the comprehensiveness of data collection by explaining how the search for literature was exhausted. Including when the literature was searched for, how the literature was obtained and from what sources (i.e., electronic databases, scholarly journals, trade publications, or websites), who conducted the review, the publication dates of literature selected for inclusion, a detailed description of the sampling strategy (e.g., snowball sampling, reverse citation lookup), the selection criteria used to determine which literature was kept or discarded, and the logic behind the criteria, and the rationale for the final set of documents (Callahan, 2014; Whittmore & Knafl, 2005).

Although important for researchers to provide a description of data collection methods equally important is an explanation on how the literature was reviewed (Torraco, 2005). Generic statements about data analysis fail to help the reader understand the reviewer's interpretations throughout the review process and final conclusions (Chisholm, 2007; Yorks, 2008). The conduct of the review should be such that others could replicate the study of the literature (Callahan, 2010; Torraco, 2005). Reviews build on the work of others (Broome, 1993) when the integrated literature review attends to critical analysis, synthesis, and conceptual reasoning (Torraco, 2016). Inattention to the practice of analysis, synthesis, and reasoning is evident in reviews submitted for publication. Likely because methods of analysis for literature reviews receive minimal attention (Onwuegbuzie & Weinbaum, 2017; Torraco, 2016). Onwuegbuzie and Daniel (2005) examined 52 manuscripts submitted for publication to a nationally refereed



research journal and found that 40% of the manuscripts had inadequate literature reviews.

Reviewing 31 publications addressing how to write a literature review Torraco (2016) found that thorough and detailed description of analysis methods were absent in most publications and the importance of, and the process for synthesis were rarely discussed.

Requisite to synthesis is analysis of the literature (Torraco, 2016; Onwuegbuzie & Weinbaum, 2017; Yorks, 2008). As reviewers engage in the critical analysis of the literature, they aim to critique the literature so that synthesis of the literature ensues, leading to a deeper understanding and new perspective of the phenomenon as a result of integrating new ideas with existing ones (Broome, 1993; Torraco, 2005). Important for analysis and synthesis are (a) documentation of the literature content, (b) methods of analysis used on each piece of literature, (c) organization and synthesis of the literature content and (d) the presentation of the analysis and synthesis (Broome, 1993).

Despite guidelines for achieving transparency relevant to data collection, less clear are methods for data analysis and clarity in the production of an integrative literature review (Onwuegbuzie et al., 2012; Torraco, 2016; Whitemore & Knafl, 2005). As a lack of attention to analysis and synthesis in literature reviews affects the quality of integrative literature reviews (Onwuegbuzie & Weinbaum, 2017; Torraco, 2016), these reviews need more systematic data analysis methods to improve viability and trustworthiness (Whitemore & Knafl, 2005).

### **Purpose**

The purpose of this manuscript is to describe a systematic and rigorous data analysis method for use with integrative literature reviews, namely, Qualitative Content Analysis (QCA). The twofold aim is to explore the use of a qualitative content analysis approach for executing an

integrative literature review, and demonstrate how the choices related to synthesis and analysis can be made transparent by using QCA as a data analysis method.

The overall research question *how might Qualitative Content Analysis be used in the execution of an integrative literature review?* is addressed through three parts in the article. First, described is the data analysis method of Qualitative Content Analysis (QCA) outlined with examples. Second, discussed is the use of QCA for the execution of an integrative literature review. And third, provided are implications for Human Resource Development (HRD) followed by closing conclusions.

### **Qualitative Content Analysis**

While the exercise of analysis and synthesis is central to integrative literature reviews, instructional methods for practical application are few (Onwuegbuzie & Daniel, 2005). Practical considerations of research methods developed for qualitative analysis of data are appropriate for integrated literature reviews. Qualitative data analysis methods, “provide greater transparency of both the process used in interpreting a foundation for a study as well as the end product and related assumptions yielded throughout the process” (Onwuegbuzie & Weinbaum, 2017, p. 364). Thus, the data analysis method of qualitative content analysis is suitable to address the gap in the analysis and synthesis methods for an integrative literature review, as the following description of the particulars of qualitative content analysis makes evident.

Qualitative Content Analysis is a technique for systematic text analysis that describes the meaning of the text (Mayring, 2000; Schreier, 2012). It is particularly useful in analyzing textual data sets because it extracts the most important aspects of text data into fewer content related categories, aimed at attaining “a condensed and broad description of the phenomenon” (Elo & Kyngäs, 2008, p. 108). Systematic coding and categorization allow the analyst to ascertain trends

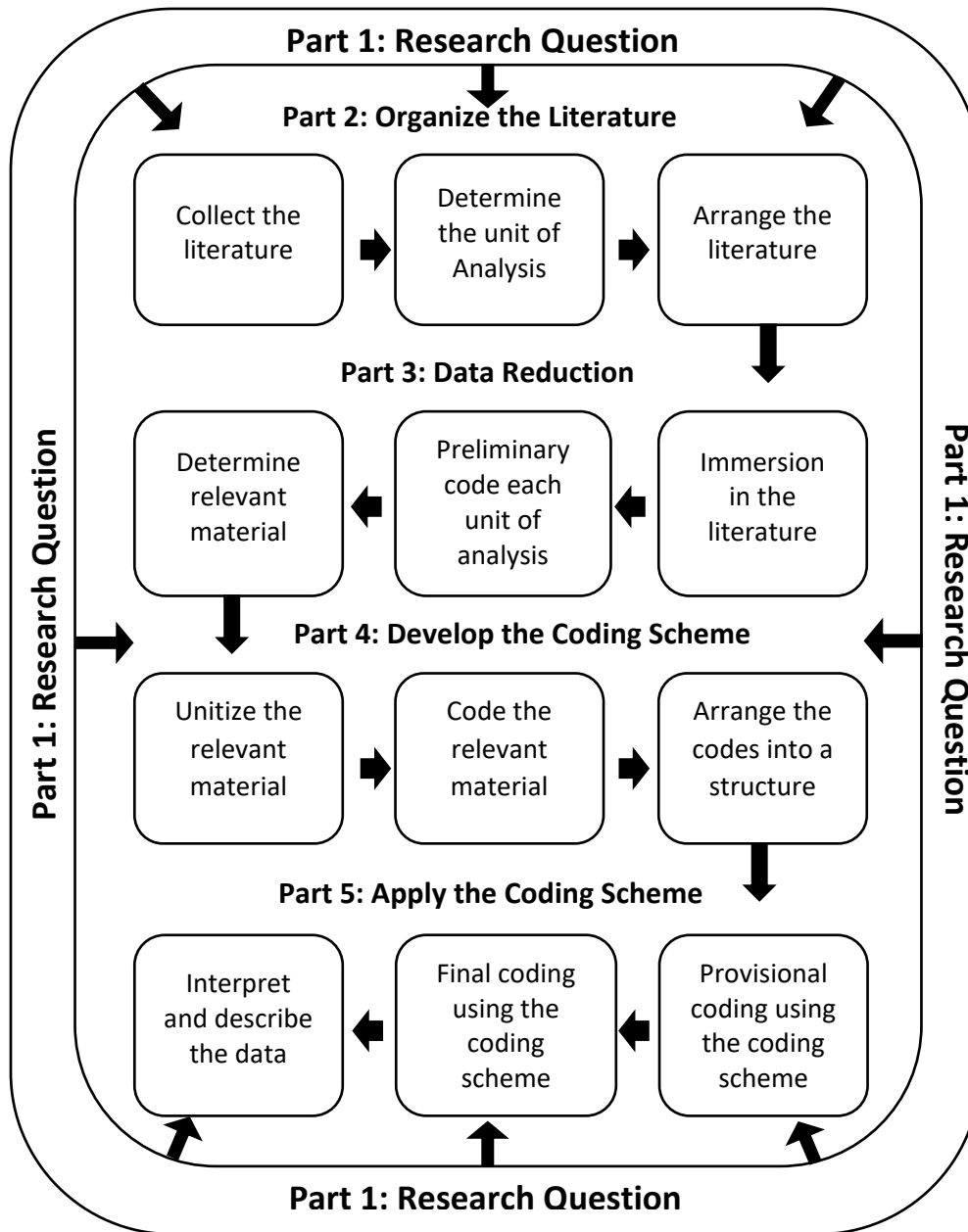
and patterns in the textual information with an end goal of developing a conceptual model, system, or map of the phenomenon (Elo & Kyngäs, 2008; Grbich, 2007).

Qualitative content analysis is an iterative and non-linear process. The analyst shifts between the whole and parts of the text and becomes familiar with the text by reading it several times (Elo & Kyngäs, 2008). Analyzed text may include newspapers, magazine articles, advertisements, transcripts of interviews, and video tapes, (Elo & Kyngäs, 2008; Mayring, 2000). Allowable within the method are both deductive and inductive approaches to analysis (Elo & Kyngäs, 2008; Mayring, 2000). An inductive approach works well for when knowledge is limited about a phenomenon and the categories are derived from the data. A deductive approach is appropriate when using a prior theory or model (Elo & Kyngäs, 2008). The approach used to analyze content depends on the research question and purpose of the study (Elo & Kyngäs, 2008; Mayring, 2000).

Qualitative content analysis (QCA) requires thick description and rejects the notion of objectivity. The interpretation of text is subject to multiple interpretations, constructions, and situated in specific contexts (Krippendorff, 2013; Schreier, 2012). The analyst serves as the instrument and is an active participant in what the analysis reveals—a constructed context, a world in which the texts make sense (Krippendorff, 2013). The textual material is viewed through a worldview that the analyst brings to the data, which may be influenced by their specific discipline. Qualitative content analysis is used when the meaning of a text needs interpretation. A goal of an integrative literature review is to understand the meaning of a phenomenon and qualitative content analysis limns well with this purpose, inasmuch that QCA is a method that reduces data and focuses the analysis on the phenomenon (Schreier, 2012), thereby informing the understanding being sought.

## **Using Qualitative Content Analysis for an Integrative Literature Review**

Appropriate methods of inquiry depend on the research question. Qualitative Content Analysis (QCA) is a qualitative data analysis method that works well for questions that are descriptive in nature (Schreier, 2012). Each prior articulation of qualitative content analysis as a method references a research question, data collection, sampling, developing codes, a codebook, and a coding scheme, analysis, and interpretation (Elo & Kyngas, 2007; Forman & Damschroder 2007; Wolfswinkel et al., 2013; Schreier, 2012). Further, while previous authors have provided detailed description on how to do this type of analysis for research interviews, much is needed to explore the method with the analysis and synthesis of literature for the purpose of an integrative literature review. The value of the qualitative content analysis method described in this article is the interpretation and application of the method for an integrative literature review. Although the data analysis method is presented as stepwise, it is an iterative process. The Qualitative Content Analysis Approach for an Integrative Literature Review consists of five distinct parts: First, deciding on the research focus; second, organizing the literature; third, reducing the data; fourth, developing a coding scheme; and finally, fifth, applying the coding scheme. Figure 1 provides a conceptual model of the Qualitative Content Analysis Approach for an Integrative Literature Review and further description of the five parts.



Note: Informed and synthesized from Elo & Kyngas, 2007; Forman & Damschroder 2007; Wolfswinkel et al., 2013; Schreier, 2012.

**Figure 1**  
*Conceptual model: Qualitative Content Analysis Approach for an Integrative Literature Review*

## **Part 1: Deciding on the Research Focus**

The researcher should develop a sound research question or inquiry focus as a starting point (Krippendorff, 2012; Schreier, 2012; Torraco, 2005; Whitemore & Knafl, 2005). This decision is in alignment with the methodology for executing an integrative literature review and for Qualitative Content Analysis. As illustrated in Figure 1, the research question will serve as a guide for each of the parts that follow. Through the clear formulation of the research question, the review purpose and scope will emerge, and serve as a reference point that bounds the review and shapes decisions made during the review (Whitemore & Knafl, 2005; Wolfswinkel, Furtmueller, & Wilderom, 2013). The research question focuses the review, informs the objective, and guides the analysis (Thomas, 2006)

## **Part 2: Organizing the Literature**

As indicated in Figure 1, this second part of the Qualitative Content Analysis process involves three sub-processes, namely, (a) collecting the literature, (b) determining the unit of analysis, and (c) arranging the literature. Each is briefly explicated below.

### ***Collect the Literature***

This first sub-process of organizing the literature refers to the aspects of collecting the data, i.e., necessary literature to conduct the analysis. Following the methodology of an integrative literature review, literature for the review is identified through a systematic search and selection process. Similar to the literature selection process for integrative literature reviews, choices related to selection are to be made transparent. For throughout the Qualitative Content Analysis Approach to an Integrated Literature Review, choices are made transparent so that the review can be replicated, and the conceptual process of the review understood, including decisions about final outcomes.

### ***Determining the Unit of Analysis***

In this second sub-process of organizing the literature, review authors are to provide an explanation of how the literature was reviewed (Torraco, 2005) to enable understanding of the synthesis process used. An early choice in the Qualitative Content Analysis Approach to an Integrative Literature Review is to decide on the unit of analysis. In the literature related to qualitative content analysis there are different interpretations for what is taken to be a unit of analysis (Krippendorff, 2012; Schreier, 2012). For intended purposes a unit of analysis yields one text (Schreier, 2012) and is the object that is described as part of the study (Forman & Damschroder, 2007). The object described in an integrative literature review is the literature on a specific topic of inquiry. Unlike inquiry in which interviews or field notes may be the unit of analysis, the unit of analysis for an integrative literature review is taken to be each individual piece of literature, e.g., a peer-reviewed article, book, dissertation, conference paper (Forman & Damschroder, 2007). Once the unit of analysis is determined it is necessary to arrange the units of analysis (literature).

### ***Arranging the Literature***

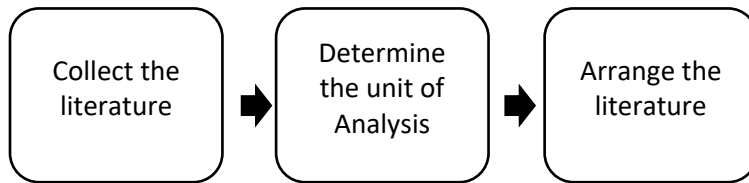
The third sub-process of organizing the literature (Part 2 of the QCA approach) is that of arranging the literature. Notably, the advantage of an integrative literature review methodology and qualitative content analysis is the inclusion of diverse literature from empirical and non-empirical sources. As such, in this third sub-process the reviewer needs to determine how to sort and organize the literature in a meaningful way. Often with any type of qualitative inquiry there is more data than one can reasonably handle and organizing the literature helps one develop an entry point to access the literature for review, synthesis, and analysis. The reviewer can organize the literature by topic, by source, discipline, or year. The reviewer may consider using an

organizing criterion to divide the literature (Schreier, 2012). For instance, when reviewing journal articles, one may decide to organize by different disciplines such as communication studies, information science, or human resource development.

After the reviewer has chosen how to sort the literature e.g., by date, topic, or discipline, the reviewer decides which unit of analysis (i.e. literature source) to start with. One may want to start with articles from one discipline before moving on to articles from a different discipline, or even consider analyzing the articles based on publication date (Elo & Kyngäs, 2008). For instance, if deciding to use a publication date criterion, all literature from the year 2000 might be read first. Then all literature from the year 2001 read second, and so forth. Inasmuch that the research question is important to qualitative content analysis, as the research question focuses the review and guides the analysis (Thomas, 2006) a book or dissertation as the unit of analysis may use different criteria. Thus, with a book or dissertation the reviewer may select only a part of the document, i.e., the part that addresses the research question (Schreier, 2012, p. 81). For instance, a book chapter(s) or the findings and discussion section of a dissertation. Whichever direction the reviewer chooses, the steps should be recorded because the order becomes important in the later parts of analysis. An overview of Part 2: Organize the Literature and its subprocesses are illustrated in Figure 2.



## Part 2: Organize the Literature



**Figure 2**

*Qualitative Content Analysis Approach to an Integrative Literature Review, Part 2: Organize the Literature and subprocesses*

## Part 3: Data Reduction

The third part of the Qualitative Content Analysis approach, highlighted in Figure 1, reducing the data. Data reduction helps a researcher reduce large amounts of text data (Schreier, 2012) and inform a consistent approach to the data (Forman & Damschroder, 2007). Data reduction is made up of three sub-processes, (a) immersion in the literature, (b) preliminary coding for each unit of analysis, and (c) determining relevant material. A descriptive overview of each follows.

### *Immersion in the Literature*

Immersion in the literature as the first subprocess for data reduction occurs after the units of analysis have been organized using the developed criterion (e.g., by discipline, year, topic, etc.). First, the reviewer becomes familiar with the literature through an immersive review of several articles to “obtain a sense of the whole” (Forman & Damschroder, 2007, p. 47). The reviewer reads the literature sources in order, based on the previous organizing criterion. While reading and re-reading the literature, one might respond to questions such as “what is the text talking about? what stands out?” (Erlingsson & Brysiewicz, 2017, p. 96). The aim is for the researcher to become “completely familiar” with the data so that insights and theories may be developed (Elo & Kyngäs, 2007, p. 109). Through a sense of the whole the reviewer can begin to

develop a systematic approach to the data and achieve the reduction goal to “reduce the amount of raw data to that which is relevant to answering the research question(s)” (Forman & Damschroder, 2007, p. 48). The second sub-process, preliminary coding of each unit of analysis, of Part 3, (data reduction) highlighted in Figure 1. The preliminary coding subprocess is about coding initial thoughts and concepts about the literature.

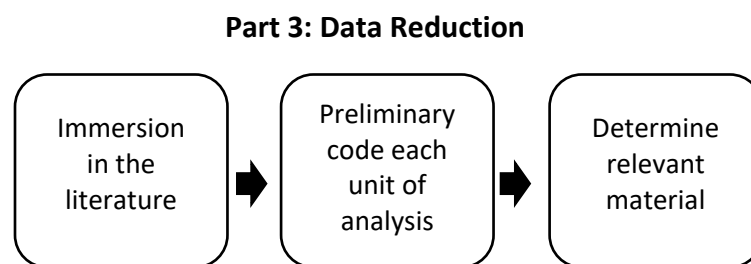
### ***Preliminary Code Each Unit of Analysis***

Concurrently while reading each literature source to gain a “sense of the whole” the reviewer begins to develop preliminary codes that capture initial thoughts and concepts (Elo & Kyngas, 2007; Forman & Damschroder, 2008; Hsieh & Shannon, 2005; Schreier, 2012). It is unnecessary to review each literature source, instead one may read a few journal articles, book chapters, or parts of a dissertation for preliminary code development. A review of 10-50% of the material during this stage is enough (Mayring, 2000). The outcome of preliminary coding is an understanding of the literature and its content. These initial codes are synthesized and organized into larger conceptual ideas or categories into a coding scheme. Later in the Qualitative Content Analysis Approach for an Integrative Literature review the developed coding scheme is used to complete a detailed review of all the literature. The initial review and preliminary coding enable one to begin the next step of data reduction, determining relevant material.

### ***Determining Relevant Material***

In this third sub-process of Part 3 of the QCA approach to an ILR (see Figure 1), one determines relevant material from each unit of analysis using an a priori coding scheme informed by the immersion and preliminary coding subprocesses of data reduction. The a priori coding scheme has two categories, relevant and irrelevant. Distinguishing between relevant and irrelevant material is a sampling consideration (Elo & Kyngäs, 2008; Forman & Damschroder,

2007). To ensure consistency in the selection of relevant material, the reviewer develops relevant and irrelevant code definitions. The reviewer applies the a priori relevance coding scheme to each unit of analysis and identifies relevant material. Determining relevant material results in relevant text segments derived from the literature and are applicable to answering the research question (Elo & Kyngäs, 2008; Schreier, 2012). Relevant material will be analyzed using the coding frame developed in Part 4 of the Qualitative Content Analysis Approach for an Integrated Literature Review. Next, is a description of Part 4, developing the coding scheme and its sub-processes. An overview of Part 4: Developing the Coding Scheme and its subprocesses are illustrated in Figure 3.



**Figure 3**  
*Qualitative Content Analysis Approach to an Integrative Literature Review, Part 3: Data Reduction and subprocesses*

#### **Part 4: Develop the Coding Scheme**

Assuming the literature has been collected, organized, and reduced the next step is to build the coding scheme. The development of a coding scheme is central to the execution of qualitative content analysis. It is “the systematic classification process of coding and identifying themes or patterns” that enables qualitative content analysis to be ideal for “the subjective interpretation of the content of text data” (Hsieh and Shannon, 2005, p. 1278). The process is informed by the research question and derived from the literature, i.e., data (Schreier, 2012). Coding schemes in qualitative content analysis may be developed as theory or concept driven

(i.e. developed deductively), data-driven (i.e. developed inductively) or both (Elo and Kyngäs, 2007; Mayring, 2000; Schreier, 2012). Essentially, the process for building the coding scheme includes three sub-processes, namely, unitizing the relevant material, developing codes, and structuring the codes and categories (Elo and Kyngas, 2005; Hsieh and Shannon, 2007; Schreier, 2012). An illustrative description of each is described next.

### ***Unitize the Relevant Material***

In this first sub-process of building the coding frame (see Figure 1), relevant material (relevant text segments) is first divided into coding units, that is, relevant text segments are divided into the smallest possible unit of text that can be meaningfully interpreted (Krippendorff, 2013; Schreier, 2012). Ideally, coding units are defined in such a way that the unit maintains meaning for the purpose of analysis (Krippendorff, 2013). Coding units emerge through the process of reading and looking for meaningful and conceptual breaks within relevant text segments (Krippendorff, 2013). For instance, a formal criterion is a logical break in the material that does not require judgment on meaning and the structure is inherent in the material such as headings, subheadings, chapters, or even interview questions (Krippendorff, 2013; Schreier, 2012). A thematic criterion requires one to look for themes in the data or places where there is a change in topic. A theme is conceptualized based on the research question (Schreier, 2012). Recall that part one of the qualitative content analysis approach for an integrated literature review involved using an organizing criterion (e.g., discipline, topic, year, etc.) to organize the literature. Thus, starting with the first unit of analysis (i.e., book chapter, journal article, white paper, etc.) coding units are constructed. Coding units are analyzed with the coding scheme.

