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Pepperdine University  
Graduate School of Education and Psychology

THE SEED OF TRANSFORMATION: A DISORIENTATION INDEX

A dissertation submitted in partial satisfaction  
of the requirements for the degree of  
Doctor of Philosophy in Global Leadership and Change

by  
Tonya Gander Ensign

June, 2019

Paul Sparks, Ph.D. – Dissertation Chairperson

This dissertation, written by

Tonya Gander Ensign

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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## DEDICATION

This research is dedicated to  
all who experience the gift of disorientation and are able to view it as an invitation –  
for disorientation is the very seed of transformation.

*What the caterpillar calls the end of the world,  
the master calls a butterfly.*

- Lao Tzu

## ACKNOWLEDGEMENTS

This research would not have been possible without the support of several people – many of whom have become good friends during this journey. I would like to thank my Chairperson, Dr. Paul Sparks, whose brilliant, out-of-the box thinking both challenged me and supported me. I would also like to thank my Dissertation Committee. Dr. Kent Rhodes, thank you for taking me under your wing as your research assistant and sharpening my skills prior to undertaking this dissertation; also, thank you for deliberating a plethora of research designs with me. I hope to travel to Costa Rica with you one day to continue this research. Dr. James DellaNeve, thank you for taking my understanding of research methods to the next level and for encouraging me to consider how I will use my research findings as a practitioner – you have started my wheels spinning. It has been an honor to be guided by each of you during this project.

To the subject matter experts who mentored me – thank you Dr. Chad Hoggan, your knowledge of transformative learning has been invaluable and made my learning curve easier and more fun; thank you for encouraging me to attend the 2018 International Transformative Learning Conference and for welcoming me into the tribe. To Dr. Ed Taylor, thank you for validating the need for and importance of this research and for providing an invaluable perspective on this topic; to Dr. Joyce Osland, thank you for sharing your vast knowledge of global leadership and for being a collaborative thought partner during our many conversations about disorientation as a catalyst for global leadership development; to Johnny Saldaña, thank you for collaborating with me about coding strategies. And, to other specialists who coached and mentored me – Ben, Debra, Guy, and Sara – you are truly experts in your fields, and I am grateful for your assistance.

To Pepperdine University, the leaders of the Ph.D. program – Dr. June, Dr. Madjidi, Dean Williams, and all the professors who serve in the doctoral program, thank you for providing a

learning environment for me to transform from a practitioner into a scholar. Your vision for this innovative program and your courage to create and deliver it is having a ripple effect around the world. Additionally, thank you Dr. June, for inviting me to be your graduate assistant and allowing me the opportunity to add value to Pepperdine University in this way during my time as a doctoral student. Thank you to Jane, Christy, Erika, Regina, Carlos, Maria and other Pepperdine staff – you are the backbone of the program and your hard work does not go unnoticed.

To my Pepperdine colleagues – you know who you are – thank you for walking alongside me on this journey. As you know better than anyone, our program intensives took “intensity” to a new level; your collaboration, wisdom, care, humor, and friendship were truly a highlight of this experience. Long live The Dream Team and Charlie’s Angles!

To my past, present, and future coaching and consulting clients, and to my students – I began conducting this research for you because I wanted more tools and research-backed methods for our work together. I look forward to sharing what I have learned and continuing our journey.

To my dear friends in Durango, Phoenix, Los Angeles, Orange County, and around the world – thank you for your constant and continual care when I would disappear to write for weeks at a time. Your reminders to “eat” and “move away from the computer” were the best. To my yoga instructors and friends in the wellness community – thank you for helping me stay strong and healthy; research is not for the weak.

Most importantly, a very special thank you to my family, especially Chuck, Rachel, Alec, Lukman, Suciani, Susan, R.J., Mike, Mary. It is a privilege to be your wife, mother, daughter, sister, and niece. Your ever-present love and support, in a myriad of ways, sustained me through my doctoral program. You believed in me and made many sacrifices to help make this happen – I am so grateful for you.