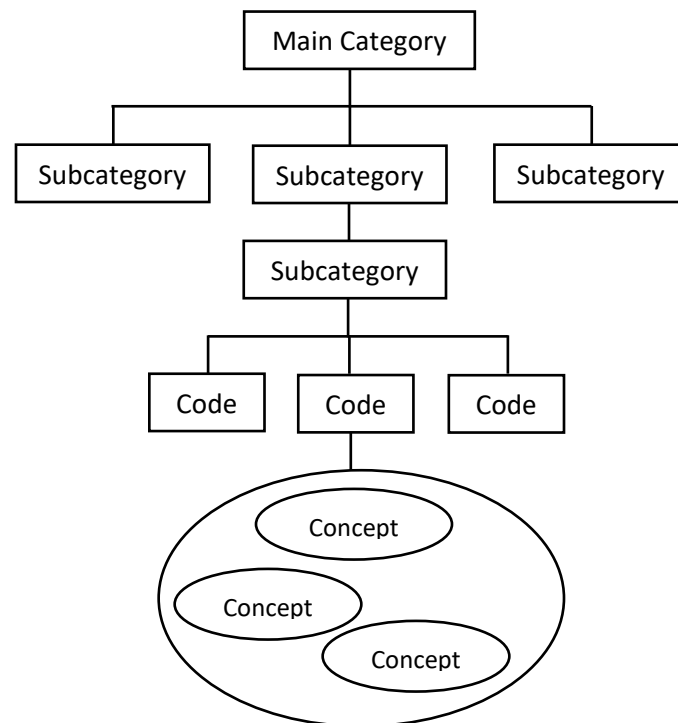
### ***Code the Relevant Material***

The second sub-process to Part 4, development of the coding scheme (see Figure 1), commences with open coding of the coding units (Saldana, 2016). Thus, starting with the first unit of analysis and its coding units, within a specific organized grouping, the review author develops codes (i.e., descriptive labels for each coding unit). Each subsequent unit of analysis is coded with descriptive labels. For example, in practice, after organizing the literature using an organizing criterion the review author starts coding the first unit of analysis, within an organized grouping e.g., communications. The reviewer would next code the second unit of analysis within the communication literature grouping with descriptive labels, then the third unit, the fourth, and so on. The reviewer would complete the same process for the next organized grouping e.g., managerial science. This method of open coding is completed until a point of saturation is reached. Schreier (2012) states that saturation is achieved during open coding in qualitative content analysis when the production of new insights concludes. At the completion of this coding process the reviewer will have several codes that need to be grouped into categories before organized into a hierarchical tree, or coding structure.

### ***Arrange the Codes into a Structure***

In the next and third sub-process (see Figure 1) the codes are organized in relation to each other to form a conceptual map (Forman & Damschroder, 2007). The reviewer compares the codes and groups similar codes together that share a key thought (Hsieh & Shannon, 2005). This process is analogous to pattern coding (Saldana, 2016). These groupings become the initial categories of the coding scheme. Further, categories are organized and grouped under higher-order headings into a structure, such as a hierarchical tree diagram (Forman & Damschroder, 2007; Hsieh & Shannon, 2005). Figure 4 shows an example of a generic structure for a

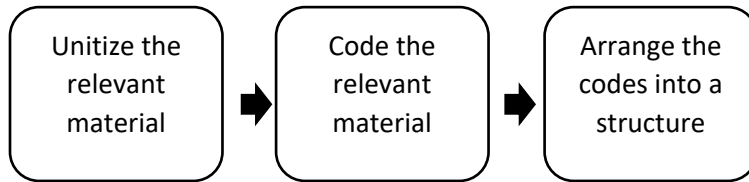
hierarchical tree. The higher-order headings can be considered the main categories and the parts of the text that answer the research question. Categories subsumed under the main categories are subcategories and are the specifics that describe the main categories (Elo & Kyngäs, 2008; Forman & Damschroder, 2007; Hsieh & Shannon, 2005; Schreier, 2012). Notably, the coding scheme's complexity will vary based on the inquiry.



**Figure 4**  
*Part 4: Developing the Coding Scheme, Example Coding Structure*

Lastly, before the coding scheme can be applied to the data, categories are defined. Category definitions are considered the rules used for coding that enable data segments to be assigned to the most appropriate category. Definitions describe exactly what is meant by each category (Forman & Damschroder, 2007; Hsieh & Shannon, 2005; Schreier, 2012). An overview of Part 4: Developing the Coding Scheme and its subprocesses are illustrated in Figure 5.

#### Part 4: Develop the Coding Scheme



**Figure 5**

*Qualitative Content Analysis Approach to an Integrative Literature Review, Part 4: Developing the Coding Scheme and subprocesses*

#### Part 5: Applying the Coding Scheme

Finally, discussion of part five of the Qualitative Content Analysis Approach to an Integrative Literature Review is applying the coding scheme, and has three sub-process, of provisional coding, final coding, and interpreting and describing the data.

##### *Provisional Coding with the Coding Scheme*

Provisional coding as a sub-process is part of the last part (applying the coding scheme) of the qualitative content analysis approach for an integrative literature review. Through provisional coding, the clarity, consistency, and viability of the coding scheme are assessed (Zhang & Wildemuth, 2009). During provisional coding the coding scheme is assessed for duplication, category phrasing, category applicability, fitness of the coding units, and coding procedures (Schreier, 2012). The provisional coding allows one to try out the initial coding scheme, prior to conducting the final analysis. The initial design of the coding scheme may be developed from part of the data e.g., the communications literature. A coding scheme that fits the first unit of analysis, e.g. journal articles from communications or articles from the year 2001, can be added to a later stage to fit it with other material (Durliau, Reger, & Pfarrer, 2007; Schreier, 2012). The starting point is informed by the intent and purpose of the research, defined by the research question (Schreier, 2012).

Provisionally trying out the coding scheme, one learns if the scheme needs to be revised or expanded. If during the provisional coding the coding definitions can be applied consistently and are stable, then the coding scheme is ready for use. Also, the reviewer should aim for coding agreement. Coding agreement refers to the consistent application of the coding scheme when applied at two different points in time (Forman & Damschroder, 2007; Schreier, 2012). When working individually to complete an integrative literature review, the reviewer should conduct a second provisional coding 1-2 weeks after the first coding to test the integrity of the coding scheme (Schreier, 2012). Inconsistency is an indication that the coding scheme needs revision or modification. If significant changes are made to the coding scheme, then these changes may necessitate conducting another provisional coding before applying the coding scheme to the entire data set (Forman & Damschroder, 2007; Schreier, 2012; Zhang & Wildemuth, 2009). In the second sub-process of Part 5, the coding scheme is finalized as illustrated in Figure 1.

### ***Final Coding with the Coding Scheme***

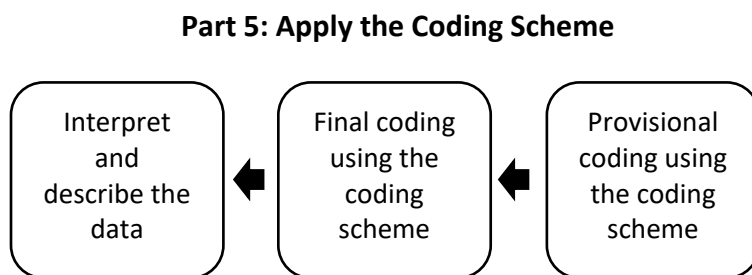
If there are no changes to the coding scheme after the provisional coding and coding agreement is achieved, the final version of the coding scheme is applied to the unitized relevant material from each unit of analysis (coding unit), that is, all the text in the data set (Forman & Damschroder, 2007; Schreier, 2012). At this point, it is time to interpret and describe the data.

### ***Interpret and Describe the Data***

Findings should accurately reflect the data (Hsieh and Shannon, 2007). Presentation of findings may include a description of the coding scheme as the outcome. In an interpretive study, the data are to be interpreted and findings explained for the purpose of an integrative literature review. Interpretation of the data involves identifying patterns and/or themes and communicating the meaning of the data through descriptive and interpretive summaries (Forman &



Damschroder, 2007). Drawing conclusions from the coded data may include “exploring the properties and dimensions or categories, identifying relationships between categories, or uncovering patterns” (Zhang & Wildemuth, 2009, p. 5). It is important that the researcher “aim at describing the analyzing process in as much detail as possible when reporting the results” (Elo & Kyngas, 2007, p. 112). This aim includes reporting the decisions and practices related to the coding process, a “balance between description and interpretation” (Zhang & Wildemuth, 2009, p. 5). The final step of interpreting and describing the data, taken together with all other parts complete the Qualitative Content Analysis Approach for an Integrative Literature Review. An overview of Part 5: Applying the Coding Scheme and its subprocesses are illustrated in Figure 6. All five parts are illustrated together in Figure 1.



**Figure 6**  
*Qualitative Content Analysis Approach to an Integrative Literature Review, Part 5: Apply the Coding Scheme and subprocesses*

The Qualitative Content Analysis Approach for an Integrative Literature Review was described as having five parts. Application of the process has its benefits and therefore the next section focuses on and discusses an application of the approach as used for a completed integrative literature review.

### **An Illustrative Case of Qualitative Content Analysis Application**

To illustrate the Qualitative Content Analysis Approach for an Integrative Literature Review, I explore the use of qualitative content analysis in the execution an integrative literature

review on the concept of organizational knowledge and its associated component parts. The research question that guided the analysis was, *what is the concept of organizational knowledge and its associated component parts?* Data were collected utilizing several online databases. Through application of five selection criteria the final sample included 49 journal articles (Ziegler & Lynham, 2017). The unit of analysis was each individual journal article. The organizing criterion for the literature was number of citations, thus journal articles were ordered according to their number of citations. The journal article with the most citations was selected as the first unit of analysis. The journal article with the second greatest citations was ordered as the second unit of analysis. Hence each subsequent unit of analysis (journal article) was ordered by number of citations.

To develop a distinction between relevant and irrelevant material each journal article was read to gain a sense of the literature as a whole (Elo & Kyngas, 2007; Forman & Damschroder, 2007, Hsieh & Shanon, 2005). Reading the texts as a whole established familiarity with the texts and aided in the development of relevance criteria. Accordingly, definition for both relevant and irrelevant text were developed for an a priori coding scheme which was used to identify relevant material within each unit of analysis. The a priori coding scheme was derived from the primary research question—*what is the concept of organizational knowledge and its associated component parts?* Text was considered relevant material if it met the relevance criteria which included text that could be considered a definition of organizational knowledge; described characteristics of knowledge or knowledge types within an organization; referred to knowledge as group, social, collective; and referenced knowledge existing within communities of practice. Alternatively, irrelevant text described abstract concepts of knowledge and/or provided philosophical explanations of knowledge, addressed the epistemology of knowledge, or

referenced individual knowledge (Ziegler & Lynham, 2017). In total 100 relevant text segments were identified from the corpus of literature.

Through the use of open coding the relevant text segments were reviewed until saturation was reached and new concepts were unidentifiable. The coding scheme for the representative study (i.e. the concept of organizational knowledge and its associate component parts) was developed inductively. A total of 136 concepts were identified, and through pattern coding were organized into 19 categories. Then developed into 6 main categories with corresponding subcategories. Following the conventions of the Qualitative Content Analysis Approach for an Integrative Literature Review the categories and subcategories were defined. The data (i.e. relevant text segments) were unitized using a thematic criterion and provisional coding was applied. Consistency in the coding scheme was achieved during the first provisional coding, thus, the coding scheme was not revised. The reviewer conducted a final analysis of all the data and the analysis resulted in the characterization of the concept of organizational knowledge and its associate component parts as an organization's capacity to act, an enactment of culture, with definitions, types, properties, and origin (Ziegler & Lynham, 2017). While a narrative description about an application of qualitative content analysis is beneficial, the narrative description is summarized in Table 1. The applied process in Table 2 is reflective of the five-part Qualitative Content Analysis Approach for an Integrative Literature Review illustrated in Figure 1.

**Table 2**

*Application of Qualitative Content Analysis to an Illustrative Case*

Qualitative Content Analysis Parts	Enactment of parts in the illustrative case
Part 1: Decide on the research focus	
Research Question	What is the concept of organizational knowledge and its associate component parts?
Part 2: Organizing the Literature	
Collect the literature	Data were collected utilizing several online databases. Through application of five selection criteria the final sample included 49 journal articles (Ziegler & Lynham, 2017).
Determine the unit of analysis	The unit of analysis was each individual journal article.
Arrange the units using an organizing criterion	The organizing criterion was number of citations. The journal article with the most citations was reviewed as the first unit analysis, then the journal second in number of citations was reviewed, and so forth.
Part 3: Data Reduction	
Immersion in the literature	To develop a distinction between relevant and irrelevant material each journal article was read to gain a sense of the literature as a whole (Elo & Kyngas, 2007; Forman & Damschroder, 2007, Hsieh & Shanoon, 2005).
Preliminary code each unit of analysis	Initial thoughts and insights were written in the margin of each unit of analysis during the immersion phase. Reading the texts as a whole established familiarity with the texts and aided in the development of relevance criteria.
Determine relevant material	Definition for both relevant and irrelevant text were developed for an a priori coding scheme which was used to identify relevant material within each unit of analysis.
Part 4: Develop the Coding Scheme	

Unitize the Relevant material	The data (i.e. relevant text segments) were unitized using a thematic criterion.
Code the relevant material	Preliminary codes were assessed for fit with the relevant material. Relevant codes were kept and finalized.
Arrange codes into a structure	Codes were organized into 19 categories. Thus, developed into 6 main categories with corresponding subcategories.

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Part 5: Apply the coding scheme

Provisional coding with the coding scheme	Provisional coding was applied. Consistency in the coding scheme was achieved during the first provisional coding, thus, the coding scheme was not revised
Final coding with the coding scheme	The reviewer conducted a final analysis of all the data and the analysis resulted in the characterization of the concept of organizational knowledge and its associate component parts
Interpret and describe the data	The concept of organizational knowledge and its associate component parts was taken to be an organization's capacity to act, an enactment of culture, with definitions, types, properties, and origin (Ziegler & Lynham, 2017).

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**Alignment of Qualitative Content Analysis and an Integrative Literature Review**

**Methodology**

Qualitative Content Analysis (QCA) is a useful data analysis method for executing an integrative literature review. It enables one to describe the inquiry phenomenon through critique, analysis, and synthesis of the literature. The step of selecting relevant material initiates the critique of the literature, it requires one to first review all the data (i.e. literature), and deconstruct the data into its parts, thus to identify aspects that have bearing on the research question

(Torraco, 2016). To the extent that an integrative literature review permits the inclusion of experimental and non-experimental research types (Whittemore & Knafl, 2005), and QCA can be applied to a range of textual material inclusive of interview transcripts, textbooks, websites, and journal articles (Schreier, 2012), the methodology of an integrative literature review and the data analysis method of qualitative content analysis align well.

Integrative literature reviews are used for examining the literature on a topic and to “assess how well the topic is presented in the literature” (Torraco, 2005, p. 362). Qualitative content analysis is grounded in the text using inductive (i.e., data driven) methods, the topic is constructed from the literature, and the answer to the research question is in the text. The author of an integrative literature review brings a particular lens to the review and defines the objective of the review (Torraco, 2005), exemplified by the research question. Qualitative content analysis uses the research question to guide the analysis of the texts, the research question specifies how you examine the text.

Whittemore and Knafl (2005) suggest that integrative literature review methods for data analysis should be made explicit, that the review should outline the steps that were followed in the conduct of the review. Qualitative content analysis (QCA) is a systematic method that has explicit steps related to the analysis and interpretation of the text. There is a specific sequence of steps in QCA which increases transparency on how one has arrived at interpretations and conclusions. The coding scheme in QCA reveals decisions made in the interpretation of the text to the extent that the coding scheme’s categories and subcategories are defined and sample text is representative of the category it is assigned to. The coding scheme enhances the execution of an integrative literature review because it influences the reconstruction and a clearer understanding

of the phenomenon (Torraco, 2005, Whitemore & Knafel, 2005). Qualitative content analysis makes explicit the process and logic used for data analysis in an integrative literature review.

### **Implications**

Several implications may be drawn from the use of qualitative content analysis in the execution of an integrative literature review. There are briefly reviewed specifically for practice, research, and theory.

#### **Implications for Practice**

Highlighted within the HRD literature is a need for rigorous integrative literature reviews with sound analysis and synthesis methods (Callahan, 2014; Torraco, 2016; Yorks, 2008). This manuscript proposes that Qualitative Content Analysis (QCA) is a useful data analysis method for the execution of an integrative literature review for HRD practitioners. The manuscript addresses the absence of logic and conceptual reasoning for integrative literature reviews published in scholarly HRD journals (Callahan, 2014; Chisholm, 2007; Torraco, 2016). Novice practitioners seeking to conduct an integrative literature review can use the method outlined in this manuscript as a starting point to access the extant literature on a particular phenomenon. The concepts of methods and methodology are important for HRD (Grenier, 2015; Grenier & Dudzinska-Przesmitzki, 2015; Holton, 2003; Korte, 2016). Qualitative content analysis (QCA) could be used in future integrative literature reviews on topics relevant to HRD.

#### **Implications for Research**

The utility of the method could be reassessed, its application refined, extended, or amended. QCA is not limited to integrated literature reviews. This method can be applied to HRD empirical research studies, too. Attention to developing the method itself is an ideal avenue for HRD theorists. For instance, an assessment of the utility of qualitative content analysis as a

method could be accomplished by comparing and contrasting the outcomes of an empirical research study on a topic against the outcomes of an integrative literature review using the QCA method. Insight derived from identifying the similarities and differences in terms of outcomes could be used to improve the method. Further, the qualitative content analysis method can now be tested and validate for use in an integrative literature review, contributing to range of verified tools for integrated literature reviews.

### **Implications for Theory**

The outcome of this inquiry has value regarding theorizing related to methods. Theory building is a means in which we develop understanding of the world. This inquiry provides insights into the world of methods and their application and use with different data. Qualitative content analysis has been used with interview transcripts, yet its broader applications are underdeveloped. Future theorizing on the approach as well as methods would add value to our overall understanding of methods. This study has made explicit a method for data analysis in an integrative literature review and can strengthen the rigor of integrative literature review studies. We can then enter a cycle of theory, research, and practice (praxis) related to methods and theorize on their utility.

### **Conclusions**

Qualitative content analysis (QCA) is well suited for use in integrated literature reviews. This article explicated the components of the method to illustrate its use in the process of conducting an integrative literature review. The method addresses several considerations associated with integrative literature reviews, including the lack of descriptive specificity related to methods of analysis and synthesis in integrated literature reviews (Callahan, 2014; Torraco, 2016; Whitemore & Knafel, 2005). The article sought to answer the research question *how might*



*qualitative content analysis (QCA) be used in the execution of an integrative literature review?*

The method makes evident the logic of the review process, which enhances a reader's ability to see how the review process was “used to develop and present the synthesis and findings of the review” (Torraco, 2005). Although, there are a variety of qualitative data analysis methods that could be used to complete an integrative literature review, the evidence presented in this article demonstrates that Qualitative Content Analysis is indeed a viable option.

## CHAPTER THREE

### **Article Two (Conceptual, of Integrative Literature Review)**

#### **Summary**

Within its extant literature organizational knowledge is theorized as an entity that can be created, captured, and transferred. A pragmatic and applied definition of the concept of organizational knowledge is absent in the literature. The purpose of this integrative literature review was to explore, synthesize, and describe the concept of organizational knowledge and its associate component parts in order to improve the utilization and utility of the concept. The methodology of the review is informed by the constructivist paradigm, a qualitative research strategy, and the methodology of integrative literature reviews. Methods of data analysis were guided by the conventions of Qualitative Content Analysis. The literature review revealed organizational knowledge to be a concept that describes an organizations capacity to act, is an enactment of culture, and has definitions, types, properties, and origin. The findings suggest that the management and use of organizational knowledge is complex and dynamic. Finally, implications for HRD practice, research, and theory are examined and explained.

*Keywords:* Organizational knowledge, Integrative Literature Review, Content analysis

#### **The Concept of Organizational Knowledge and Its Associate Component Parts:**

##### **An Integrative Literature Review**

While various descriptive and explanatory frameworks independently cover macro and micro component concepts of organizational knowledge (Guzman & Wilson, 2005), attention to how these various frameworks are integrated is absent. The synthesis and integration of such frameworks, for use by practitioners and researchers, would greatly improve the utilization and utility of the concept of organizational knowledge. As a result of these differing and fractured

epistemologies—that is, what is taken to constitute knowledge of the concept of organizational knowledge and its associate component parts—progress towards a shared definition and likewise practice is currently limited.

The concept of organizational knowledge has gained noticeable traction over the past decade, an importance mostly due to the presumed impact of organizational knowledge on the performance of firms. For example, it is typically considered a key source for a firm's competitive advantage. Such use of the concept is influenced by Nonaka's (1994) published work "A Dynamic Theory of Organizational Knowledge Creation". Yet a review of this work highlights that while Nonaka (1994) proposed a spiral process for knowledge creation, he did not describe the concept of organizational knowledge itself. Similarly, other authors have used the concept of organizational knowledge without describing and defining it (Bryant, 2005; Huff, 2000; Mizuchi & Fein, 1999; Toften & Olsen, 2003).

The related literature is inconsistent, and although the concept of organizational knowledge is used, the related content of the texts differs. For example, literature that adopts the concept of organizational knowledge refers to it as: firm performance (Decarolis & Deeds, 1999; Minbaeva, 2013; Toften & Olsen, 2003); organizational knowing (Cook & Brown, 1999); research about organizations (Barge & Schockley-Zalabak, 2008; Mizuchi & Fein, 1999); culture (Sackmann, 1992); communication theory (McPhee & Zaug, 2001); and project management (Henry et al., 2007). Despite this lack of descriptive specificity and concomitant understanding of the concept, it has been proposed that organizational knowledge can be created, transferred, shared, and integrated, suggesting that the development of an applied definition must be possible.

Complicating the task of developing a pragmatic and applied definition of organizational knowledge for practitioners is the diversity of the authors who write on the subject. Authors are associated with specialist fields and there is little overlap between their work (Easterby-Smith & Lyles, 2011). The related literature is multi-disciplinary and includes fields such as organizational science (Cook & Brown, 1999), communication (McPhee & Zaug, 2001), management information systems (Chen & Edgington, 2005), management (Coghlan, 2003), decision support systems (Holsapple & Joshi, 2001; Scott, 1998), and information science and technology (He, Fang, & Wei, 2009). Organizational knowledge is therefore used as an encompassing term for a range of matters. As it is with the concept of knowledge in general, the concept of organizational knowledge appears broad, difficult to define, and hard to measure. Because of these challenges, similar ideas are articulated differently and in disconnected ways. This disparity only further hinders the understanding of this core concept and its associate components, and in turn, informed practice, research and theorizing.

It is important to emphasize that this inquiry is focused on the concept of organizational knowledge, a focus distinctive in that the extant literature uses the term organizational knowledge expressively as a concept. A concept is defined as “an idea of something formed by mentally combining all its characteristics or particulars” (www.dictionary.com). The etymology of the word concept is of “something conceived” (*Oxford Languages Dictionary*). While the concept of organizational knowledge has been ‘conceived’ in the literature, that is, an idea has been formed about the concept, it has not, however, yet been expanded conceptually, meaning its component characteristics or particulars have not been articulated. Instead, a field of praxis (theory-research-practice) has developed around the concept without a supporting logic or explanation of the concept.

## Purpose and Structure of the Review

The purpose of this explanatory and integrative review is to better understand the concept of organizational knowledge and to do so through analysis and synthesized description of its associate component parts. Then to use such understanding to inform possible future research on the concept, as well as improve related practice and theorizing. The goal of this inquiry is not to develop one unifying framework, nor define what organizational knowledge is not. Rather, it is to expand understanding of the concept through focused, integrative and disciplined interrogation and description of the informing literature. This exploration therefore allows for descriptive definition of the concept, which in turn can be used to inform practice, research, and theories associated with the concept. Three questions were used to inform and guide this focused, exploratory, purposeful, and integrative inquiry, (a) *what is known in the informing literature about the concept of organizational knowledge and its associate component parts?* (b) *what is not known (unknowns) in the informing literature about the concept of organizational knowledge and its associate component parts?* And a third, implicative and conclusive, question derived from and informed by the first two research questions, namely, (c) *what are implications of the knowns and unknowns about the concept of organizational knowledge and its associate component parts for related practice, research, and theory?*

This aim is pursued and presented by way of five key sections. First, the methodology and accompanying methods used to carry out the integrative literature review are described. Second, the research design is described. Third, the results of the integrative review are presented and discussed, while fourth, implications for practice, research and theorizing are reflected upon. Finally, some conclusions are offered.

## **Methodology and Methods**

The methodology “refers to the blueprint or set of decisions and procedures that govern a study and renders it understandable to others” (Lapan et al., 2012, p. 70). The methodology of this integrative literature review is informed by the constructivist research paradigm, a qualitative research strategy, and the methodology of an integrative literature review.

This study is grounded in the constructivist (interpretive) perspective which views knowledge as contextual, that is, there are multiple realities and interpretations of phenomena (Lincoln & Guba, 1985). Thus, this inquiry will analyze the literary interpretations of the concept of organizational knowledge (Lapan et al., 2012; Merriam, 2015) and no single perspective of organizational knowledge will be privileged. The study’s aim aligns with the constructivist paradigm to identify the variety of constructions that exist for the concept of organizational knowledge and “bring them into as much consensus as possible” (Guba & Lincoln, 1989, p. 26). In the constructivist paradigm there is no objective world waiting for discovery. The concept of organizational knowledge is not expected to manifest itself in the literature instead the concept of organizational knowledge and its associate component parts will be constructed from a textual analysis of the literature.

Located within the constructivist (interpretive) paradigm, a qualitative research strategy is pursued (Merriam, 2015). The overall purpose of qualitative research is to achieve deeper understanding. Agreeing with the constructivist paradigm, a qualitative research strategy does not begin with preconceived ideas of a phenomenon or pre-determined findings. There is no interest in manipulating the data. Instead, through the process of induction, the researcher constructs meaning from the data (Charmaz, 2014; Lapan et al., 2012; Merriam, 2015). Distinctively, in qualitative research the emphasis is on text (Lapan et al., 2012) and further

establishes criteria for a qualitative research design, where-in text material will be used as data (literature as data).

As the main purpose of this study is to describe what is known about the concept of organizational knowledge and its associate component parts using literature as data, an integrative literature review aligns well with the inquiry purpose. An integrative literature review is a “form of research that reviews, critiques, and synthesizes representative literature on a topic such that new frameworks and perspectives on the topic are generated” (Torraco, 2005, p. 356). The intended outcome of this integrative review is a broad and in-depth exploration of the literature (Callahan, 2010), to describe any new constructions about the concept of organizational knowledge and its associate component parts. An integrative literature review method is deemed most appropriate to this inquiry because it allows for the inclusion of multiple literary sources to address the research question and achieve the study purpose. Hence the constructivist paradigm, a qualitative research strategy, and specifically the methodology of an integrative literature governs this inquiry and its review of the related literature on the concept of organizational knowledge and its associate component parts. Next is an articulated description of the research design which describes how the data (literature) were collected, analyzed, and reconstructed.

### **Data Collection and Selection of Literature**

An integrative literature review should include a description of the research design (Rocco & Plakhotnik, 2009), that is, how the “literature was identified, analyzed, and synthesized” (Torraco, 2005, p. 360). The description requires an explanation of search terms used to collect the literature (Rocco & Plakhotnik, 2009), keywords and databases used (Torraco, 2005), the sampling process for selecting literature—that is “identifying the population (literature

streams and terms being targeted for drawing the sample)—and clear criteria for inclusion and exclusion of literature” (Yorks, 2008, p. 140).

For the purpose of this study, a search for relevant literature was completed using the electronic databases, Academic Search Premiere, Business Source Complete, Google Scholar, PsycINFO, JSTOR, and Web of Science (Conn, et al., 2003; Ipe, 2003). The keyword combination “organizational knowledge” in quotations was used as the initial search term and yielded a sum of 30,008 possible literature sources. In order to truncate the search results, a query was performed for literature that contained “organizational knowledge” in the title only and were published between 1985 and 2020. The truncated search produced a sum of 2,489 results. The date range 1985 to 2020 was chosen due to limitations of the utilized databases, and because the dominant view of the concept of organizational knowledge came into existence in the early 1990’s (Evans & Easterby-Smith, 2001). The year 1985 was purposively chosen to locate literature related to the concept of organizational knowledge prior to the year 1990.

Five selection criteria were used to identify literature for this integrative literature review (Yorks, 2008). First, literature was sorted in order of relevancy. The filter of “relevancy” was chosen within each database and was determined by a formula internal to each database. Second, although the search criterion was for literature with “organizational knowledge” in the title only, the lists of literature yielded from each search engine were further reviewed for any literature that did not fit this criterion. Literature sources were also excluded from this review if they were duplicate entries, dissertation abstracts, book reviews or written in a language other than English (Wright et al., 2007). Third, a cross-comparison of the results from each database was conducted to identify similar literature, between lists of literature yielded from each database (Wright et al., 2007). This comparison narrowed the list of potential literature sources to 148. Fourth, a



literature source was selected for inclusion if it was included in the results of multiple databases. As a result, literature that appeared on four to five databases was reviewed (i.e., 50 literature sources). Lastly, the number of citations was used as a criterion to review each plausible source, i.e., literature listed on 4-5 databases (Conn et al., 2003; Torraco, 2005). The Web of Science Citation Index and Google Scholar were used for citation purposes. In total, 50 literature sources related to the concept of organizational knowledge were reviewed. Analysis and synthesis of identified literature were guided by the conventions of Qualitative Content Analysis. Following is a description of this method of text analysis and synthesis used to inform a literature review on the concept of organizational knowledge and its associate component parts.

### **Application of Qualitative Content Analysis to the Data**

Qualitative Content Analysis is a method designed for use with large amounts of textual data which require interpretation. The aim of qualitative content analysis is to “systematically describe the meaning” of the data (Schreier, 2012, p. 3). The analysis is guided by the research question which “provides a focus or domain of relevance for conducting the analysis, not a set of expectations about specific findings” (Thomas, 2006, p. 239). As a qualitative method, qualitative content analysis is applicable to an integrative literature review methodology, because it allows for the iterative comparisons of data through the process of coding (Whittemore & Knafl, 2005). The findings are developed inductively from the data as a result of multiple readings and interpretations of the texts.

Essentially, qualitative content analysis can be described as having three outputs, (1) selecting relevant material for analysis, (2) developing a coding scheme from the relevant material, and (3) analysis and synthesis of the relevant material. Preceding the three outputs the reviewer engaged in the act of immersion to which each literature source was read in detail to

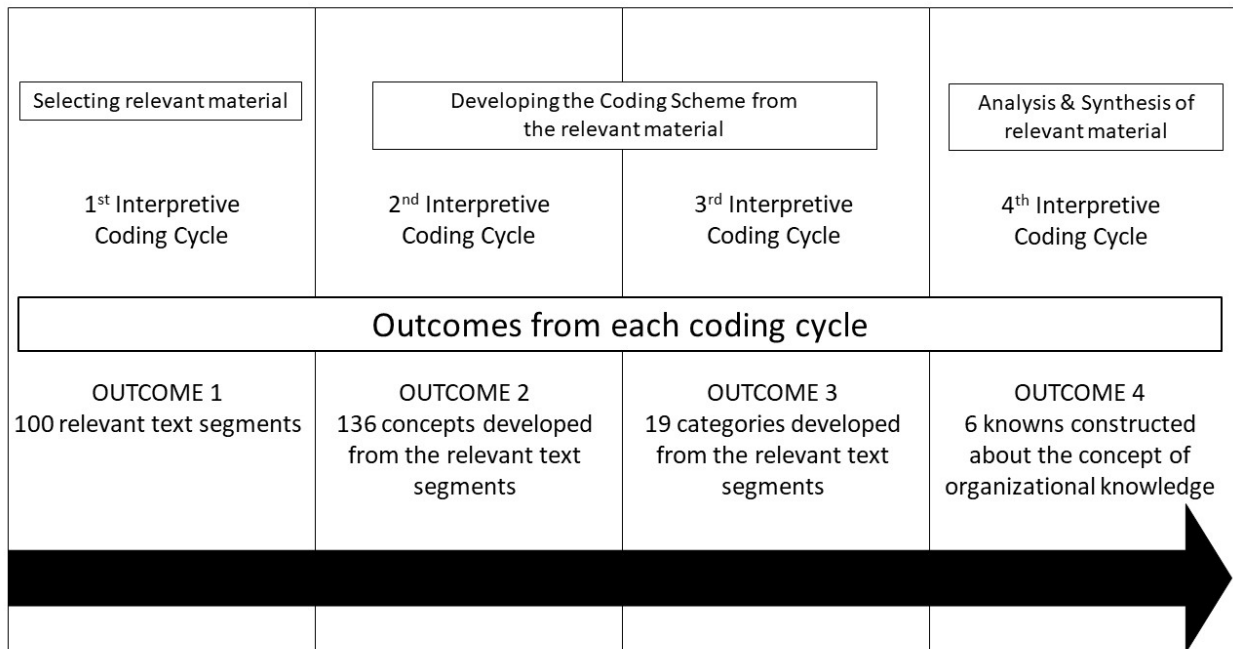
gain familiarity with, and an understanding of the overall data set (Forman & Damschroder, 2007; Schreier, 2012). After immersion qualitative content analysis was applied to the data (literature) through four interpretive coding cycles. The first cycle focused on the selection of relevant material within each source that was applicable to the research question. The second and third cycles involve development of a coding scheme from the relevant material. And in the fourth cycle the data (relevant material) was further analyzed and then synthesized to inform the construction of the concept of organizational knowledge and its associate component parts. Figure 7 provides an overview of the four interpretive coding cycles and their outcome, subsequently described within the context of the three outputs of qualitative content analysis.

### **Selecting Relevant Material: Interpretive Coding Cycle One**

The first interpretive coding cycle was used to identify relevant material in the selected literature sources (Schreier, 2012). Each literature source was read in its entirety, and text was selected if it fit the definition for relevance. The criterion for relevance was established by the research question, “what is the concept of organizational knowledge and its associated component parts?” Relevant material was considered text that used the specific phrase organizational knowledge, described characteristics of knowledge or knowledge types within organizations, referred to knowledge as group, social, or collective knowledge, referenced knowledge within communities of practice or as organizational. (Brown & Duguid, 1998) The first interpretive coding cycle, selecting relevant material was used as an indexing device that focused the analysis on the aspects of the texts that were relevant to the research question.

This process of identifying relevant material is analogous to structural coding (Saldana, 2016). Through the application of the first interpretive coding cycle and the relevance criterion, 100 relevant text segments were identified. Thus, the relevant material or the 100 relevant text

segments, included text related to organizational knowledge definitions, types of organizational knowledge, possible organizational knowledge, knowledge types in organizations, and dimensions of organizational knowledge.



**Figure 7**  
*Four Interpretive Coding Cycles and Outcomes within the Three Outputs of Qualitative Content Analysis*

### **Developing a Coding Scheme: Interpretive Coding Cycles Two and Three**

A second interpretive coding cycle utilizing open coding (Saldana, 2016), was applied to the 100 relevant text segments to identify related concepts within the segments. A total of 136 concepts were identified. The third interpretive cycle of coding used pattern coding (Saldana, 2016) to find similarity between concepts. The similar concepts were grouped together and as a result 19 categories were developed. The categories were subsequently structured into 6 main categories and 14 subcategories illustrated in Table 3.

**Table 3**

<i>Categories and Sub-categories Constructed from the Third Interpretive Coding Cycle</i>	
Six Main Categories	13 Sub-categories
Definitions of organizational knowledge	Descriptive definitions of the concept of organizational knowledge as found in the literature.
Types of organizational knowledge	Organizational assets Proxies of organizational knowledge Observable measures of organizational knowledge
Properties of organizational knowledge	Body of social knowledge Embedded throughout an organization Organizational knowledge is an outcome Organizational knowledge is accumulated over time
Organizational knowledge is the enactment of culture	Governance of work Organizational axioms Organizational facilitation
Origins of organizational knowledge	External to the organization Internal to the organization Dependence on organizational members
Organization's capacity to act	Subcategories were not identified.

### **Analysis and Synthesis of the Relevant Material: Interpretive Coding Cycle Four**

In the fourth and final interpretive coding cycle, the relevant material, i.e., the 100 relevant text segments were analyzed once more, and the coding frame developed from the second and third coding cycles, was applied to the 100 relevant text segments. Using the method of Qualitative Content Analysis, the four coding cycles enabled analysis and synthesis of the informing texts. This analysis and synthesis informed the construction of the concept of organizational knowledge and its associate component parts through multiple interpretations of the data. Following are the findings from the analysis and synthesis of the literature.

### **Findings and Discussion**

The primary focus of this integrative literature review was to describe the concept of organizational knowledge and its associate component parts. The resulting findings follow in

three parts and are presented in relation to the guiding research questions. The first part pertains to what is known from the informing literature about the concept of organizational knowledge and its associate component parts. Next, is a discussion about what is not known (the unknowns) from the informing literature about the concept and its associated component parts and thus gaps in related knowledge. And finally, the description of the implications of the unknowns for related practice, research, and theory.

### **The Knowns of the Concept of Organizational Knowledge and Its Associate Component Parts**

Through a synthesis of the associated literature six knowns were identified about the concept of organizational knowledge and its associated component parts. They are (a) definitions of organizational knowledge, (b) types of organizational knowledge, (c) properties of organizational knowledge, (d) organizational knowledge as the enactment of culture, (e) origins of organizational knowledge, and (f) organizational knowledge as an organization's capacity to act. Each known is expanded on in the paragraphs following.

#### ***Definitions of Organizational knowledge***

The literature was purposefully searched for descriptive definitions of the concept of organizational knowledge. A segment of text was taken to be a definition of the concept of organizational knowledge if the text segment began with the key phrase, "organizational knowledge is"..., "organizational knowledge reflects/implies"..., or "organizational knowledge includes".... Thus, a definition of the concept of organizational knowledge states or describes its nature or scope, essentials qualities, characteristics, or meaning of (Oxford Languages Dictionary, Merriam-Webster Online). Noticeably, several authors use the concept of organizational knowledge without description and those authors that do provide an explicit

description of the concept of organizational knowledge borrow from another source (Bhagat et al., 2002; Brown et al., 2013; Bryant, 2005; Deeds, 1999; King, 2003; McPhee & Zaug, 2001; Treleaven & Sykes, 2005). Of the 50 articles reviewed only one article explicitly defined organizational knowledge. Tsoukas and Vladimirou (2001) state that organizational knowledge is,

the capability members of an organization have developed to draw distinctions in the process of carrying out their work, in particular concrete contexts, by enacting sets of generalizations (propositional statements) whose applications depends on historically evolved collective understandings and experiences. (p. 49)

Common to other less explicit definitions of organizational knowledge is that organizational knowledge depends on people. It is individuals, organizational members that formulate knowledge and use it for different purposes than for what it was originally intended. Organizational knowledge transverses multiple organizational contexts because of individuals within an organization (McPhee & Zaug, 2001). Organizational knowledge includes all the tacit and explicit knowledge of individual organizational members (Bryant, 2005) and “usually implies a body of social knowledge” (McPhee & Zaug, 2001, p. 588). It’s social in that it is “individual knowledge brought into a social context” (Chiva & Alegre, 2005, p. 60). One such context is the “strategic relationships nurtured over time between organizational members, customers, suppliers, and partners” (Bhagat et al., 2002, p. 216). Thus, it is through the use of, and interaction with shared individual knowledge, organizational members develop tacit understandings of such knowledge and form implicit belief (Chiva & Alegre, 2005), that becomes embedded in an organization as organizational knowledge.

Thus, organizational knowledge is “distinctly organizational” because it is codified into generalized statements underlain by the social beliefs of organizational members “collective understandings” (Treleaven & Sykes, 2005, p. 354). These collective understandings are stocked and codified in manuals, databases, and information systems, which contain implicit knowledge related to rules, routines, norms, and typical ways of dealing with divergence, uncertainties, and ambivalence (Bryant, 2005; McPhee & Zaugg, 2001). Organizational knowledge is also taken to exist as a flow of knowledge into the organization; specifically, knowledge flows into an organization through formal and informal mechanisms. Thus, organizational knowledge exists in the form of stocks and flows (Deeds & Decarolis, 1999). It is, therefore, firm specific, non-imitable, non-tradeable, and personal to the organization (Chiva & Alegre, 2005; Deeds & Decarolis, 1999).

### ***Types of Organizational Knowledge***

Organizational knowledge types can be classified into three categories (a) organizational assets, (b) proxies of organizational knowledge, and (c) observable measures of organizational knowledge.

**Organizational Knowledge is an Organizational Asset.** For this type of organizational knowledge, text was structurally coded and interpreted as an organizational asset if the text described knowledge as owned or possessed by an organization and regarded as valuable and useful (Oxford Languages Dictionary; Merriam-Wester online). Organizational knowledge assets are collected and built over time, and include organizational knowledge resources (e.g., organizational competencies), stores (e.g., organizational routines), and stocks (e.g., corporate reputations) of organizational knowledge. Organizational knowledge resources include employee knowledge and competencies, capital (i.e., human, customer, and organizational), and knowledge

embedded in physical systems (Holsapple & Joshi, 2001). Organizational knowledge resources are simultaneously internal and external to an organization. Internal organizational knowledge resources include an organization's culture, purpose, and strategy. External resources include extant knowledge within a particular industry, and the organization's knowledge of its customers, suppliers, or partners (Holsapple & Joshi, 2001).

Organizational knowledge stores include relational knowledge stores which refer to the management of inter-firm relationships. Relational knowledge stores include "collective insights, beliefs, behavioral routines, procedures and policies that influence inter-firm relations" (Yang & Lai, 2012, p. 421). Knowledge stores are akin to cultural cognitions held in common by organizational members (Sackmann, 1992, p. 141). Cultural cognitions exist in the form of cultural knowledge or commonly held knowledge about descriptions or definitions, practices, norms, and premises of an organization. Additional stores of knowledge include knowledge about hidden rules (Nonaka et al., 2001), knowledge of processes and about people (Bryant, 2005), and knowledge about routines (Holsapple & Joshi, 2001).

Lastly, stocks of knowledge are foundational to an organization such as corporate reputations, dealer loyalty, and the firm-specific skills of employees (DeCarolis & Deeds, 1999). Stocks are an organizational asset because they are specific to an organization. They are of value because they are non-imitable, non-tradeable, and non-substitutable by another organization (Dierickx & Cool, 1989). Knowledge stocks are the possession of the organization that developed them (e.g., corporate reputations), for stocks are "accumulated assets internal to the organization developed over time" (DeCarolis & Deeds, 1999, p. 954).