Lastly, I would to also extend my gratitude to Jack and Edee Mezirow (posthumously). There is something serendipitous about my research experience and the Mezirow's journeys. In 2015, I began my doctorate degree 23 years after earning my Master's degree; when Edee was about my age, she also returned to college after many years away from formal schooling. For both Edee and myself, returning to college provided disorienting experiences and invitations to transform. Edee's transformation was the impetus for Jack's seminal research which birthed the idea of perspective transformation in 1978; my return to college was the impetus to further his theory with a deep dive into the first step and catalyst for transformation, the disorienting experience. Jack and Edee Mezirow lived in Minnesota in the 1970s while Jack attended the University of Minnesota. I was in elementary school at that time, and lived just 20 miles away in Hudson, Wisconsin. There is something familiar about the way Jack thinks and writes; perhaps it is a sixth sense of a fellow Midwesterner. Even though Jack and Edee passed before I could meet them in person, I feel they have been watching over me (and smiling) as I carry on the important work that they began.

## VITA

## EDUCATION

Pepperdine University, 2019  
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University of Phoenix, 1993  
Master of Arts - Organizational Management

University of Wisconsin – Madison, 1987  
Bachelor of Science – Finance, Investment & Banking; International Business; German language

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Certified Personal and Executive Coach  
Certified Positive Psychology and Wellbeing Coach  
Certified Myers Briggs Practitioner  
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## PROFESSIONAL SUMMARY &amp; COMMUNITY LEADERSHIP

Tonya Ensign is an accomplished business leader, entrepreneur, and academic instructor recognized for developing highly effective leaders and leading innovative, corporate initiatives as an executive and as a consultant. A serial entrepreneur, Tonya has founded three businesses and has been an active, private equity investor in dozens more. Her experience gives her an in-depth understanding of the challenges that leaders face in start-up and growth-stage companies – strategically, operationally, and personally. She brings this expertise to clients through her executive coaching and consulting firm.

In addition to her industry experience, Tonya has a passion for education. For the past eight years, she has taught as an adjunct professor and served as a graduate assistant in her Ph.D. program. Her students consistently share their appreciation of her ability to both apply theory and convey real-world applications. Her research has contributed to theories in transformative learning and experiential learning. She studies how learning solves problems, transforms people, and transforms organizations. In 2007, she founded an online environmental education company, emagineGreen, LLC, and she is currently the Executive Director of Braeburn, Inc., a global, not-for-profit organization transforming lives by providing educational opportunities and leadership skills to underserved Indonesian youth. Tonya has also served on the boards of several other nonprofit organizations and co-founded the Professional Development Coaching Program for the Women’s Resource Center in Durango, Colorado.

## AWARDS

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## ABSTRACT

Transformation is all around us. It spans geography, time, cultures, religions and disciplines. Throughout life, events occur when something we thought was certain becomes uncertain and our current mental model cannot make sense of it. This experience causes disorientation and offers a choice: to transform our perspective or remain unchanged. When we revise our mental model to make meaning of our experience we are transforming our perspective. This is a special type of learning called transformative learning (Mezirow, 1978a, 1991a).

Across disciplines, a disorienting experience is widely believed to be a catalyst for transformation, however, aspects of this experience remain elusive. It is not well defined nor understood. The purpose of this qualitative descriptive study was to better understand the disorienting experience and develop language to describe its dimensions thus contributing to transformative learning theory and benefiting scholars and practitioners in disciplines such as learning and education, global leadership development, and change management.

This study was situated in a constructivist worldview and Mezirow's (1978a, 1991a) transformative learning theory was the theoretical framework; it provided a rich 40-year research stream and is one of the most extensive conceptualizations of the disorienting experience within the larger frame of adult learning theory. Hundreds of scholars have examined populations in diverse circumstances to understand if and/or how they experienced transformative learning triggered by disorientation.

The guiding research question was: how do scholars conceptualize the disorienting experience in the transformative learning literature? The data set included 53 empirical studies (2003-2017), yielding 82 disorienting instances, written by 114 scholars representing every

continent except Antarctica. Qualitative content analysis was used to explore, understand, and interpret this diverse, global data set of disorienting experiences.

This study revealed three findings. First, it generated a Disorientation Index providing eight dimensions that move toward a common language describing the disorienting experience; the most common experience in the data set was also identified. Second, 16 contexts of disorienting experiences were uncovered. Third, 656 coding instances were presented by Disorientation Index dimension across the 16 contexts. This study concluded with a suggested formula for the disorienting experience, implications, and suggestions for future research.



## Chapter 1: Introduction

Transformation is all around us. It spans geography, time, cultures, religions, and disciplines. In biology, this term refers to metamorphosis during the life cycle of a living organism; in political science, it may be a regime change; and in human development, it occurs in transitions between stages of life (McWhinney & Markos, 2003). Scholars and practitioners in fields as varied as global health, environmental science, archaeology, religious studies, media literacy, and spirituality have studied the phenomenon of transformation as it relates to transforming our mental models (Taylor & Snyder, 2012).

Throughout life, events occur when something we thought was certain becomes uncertain. For example, we may feel certain we are in good health, but then we are diagnosed with an illness, or we may travel to a foreign land where new customs cause uncertainty and disorientation. These situations offer us a choice: to transform our perspectives or remain unchanged. Traditional methods of learning, such as gaining more book knowledge or a new skill, cannot completely resolve these disorienting dilemmas. Instead, resolution requires us to revise our mental models—the very scaffolding upon which our view of reality is built—to make new meaning. When we revise our mental models to make new meaning of our experience, we are transforming our perspective. This is a special type of learning called transformative learning (Mezirow, 1978a, 1991a). A disorienting dilemma precedes this transformation and can act as a catalyst or trigger for transformation.

Opportunities to transform are all around us. For example, in higher education, college students often experience disorientation during study abroad programs, and this disorientation can act as a pedagogical primer for transformative learning outcomes such as a shift in worldview and/or a shift in self-view (Bell, Gibson, Tarrant, Perry, & Stoner, 2016; Strange &

Gibson, 2017). In global leadership development, the ambiguity of navigating a foreign land during an international work assignment can be a disorienting catalyst for transformative learning, resulting in increased global leadership skills (Kozai Group, 2008; Mendenhall et al., 2018). In change management, disorienting dissatisfaction is a catalyst for organizational change (McWhinney & Markos, 2003).

Transformative learning theory, first introduced by Jack Mezirow (1978a, 1991a), helps explain how adults change their interpretation of their world by providing a structure for understanding how our frames of reference (also known as our *mental models* or *thought paradigms*) are transformed. However, the catalyst for potential transformation, the disorienting experience, is neither adequately defined nor fully understood. Transformative learning theory is a rich stream of research that spans 40 years and includes hundreds of empirical studies of populations who experienced a disorienting event as the first step in transformative learning. Hence, in the present study, transformative learning theory was used as a framework to better understand how scholars describe the catalyst for transformation.

## **Background**

To better understand the role of the disorienting experience as a catalyst for transformation, it is helpful to understand the seminal research in transformative learning theory. In 1978, Jack Mezirow, a professor of Adult Education at Teacher's College at Columbia University (assisted by Victoria Marsick, a doctoral student studying Adult and Continuing Education at the University of California-Berkeley) first articulated this phenomenon in a study of women's re-entry programs in community colleges across the United States (U.S.). The inspiration for the study was when Mezirow's wife, Edee, "decided to return to college to complete her undergraduate education after several years away from formal schooling"

(Mezirow, 1991a, p. xvii). As Mezirow attempted to understand his wife's experience in the context of his profession, adult learning, he found Edee's "dramatically transformative experience which led to a new career and life-style, both fascinating and enlightening" (Mezirow, 1991a, p. xvii).

Mezirow noticed that his wife's transformative experience did not result from simply gaining more book knowledge; there was something else happening. He observed that when people undergo a complex life change or transformation, as Edee did, they often experience a unique type of dilemma where "simply learning more, solving problems more effectively, or acquiring a new skill or behavior [does] not resolve" the life change (Mezirow, 1978a, p. 7). He conceptualized Edee's situation as a disorienting dilemma and launched a national study of women returning to college and the workforce (Mezirow, 1991a). Mezirow drew from prior research by scholars such as Freire (1970, 1973), Habermas (1971), Kelly (1970), Kuhn (1962) and Piaget (1972). In 1978, Mezirow revealed, "The major theoretical finding of this study is the identification of perspective transformation as the central process occurring in the personal development of women participating in college re-entry programs" (p. 7). Mezirow posited a disorienting dilemma as the first step and catalyst for perspective transformation. A disorienting dilemma occurs when something a person holds as certain becomes uncertain (Mezirow, 1991a). This landmark study positioned perspective transformation, which later evolved into transformative learning theory, squarely in the discipline of education, specifically in adult education. Mezirow's seminal theory has ten phases and is a useful and appropriate theoretical lens through which to study the disorienting dilemma. The ten phases of transformative learning are listed in Table 1.