**Proxies of Organizational Knowledge.** In this second type of organizational knowledge, knowledge is represented in the form of patents, products, and scientific citations. A patent



represents organizational knowledge, inasmuch that patents are “physical, codifiable manifestations of innovative ideas, techniques, and products that embody the knowledge of one or several employees” (DeCarolis & Deeds, 1999, p. 956). Furthermore, organizational knowledge can be expressed in the form of a product. As evidenced in the process of reverse engineering, which is an attempt to extract the knowledge that was used to develop a product (Holsapple & Joshi, 2001). Organizational knowledge is also thought to be contained within a firm’s scientific team. As such a proxy for organizational knowledge is the number of citations associated with the firm’s scientists (Decarolis & Deeds, 1999).

**Observable Measures of Organizational Knowledge.** In this third type of organizational knowledge, organizational knowledge can be identified through the workings of an organization (Holsapple & Joshi, 2001). The way an organization is structured signifies organizational knowledge, in that the organization knows a specific structure is ideal to achieve organizational purpose. Organizational knowledge is captured through language inasmuch that “language articulates the scope of what is organizational knowledge” (King & Zeithaml, 2003, “Theoretical Background,” para.5). Written language is used to capture organization knowledge and document it in organizational artifacts and in propositional statements (DeCarolis & Deeds, 1999). Furthermore, organizational knowledge is taken to be realized in the enactment of rules. Thus, a typology of organizational knowledge is a useful way to understand these associate component parts of the concept of organizational knowledge, the latter of which can be further developed with a description and understanding of its properties.

### ***Properties of Organizational Knowledge***

The extant literature suggests that organizational knowledge reflects several discernable properties. Four such properties are discernable in the literature. Hence, organizational

knowledge is taken to be a body of social knowledge, embedded in an organization, is of outcome, and is accumulated over time.

**Organizational Knowledge is a Body of Social Knowledge.** A first property of organizational knowledge is that it is socially constructed (Chiva & Alegre, 2005). It thus, exists as a body of social knowledge, held in common by organization members, both individually and within teams. Such knowledge has been manipulated, made available or articulated. Through articulation organizational knowledge is brought into a social context and shared and distributed (King & Zeithaml, 2003) by members of a group or organization through social interactions (Bhagat et al., 2002; Chiva & Alegre, 2005; King & Zeithaml, 2003). The social nature of organizational knowledge is reflected in member's ability to collaborate using shared knowledge. Organizational knowledge is thus developed as a set of collective understandings that exist as a result of people working together and is cross-functional in nature.

Furthermore, organizational knowledge is enacted through the perspectives of multiple knowers (DeCarolis & Deeds, 1999; King & Zeithaml, 2003) and is rooted in the expertise of an organization's members (Bhagat et al., 2002). It is a term that "usually implies a body of social knowledge that is socially useful" (McPhee & Zaug, 2001, p. 588), because it is explicitly formulated and captured through language (King & Zeithaml, 2003) enabling it to be used outside the immediate context where ideas are first conceived (McPhee & Zaug, 2001). Organizational knowledge is shared expertise, between and among members, for instance when a mentor shares knowledge of the organization with a mentee (Bryant, 2005). Henceforth, as underscored by Bhagat et al. (2002), it is "social knowledge that exists in relationships among individuals or within groups" (p. 206).

**Organizational Knowledge is Embedded Throughout an Organization.** A key property of organizational knowledge is that it is embedded throughout an organization, in written documents, processes, practices, and norms of an organization. Through the application of organizational processes organizational knowledge becomes embedded in organizational practices (Vandaie, 2008). It is ingrained in an organization's infrastructure, culture, strategy, and purpose (Holsapple & Joshi, 2001). Organizational knowledge thus personifies an organization as knowledge embedded in social relationships (von Krogh, Nonaka, & Rechsteiner, 2012), embedded in organizational rules and routines (Chiva & Alegre, 2005), and interrelated with organizational learning and organizational memory (Spender, 1996). It is multidimensional, grounded in not only a firm but also its industry. Both firm and industry embed organizational knowledge with meaning (King & Zeithaml, 2003).

**Organizational Knowledge is of Outcome.** Organizational knowledge has the property of outcome (Toften & Olsen, 2003). On the one hand organizational knowledge can be considered an outcome, as in the outcome from the use of export information (Toften & Olsen, 2003). On the other hand, organizational knowledge can also produce an outcome such as when an organization achieves its purpose, it produces an outcome such as a tangible product like a medicine or an intangible product such as relationships nurtured over time. Thus, organizational knowledge exists in this dual manner, as the outcome of an organization as well as a producer of outcomes.

**Organizational Knowledge is Accumulated Over Time.** A further property essential to organizational knowledge is that it is accumulated over time. Organizational knowledge accumulates over time as organizational employees work together and share knowledge. The sharing of knowledge leads to "collective understandings" that evolve (Tsoukas & Vladimirou,

2001). One such collective understanding is cultural knowledge, or knowledge that has evolved over time to form the labels and definitions used in an organization, an organization's practices, improvement strategies, judgments and explanations (Sackmann, 1992). Further, organizational knowledge accumulates over time in the form of capabilities such as research and development capabilities, the capability to develop strategic partnerships with customers, and the capability to maintain a corporate reputation (Bhagat et al., 2002; Decarolis & Deeds, 1999). The accumulation of knowledge is aided by organizational mechanisms that include organization employees, knowledge documentation, and technological systems (DeCarolis & Deeds, 1999). Thus, organizational knowledge is accumulated through an organization's work functions, organization employees sharing knowledge with other employees, growth in research and development capabilities, and knowledge gained through customer relationships. The knowledge developed and gained from executing work is documented in technological systems over time.

### ***Organizational Knowledge is the Enactment of Culture***

A fourth discernable thematic is that organizational knowledge governs organizational work. It thus exerts restrictions on the members of an organization by explicating expectations—expectations related to how individuals in certain organizational roles are to act, what is to be done by each role (Chiva & Alegre, 2005), and how organizational members engage in relationships (Holsapple & Joshi, 2001). Organizational knowledge also provides expectations related to organizational action, that is, what gets done in an organization and provides context and structure through which it develops. These specific contexts and structures serve to orient individual choices and actions (Bhagat et al., 2002). Organizational knowledge defines the reality for specific organizational behaviors in the form of axioms. Axioms provide reasons and explanations for why things happen, for example, why a certain problem emerged, why people

are promoted, and why organization members think or feel a particular way. Furthermore, these axioms affect firm-specific routines, rules, premises, plans, strategy, prescriptions and recommendations (Sackmann, 1992).

### ***Origins of Organizational Knowledge***

A further discernable thematic of organizational knowledge is that organizational knowledge has internal and external organizational origins. Internal organizational knowledge exists as a body of social knowledge and is conveyed through an organization's infrastructure, culture, purpose and/or strategy (Holsapple & Joshi, 2001). Organizational knowledge originates from individual organization members, that is, it does not exist independently of members (Spender, 1996). Rather it is what members know—employee's competencies and knowledge rooted in employee's expertise and experience within a given organizational context (Bhagat et al., 2002, p. 216).

It can be external inasmuch that organizational knowledge is mobile and moves through a mobile labor pool (DeCarolis & Deeds, 1999). The movement of knowledge has benefits for an organization due to external knowledge flows into an organization. Knowledge flows are a result of relations through informal channels between customers or suppliers and from social interactions of employees who work for a specific industry situated in a particular geographic region in which the organization exists (Holsapple & Joshi, 2001). External knowledge is used in the shared and distributed practice of organizational members and through the development of collective understandings becomes internal to the organization (Nonaka et al., 1996). Further, when codified in written formats (i.e., documents, policy manual) organizational knowledge can exist apart from the organization. Hence, organizational knowledge originates from multiple sources and gives an organization the capacity to act.

### ***Organization's Capacity to Act***

A final discernable thematic of organizational knowledge is a firm's capacity to act. A firm uses organizational knowledge to act purposefully and effectively (King & Zeithaml, 2003), and its capacity to act is due in part to organizational members carrying out their work. Put another way, organizational member's carry out work through enacting sets of generalizations and these generalizations enable a firm to put its resources to use (Treleaven & Sykes, 2005, p. 356). Similarly, firms put their resources to use through manipulation activities; individual members or a team of individuals engage in knowledge manipulation activities, and thereby make knowledge available (Holsapple & Joshi, 2001). A firm differentiates itself from its competitors with its ability to act and use organizational knowledge.

### **The Concept of Organizational Knowledge**

The aim of this integrative literature review was to provide an understanding of the concept of organizational knowledge and its associate component parts. This review is significant in that organizational knowledge is viewed as an essential component of organizational performance. To have knowledge of the concept of organizational knowledge and its associate component parts is to have knowledge of how the concept is defined, its types, properties and origins, its enactment of culture, and how it influences an organizations capacity to act.

The findings suggest that the management and use of organizational knowledge is complex. The concept of organizational knowledge is dynamic and interwoven throughout an organization. And the context set by the organization through the enactment of its culture, influences the interactions of its members with organizational knowledge. Organizational knowledge is both specific to an organization and is also dependent on an organization's

interactions with the external environment. The properties associated with organizational knowledge, such that it is a body of social knowledge, socially constructed, shared and distributed by organizational members, accumulating over time and embedded in an organization suggests that organizational knowledge is dynamic and active.

### **Unknowns about the Concept of Organizational Knowledge and Its Associate Component**

#### **Parts**

While this study offers an initial conceptualization of the concept and its associated component parts further analysis is still warranted. Several relevant unknowns remain. Specifically, the interrelatedness of the parts is an area for inquiry. What is not known is how the properties of organizational knowledge are associated with different types of organizational knowledge or how the enactment of culture and origins of organizational knowledge enable organizations' capacity to act. Additionally, organizations contain subcultures and these subcultures are relevant to organizational knowledge. For instance, Sackmann (1992) found the valuation of knowledge types was dependent on organizational subcultures. Inquiries related to the noticeable differences between internal and external origins of knowledge may add clarity to whether the origin of organizational knowledge matters. Perhaps what is most important is how the knowledge is shared and distributed in the organization.

It's unclear how the concept of organizational knowledge is realized in different organizational contexts. Organizational knowledge may present differently in a non-profit versus a for-profit organization. Differences may exist between different industries, for example business versus education. Similarly, the transfer of organizational knowledge between countries needs investigation. Bhagat et al. (2002) found that variations existed in the cross-border transfer of organizational knowledge in the same company. A deeper analysis of globalization and multi-

national corporations may yield additional insights about organizational knowledge and its associate component parts.

Issues related to access are also relevant to the study of organizational knowledge. Even though it is known that organizational knowledge is rooted in organization members, it is uncertain as to who exactly participates in the social construction of organizational knowledge.

Are there varying degrees of value associated with an employee's organizational knowledge based on the position they occupy within an organization and based on the position what is an employee's level of participation in the construction of organizational knowledge?

Differentiation between organizational knowledge and organizational knowing is a further point for clarification, each represents a different aspect of an organization's knowledge. While organizational knowledge is distinguished as knowledge that an organization possesses—what is stored—organizational knowing refers to knowledge that is part of practice (Cook & Brown, 1999). Clarification of this distinction increases understanding of how and in what capacity to act on knowledge and choose the appropriate course of action (Choo, 1996).

Exploring the emergent knowns and unknowns in the informing literature enables us to begin to identify future implications of our findings for, among others, Human Resource Development (HRD) practice, research and theory. The findings also inform some related conclusions about the future study of the concept and conceptualization of organizational knowledge.

### **Implications for Human Resource Development**

The purpose of this review was to describe and better understand the concept of organizational knowledge and its associate component parts, and to use such understanding to inform possible future research on the concept as well as improved practice and theorizing.



Given this purpose several discernable implications for HRD can be highlighted. First highlighted are implications for practice, second implications for research, and lastly implications for theory.

### **Implications for Practice**

An understanding of the concept of organizational knowledge can assist HRD practitioners in determining the knowledge that employees need to know for the organization to fulfill its purpose and mission. Practitioners can use the understanding from this analysis to get the right knowledge to those who make decisions (Holsapple & Joshi, 2001). The conceptualization of organizational knowledge suggests a need for designing specific workplace cultures that promote social interaction and sharing of knowledge. HRD can and should be a critical proactive agent in this process (Holton & Yamkovenko, 2008). HRD is positioned to help organizations maximize relationships with external entities and develop processes and systems to incorporate external knowledge into the organization (Gubbins & Garavan, 2005). A skill of HRD practitioners is the ability to work with intangible assets such as organizational knowledge. A focus on organizational knowledge positions HRD to be an integral part of organizational strategy. An understanding of the concept of organizational knowledge prepares HRD practitioners to be key players in the organization, and positions HRD to conduct research that aids in the practical application of the concept.

### **Implications for Research**

In addition to implications for practice, the findings of this integrated literature review hold implications for HRD research, too. In review of the research journals published by the Academy of Human Resource Development, only two articles were identified that specifically used the descriptor organizational knowledge (Song & Chermack, 2008; Song et al., 2012).

Considering the few empirical studies of the concept of organizational knowledge and its associate components parts, it is suggested that future research in HRD be more attentive to the concept of organizational knowledge. HRD is integrated in an organization and positioned to explore the concept of organizational knowledge at multiple levels (Garavan et al., 2004). Research on the employee perspective of organizational knowledge from multiple organizational contexts would add value to the conceptualization of organizational knowledge.

Furthermore, researchers might also look to develop measuring tools that validate the findings of this review and explore the utility of the concept in various organizational settings. A focus on differentiating the concept from organizational learning and organizational memory is beneficial, too (Spender, 1996). Such research would aid in understanding how these three (i.e. organizational knowledge, learning, and memory) are related and note their specific locus of impact on the organization. For a comprehensive understanding of the concept of organizational knowledge, it is viable for HRD professionals to conduct research on the concept from multiple paradigmatic positions toward generating theory on the concept.

### **Implications for Theory**

A final discernable implication of the identified gap in knowledge about organizational knowledge and its associate component parts is the need for theory to connect the work of practitioners with the outcomes of research in order to further the understanding of the concept. For instance, a theory on the concept of organizational knowledge will assist organizations in description of the concept and its associate component parts impact on organizational performance. A theory of organizational knowledge developed for use within organizations has more practical utility for an organization seeking to improve performance. As theories guide behaviors and influence future directions, a working theory of organizational knowledge may

assist organizations in maximizing the potential of organizational knowledge. Theory development of the concept of organizational knowledge helps it become an integral aspect of organizational practice.

### **Conclusion**

While the concept of organizational knowledge enjoys face validity in practice, and has yet to be fully conceptualized, there is evidence of some commonality in the way the concept is used. This integrative literature review provides an informed description, synthesis, and understanding of the concept of organizational knowledge and its associate component parts. The purpose and outcomes of this review help address the lack of integration and conceptualization of the concept. It also informs the building of a foundation for further development of the concept of organizational knowledge, increasing its utility to both the practitioner and researcher. Such a deeper understanding is beneficial, too, in terms of measuring, sharing, transferring, leveraging, and creating organizational knowledge.

In closing, exploration of the “knowns” of the concept of organizational knowledge and its associate component parts, informs rigor and relevance in future inquiry and practice. For example, a logical next question provoked by this exploratory study would be one of “How” ...how do the parts relate to the concept as a whole, and the whole to the parts?” Addressing such a question begins the process of theorizing organizational knowledge as a phenomenon of practice and inquiry.

## CHAPTER FOUR

### Article Three (Empirical, of Case Study)

#### Summary

Organizational knowledge is a concept that has been proposed to have utility for organizations and their competitive advantage. And while the concept has been studied in various industry contexts, it has not been studied in the context of higher education. The aim of this manuscript is to advance study and understanding of the concept of organizational knowledge and its associate component parts. The aim is pursued through disciplined inquiry of a qualitative case study. The informing research question was, *what is the concept of organizational knowledge and its associate components parts from the perspective of participating undergraduate academic advisors in a selected higher education institution in the mid-western United States?* Data were collected using the case study approach of triangulation of data sources. Data were collected through interviews, observations, and document analysis. The findings of the empirical study describe the concept of organizational knowledge from the perspective of undergraduate academic advisors as nine associate component parts. As such organizational knowledge is knowledge that has description, is foundational, is knowledge to find balance, to find solutions, is knowledge of processes, and knowledge of philosophies of practice, is knowledge about the student experience, about the advising role, and knowledge to do the work.

*Keywords:* Organizational Knowledge, Higher Education, Advising, Case Study

#### **Organizational Knowledge in Higher Education:**

##### **A case study perspective of undergraduate academic advisors**

Knowledge is discovered, shaped, transmitted, and applied in higher education institutions (Duderstadt, 2002). Institutions disseminate knowledge in the classroom (Petrides &

Nodine, 2003), search for knowledge through academic research, produce knowledge workers (Gourova & Zografov, 2014), provide knowledge enrichment activities (i.e. conferences, speakers, events), and are considered repositories of knowledge. These learning, teaching, and research activities produce and transmit academic knowledge (Nawaz & Gomes, 2014).

Undoubtedly academic knowledge has particular importance for higher education institutions.

However, the role of higher education and the importance of academic knowledge are being contested. Public opinion of higher education has waned and education imperatives for higher education center around the issues of effectiveness and accountability (Townley, 2003). In addition to knowledge activities, higher education institutions are being asked to increase student enrollment, retention, and graduation rates, improve institutional processes such as student learning, focus on faculty development and strategic planning (Nawaz & Gomes, 2014). Scarce public funding over the last decade is indicative of a lack of confidence in higher education's ability to provide value and prepare students for post-college life (Staley & Trinkle, 2011). Moreover, higher education institutions are required to share responsibility for high school college preparation, college affordability, and college drop-out rates (Hunt & Tierney, 2006). Colleges and universities must think differently about the way they deliver education.

Thinking differently is an appropriate concern of organizational knowledge, for "it is not merely information about how to achieve values and resolve uncertainties, it also encapsulates the norms and typical ways of dealing with inescapable divergence or impossibility or seeking and avoiding information about uncertainties, and of resolve and enduring ambivalence" (McPhee & Zaugg, 2001, p. 588). Organizational knowledge has value for higher education institutions because it can help institutions meet their intended goals e.g., student enrollment, retention, and graduation (Delgado-Verde, de Castro, & Navas-Lopez, 2011; Sunalai &

Beyerlein, 2015) as higher education institutions transform knowledge into action (Petride & Nodine, 2003).

Organizational knowledge is associated with the “overall business of an institution: its strengths, weaknesses, strategies, critical factors of success, and relationships with research centers” (Nawaz & Gomes, 2014, p. 74). All organizations use knowledge, the differing factor is their use of knowledge to add value to product and service delivery (Nawaz & Gomes, 2014). Yet, studies on the concept of organizational knowledge focus on theoretical development and empirical research in business contexts (Decarolis & Deeds, 1999; Nonaka, 1994; Tsoukas & Vlachmirou, 2001). Less attention has been devoted to the study of the concept of organizational knowledge and its associate component parts in the context of higher education, even though higher education institutions “face similar challenges that many other nonprofit and for-profit organizations face as they seek to share information and knowledge among people within the organization” (Petrides & Nodine, 2003, p. 10). A focus on organizational knowledge enables higher education institutions to have “a wider perspective of the role of knowledge” (Steyn, 2004, p. 622), a perspective in which knowledge is recognized as an asset (Steyn, 2004). An important perspective if higher education institutions are to address the concern of accountability i.e., waning public opinion and scant public funding.

Thus, it seems important to explore the concept of organizational knowledge and its associate component parts within the context of higher education. The inattention of the concept of organizational knowledge and its associate component parts in higher education inhibits the identification and utilization of organizational knowledge assets and affects the quality and performance of higher education institutions (Adhikari, 2010; Chen & Burstein, 2006). The aim of this study is to provide a broader understanding of knowledge within the context of higher

education, independent of academic knowledge, through an exploratory case study of the concept of organizational knowledge and its associate component parts. The inquiry aim is pursued by addressing the research question, *what is the concept of organizational knowledge and its associate component parts from the perspective of participating undergraduate academic advisors in a selected higher education institution in the mid-western United States?* Case study is appropriate because the primary purpose of this study is to gain a holistic understanding of the concept of organizational knowledge and its associate component parts, which is a core purpose of such study.

This study is discussed by way of the following three parts. First, presented is a description of the informing research methodology. Second, the empirical findings are presented. Lastly, the concluding section summarizes the study and offers suggestions for future research, practice, and theory.

### **Methodology and Methods**

The philosophical worldview or research paradigm that orients this study is constructivist. The constructivist paradigm (i.e. interpretive or naturalistic inquiry) believes that human beings construct meaning as they engage in their world, phenomenon is understood through the perspective of multiple knowers, and values and context play active roles in shaping the inquiry (Lincoln & Guba, 1985). This paradigm was appropriate for the study, in that the assigned meaning of organizational knowledge results from the interaction of individuals in collective meaning making within an organizational context (Cook & Brown, 1999; Nonaka et al., 1996). A qualitative research strategy was pursued for its alignment with the constructivist paradigm and the intended purpose of this inquiry, to describe and interpret an applied and practical understanding of the concept of organizational knowledge and its associate component

parts. Further, a case study research approach was used which aligns with constructivism and a qualitative research study, insomuch that the aim to is to describe and understand a particular case of the concept of organizational knowledge and its associate component parts in the context of undergraduate academic advising in a selected higher education institution (Stake, 1995; Willis, 2007).

### **Research Paradigm**

A philosophical worldview and its assumptions influence a researcher's orientation to inquiry (Creswell, 2013). This worldview or basic belief system is a research paradigm (Lincoln & Guba, 1994). A research paradigm is a basic set of beliefs that guide disciplined action, including what to study, how to study, and the why of conducting inquiry (Guba & Lincoln, 1990; Bryman, 2008). The philosophical worldview or research paradigm that orients this study is a constructivist worldview. The constructivist paradigm (i.e., interpretive or naturalistic inquiry) believes that human beings construct meaning as they engage in their world (Lincoln & Guba, 1985). Thus, "all knowledge, and therefore all meaningful reality as such, is contingent upon human practices being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Crotty, 1998, p. 42). This paradigm is appropriate for the study, such that the assigned meaning of organizational knowledge results from the interaction of individuals in collective meaning making within an organizational context (Cook & Brown, 1999; Nonaka & Takeuchi (1994). Insomuch that context has importance for this inquiry the constructivist research paradigm aligns with the purpose of this study.