Table 1

*Mezirow's (1978a, 1991a) Ten Phases of Transformative Learning*


---

Ten Phases of Transformative Learning	
Phase 1	A disorienting dilemma
Phase 2	Self-examination
Phase 3	A critical assessment of assumptions
Phase 4	Recognition of a connection between one's discontent and the process of transformation
Phase 5	Exploration of options for new roles, relationships, and actions
Phase 6	Planning a course of action
Phase 7	Acquiring knowledge and skills for implementing one's plan
Phase 8	Provisional trying of new roles
Phase 9	Building competence and self-confidence in new roles and relationships
Phase 10	Reintegration of a new perspective into one's life (pp. 168-169)

---

**Statement of the Problem**

For over 40 years, transformative learning has evolved in the scholarly literature. Interest in transformative learning has resulted in hundreds of scholarly papers and presentations, more than a dozen books, an academic journal, international conferences, and more than 150 doctoral dissertations (Kitchenham, 2008). Entire program pedagogy has even been developed with an intention of instigating a disorienting experience to provide an environment for perspective transformation and transformative outcomes (Taylor & Cranton, 2012). Transformative learning originated in North America, however, it has become a global area of study. Hoggan (2016a) documented interest from a number of international scholars such as Illeris (2004), Mälkki (2010), Jarvis (2012), Kokkos (2012), and West, Fleming, and Finnegan (2013), and the International Transformative Learning Conference has been hosted in the U.S., Canada, and Europe over the past 20 years. Transformative learning theory has been called the new

andragogy and the central theory of adult learning (Howie & Bagnall, 2013; Taylor, 2007; Taylor & Cranton, 2012), and Edward Taylor (2007) asserted that transformative learning theory is “the most researched and discussed theory in the field of adult education” (p. 173).

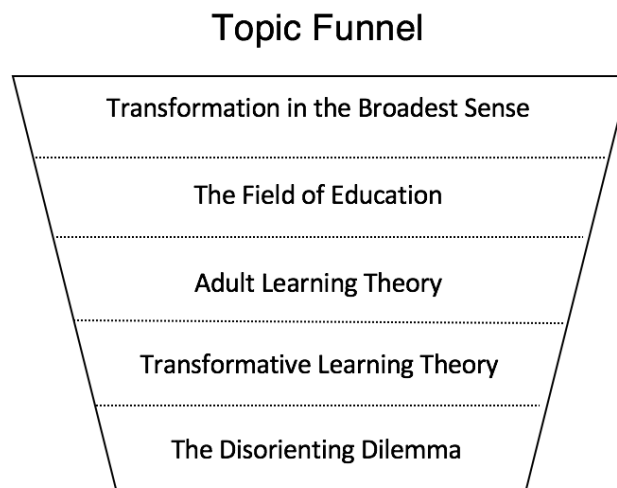
However, despite over four decades of scholarly evolution on a global scale, the disorienting experience as an initiating circumstance for transformation remains neither adequately defined nor fully understood. It is widely accepted as a catalyst for transformation and widely mentioned in studies, yet these descriptions are fragmented and lacking a common language or set of attributes. Researchers have yet to critically analyze, understand, and interpret the disorienting experience as it is described across studies in the transformative learning literature.