The research goal is to understand the multiple perspectives of participants and bring them into as much consensus as possible (Guba & Lincoln, 1990, p. 26). Assumptions about the



concept of organizational knowledge and its associate component parts do not exist. A priori assumptions about this phenomenon does not guide the direction of the study, instead conceptualization is a result of a dialogue between the inquirer, and the inquiry or inquired into (Lincoln & Guba, 1989). Accordingly, the inquirer will function as the data collection instrument, and as such, the construction of the concept of organizational knowledge and its associate component parts is taken to be “embedded in the researchers experiences and through the researchers’ perception” (Merriam, 1991, p. 49). Further, positioning this study in the constructivist paradigm in which the inquirer and the object of inquiry interact to influence one another; the knower and known are taken to be inseparable (Lincoln & Guba, 1985). In agreement with the constructivist paradigm, this study does not seek generalizability.

### **Rationale for the Use of a Qualitative Research Strategy**

A qualitative research strategy is used to achieve the study purpose. Qualitative methods are appropriate for a constructivist inquiry (Merriam, 2015; Lincoln & Guba, 1985). The purpose of this study is to understand the concept of organizational knowledge and its associate component parts within a specific context, that is, this interpretive inquiry is situated within the selected context of higher education, and more specifically the perspective of participating undergraduate academic advisors. Similar to constructivism, context is important to qualitative researchers, in which meaning is viewed as context and time bound (Lapan, Quarteroli, & Reimer, 2012; Merriam, 2015). The aim is to describe how particular things happen at a particular place and time (Stake, 1995; Willis, 2007) and to understand how people construct meaning of their world (Merriam, 2015). The qualitative researcher develops understanding from the data inductively and prior theory does not pre-determine the findings (Merriam, 2015). The qualitative research expects and accepts multiple perspectives and assumes that reality is socially

constructed and there exists multiple interpretations of a single event (Willis, 2007; Merriam, 2015).

Unlike other research designs that utilize questionnaires or instruments developed by the researcher, in qualitative studies the researcher is the main instrument—the gatherer and processor of the data. The overall purpose of qualitative research is to achieve an understanding and “requires a data collection instrument that is sensitive to underlying meaning when gathering and interpreting data” (p. 2). The human as an instrument is well suited to do this task, and able to construct meaning from data (Lincoln & Guba, 1985; Merriam, 2015).

A qualitative research strategy is agreeable to the human as instrument because it is inclusive of the researcher’s natural inclination to look, listen, and read; natural activities for humans (Lincoln & Guba, 1985, p. 199). The researchers’ guiding interests and disciplinary perspectives provide an avenue to develop ideas and specific concepts (Charmaz, 2014; Merriam, 2016). Yet, the focus is on the participants meaning of their experience, and not the meaning the researcher ascribes to the data (Creswell, 2013).

The purpose of this exploratory study is to develop an applied and practical understanding of the concept of organizational knowledge and its associate component parts. Description and interpretation are sought and are amenable to a qualitative research strategy. A qualitative research design is such that it lends itself to the study of this particular phenomenon (Creswell, 2013). The process of research is conducted at the site the participant experiences the phenomenon under study. Characteristic of this design researchers have facetime with participants, whether one-on-one or within a group. The use of a qualitative research strategy to explore the understood or constructed meanings of the concept of organizational knowledge and its associate component parts by participants is suited for the proposed study and aligns with the

constructivist paradigm. Further, although multiple qualitative research approaches exist, a case study research approach will be used. The primary goal of this inquiry is to study a case or ‘instance’ of the concept of organizational knowledge and its associate component parts. The intended research goal aligns the inquiry with a case study approach, as described next.

### **Case Study Research Approach and Methods**

Case study is one approach for conducting qualitative research (Creswell, 2013; Lincoln & Guba, 1985; Merriam, 2015; Stake, 1995). In contrast to other qualitative approaches, the inquiry does not seek to understand the cultural underpinnings of the concept of organizational knowledge and its associate component parts within the context of higher education (anthropological), nor is the goal to complete a historical account (historical). It is not focused on the lived experience of participants with the concept (phenomenology), and the goal is not to generate theory (grounded theory). The case study research approach aligns with a qualitative research strategy because the primary concern of a case study is to understand one case (Stake, 1985). It is a “holistic, intensive, rich description and analysis of an individual instance” (Merriam, 1985, p. 206). The researcher as human instrument has an interpretive role to “record objectively what is happening but simultaneously examines the meaning of the case... and tries to preserve the multiple realities, the different and even contradictory views of what is happening” (Stake, 1985, p. 8).

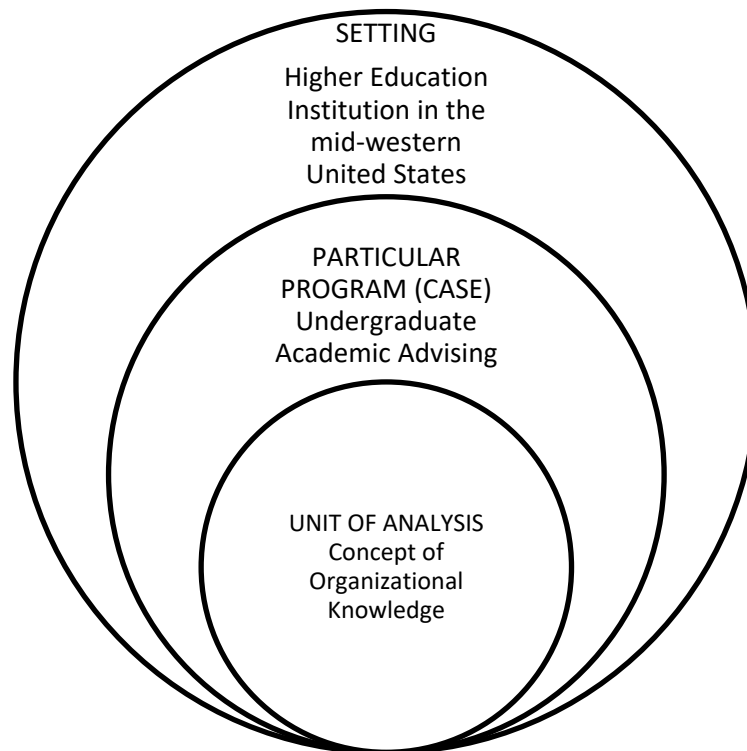
A constructivist and qualitative inquiry are exploratory oriented and results in understanding. The discovery and understanding sought is in accordance with the use of case study. The aim of the case study approach is to understand the case (Stake, 1995). The setting for the case study is in the natural setting, as context is important in such a case study, and assumes a case is not separated from the context of which it is a part (Houghton et al., 2006). The strength

of the case study approach is its inductive mode of study. Pre-emptive theories are not a part of this approach (Houghton et al., 2006). Rather, the aim is to explore, describe, and understand the uniqueness of a case and its particulars (Merriam, 1991; Houghton et.al, 2013; Stake, 1985).

There are various descriptions and methodologies associated with case study research (Merriam, 2015; Stake, 1995; Savin-Biden & Major, 2013) and as such, it is necessary to define case study for this inquiry. Savin-Biden and Major (2013) propose a definition of case study that is inclusive of multiple case study descriptions. Thus, the definition of case study adopted for the inquiry describes case study as an approach that focuses on a specific case, employs a particular case study research approach, and documents the inquiry with a narrative research report (Savin-Biden and Major, 2013, p. 154). The key characteristic of a case is its boundedness. It can be bounded by time and place (Creswell, 2013), time and activity (Stake, 1978) and by definition and context (Merriam, 1991). A bounded case study is “focused and intensive as well as narrow in scope” (Savin-Baden & Major, 2013, p. 154), it has specificity and not generality (Stake, 1985), it is any research that can be defined as a coherent entity (Houghton et al., 2013).

Case studies are an in-depth examination of a unit of analysis (Merriam, 2015; Savin-Baden & Major, 2013; Stake, 1995). The unit of analysis or case is a particular instance of a phenomenon (Savin-Baden & Major, 2013). A case can be a specific individual (i.e., position, demographic), a group of individuals, a particular event, process, an innovative program, organization, institution, a location, or period of time (Stake, 1985; Merriam, 1988, Houghton, et al., 2013). The research question frames the case, *what is the concept of organizational knowledge and its associate component parts from the perspective of participating undergraduate academic advisors within the selected context of a higher education institution in the mid-western United States?* As such the case for this study is bounded, insomuch that the unit

of analysis is an instance of the concept of organizational knowledge and its associate component parts, within a particular program (i.e., undergraduate academic advising), within one university from a class of higher education institutions in the mid-western United States. Figure 8 is a visual representation of the boundaries of the study. Having discussed the constructivist research paradigm, qualitative research strategy, and case study research approach, the next consideration are the methods of data collection and data analysis.



**Figure 8**  
*The Boundedness of the Empirical Case Study*

### **Data Collection**

Data were collected primarily through open-ended, semi-structured interviews. Supplemental data collection methods included observations and document analysis. Interviews were conducted with five undergraduate academic advisors that varied in duration from 30 minutes to one hour. All interviews were audio-recorded and transcribed word-verbatim. The use

of a semi-structured interview allowed for follow-up questions to clarify respondent's responses and provided richer data for interpretation. The use of open-ended questions allowed the participants to articulate their experiences and elaborate (Gibson & Brown, 2009). Approval was sought from participants to audio record the interviews. Written notes were also taken to supplement the audio recording and make possible researcher observations. Interviews (e.g., see Appendix D for interview protocol) were conducted in a setting that respondents chose to make respondents more comfortable (Patton, 2014).

Eight undergraduate advising appointments were observed with each appointment lasting thirty-minutes. The standard advising appointment was scheduled for 30 minutes. Observations were overt and participants knew the purpose of the study and the researcher's identity and role. Observations were conducted of appointments scheduled in advance to obtain the students' informed consent for participation (e.g., see Appendix C). Advisors emailed the student in advance to let the student know that the advisor had chosen to participate in the study, and the student had the right to consent to participation. Only those advising appointments in which a student informed consent had been obtained were observed. For the purpose of this study the position of complete observer was adopted (Bryman, 2008; Merriam, 2016). I observed and attended to the following during the observation period: the physical setting, participants, activities and interactions, conversation, and the researcher's own behavior (Merriam, 2016). The observation form used in the empirical study was unstructured (Gibson & Brown, 2009; Merriam, 2016) in alignment with the constructivist methodology. The goal was to construct meaning from the observation and not prescribe preassigned values to the observation (Gibson & Brown, 2009). In unstructured observations discovery and understanding is worked through in context, "researchers do not follow a tightly defined schedule of observation, but work in a more

iterative fashion to find out about a particular setting or set of practices” (Gibson & Brown, 2009, p. 101). Notes were also recorded during the observation. Lastly documents were collected from the advisors in the form of annual reports.

### ***Site selection***

The research site was a four-year, Carnegie Class Research University located in the mid-western United States. The university consists of eight colleges and offers both graduate and undergraduate degree programs. The full-time undergraduate student enrollment is approximately 23,000 students. This university was selected because its graduation and retention rates are higher than the national average. A central component of the selected higher education institution’s undergraduate student retention plan was a new advising model, in which the university began intentionally hiring academic advisors located within, and specific to individual academic units. Thus, the participants for this study were undergraduate academic advisors. The rationale for selecting these participants is due to the fact that academic advising is an essential strategy through which universities achieve student retention and graduation goals (Habley, 2007).

### ***Participants***

Participants were identified using the institution’s website and invited to participate by email (e.g., see Appendix A). Purposeful sampling was used to identify participants that met specific criteria determined by the researcher (Bryman, 2008, p. 415) and in keeping with (Patton, 2014), who recommends selecting information rich cases that will provide an in-depth understanding of the phenomenon. The sample size for this study was five undergraduate academic advisors. To be included in the study participants had to (a) be employed at least one year as an undergraduate academic advisor, (b) hired as part of the selected institution’s student

retention initiative, and (c) only advise undergraduate students. Participants were excluded if they had faculty or administrative responsibilities. Participants were required to sign a consent form and complete a demographic information form (e.g., see Appendix E). Consent of participation (e.g., see Appendix B) was obtained for each element of data collection (i.e., interviews, observations, and document analysis). Identifying information was removed from the data and pseudonyms were used to protect participants' identity.

### **Data Analysis**

Data analyses were iterative and the coding scheme for analysis was developed inductively from the data. Data analysis was ongoing and began in the early stages of data collection (Guba & Lincoln, 1990; Stake, 1995). Once the first interview was complete the transcription process began. The statements of each interview were transcribed word-verbatim to document the participant's responses. The transcripts were reviewed to make certain that the transcribed words matched the word of the participants. The recordings and transcripts were "approached with an openness to whatever meanings emerged" (Hycner, 1985, p. 280).

Observations were analyzed within the same day of observation. After each observation I spoke with the advisor to clarify any assumptions, to check my bias, and check for understanding. To assist with accuracy of notes from the observation time was schedule after each observation period to write and record the detail of the observation. I wrote initial impressions in the margins of the field notes (Patton, 2014; Saldana, 2016). Analysis of the observations included operationalizing the thoughts I encountered during the observation and I tried to understand why things happened as they did and reflected on aspects of the observations that were interesting to the study (Bazeley, 2013; Patton, 2014).



Documents were analyzed using a constant comparison approach (Lincoln & Guba, 1985; Schreier, 2012). The documents were examined with attention to the documents purpose and content (Gibson & Brown, 2009; Merriam, 2016). I reviewed each annual report to gain an overview of the content of advising annual reports. I then read through each report individually and wrote notes in the margins. I asked questions as to how the document provides background and context on the concept of organizational knowledge and its associate component parts from the perspective of the participating undergraduate academic advisors in the selected higher education institution (Gibson & Brown, 2009). The documents supplemented the other data sources (e.g., interviews observations), reflecting what Lincoln and Guba (1985) refer to as data triangulation and were used to add understanding to the findings of other data sources (Bowen, 2009; Gibson & Brown, 2009; Patton, 2014).

Within-case analysis and coding were conducted sequentially of interview transcripts, then observations, and lastly documents. Within-case analysis has a goal to “describe, understand, and explain what has happened in a single, bounded context—the ‘case’ or site” (Miles et al., 2014, p. 100). Thus, each type of data was considered a singular case. Interview transcripts were analyzed first, then observations were analyzed separately, and lastly documents were analyzed. The sequential analysis was to understand and describe the concept of organizational knowledge and its associate components parts as constructed in the interviews, observations, and documents. After within-case analysis of each data source a cross-case analysis was conducted to “deepen understanding and explanation” of the phenomenon across the three data sources. The constructions of the concept of organizational knowledge and its associate component parts, of each data source were compared with one another (Miles et al., 2014, p. 101). A five-step process was used to analyze the data, (a) each data source was

preliminarily reviewed to gain familiarity of its content and build a sense of the whole (Bazeley, 2013), (b) preliminary words or phrases were written in the margins, (c) the data were unitized based on topic changes (Saldana, 2013), (d) definition and inclusion criteria were developed for each code, and (e) pattern coding was used to organize similarly coded units into themes (i.e., constructed associate component parts). This five-step coding process was used for both within and cross-case analyses. Memos were used to keep notes on insights, ideas, patterns, connections and contradictions throughout the coding process (Gibson & Brown, 2009; Miles et al., 2014; Patton, 2014; Stake, 1995). Interpretations of the data were subject to peer-checking with my advisor and undergraduate academic advising colleagues. I member-checked with participants via face-to-face member checking sessions (Lincoln & Guba, 2013).

From the data analysis of the cross-comparison of interviews, observations and documents, peer checking and member checking nine associate component parts of the concept of organizational knowledge were constructed. They are presented and discussed in the section following.

### **Findings**

From the perspective of participating undergraduate academic advisors in a selected higher education institution in the mid-western United States, the concept of organizational knowledge is knowledge that (a) has description, (b) is foundational, (c) is knowledge to find balance, (d) knowledge to find solutions, (e) is knowledge of processes, (f) knowledge of philosophies of practice, (g) knowledge about the student experience, (h) knowledge about the advising role, and (i) knowledge to do the work. Description of the nine associate component parts of the concept of organizational knowledge follows. Text in quotations are from the interviewed participants (i.e., participating undergraduate academic advisors).

## **First Associate Component Part: Foundational Knowledge**

Foundational knowledge is the underlying base of knowledge that informs the work of an undergraduate academic advisor. Foundational knowledge consists of two knowledge types 1) knowledge related to degree planning and, 2) experiential knowledge, i.e., prior knowledge. Construction of a degree plan requires that advisors know the courses in a major program of study that a student must complete to graduate. At a basic level, undergraduate academic advisors know their major curriculum, know how to use technical tools to access degree information, and how to incorporate student records as part of the plan. Advisors know curriculum in terms of course “sequencing and ordering” and course types like electives, minor-relevant courses, and general education courses. Degree planning is a complex process that requires advisors to know more than the curriculum and how to sequence and order it.

Undergraduate academic advisors must have an advanced understanding of the components associated with degree planning. “Phillip” describes this knowledge as “knowledge of the department and what is going on, what are the classes offered, when are they scheduled, [who] are the instructors that teach those courses, when those courses are becoming available and when not, and when those courses are going to disappear or not. Some knowledge about the [course] content...” Advisors use such knowledge to help students rearrange classes for education abroad experiences, for a desired graduation date, to accommodate a minor, and internships. They help students with degree planning because they have knowledge of technical tools that can be used to access a students’ academic record and help students plan accordingly, such as a degree audit. “Jamee” described a degree audit as —“an electronic checksheet that keeps track of all their [students] credits, their requirements for the university and their

requirements for their major.” Advisors competence in degree planning is foundational to the role of advising.

The second type of knowledge that is foundational for advisors is experiential knowledge, “knowledge that emerges from life experience” (dictionary.apa.org), i.e., prior knowledge or transferable skills. Transferable skills refer to “aptitude and knowledge acquired through personal experience such as schooling, jobs, classes, hobbies, sports ... developed and able to be used in future employment” (Medixteam.com). Advisors experiential knowledge includes learning from the experiences of others. For instance, as a new advisor “Nan” drew on faculty’s experience with curriculum, including how to explain curriculum and its nuances to students. Advisors’ own personal college experiences influence their interactions with students. “Nan” and “Mutant’s” advising practices are influenced by how they wish they had been treated while in college. Advisors also use knowledge from prior work experiences. Knowing that what they know, is a result of the “experiences [of] having worked in higher education.” Past experiences and lessons learned from others inform an advisor’s ability to find balance, the second associate component part of advisors’ organizational knowledge.

### **Second Associate Component Part: Knowledge to Find Balance**

Finding balance is conceptually described as the ability to recognize or discover how to reconcile contrasting, opposing, or interactive elements as an undergraduate academic advisor, including the stability of one’s mind or feelings (Merriam-Webster Online). Finding balance is an associate component part concerned with the ability to establish and maintain position boundaries, put time and effort toward some things and not others, and finding a way. “Phillip” describes finding balance as this “ideal that you, and for lack of a better way of saying this, you kind of have to switch your roles, you have to change hats and understand exactly what one role

requires and the other role requires....” It is through trial and error that advisors figure out how to switch roles and adjust to the position’s “steep learning curve.”

Adjusting to the position is knowing what will or can be achieved in the role that is, reconciling contrasting expectations. Known expectations include self-expectations, expectations from others, and expectations of competing priorities. Self-expectations derive from what advisors believe they should be able to achieve. “Izzy” wanted to be able to do the job “perfectly from the get-go” and learned that the job is not “cut and dry.” Advisors know that self-imposed expectations can lead to imbalance.

“Jamee” articulated the idea of imbalance when discussing expectations related to their accessibility for students:

I keep saying email me if you’ve got any questions and I like truly mean it. Like what do you have, if this doesn’t work out let me know. And then I’m like everyone’s letting me know. So, I set it up, so I am accessible to you and then I feel like if I’m not accessible in the next 10 minutes I am doing you a disservice because I said I was accessible. And I am [available] it’s just the timeframes [have] changed slightly in this peak time. It’s in the very time that students don’t want the timeframe to change. It’s not fair, it’s not fair.

Expectations from others include those of multiple supervisors or faculty expectations about advising. Conflicting expectations arise when more than one person assigns an advisor a duty. “Phillip” expressed that “the university and often other people higher in the department, do not realize it [the competing expectations] because they don’t you know they assign you one, but they don’t realize someone else assigned you two other things on top of that and they’re not just like oh do this and that.” Advisors know that balance entails setting expectations as well in the form of clarifying boundaries. Advisors know how to make the role less confusing and more

comprehensible by limiting their sphere of activity through clarified boundaries and communication of what an advisor is not. For instance, “Phillip” clarifies boundaries for students in the case of mental health by letting students know “I’m not a therapist, I’m not a counselor.” Finding balance in the role related to expectations and through boundaries enable advisors to complete an essential part of the role which is to help students find solutions.

### **Third Associate Component Part: Knowledge to Find Solutions**

Advisors know how to find solutions—to find an answer to, an explanation for, or effectively deal with a problem, an unsettled question, or a perplexing student concern (Merriam-Webster Online). They know to find a probable solution they need to identify the student’s concern, and to identify a concern they need to ask questions. Advisors arrive at solutions by asking questions that “aren’t directly related to academics like, ‘are you eating? How did you sleep last night’”? Advisors know that certain factors, such as a student’s graduation timeline informs a determinate solution. “Phillip” as an advisor wants a student to leave their office with “some sort of feeling that they found a solution, they know how to find a solution, or they understand why the solution was not found.” Finding a solution is often influenced by the availability of university resources.