Numerous scholars within transformative education have emphasized the need for a better understanding of the disorienting event. Twenty years after Mezirow’s seminal research, Taylor (1997) noted in his critical review of the empirical studies of Mezirow’s transformative learning theory that the nature of the catalyst for transformation varies greatly, and the field would benefit from a better understanding of the varying nature of the disorienting experience. Taylor (1997) noted just two studies that attempted to understand this seemingly vital phase. In a later study, Taylor and Snyder (2012) found scholars were studying many new and interesting tangential topics such as greater recognition of the role of context in shaping transformative learning, a growing appreciation for other ways of knowing, how to foster transformative learning, and studies exploring how individuals experience transformative learning; however, they noted that there was still little focus on the disorienting dilemma phase. Thus, academic research often describes the disorienting experience within the context of a specific study, but this concept has not been examined across studies. There may be relationships between the

disorienting catalyst and other phases of transformative learning (such as critical reflection) or between the disorienting catalyst and transformative outcomes, however, without a common language or set of attributes for the disorienting experience, it remains difficult to conduct these correlative types of studies.

### **Purpose of the Study and Guiding Research Question**

Therefore, in order to address these problems and the gap in research described above, the purpose of this qualitative descriptive study was to better understand the first phase of transformative learning, described by Mezirow (1978a, 1991a) as a disorienting dilemma. The guiding research question asked: how do scholars conceptualize the disorienting experience in the transformative learning literature? This study was situated within the context of the theory itself to contribute to the existing research on the subject of transformative learning as well as assist both scholars and practitioners in understanding this phase as they apply it to learning and education, global leadership development, change management and other disciplines. Figure 1 summarizes the topic funnel for this study.



*Figure 1.* Topic funnel for this study.

## **Significance of the Study**

Transformative learning has overshadowed andragogy and is now at the center of the study of adult learning, both in the field of adult education and in other disciplines (Taylor & Laros, 2014). The concept of the disorienting experience as a catalyst is shared across disciplines, but it is sometimes referred to by other names. For example, it is referred to as expectation failure in other learning theories (Schank, 1982, 1999); identity crises and life crises in human development (Dohrenwend & Dohrenwend, 1974; Erikson, 1977, 1994; Erikson & Erikson, 1998); disjuncture in life-long learning (Jarvis, 2006); cognitive dissonance in psychology (Festinger, 1962); sensemaking (Louis, 1980; Louis & Sutton, 1991; Weick, 1995), defining moments (Badaracco, 1997) and crucible moments (Bennis & Thomas, 2002) in the management sciences; culture shock (Adler, 1975; Furham & Bochner, 1986; Kim, 1988; Kim & Ruben, 1988) and trigger events (Kozai Group, 2008; Mendenhall et al., 2018) in international education, global leadership, and intercultural studies; unfreezing (Lewin, 1947) in change management; and eureka, aha, and power moments in pop literature.

As the above list indicates, researchers across disciplines intuitively sense that there is something transformative about the process of moving from disorientation to orientation. As the researcher of this study progressed through Pepperdine University's Ph.D. in Global Leadership and Change program, she studied learning, leadership, and change theories and noticed that the concept of disorientation as a catalyst came up again and again. Yet, she did not come across a common language or set of attributes to describe this phenomenon. This observation led the researcher to formulate questions such as: how might we approach learning, development, and change management differently if we knew more about the disorienting experience as a catalyst? Are there attributes common to all (or most) disorienting experiences? Is disorientation

measurable, and might it be operationalized? Does the type or degree of disorientation relate to outcomes? Why do some events that would seem relatively insignificant to some people trigger transformative outcomes for others? How do both positively and negatively disorienting experiences affect transformative outcomes? And, what are typical affective and behavioral reactions to these experiences?

Prior to conducting grounded theory research that may answer some of these questions, the researcher felt it imperative to first understand how scholars have conceptualized the disorienting experience in the existing academic literature. Transformative learning is a rich stream of discourse and was an appropriate lens through which to begin this research. Therefore, this study is positioned as a launching point to better understand the concept of the disorienting experience. It utilized transformative learning theory as a framework to examine how scholars conceptualize the disorienting experience. Findings from this study are significant to both scholars and practitioners in many disciplines, particularly in three areas: learning theory and education, global leadership development, and change management.