Available university resources are sources of information or expertise that students access to function more effectively in the college environment and to enhance the quality of their student experience. Knowledge of resources help advisors determine “what resources seem like the best fit for students and help them navigate those,” including campus resources, niche department resources and umbrella resources. “Izzy” finds that umbrella resources have importance because they are those “go to spots and office’s that [advisors] use on a frequent basis.” In offering resources advisors know that there are many “possible avenues” a student can

pursue. Advisors know that by explaining such avenues to students they give students an account of what can be done within their ability, to progress through college and graduate. However, advisors also know that university processes influence a student's graduation.

#### **Fourth Associate Component Part: Knowledge of Processes**

Advisors know the processes that impact student life. The series of actions, steps, or operations students must take to achieve graduation. Students make progress toward graduation by getting through college, completing university processes, or processing through personal student experiences. "Nan" knows that there are desired processes, "a way people say they want things done, but there's a way sometimes of how things actually get done." Advisors know that there are loopholes students can navigate, like policies that are expressed as operating one way but are enacted in a different way, or a deadline that can be appealed. Advisors are aware of the exceptions. If a student has certain circumstances that might call for an exception to a process, advisors know about "these work arounds" and that students have options. Advisors know that the institution tries to "accommodate people on an individual level and understand that stuff comes up in lives that can't be prevented."

Advisors also know processes that extend beyond students. Advisors know the process of change at the university and processes of select university offices like the registrar's office (e.g., course registration), career services (e.g., registering for a career fair), admissions (e.g., placement exams), and university housing (e.g. cancelling a contract). "Jamee" describes the university as a big system in which "things can go really fast; some things can change really quickly." And rapid changes without effective communication create surprise, like "surprise that is just happening, it's not written anywhere, it's not listed anywhere but I got an email two months ago about it... and it's like what? all these changes just happened." Exceptions, appeals,

and university change coalesce around advisors knowing the process of college and the processes students might experience. It's "knowledge that all advisors use [as] a basis understanding of higher education and what is needed to succeed in higher education."

The process of college that students experience, and advisors know is aptly described by "Nan":

It's students getting to graduation... through all their classes, they got through all the emotional pieces that might impact them to not be as successful in their classes. They took advantage of resources... they picked up a lot of things along the way. They actively picked up things along the way....bees jumping from flower to flower and picking up pollen on their feet...this busy little bee picking up this knowledge, taking up this experience and everywhere they go they're developing this sense of self, understanding academically, emotionally, and things are blossoming

### **Fifth Associate Component Part: Knowledge of Philosophies of Practice**

Advisors know the habitual guiding principles that underlie their advising or their philosophies, i.e. beliefs, concepts, and attitudes that inform their work. Advisors enact philosophies in their professional work, affirming students, holding students accountable, and putting students first. Advisors know that to affirm students they need to honor the student and their choices, thoughts, and actions during an advising appointment, a drop-in office visit, or through email. Advisors know student choices aren't necessarily ideal, and that students may not always think about the long-term effects of their decision. For instance, a student may want to change their degree program after completing courses in the major and may think "ooh, I am feeling guilty and anxious that I'm not loving this as much and is this a problem." The job of the advisor is to say, "it's absolutely not a problem."



The notion of accountability is related to student accountability and self-accountability. Advisors know to hold a student accountable for knowing their curriculum and being an active participant in their own development. Candid conversations are the means that advisors know to hold students accountable. Advisors have honest and sincere conversations with students about their advisor observations and formed opinions, or ideas about student aspirations and mental health. The aim is to highlight discrepancies in a student's narrative account. Advisors accountability conversations can be related to mental health. An advisor might tell a student that they've seen a change in a student's demeanor. For instance, "Nan" has told students "this is who you were when you first came in and now this is how you are showing up." It's about advisors "not being afraid to ask questions" such as "what's going on for you"?

Advisors know to hold students accountable on their path to graduation, that is, to help students prioritize what is most important to reach their goals. For instance, a student's high anxiety levels. Advisors encourage students to think about the impacts of mental health and their ability to "function within the classroom" and "in society." Advisors know that practicing accountability requires an advisor to highlight discrepancies between future goals and current behaviors. For "Phillip" the practice of accountability may necessitate an advisor saying "you want to be in the NFL one day, but you also love smoking weed. These two things cannot coexist...." "Nan" states that accountability involves knowing how to provide "a check for students that they're on the right path" academically, professionally, and emotionally. Additionally, advisors know that they too must be held accountable. Self-accountability for an advisor is having ownership of their mistakes or doing "the work to help fix the issue" when it is the advisor's fault.

Knowingly, advisors operate from the philosophy of putting students first. They put students first by letting students lead advising appointments and giving students the opportunity to guide the conversation. “Nan” expressed that putting students first involves advisors flexing, adjusting, or adapting depending on how students come to an appointment. Advisors know that they need to first, “figure out where [students] want to go with the appointment,” and place advisor concerns second. “Nan” explained that they put students first by addressing “their immediate concern, because if I don’t have their immediate concern addressed none of the other parts that I might want them to have—they won’t necessarily take it in or hear it.” This knowledge to put students first is just one part of an advisor’s knowledge about the student experience.

#### **Sixth Associate Component Part: Knowledge About the Student Experience**

Knowledge about the student experience is academic advisors’ knowledge about what students personally encounter, undergo, or live through; the events that make up a student’s collegiate life (Merriam-Webster Online). Advisors know student needs and the roadblocks that are a part of the students’ college experience. The advising role is encompassing and “Phillip” states that if you want to know about students, “if you are going to talk about student life, what students are experiencing” advisors are the experts. Advisors can explain the “why” of the student experience, how students move through college successfully, how students enter college, and why they select a chosen major. Advisors know students’ backgrounds, and that a student may have entered college to support their family. They know students’ “past records in terms of high school stuff, current records, [and] notes from other advisors.” Advisors have knowledge of the “college experience” and of how students develop emotionally, professionally, and academically. “Jamee” highlights that “advisors sit with students and see them and see patterns”

they have knowledge of student needs and roadblocks to degree completion, all the “little things.” While, it is important for advisors to know the student experience, it is also important that advisors have knowledge about the advising role.

### **Seventh Associate Component Part: Knowledge About the Advising Role**

Advisors have knowledge about the advising role, that is, the part played by an advisor and their articulated purpose within the university. Advisors know that their purpose is to be “folks on board” that work with students to “navigate the university.” The purpose of advising is to help with student retention, graduation, and student success. Advisors “monitor and go through the curriculum and go through classes” to make sure that students are “on track to graduation.” Advisors know that at the university the role can be ambiguous and differ in implementation and understanding across campus.

Ambiguity surfaces as new advisors enter the role without a clear understanding. “Phillip” describes what was absent in their introduction to the position. “No here’s the history, here’s what initiative one is, cause guess what we are now on initiative two, what is initiative two? What was initiative one? What were the outcomes of it? Here’s how advising got started.” “Nan” states that at the university “people understand why we need these [advising roles]... people appreciate these [advising] roles. But ... they don’t fully have understanding [of] why these roles [are] valuable to academic success [and] student success.”

Ambiguity exists in the interpretation and implementation of the role across campus at different organizational levels, e.g., college or department. “Nan” describes what they believe influences the ambiguity of the role, “I don’t think we have a clear baseline. I [don’t] think all our moving parts are getting us off the ground, not all of our parts are communicating with each other. I don’t even think we have a clear language. We’re all talking different languages.”

Advisors ask different questions of students, of processes, and systems and “not everyone seems to... prioritize certain aspects of student life.” In spite of the ambiguous nature of the role, advisors have knowledge to do the work of advising.

### **Eighth Associate Component Part: Knowledge to Do the Work**

Advisors knowledge to do the work, is knowing how to actively perform actions and tasks with sustained effort to achieve a purpose, result, or desired effect. Advisors know to do the work requires organizing the work, preparing the work, recording the work, and knowing the advising work cycles. Organizing the work is the way in which advisors arrange or structure their day, work duties, and tasks that need to be done. It is how an advisor starts and end their workday, structure the morning and afternoon, arrive to work, prioritize first tasks, and address student concerns; essentially organizing time and tasks throughout the day. “Izzy” described organizing her work as “organized chaos.” Knowing how to organize the “controlled chaos” is knowing how to do the work to manage “random stuff” that comes up throughout the day. Random tasks include email, phone calls, students dropping into the office, working with faculty, or completing administrative tasks, “those sorts of special things that pop up on to do lists.”

Knowing how to do the work is knowing how to prep your work and differs depending on the advisor. For “Phillip” preparation was a sense of feeling prepared, being ready for what might come next, “getting his mind right.” Indeed, preparation in the sense of being made ready for use (Oxford Language Dictionary) that is, advisors being ready to be in-use during an advising appointment. It was important to “Phillip” that he understood what he was “walking into and ... preparing for.” The act of preparation has importance because it gives advisors a chance to look over their calendar and their day “to understand what is happening.” Advisors know that preparation before appointments helps to refresh one’s memory. “Mutant” describes

that in the act of preparation, which includes reviewing advising notes, a student's degree audit and "what the [students'] have put in the comments before coming to the advising appointment" advisors can identify what they "need to sorta take note of and bring up in conversation." By recording the work, that is developing a documentation of the student and advisor interaction, they have a reference for knowing the contents of a previous appointment. Advisors may use this information to hold students accountable. For instance, "Nan" likes to record a note to remind them that a "student did not come prepared."

Lastly, doing the work is knowing the cycles of work and what occurs at the beginning of the semester, halfway through the semester, during peak advising, and the end of the semester. The type of work an advisor does will change as a result of the advising cycle ranging from course withdraw and helping a student finalize their schedule, to homesickness, to registering for the upcoming semester. Knowledge to do the work is not simplistic nor is advisors' organizational knowledge.

### **Ninth Associate Component Part: Descriptions of Organizational Knowledge**

When asked directly what they considered to be organizational knowledge, advisors described the concept of organizational knowledge as complex and inclusive of the work norms and organizational culture—of individuals, of groups, and the larger institution. "Nan" felt that what makes for organizational knowledge is "what is more true than false...more people adhere to this or agree to this." It is an agreed upon way of doing the work or group knowledge. Mutant stated that organizational knowledge is:

certain topics or certain things that we all know. Or certain areas that we all work at. Or certain group knowledge of policies, procedures, cultures, ways of doing stuff that is kind of the same across the board, that is the normal way to do things, knowledge kind of an

overarching group of things that we do, that are similar to everybody regardless of their area.

“Mutant’s” idea of the concept of organizational knowledge aligns with the concept of culture. Appropriate to “Mutant’s” description of organizational knowledge, culture can be defined as “the set of shared attitudes, values, goals, and practices that characterizes an institution or organization” (Merriam-Webster Online). Similarly, “Jamee” articulated organizational knowledge as culture, “when I hear the term organizational knowledge. Already I think of culture. I think of what is the office culture or the department culture, or the university culture...how the system is set up, and how is knowledge disseminated, shared, not shared, not disseminated, who gets what.” Organizational knowledge encompasses how knowledge is disseminated through a top-down approach or across a group. “Izzy” considered organizational knowledge as the dissemination of knowledge, that is, the organizations philosophy on dispensing knowledge. The knowledge that the university “want students to gain from them or have access to through the organization.”

“Phillip” articulated organizational knowledge as “understanding the function of a program, the curriculum and how it is supposed to be run.” It’s about an individual, department or organization’s “sphere of influence.” Organizational knowledge is layered at “your department and your college, your major, your curriculum, you also have to have this certain amount of knowledge in terms of what your role as an advisor is to the greater community.” “Nan” was unsure if the concept of organizational knowledge was applicable to academic advisors because they aren’t truly “established as an organization.” Inasmuch that advisors do not have clear or consistent knowledge. An organization has “a mission, and a vision, they have

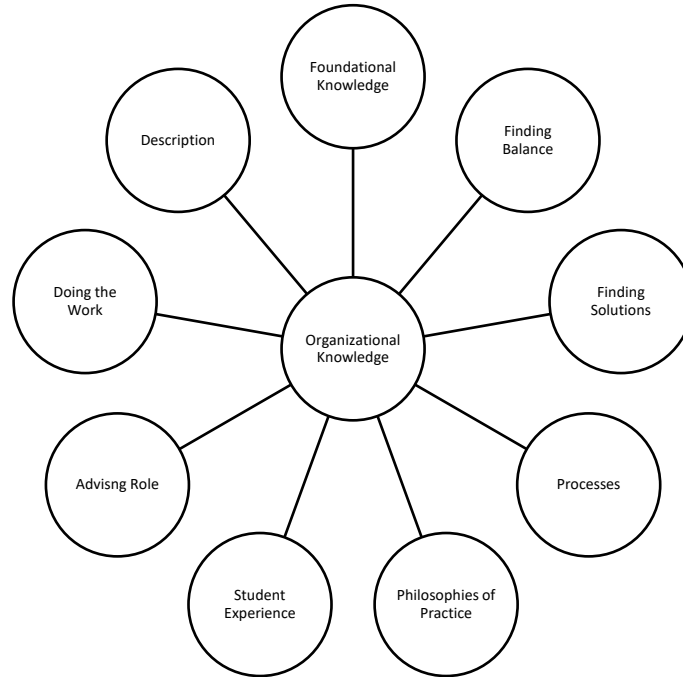
shared terms and they understand, they have key players and people have roles...there's structure" all of which is lacking in advising at the university.

### **Discussion**

The purpose of this qualitative case study was to explore and understand an instance of the concept of organizational knowledge and its associate component parts. To this end the case study sought to answer the research question *what is the concept of organizational knowledge and its associate components parts from the perspective of participating undergraduate academic advisors in a selected higher education institution in the mid-western United States?*

Constructed from the perspective of undergraduate academic advisors' organizational knowledge is layered, (i.e., major, department, college, and university levels), overarching group knowledge that people adhere to and is normalized and shared through an organization's structure, roles, philosophies, spheres of influence and culture, i.e., office, departmental and university culture. Organizational knowledge is disseminated to and is accessible to advisors; and informs what advisors work on and their ways of doing.

Advisors concept of organizational knowledge consists of nine associate component parts, that is, (a) foundational knowledge, (b) knowledge to find balance, (c) knowledge to find solutions, (d) knowledge of processes, (e) knowledge of philosophies of practice, (f) knowledge about the student experience, (g) knowledge about the advising role, (h) knowledge to do the work, and (i) knowledge that is descriptive. Figure 9 is a conceptual model of these associate component parts.



**Figure 9**  
*Conceptual Model of Undergraduate Academic Advisors' Organizational Knowledge and its Nine Associate Component Parts*

The importance of this study is that it adds to the empirical understanding of both undergraduate academic advising and the concept of organizational knowledge and its associate component parts. While the data, findings, and conclusions are from the perspective of undergraduate academic advisors, the intent of the study was to explore and bring meaning to the concept of organizational knowledge through description of its associate component parts through the study of a case, or an instance of organizational knowledge. The constructed definition of the concept of organizational knowledge aligns with the few empirical studies conducted on the concept of organizational knowledge. Specifically, Tsoukas and Vladimirou's (2001) definition of organizational knowledge as

the capability of organization members to draw distinctions in the process of carrying out their work, in particular concrete contexts, by enacting sets of generalizations



(propositional statements) whose application depends on historically evolved and collective understandings and experiences. (p. 983)

Undergraduate academic advisors carry out their work in the context of higher education and advising, and apply generalizations that have been developed collectively as a result of advisors talking with one another, documentation of knowledge within student data bases, annual reports, or through problem solving activities with students. In the act of working with students, advisors draw distinctions to identify the appropriate solution or resource and help students develop a degree plan.

“Nan” stated that advisors do not have organizational knowledge, that is advisors do not know the “taken-for-granted stream of everyday routines, interactions, and events that constitute both individual and social practices” (Patriotta, 2004, p. 5). Through interview, observation, and document analysis this study was able to explore the taken-for-grantedness of the practice of undergraduate academic advising and help make clear the organizational knowledge (i.e., rules, principles, generalizations) of undergraduate academic advising which can clarify confusion, enable reflection and improve practice (Tsoukas & Vladimirous, 2001).

Central to discourse on the concept of organizational knowledge are explicit and tacit dimensions of knowledge. Explicit organizational knowledge is codified, communicated, expressed in words and captured in records (Nonaka, 1994; Spender, 1996; Toften & Olson, 2003). Tacit organizational knowledge is described as personable, “hard to formalize and communicate, deeply rooted in action, commitments, and involvements in a specific context” (Nonaka, 1994, p. 16). Constant in the literature related to the concept of organizational knowledge is the idea that to capture organizational knowledge individual tacit knowledge need

only be transformed to explicit knowledge and the adage that we “know more than we can tell” (Polanyi, 1966, p. 4).

However, Polanyi (1958) describes all knowledge as having tacit dimensions. Patriotta (2004) offers another way to operationalize the distinction between explicit and tacit knowledge “in terms of a dichotomy between background and foreground” (p. 6). Thus, this study’s conceptualization of organizational knowledge and its associate parts has brought forth internalized, institutionalized and automatic knowledge (Patriotta, 2004). Interviews gave advisors the opportunity to reflect on their automatic knowledge, through observations I was able to see automatic knowledge in use and clarify what may not have been expressed during the interviews, and review of documents provided a form of insight which is not observable or may not come readily to an interviewee (Patton, 2002). Hence, the relevance and significance of this study has implications for future, practice, research, and theory.

## **Implications**

### **Implications for Practice**

Advisors’ perspectives of the concept of organizational knowledge and its associate components parts has implications for practice. For example, the associate component parts of this study may be used to inform the development of an undergraduate advisor training program. Organizational knowledge is “acquired through socialization of organizational members into a group by guidance of a mentor” (Nonaka et al., 2001, p. 647). A training program enables socialization and the distribution of knowledge to organizational members. Through yearly training the advisors’ organizational knowledge and associate component parts become formalized and made explicit so that members can draw upon the formalized knowledge during their work (Tsoukas & Vladimirou, 2001). Advisor’s knowledge of processes can further

streamline and improve organizational capacity by addressing gaps in the system. Finding gaps in the organizational system can help develop new ways of thinking and doing (i.e., knowledge flows) in a higher education setting. Thus, advisors and their organizations can use the knowledge flows to their benefit, such as, addressing gaps in the student experience e.g., related to university processes.

### **Implications for Research**

The findings from this study inform several areas of future research for understanding the concept of organizational knowledge and its associate components parts in higher education institutions. Future research on the concept should aim to explore different settings, different participants, and the use of different research approaches. This inquiry focused on the concept of organizational knowledge and its associate component parts in the context of a four-year, Carnegie Class Research University located in the mid-western United States. Future inquiry might include different higher education settings, such as Baccalaureate Colleges, Associate's Colleges, Special Focus Institutions (e.g., health professions or technical professions), and/or Tribal Colleges ([https://carnegieclassifications.iu.edu/classification\\_descriptions/basic.php](https://carnegieclassifications.iu.edu/classification_descriptions/basic.php)). If one is to understand the concept of organizational knowledge and its associate component parts context matters, for “what makes sense in one context can change or even lose its meaning when communicated in a different context” (Nonaka, 1994).

Context differs across organizational subcultures such as different employee groups, organizational units, or geographic locations. Organizational subcultures influence knowledge sharing and what is held in common by organization members (Sackmann, 1992). Thus, a likely research focus is how the concept of organizational knowledge and its associate component parts are perceived by different employee groups, e.g., university housing, teaching and learning

professionals, faculty, or administration. Further, undergraduate academic advisors work in different subcultures across university academic majors, academic departments, and academic colleges. A deeper dive into the concept and its associate component parts from the perspective of academic advisors across the university would deepen this study's framework and extend its application. The associate component part Knowledge of Advising Role alludes to the importance of subcultures, that is, the difference in implementation of advising across departments. Research on the concept of organizational knowledge and its associate component parts should explore the interactions between individuals in different employee groups, their expertise, values, and insights (Nonaka et al. 2001).

Lastly, the inductive nature of this inquiry and its resulting nine associate component parts may serve as propositions for studies on the concept of organizational knowledge and its associate component parts using a deductive research approach. One may use the framework constructed in this study to see if these associate component parts are identifiable in (a) another university undergraduate advising program, (b) higher education institutions academic and student support units, and (c) different organizational contexts, e.g., corporate, non-profit, or industry.

### **Implications for Theory**

The outcome of this inquiry contributes to theorizing on the concept of organizational knowledge and its associate component parts. Through rigorous analysis and synthesis nine associate components parts were constructed for the concept of organization knowledge within the specific context of higher education. These nine associate component parts provide new insights and description about knowledge in higher education beyond knowledge of teaching and research. The identification and description of associate component parts is a starting point for

theorizing because this inquiry “helps us to understand, explain, anticipate, and know” about the concept “in better and more informed ways, and to better ends and outcomes” (Lynham, 2002, p. 222), thus enabling additional inquiry into the concept of organizational knowledge and its associate component parts in different situations, context, settings, and with different participants. Such inquiry may lead to developing additional logic of the conceptual framework constructed in this study, and the component parts may be “further inquired into and confirmed through rigorous research and relevant application” (Lynham, 2002, p. 233). Together the implications for research, practice, and theory improve praxis.

### **Conclusion**

The case study sought to study the concept of organizational knowledge and its associate component parts in the context of a higher education institution in the mid-western United States through the lens of undergraduate academic advisors. Through a disciplined inquiry using a qualitative case study approach of interviews, observations, and document analysis, nine associate component parts were constructed for the concept of organizational knowledge. This study contributes to the idea that knowledge in higher education extends beyond that of knowledge dissemination e.g., in the classroom and knowledge creation, e.g., through research. The findings from this qualitative case study inform the understanding of the concept of organizational knowledge and its associate component parts by providing empirical support to address the concern of the “proliferation of organizational knowledge theories that are not accompanied by a parallel development of methodologies for studying knowledge empirically” (Patriotta, 2004, p.1).