**Significance for learning theory and transformative education.** First, in the field of transformative education, scholars continue to call for more research on transformative learning theory itself through a better understanding of each of the ten phases of the theory (Taylor, 1997, 2007; Taylor & Snyder, 2012). Mälkki and Green (2014) explained that Mezirow's theory has "offered the basis for numerous empirical studies and successful educational programs, [yet] there remains considerable uncharted terrain (see Taylor, 2007) both at the fringes of the theory and at the conceptual joints within the theory (see Mälkki, 2010, 2011, 2012b)" (p. 6). Mälkki and Green (2014) also urged further understanding of conceptualizations of specific aspects of the theory such as the role of the disorienting experience. Taylor (2007) noted that a more in-



depth understanding may be gained by focusing closely on certain aspects instead of trying to consider transformative learning in its entirety. Therefore, this study contributes to the evolution of transformative learning theory itself by attempting to better understand one specific aspect of the theory: the first step and catalyst for perspective shift, the disorienting dilemma.

Practitioners utilizing other learning theories, such as experiential learning, may also benefit from this study. One example of this is in the area of international education programs. With an increased focus on global citizenry skills, a plethora of international education opportunities for students have emerged. In the 2014/15 academic year, 313,415 U.S. students studied abroad, which is a 300% increase from a decade earlier in the 1994/95 academic school year (Institute of International Education, 2016). Hoff (2005) argued that the literature has largely focused on study abroad academic outcomes; however, there is little research on the specific program characteristics that produce positive outcomes. According to Tarrant (2010), transformative learning theory is a framework that could be used to explore these characteristics. Disorientation is a commonly experienced phenomenon in study abroad, as a student has the opportunity to change their global citizenry perspective (Tarrant, Rubin, & Stoner, 2014).

**Significance for global leadership development.** The second area of significance is in the field of global leadership development. Scholars in global leadership are calling for a better understanding of the disorienting dilemma, also referred to in the global leadership literature as a triggering event (Mendenhall et al., 2018). It is widely accepted in the global leadership literature that competencies for global leadership development are distinct from general leadership competencies. For practitioners in an increasingly globalized world, Mendenhall et al. (2018) stated that an ability to deal with ambiguity is a core competency of global leadership training and education. Mendenhall et al. (2013) argued that for global leadership development programs to be effective, they must address the learning process at a conceptual level. One model that

embodies this is Black and Gregersen's (2000) model of Contrast, Confrontation and Remapping, which Mendenhall et al. (2013) equated to an abbreviated version of Mezirow's ten phases of transformative learning.

In Black and Gregersen's (2000) model, the first step, *Contrast*, represents exposure to a disorienting situation as described in transformative learning; the second step, *Confrontation*, represents self-examination and exploration of options as described in transformative learning; and the third step, *Replacement* or *Remapping*, represents provisional trying on of new roles, building competence in those roles, and reintegrating based on one's new perspective as described in transformative learning (Mendenhall et al., 2018). Additionally, the Kozai Group (2008) developed a model for global leadership development using Mezirow's transformative learning theory as a theoretical framework. In this model, the first step, or catalyst, is referred to as the trigger event (Mendenhall et al., 2013). Louis (1980) and Louis and Sutton (1991) conducted seminal work in the management sciences on surprise and sensemaking; however, the idea of the trigger concept has largely remained unexplored since. Thus, a more precise and comprehensive understanding of the disorienting experience would assist global leadership scholars and practitioners in designing frameworks for training and development programs. In a preliminary research working paper, Osland, Bird, and Gunderson (2007) uncover basic triggering events such as novelty, discrepancy, and deliberative initiation and suggest that future research could develop measures of these events.

**Significance for change management.** A third area of significance of this study relates to change theory in the management sciences, including executive coaching and organizational development. A better understanding of disorientation would be helpful for leaders and practitioners who are carrying out change initiatives such as mergers and acquisitions, entry into

new markets, and/or a change in company leadership. Executive coaching is a field immersed in this topic, as clients often hire an executive coach while experiencing a state of transition that involves disorientation. Practitioners in the fields of organizational development and organizational behavior also strive to understand the human component of organizational learning and change processes. In highly uncertain situations, both leaders and employees often face levels of ambiguity that are disorienting and can impact metrics such as productivity and turnover.