## CHAPTER FIVE

While much has been written about the concept of organizational knowledge, the concept continues to lack descriptive specificity and empirical study. It is this lack of descriptive specificity that underscores the importance and aim of this dissertation study. To respond to the overarching research question “What is the concept of organizational knowledge and its associate component parts?” three stand-alone articles inform the understanding of the concept and its associate component parts. Chapter two, article one, methodological (of methods), presented how methods, namely, a qualitative content analysis was useful in analyzing and synthesizing the existing literature about the concept of organizational knowledge to inform description of the concept and its associate component parts. Specifically, the research question in article one is, *how might Qualitative Content Analysis be useful for the execution of an integrative literature review?*

Chapter three, article two, conceptual (of integrative literature review) presented a conceptual model of the concept of organizational knowledge and its associate components parts. The model was constructed through a focused, disciplined integrated literature review that explored synthesized, and describes the concept of organizational knowledge and its associated component parts. Three research questions guided the study and the focus of this conceptual and integrative literature review: *(1) What appears to be known about the concept of organizational knowledge and its associated component parts? (2) What appears to not be known (the unknowns) about this concept and its associated component parts?* And the third, implicative and conclusive question, derived from and informed by the first two research questions, namely, *(3) What are implications of the knowns and unknowns for related practice, research, and theory?*

Lastly, chapter four, article three, empirical (of case study) sought to explore an instance of the concept of organizational knowledge and its associate component within a given context, i.e., a selected higher education institution. The rationale for article three was informed by absence of empirical studies and descriptive specificity of the concept of organizational knowledge and its associate component parts in an organizational context. The specific research question addressed in article three is, *what is the concept of organizational knowledge and its associated component parts from the perspective of undergraduate academic advisors within a selected context of a higher education institution?* Each article helps to address the overarching purpose of this inquiry to provide thick and hermeneutic description of the concept of organizational knowledge and its associate component parts. Thus, each article has a dual purpose as a stand-alone article and a chapter in this dissertation. Each article answers its specific research questions and addresses this dissertation's overarching research question, namely, "*What is the concept of organizational knowledge and its associate component parts?*" The findings across the three articles suggest that the concept of organizational knowledge is complex, as is, its associate component parts. Study and understanding of the concept of organizational knowledge and its associate component parts benefit from a dialogic approach. Understanding does not derive from one discipline or method of inquiry, instead through triangulated processes of disciplined inquiry, namely, associated methods, an integrative review of extant literature, and an empirical case study. Conduct of the study contributes to a more informed understanding of the concept of organizational knowledge and its associate component parts, and in turn its utility for improved practice, extended research, and future theorizing.

This three-article dissertation has the elements of a traditional dissertation format. The dissertation has an introduction chapter, a literature review chapter, a methodology chapter, and empirical inquiry. As such, chapter five will adhere to the tenets of a traditional dissertation format. The first section provides a summative description of the concept of organizational knowledge and its associate component parts informed by the findings of each stand-alone article. The second section describes implications for practice, research, and theory. The third section describes how quality criteria was addressed in the dissertation. The fourth section is a description of my experience as the research instrument, i.e., human as inquiry instrument. The last section describes relevant conclusions of the overall dissertation study.

### **Research Design/Conceptual Framework**

The research design for this study to understand the concept of organizational knowledge and its associate component parts is of three perspectives (methodological, conceptual, and empirical). First, what methods may be useful to approach the analysis and synthesis of the literature on the concept of organizational knowledge and its associate component parts? Second, what literature review methodology can accommodate the diverse literature streams (e.g., conceptual, theoretical, and empirical literature) on the concept and its associate component parts? Third, how does the review of literature inform an empirical study of the concept of organizational knowledge and its associate component parts? And fourth, where is there alignment between methods, an integrative review of extant literature, and an empirical case study and the study's informing research paradigm? Taken together three perspectives (methodological, conceptual, and empirical) answer these questions and addresses this dissertation study's overarching research question of "what is" in relation to the concept of



organizational knowledge and its associate component parts. With each inquiry informing the next.

## **Chapter Two: Article One (Methodological, of Methods)**

Chapter two, article one, methodological (of methods), article contributes to understanding the concept of organizational knowledge through articulation of an approach used in the analysis and synthesis for an integrative literature review on the concept of organizational knowledge and its associate component parts. Although conceptual papers exist on the concept of organizational knowledge, the reasoning and rationale that inform the conceptual conclusions are unclear. The data analysis method, Qualitative Content Analysis (QCA), presents a convincing and supportive rationale that strengthens an integrative literature review on the concept of organizational knowledge and its associate component parts (Chapter three, article two, conceptual (of integrative literature review; (Callahan, 2014).

Qualitative Content Analysis (QCA) strengthens interpretation of an integrative literature review because it is a systematic process of review, analysis, and synthesis of the literature on the concept of organizational knowledge and its associate component parts. The QCA method requires one to review all the data (i.e., literature) through multiple interpretive cycles which makes possible a critique of taken-for-granted knowledge and understanding of the concept of organizational knowledge and its associate component parts (Callahan, 2014). Guiding the analysis in QCA is the research question, which forms a lens that one views the data (i.e., literature). Assumptions about organizational knowledge are lessened because one is required to approach the analysis without an a priori conceptualization of the concept and its associate component parts. Instead, understanding derived from the first cycle of coding informs the

development of relevance criteria aimed at the identification of data that can answer the research question.

Specifically, one looks for all the data that could answer the question “what is” the concept of organizational knowledge and its associate component parts. Thus, data (text) was considered to answer the question if it could be considered a definition of organizational knowledge; described characteristics of knowledge or knowledge types within an organization; referred to knowledge as group, social, collective; and referenced knowledge that might exist within communities of practice. The structured and systematic nature of qualitative content analysis grounded the construction of the concept of organizational knowledge and its associate component parts in the data (i.e., literature) and enabled the development of a “substantial knowledge base” about the concept and its associate component parts (Broome, 1993, p. 23).

Consequently, chapter two, article one (methodological, of methods) contributes to understanding of the concept and its associate component parts by making transparent the review, analysis, and synthesis of the informing literature on the concept of organizational knowledge. As such, informs the second part of the dissertation research design, that is, chapter three, article two (conceptual, of integrative literature review). The conceptual article lays out a framework for the concept of organizational knowledge and its associate component parts as informed by the extant organizational knowledge literature on the concept, that was analyzed and synthesized using qualitative content analysis.

### **Chapter Three: Article Two (Conceptual, of Integrative Literature Review)**

Article two, conceptual (of integrative literature review) reviewed the existing literature on the concept of organizational knowledge to identify noticeable gaps of understanding about the concept. While much has been written about the concept of organizational knowledge,

description of the concept is limited, and lacking is discourse related to its associate component parts. The outcomes of article two is a synthesis of previous work, i.e., multiple strands of literature from different discipline perspectives which builds on current understanding of the concept, provides description of its associate component parts, and addresses unresolved inconsistencies about the concept through execution of an integrated literature review.

This dissertation's integrative literature review constructs novel associations and thinking related to how we consider the concept of organizational knowledge and its associate component parts. As such the framing of the concept of organizational knowledge and its associate component parts helps with application in practice toward understanding and knowledge about the concept and its associate component parts. As a conceptual contribution, the integrative literature review provides an "integration of literatures, offers a framework, provides value added and highlights directions for future inquiry" (Gilson & Goldberg, 2015, p. 127). Conceptually, organizational knowledge is a concept that describes an organization's capacity to act, an enactment of culture, and has definitions, types, properties, and origin.

This article is the second link in understanding the concept of organizational knowledge and its associate component parts when considering the research design of this dissertation study. Accordingly, the research design accounts for the fact that discourse related to the concept of organizational knowledge exists in distinct and disconnected streams of literature. Thus, there was need of a useful method that would enable analysis and synthesis of the diverse literature, namely, qualitative content analysis. The second article, conceptual (of integrative literature review) furthers the description and understanding of the concept of organizational knowledge and offers a multidimensional view of the concept of organizational knowledge and its associate component parts by constructing its theoretical features as "distinct profiles that offer coordinates

for empirical research” (Jaakkola, 2020, p. 23). Hence, an empirical study (of case study) about the concept of organizational knowledge and its associate components parts is the third link in the overall study of the concept and its associate component parts and was chapter four, article three of this dissertation study.

#### **Chapter Four: Article Three (Empirical, of Case Study)**

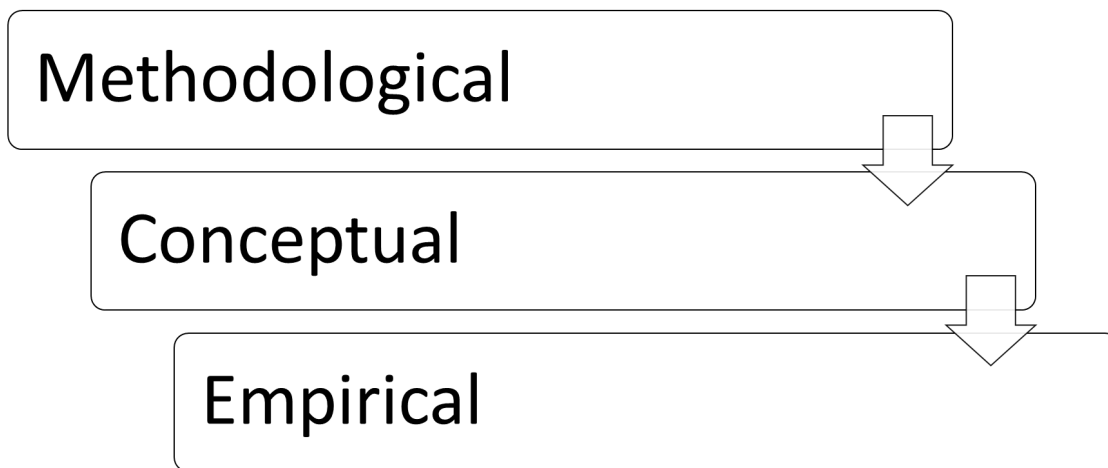
Article three, empirical (of case study) informs an understanding of the concept of organizational knowledge and its associate parts through empirical study of the concept in an organization setting. Few empirical studies have been conducted on the concept of organizational knowledge (Holsapple & Joshi, 2001; Sackmann, 1992; Tsoukas & Vladimirou, 2001) and seemingly none related to the concept of organizational knowledge and its associate component parts. Also, no identifiable empirical studies have been conducted in the context of higher education.

The empirical study (of case study) is a study on the concept of organizational knowledge and its associate component parts from the perspectives of undergraduate academic advisors within the context of a selected higher education institution. The empirical study provides evidential insight and description of the concept and its associate component parts through description of know-what, i.e., descriptions, labels, titles, and rules and know-how, i.e., processes and practices (Sackmann, 1992). Additionally, the study extends the organizational contexts in which the concept has been studied and broadens the perspective of knowledge in higher education beyond that of knowledge dissemination and knowledge creation. The outcomes from this study adds empirical support to the conceptual construction (i.e., integrative literature review) of the concept of organizational knowledge and its associate component parts. The empirical study findings align with the findings of the conceptual article (of integrative

literature review) that organizational knowledge is inherently in the structures, policies, rules, propositional statements, and expertise that are a part of, and exist apart from an organization. Organizational knowledge exists among and between an organization's members, its relationships, processes, procedures, and structures.

Collectively, these inquiries (methodological, conceptual, and empirical) advance an understanding of the concept and its associate component parts. Logically what follows is a description of the concept of organizational knowledge and its associate component parts.

Figure 10 shows the perspectives of each article and how they inform one another.



**Figure 10**  
*Three Perspectives (methodological, conceptual, and empirical) That Inform Understanding of the Concept of Organizational Knowledge and its Associate Component Parts*

## **Discussion**

### **The Concept of Organizational Knowledge and its Associate Component Parts**

Organizational knowledge is a dynamic, multidimensional, and evolving lever for organizational action and is relative to interactions that occur in an organization. Organizational knowledge is the understanding of the how and the what in an organizational context, specifically, how organizations know what they know, knowledge about an organization, and

knowledge within organizations. The distinction between individual knowledge and organization is of no consequence. For individual knowledge is integral to organizational knowledge. Individuals work in an organizational context and bring knowledge with them, development knowledge within an organizational context, and this knowledge stays with the organization even as individuals leave. Instead of anthropomorphic characteristics applied to an organization we should instead focus on how individuals interact with the nonhuman elements of an organization, such as its processes, procedures, and structures. Ontologically, what is organizational knowledge is both individual and collective. Epistemologically it is the inner workings of an organization. To have knowledge about the concept of organizational knowledge and its five associate component parts is to know that organizational knowledge has properties, origins, and types; is the enactment of culture and enables an organization to act.

### ***Properties of Organizational Knowledge***

**Body of Social Knowledge.** Organizational knowledge is the content of social interactions, or the information made available because of social interactions. The knowledge is useful to the organization and can be considered organizational knowledge because it can “be used outside the immediate context” (McPhee & Zaug, 2001, p. 588) where it was conceived, i.e., a social interaction. As such organizational knowledge exists as a body of social knowledge. It is knowledge that people create through the process of social interaction in their words (Chiva & Alegre, 2005).

**Organizational Knowledge is Accumulated Over Time.** Consequently, organizational knowledge is knowledge that has accumulated in the context of the organization through various social interactions at the individual, group, and organizational level in which “created knowledge is transformed and legitimized” (Chiva & Alegre, 2005, p. 55). Over time through “the process

of enculturation cognitions becomes rooted in the group” Sackmann, 1992, p. 141). Mutant describe it as a body of social knowledge by saying “certain type of things we know, i.e., group knowledge of policies, procedures, cultures, ways of doing stuff, the same across the board.” It is accumulated in the short-term as in the case of a brief conversation and over the long-term as in the case of learning on the job. What is considered as organizational knowledge “can change overtime and depends on the actual context and interactions among people” (Toften & Olsen, 2003, p. 100).

### ***Origins of Organizational knowledge.***

Organizational knowledge is captured through language which “articulates the scope of what is and is not organizational knowledge” (King & Zeithamal, 2003, p. 764). It is “what is more true than false and what most people adhere to or agree to” and exists as a result of people working together, developing transactional relationships and exists in relationships among individuals or within groups (Bhagat et al., 2000, p. 206). Organizational knowledge simultaneously originates internally and externally to an organization. Internal organizational knowledge resources include an organization’s culture, purpose, and strategy. External resources include extant knowledge within a particular industry, and the organization’s knowledge of its customers, suppliers, or partners (Holsapple & Joshi, 2001).

### ***Type of organizational knowledge.***

As organizational knowledge accumulates over time and is legitimized it becomes an organizational asset in the form of organizational knowledge types that is, the organization possess different types of knowledge. Organizational knowledge types include organizational knowledge resources e.g., organizational competencies (Holsapple & Joshi, 2001), stores e.g., organizational routines (Yang & Lai, 2012), and stocks e.g., corporate reputations (DeCarolis &

Deeds, 1999). Organizational knowledge resources include employee knowledge and competencies, knowledge embedded in physical systems, and are organizational capital (Holsapple & Joshi, 2001). Organizational knowledge is stored as cultural knowledge in the form of commonly held descriptions, practices, judgements, reasons, and explanations (Sackmann, 2001). Organizational knowledge stocks are specific to an organization (e.g., corporate reputations, dealer loyalty, or firm-specific skills of employees (DeCarolis & Deeds, 1999).

### ***Enactment of Culture and Governance of Work***

Organizational knowledge is identified through the workings of an organization (Holsapple and Joshi, 2001). The organization's structure serves to orient individual choices and action, and purpose. Organizational knowledge is realized in the enactment of rules (Bhagat et al., 2002). Rule exerts restrictions on members and explicate expectations on how a role is to act, what is to be done (Chiva & Alegre, 2005) and how relationships are formed (Holsapple & Joshi, 2001). Organizational knowledge also provides expectations related to organizational action, that is, what gets done in an organization and provides context and structure through which it develops.

### ***Organization's capacity to act***

Organizational knowledge as capacity is realized through an organization's work functions. Functions that include organization employees sharing knowledge with other employees, building customer relationships, and executing work. These activities are knowledge related activities and builds an organizations capacity to act. Capacity is the result of organizational members carrying out work and putting organizational resources to use (Treleaven & Sykes, 2005, p. 356) while engaged in knowledge manipulation activities that makes organizational knowledge available (Holsapple & Joshi, 2001). For instance, in the



empirical study, advisors actively and intentionally perform actions and complete tasks toward a purpose.

### ***The Concept of Organizational Knowledge***

Thus, the concept of organizational knowledge is a body of social knowledge that is accumulated over time and becomes embedded in an organization. It governs the work of organizational members through the enactment of culture derived from organizational axioms. Organizational axioms originate internally and externally to the organization. Organizational knowledge is stored as assets in the form of cultural cognitions and organizational knowledge resources, which are disseminated through the organization to enable the organization to act and achieve outcomes.

## **Implications**

This dissertation study on the concept of organizational knowledge and its associated component parts has implications for practice, research, and theory. Next, these implications are described.

### **Implications for Practice**

Organizations can use the understandings developed from this study to inquire into, identify, and reflect on available knowledge (Basaruddin et al., 2013). Organizations can begin to understand their own organizational knowledge by review of processes, structures, and procedures. The results of this study advance the idea that resources spent on knowledge management are useless without an understanding of organizational knowledge—the right knowledge matters (DeCarolis & Deeds, 1999). The present study discerned a usable description of the concept of organizational knowledge and identified associated component parts. The social construction of the concept of organizational knowledge promotes new ways of structuring

organizational teams and work. For organizational knowledge originates within individuals, groups, and relationships. It is not so much a matter of transforming tacit knowledge of individuals and groups into stored explicit knowledge (Nonaka, 1994) as it is understanding the ‘generative dance’ of individual and group tacit and explicit knowledge (Cook & Brown, 1999). Namely the interactions between individuals and groups are what makes for organizational knowledge.

### **Implications for Research**

The concept of organizational knowledge and its associate component parts are developed and accumulated over time (Tsoukas & Vladimirou, 2001). Clearly if one wants to study the concept and its associate component parts a longitudinal study has merit. If the concept of organizational knowledge is enduring, a longitudinal study can assess and identify what may be enduring knowledge. Additional inquiry into different organizational contexts has implications for understanding how organizational knowledge varies between organizational types and its utility in practice (Spender, 1996). Understanding different organizational contexts has epistemological relevance, that is what makes for knowledge of the concept of organizational knowledge and its associate components parts within, between, and among organizational types. Whereas this study employed qualitative methods, future study of the concept of organizational knowledge and its associate component parts could use quantitative methods to further description of the concept.

### **Implications for Theory**

Future theorizing should consider both the interplay between the whole (concept of organizational knowledge) and its associate component parts. As well as the interconnections and interplay between the associate parts themselves. Review and analysis of theorized

assumptions of the concept of organizational knowledge and its associate component parts strengthens conceptualization. Theorizing might include addressing such questions as what does it mean for organizational knowledge to be of cognition and of possession? (Chiva & Alegra, 2005); are explicit and tacit knowledge of one type or do they differ? (Cook & Brown, 1999; Nonaka, 1994); should we continue to focus on the concept of organizational knowledge or advance the idea of organizational knowing as organizational knowledge (Spender, 1996)?

### **Quality Criteria**

The quality criteria of this dissertation study adhere to those inherent in a constructivist inquiry and exists in two parts. First are trustworthiness criteria and second are authenticity criteria. A description of the two criteria sets and how each were attended to and satisfied for the overall dissertation follows next.

#### **Trustworthiness Criteria**

Trustworthiness criteria are associated with the inquiry process and include the concerns of plausibility, transferability, dependability, and confirmability.

##### ***Plausibility***

The first criterion of trustworthiness is plausibility, this criterion refers to the “isomorphism between constructed realities of respondents and the reconstructions attributed to them” (Guba & Lincoln, 1989, p. 237). I used the technique of prolonged engagement and spent ample time immersed in the data to familiarize myself with it though use of multiple coding cycles. I sought to build trust with respondents by demonstrating “that their confidences will not be used against them, that pledges of anonymity will be honored” and that hidden agendas were not being pursued (Lincoln & Guba, 1985, p. 303). I used an informed consent form, overt observation and pseudonyms to attend to trust building. The technique of triangulation by

different methods (i.e., literature review, interview, observation, and document analysis) was used to inform the plausibility of the study (Guba & Lincoln, 1990). I used the process of member-checking to assess the preliminary categories and interpretation with respondents. Member-checking was completed throughout data analysis to inform category developing and ensuring findings.

### ***Transferability***

The second criterion of trustworthiness, transferability, refers to the degree of similarity between contexts to the extent that findings may be transferred from one context to another. The aim is for the inquirer to provide enough description as to “enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility” (Lincoln & Guba, 1985, p. 316). I worked to provide “extensive and careful description” related to the selection of data collection and analysis methods, participant selection, and how final conclusions were constructed.

### ***Dependability and Confirmability***

The last two criteria of trustworthiness, dependability and confirmability, are complementary. Dependability refers to “how the findings and interpretations could be determined to be an outcome of a consistent and dependable process”. Confirmability refers to “how the findings and interpretations are a result of a dependable process of inquiry as well as data collection” (Lincoln & Guba, 2013, p. 105). To address these criteria, I adopted the process of a dependability audit. First, a dependability audit is concerned with the “quality and appropriateness of the *inquiry process*.” The extent to which the inquiry process is trackable and documentable, and the data can be traced back to its original source (Guba & Lincoln, 1989, p. 243). I used extensive tracking process to account for the processes used to complete the inquiry.

Throughout the process interviews, transcripts, and unitized data cards were labeled in such a way to track the data in the findings back to their original data source. Throughout each stage of data collection and analysis I reflected on methodological insights, preliminary constructions, definitions, and categories in a methodological journal, used to track the process. The four trustworthiness criteria (plausibility, transferability, dependability, and confirmability) combined with the authenticity criteria of fairness, ontological, educative, catalytic, and tactical authenticity taken together they speak to the quality of the inquiry. Thus, it is also important to discuss the authenticity criteria used in the study.

### **Authenticity Criteria**

Authenticity criteria are associated with the outcome of a constructivist inquiry, including fairness, ontological, educative, catalytic, and tactical authenticity.

#### ***Fairness***

The first criterion of authenticity, fairness, is described as the extent to “which all competing constructions have been assessed, exposed, deconstructed, and taken into account in shaping the inquiry product, that is, the emergent reconstruction(s)” (Lincoln & Guba, 2013, p. 70). Core to meeting the criterion of fairness was the use of multiple coding cycles throughout the inquiry. Through successive coding cycles I was able to seek out all constructions of data analysis methods, literature on organizational knowledge and empirical data; and explore the way the constructions were in conflict (Guba & Lincoln, 1989). One required component of the empirical study was that participation was voluntary and could end at any time without penalty, thus consent was “renegotiated continuously” (Guba & Lincoln, 1989, p. 247). Respondents signed an informed consent at the beginning of the inquiry and were subsequently given an opportunity to revoke consent before each stage of data collection.

### ***Ontological authenticity***

Constructivist research meets the criterion of ontological authenticity to the extent when individuals, respondents and researcher become aware of tacit constructions they did not know they had until the inquiry brought them to the propositional level (Lincoln & Guba, 2013, p. 70). I used reflexive journaling to reflect on to expand my own awareness of the construction of the concept of organizational knowledge and its associated component parts, my understanding of methodology and methods, and my own development as the human instrument. I attended to the idea of self-as human instrument in a section of this dissertation. Respondents were introduced to new information and interpretations of their lived experience. For instance, one undergraduate academic advisor, Izzy stated that they had never thought about the concept of organizational knowledge and needed to think more about the concept of organizational knowledge in their advising role. Semi-structured interviews helped build toward a caring and trusting relationships with respondents. The interviews were conducted in a location selected by respondents. I was able to summarize what the respondent said to demonstrate that I understood what the respondent had stated.

### ***Educative Authenticity***

Educative authenticity is the extent to which participants and inquirer become more understanding of, sophisticated about, and tolerant of the constructions of others (Lincoln & Guba, 2013, p. 70). Member checking enabled reflection by the respondents on their constructions and the constructions of others. Nan stated that she had not really thought about the concept of organizational knowledge in the way other advisors saw it, however felt other constructions were of value. Nan also challenged me about my own construction of the concept.

My use of memos helped with understanding throughout the inquiry, for example, I was able to note whether I prioritized my own constructions over others.

### ***Catalytic Authenticity***

This authenticity criterion is assessed to the extent that action is stimulated and facilitated by inquiry (Lincoln & Guba, 2013, p. 70). Attention to the criterion of catalytic authenticity included the use of member checking to jointly construct the concept of organizational knowledge and its associated component parts. Member checking helped the inquiry in meeting the aim of “consensus” (Lincoln & Guba, 2013, p. 71). The inquiry puts forth a framework that conceptualizes the concept of organizational knowledge and its associate component parts that can be explored in practice and research and offers an opportunity for theorizing. Lastly, the dissertation including the three articles will be published and available for use.

### ***Tactical Authenticity***

Tactical authenticity “is determined by an assessment of the extent to which individuals are empowered to take the action that the inquiry implies or imposes (Lincoln & Guba, 2013, p. 70). Ideally, action is stimulated and facilitated by inquiry, yet for action to occur individuals must feel empowered to act. It was important that the process of inquiry was documented well with an audit trail. This enables action on the part of individuals who may read the dissertation study that is, action regarding transferability of the findings, practical actions related to study of the concept of organizational knowledge and its associate component parts, and further thought about the concept and associate component parts. Inquiry respondents may be empowered to act because confidentiality was maintained in the inquiry. The research used pseudonyms and deidentified the data.

## **Description of the Research Instrument**

In accordance with the constructivist inquiry paradigm, this section focuses on myself as the human instrument. As a human instrument throughout the inquiry, I sensitized myself to idiosyncrasies that were a part of the research process (Guba & Lincoln, 1981). Following is a description of the seven characteristics of the human as instrument and an assessment of myself as the human instrument in the process of inquiry (Guba & Lincoln, 1985).

### **Responsiveness**

Responsiveness is described as the ability to “interact with participants and the environment” (Guba & Lincoln, 1981, p. 136). Throughout the interview process I felt comfortable and was able to interact and respond to the surrounding context. In part because of my familiarity with the higher education environment and with the function of undergraduate academic advising. The first interview felt less comfortable for I wondered whether the interview questions would evoke meaningful responses from the respondents. I found that after the first interview the questions felt appropriate and interviews felt conversational.

I was mindful to watch for how participants felt during the interview process and adjusted my approach accordingly. I could tell for instance that Mutant was rushed. At one point during the interview, they stated that they needed to shorten the interview. This is reflected in the duration of their interview, for Mutant’s interview was 35 minutes in length. Izzy provided direct answers and elaborated little. From the first two questions of Izzy’s interview, I learned that I would need to ask follow-up questions to gather additional insight about their lived experience. The semi-structured interview format allowed me to ask follow-up questions and be responsive throughout the interviews.



## **Adaptability**

Characteristically of the human instrument is the ability to adapt to changing circumstances, contexts, and needs or requirements of the study. Adaptable human instruments are perceptive and discriminant (Guba & Lincoln, 1981). I came to the research with a sophisticated ability to adapt to evolving inquiry, based on past experiences that required me to adapt to circumstance and change according to environment. I did not enter the study with the idea that everything would go as planned. I understood that some things may have to change. For instance, while I wanted to secure interviews, observations, and documents from each participant, at the start I adapted my informed consent to allow for such adaptation. Participants had the opportunity to select their level of participation. This proved useful to address concerns of coercion. Respondents expressed appreciation for the ability to choose. Respondents chose the location for interviews. Some respondents chose an interview location near their place of work, other respondents asked for a different location away from work. I was open to any change that needed to occur to minimize the risks to a respondent.

## **Holistic emphasis**

The human instrument's ability to view the world as 'all of one piece' rather than segmented, that is, as a continuous context, characterizes a holistic emphasis. The human instrument seeks to understand the totality of meaning in context and each setting (Guba & Lincoln, 1981). During the interviews I was mindful of my own bias and preconceived notions of advising. During the interview with Izzy they referenced the unimportance of parking for students. I had to suspend judgement about this statement and recognize the context related to Izzy's statement. It is possible that for Izzy student parking was not an issue, despite my own advising experiences. It was important that during data analysis I approached the data with a

whole-part-whole emphasis (Saldana, 2013). I knew that I could only understand the parts (i.e., concepts, codes, categories) by connecting them back to the whole. Though multiple coding cycles I continuously grounded the interpretations in the data. When I was unable to make sense of a piece of data instead of discarding it as irrelevant, I sat the data aside and came back to it. This process helped me to increasingly attune my skill as the human instrument.

### **Knowledge Base Expansion**

The knowledge base that the human instrument works from is simultaneously both propositional and tacit knowledge (Guba & Lincoln, 1981). The expansion of the researcher's knowledge base involves "extending awareness of a situation beyond mere propositional knowledge to the realm of the felt" (Guba & Lincoln, 1981, p. 135). Throughout the study I used a reflection journal to write down reflections, hunches, and insights related to method, theory, or general understanding of the knowable. This helped me to reflect on gaps in my knowledge. I noted what I did not understand and what I needed to study. The back-and-forth of reflection, study, reflection expanded my understanding as the researcher.

A positive influence toward knowledge expansion were ongoing conversations with participants related to the construction of the concept of organizational knowledge and its associate component parts. In one instance, Nan challenged a category I developed and asked me to explain and clarify the category. Nan also suggested ideas that could be used to describe the category. Such conversations helped me to develop knowledge related to how an advisor may see the development of a category compared to the lens I used as the research instrument.

### **Processual Immediacy**

The human instrument can "process data immediately upon acquisition, reorder it, change the direction of the inquiry based upon it, generate hypotheses on the spot, and test them with the

respondent or in the situation as they are created” (Guba & Lincoln, 1981, p. 136). Throughout the inquiry I noted initial interpretations in the margins of an article, interview note, or observation record. I used such reflections to inform data collection and analysis. During observation one, I noticed a need to account for whether the advisor or student spoke. I immediately changed the way I wrote my notes during the observation to avoid confusion during analysis. Further, I kept a separate journal to account for changes during data collection and analysis, including an intuitive hunch in the moment and immediate reasoning. Later I reviewed this information to see if I needed to change the direction of the inquiry.

### **Opportunities for clarification and summarization**

The human inquirer in the immediacy of the moment can clarify participant statements, delve deeper into a statement, and summarize the interview data (Guba & Lincoln, 1981). On the spot data can be summarized and checked for meaning, clarification, correction, and amplification (Lincoln & Guba, 1985). I was able to delve deeper into meaning at different junctures of the inquiry. In all instances I searched for clarification in areas of misunderstanding. Through email communication with scholars, I came to understand methods better. I was able to ask clarifying questions during interviews, as well as, ask respondents to explain acronyms. After observations, I was able to ask advisors questions about assumptions developed during the observation. Clarifying after observations helped me “avoid imposing values on the conversation” (Guba & Lincoln, 1981, p. 137).

### **Opportunity to explore atypical or idiosyncratic responses**

The human inquirer is open to, encourage, and seek atypical responses in order to utilize them to increase understanding. Thus, providing an opportunity to extend the boundaries of an inquiry (Guba & Lincoln, 1981). To account for atypical responses, I probed deeper during

interviews. When reading literary sources, I took to looking for original sources if I read an atypical description in terms of known understandings associated with the concept of organizational knowledge with the extant literature.

### **Conclusions**

As evidenced by the articles in this dissertation, the study of the concept of organizational knowledge and its associate component parts requires an integrated approach in terms of methods. Effectively, using a “bricolage” of techniques. Hence the methodological, conceptual, and empirical approaches helped to inform understanding for the concept of organizational knowledge and its associate component parts. The methodological approach, using qualitative content analysis enabled analysis and synthesis of extant literature on the concept of organizational knowledge and its associate component parts in a systematic way. The conceptual article described the concept of organizational knowledge and its associate component parts and presents a new framework. Lastly the empirical study explored the concept of organizational knowledge and its associate component parts in an organizational setting, adding to empirical knowledge base for the concept.

The dissertation study informs description of the concept and its associate component parts through description of an analysis method which clarifies the conceptual reasoning used to develop the concept and its associate component parts; presentation of a conceptual framework that can be used to inform practice, research and theorizing, and an empirical study demonstrates that the concept of organizational knowledge and its associate component parts may be studied empirically in organizational settings, and further set the stage for practice, research, and theorizing on the concept and its associate component parts. The research paradigm (constructivism), strategy (qualitative), and approaches (qualitative content analysis, integrative

literature review, and case study) allowed for inclusion of multiple perspectives, disciplines, and artifacts associated with the concept of organizational knowledge and its associate component parts. Thus, we have a deeper and richer understanding of the concept of organizational knowledge and its associate component parts because of this dissertation study.

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## APPENDIX A

### Recruitment Email

Dear Participant,

My name is Coronda Ziegler and I am a researcher from Colorado State University in the School of Education. We are conducting a research study on the Concept of Organizational Knowledge and Its Associated Component Parts. The Principal Investigator is Dr. Susan A. Lynham and I am the Co-Principal Investigator.

Participation in this study involves a commitment of 3-4 hours. Specifically,

- A one-hour confidential interview in a location you choose
- A 30-minute observation of a student advising appointment
- Emailing student advisees informing them of your participation and of the intended observation of advising appointments.
- Sharing of personal knowledge documents (approximately 30 minutes of your time)
- Approximately one-hour participation in a process called member checking in which you review any preliminary findings

Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participation at any time without penalty.

We will be collecting identifiers such as your name, department, years of employment, and education background. When we report and share the data to others, we will combine the data from all participants. We will keep your data confidential; your name and data will be kept separately on a password protected computer accessible only to the research team. While there are no direct benefits to you, we hope to gain an understanding of the concept of organizational knowledge and its associated component parts.

There are no known risks to you in this study. It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential (but unknown) risks.

If you are interested in participating in the study or have any questions about the research, please contact the Co-PI Coronda Ziegler at [coronda.ziegler@colostate.edu](mailto:coronda.ziegler@colostate.edu). If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: [RICRO\\_IRB@mail.colostate.edu](mailto:RICRO_IRB@mail.colostate.edu); 970-491-1553.

Susan A. Lynham, Ph.D  
Associate Professor

Coronda Ziegler  
Doctoral Student

## APPENDIX B

### Informed Consent

#### Consent to Participate in a Research Study

#### Colorado State University

**TITLE OF STUDY:** Concept of Organizational Knowledge and Its Associated Component Parts

**PRINCIPAL INVESTIGATOR:** Susan Lynham, PhD, School of Education, Education Building, Room 227, [susan.lynham@colostate.edu](mailto:susan.lynham@colostate.edu), (970) 491-7624

**CO-PRINCIPAL INVESTIGATOR:** Coronda Ziegler, Doctoral Student, School of Education, [coronda.ziegler@colostate.edu](mailto:coronda.ziegler@colostate.edu), (970) 491-2921.

**WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH?** You are being invited to participate in this study because you are an undergraduate academic advisor, in a higher education institution, who contributes to student retention.

**WHO IS DOING THE STUDY?** This study is being conducted by the co-principal investigator Coronda Ziegler a doctoral student at Colorado State University, in the School of Education; under the guidance and supervision of Susan Lynham, a faculty member in the School of Education at Colorado State University.

**WHAT IS THE PURPOSE OF THIS STUDY?** The purpose of the study is to better understand the concept of organizational knowledge and its associated component parts through the perspective of undergraduate academic advisors in a higher education institution who have a role in student retention.

**WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?** The initial part of the study is an interview conducted in a location you choose. The second part includes an observation of a student advising appointment, in your appointment location. Data from the interviews and observations will be collected and analyzed over a 4-6 month period. Write-up of the results will commence in Summer 2018 and Fall 2018, with a target completion date of March 2019.

**WHAT WILL I BE ASKED TO DO?** You are asked to participate in a confidential interview to share your perspectives of the concept of organizational knowledge and its associated component parts. You will be asked to select a pseudonym (alias). You will be asked to permit observation of an advising appointment. You will be asked to share any personal knowledge documents (if application) used in your job, which may include, but not limited to personally developed tutorials, job notes, handouts, etc. You will be asked to participate in a process called

member checking, in which you review drafts of my preliminary analyses. You can check and correct assumptions, and provide feedback that informs preliminary understandings. It is anticipated that your total time commitment for participation will be 3-4 hours.

**ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY?**

Participate if you are an undergraduate academic advisor (i.e., advise freshmen, sophomore, junior, senior), have the title of Academic Success Coordinator, work full-time, and have been employed one-year as an advisor for the selected higher education institution. Do not participate if you have the position title of faculty (teaching faculty, Assistant or Associate faculty, or Professor). Do not participate if you have an administrative advising role (i.e. Director of Advising, Coordinator of Undergraduate Advising, Senior/Lead advisor or similar position).

**WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?** There are no known risks to you in this study. However, reflecting on your experiences in an interview may cause discomfort. It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

**ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY?** There are no direct benefits to you participating in this study. The study will provide understanding of the concept organizational knowledge and its associated component parts in the selected context of higher education.

**DO I HAVE TO TAKE PART IN THE STUDY?** Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

**WHO WILL SEE THE INFORMATION THAT I GIVE?** We will keep private all research records that identify you, to the extent allowed by law. For this study, you will select a pseudonym (alias) and the pseudonym will be used in all written records of research. Any file that contains your actual identity will be kept separate from your data and stored on a secured drive with password protection. Only the research team will have access to the link between you, your code, and your data. The only exceptions to this are if we are asked to share the research files for audit purposes with the CSU Institutional Review Board ethics committee, if necessary.

When we write about the study to share with other researchers, we will write about the combined information we have gathered. You will not be identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

**WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY?** No, you will not receive any compensation for this study. Participation in this study is completely voluntary.

**WHAT IF I HAVE QUESTIONS?**

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can

contact the co-principle investigator, Coronda Ziegler at (970) 491-2921 or by email at [coronda.ziegler@colostate.edu](mailto:coronda.ziegler@colostate.edu). You may also contact the Principal Investigator, Dr. Susan A. Lynham at (970) 491-7624 or by email at [susan.lynham@colostate.edu](mailto:susan.lynham@colostate.edu). If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: [RICRO\\_IRB@mail.colostate.edu](mailto:RICRO_IRB@mail.colostate.edu); 970-491-1553. We will give you a copy of this consent form to take with you.

**WHAT ELSE DO I NEED TO KNOW?** Because this study that multiple forms of data will be collected, please read and initial all that items you give permission for.

Participant confirms participation in multiple activities (list)

Please initial by each research activity listed below that you are volunteering to participate in.

- Researchers can observe me in the course of my daily work activities \_\_\_\_ (initials)
- I will participate in an interview \_\_\_\_ (initials)

Permission to re-contact:

Do you give permission for the researchers to contact you again in the future to follow-up on this study or to participate in new research projects? Please initial next to your choice below.

- Yes \_\_\_\_\_ (initials)
- No \_\_\_\_\_ (initials)

Permission to audiotape/videotape interviews or interventions:

The researchers would like to audiotape your interview to be sure that your comments are accurately recorded. Only our research team will have access to the audiotapes, and they will be destroyed when they have been transcribed.

Do you give the researchers permission to audiotape your interview? Please initial next to your choice below.

- Yes, I agree to be digitally recorded \_\_\_\_\_ (initials)
- No, do not audiotape my interview \_\_\_\_\_ (initials)

Permission to use direct quotes:

Please let us know if you would like your comments to remain confidential or attributed to you. Please initial next to your choice below.





## APPENDIX C

### Student Consent

#### VERBAL RECRUITMENT/CONSENT TEMPLATE: No Identifiers Collected

Hello, my name is Coronda Ziegler and I am a researcher from Colorado State University in the School of Education. We are conducting a research study on the Concept of Organizational Knowledge and Its Associated Component Parts. The Principal Investigator is Dr. Susan A. Lynham, and I, Coronda Ziegler, the Co-Principal Investigator are both from the School of Education.

We would like you to allow the researcher to observe your student advising appointment. No further activity is required on your part as the student. Participation will take approximately 30 minutes, the duration of your advising appointment. Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participation at any time without penalty. If the observation is stopped any information pertaining to the appointment will be discarded.

We will not collect your name or personal identifiers. When we report and share the data with others, we will combine the data from all participants. There are no known risks or direct benefits to you, but we hope to gain more knowledge on the concept of organizational knowledge and its associated component parts from the perspective of academic advising.

Would you like to participate?

If yes: Proceed.

If no: Thank you for your time.

## APPENDIX D

### Interview Protocol

#### **Describe Project to Participants**

The research study focuses on the concept of organizational knowledge and its associate component parts. Your participations in this study is essential to understand the concept of organizational knowledge and its associate component parts from the perspective of academic advisors within the selected higher education institution's student retention initiative. The interview will last approximately one hours. After the interview I will ask to schedule an observation of a student advising appointment.

#### **Reminders to Participants**

**Confidentiality:** As a reminder the information you provide me is considered confidential, as the law permits. You will not be personally identified in the data or documentation.

**Participation:** Your participation in this research study is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty.

#### **Format**

I will ask you a few open-ended questions regarding your role as an academic advisor and your use of knowledge on the job. I will be recording the interview so that I do not miss any information. I expect the interview to last no more than an hour. Do you have questions about the study or today's interaction?

If YES, then address questions.

If NO, then researcher responds "Remember there are no right answers. I want you to feel free to tell your own story. I want to hear your unique perspective."

*Turn on the audio recorder*

**PROMPT: First, I would like you to tell me about yourself and your position at the university?**

#### **Sample Interview Questions**

##### **Demographic Information**

- What is your job title?
- Who is your supervisor? Who do you report to?
- Do you have your own private office? Shared suite? Or cubicle?

**PROMPT: Next let's talk about what you do an the knowledge you use.**

**Job Overview**

- Could you describe a typical day in your work as an advisor?
- Suppose I was in a meeting with you what would I see happening?

**Knowledge Identification**

- In your opinion, what knowledge is critical to the work you do?
- What knowledge would you say all advisor's use?
- What comes to mind when you hear the term organizational knowledge?
- Suppose I was new advisor who just started and I asked you what I needed to know to be successful in the role, what would you tell me?
- What do you wish you had known when you started the position that you know now?

**Knowledge differentiation**

- What would you consider to be organizational knowledge you use in your work?
- Are there different types of knowledge you use on the job? If so, what type?
- How would you distinguish between individuals and organizational knowledge?

## APPENDIX E

### Demographic Survey

1. Position Title: \_\_\_\_\_
2. Number of years employed as an Advisor at the university \_\_\_\_\_
3. Number of years employed at the University \_\_\_\_\_
4. What College do you belong to at the university? \_\_\_\_\_
5. Highest Degree Earned (Please select one):  PhD  Master's  Bachelor's
6. Gender (please select one):  Male  Female  Transgender
7. Age (please enter): \_\_\_\_\_
8. Race/Ethnicity:
  - Hispanic/Latino
  - Native American
  - Black
  - Asian
  - Hawaiian/Pacific Islander
  - White
  - Multi-racial