Within the field of change management, several theorists have referred to a period of uncertainty, confusion, or disorientation as a trigger for a potential transformation. For example, in 1947, Kurt Lewin referred to the concept of the disorienting dilemma with his simple, yet enduring, prescription for change: *Unfreeze – Change – Freeze*. Here, Lewin asserts that these three steps disorient a system, alter it, and then settle it into a state that is more desired than the one from which it started (McWhinney & Markos, 2003). Edgar Schein (1996) described Lewin's first step, Unfreeze, as disorientation in the form of disconfirmation, frustration, or some form of dissatisfaction. Beckhard and Harris's (1987) change theory is another example of a change theory with a triggering or disorienting first step. Their change formula is  $D \times V \times F > R$  where D = dissatisfaction, V = vision, F = first steps, and R = resistance. In this formula, change occurs when the product of dissatisfaction, vision, and first steps is greater than the resistance to the change. Beckhard and Harris (1987) describe a scenario where the disorienting uncertainty of change is overpowered by dissatisfaction with the status quo, vision for the future, and first steps toward realizing this vision.

Thus, there are significant implications for better understanding the concept of disorientation for both practitioners and scholars across disciplines, particularly as this concept

relates to learning and education, global leadership development, and change management. Herbers, Antelo, Ettlting, and Buck (2011) note the high demands placed on leaders today, who are expected to facilitate change and reform while providing exemplary leadership. Herbers et al. (2011) state, “Transformative learning theory provides a theoretical and praxis base to assist future educational and business leaders with the challenge of understanding and promoting the process of change” (p. 91). One aim of this dissertation research is to better understand the attributes of the catalyst of transformative learning and develop a common language that can be used by both scholars and practitioners.

### **Philosophical World View**

It is important for researchers to understand their philosophical assumptions and to articulate them to their audience. Creswell (2013) categorized these assumptions as “ontology (the nature of reality), epistemology (what counts as knowledge and how knowledge claims are justified), axiology (the role of values in research), and methodology (the process of research)” (p. 20). This study was situated in a qualitative, subjective, and inductive setting where reality was co-constructed between the researcher and the researched (authors of academic articles in the scholarly literature). This study adopted a constructivist philosophical worldview, as well as a constructivist research paradigm in which multiple realities were possible. In striving to better understand the disorienting dilemma, the researcher sought to explore, describe, and interpret the disorienting experience as conceptualized by scholars via content analysis. “Social constructivists believe that individuals seek understanding of the world in which they live and work” (Creswell, 2014, p. 8). The findings of this study can assist both scholars and practitioners in doing so.

## **Theoretical Framework and Research Design**

As mentioned above, the theoretical framework for this study was transformative learning theory, which originated from the seminal research of Mezirow (1978a, 1991a). The transformative learning research stream includes hundreds of published studies, written by global authors, that describe the disorienting experience in a wide variety of contexts; hence, it is a useful theoretical lens through which to answer the research question. The research design was a qualitative descriptive design. "Qualitative descriptive design is the method of choice when straight descriptions of phenomena are desired" (Sandelowski, 2000, p. 334). The data analysis utilized qualitative content analysis (QCA) to summarize, analyze and categorize the data. QCA is a method for describing and understanding the meaning of qualitative data in a systematic way by classifying material as instances of the categories of the coding framework. Instances may be in the form of qualitative codes and/or frequency of occurrence. This method is used to interpret and arrive at the meaning of the data (Schreier, 2012).

### **Definition of Terms**

For more than four decades, Mezirow and his colleagues strived to explicitly define various terms related to and used when discussing transformative learning theory. Key terms important to this study are:

**Disorienting dilemma.** An experience where a fundamentally held certainty becomes uncertain (Mezirow, 1978a, 1991a). The terms "disorienting event" and "disorienting experience" are used as synonyms for this term throughout this study.

**Perspective transformation.** "The process of becoming critically aware of how and why our assumptions have come to constrain the way we perceive, understand, and feel about our world" (Mezirow, 1991a, p. 167); the process of how adults revise their mental models.

**Transformation.** A thorough or dramatic change that is irreversible (for example, a caterpillar transforming into a butterfly). Reverting to an earlier form would require another distinct transformation (Transformation [Def. 1], n.d.).

**Transformative learning.** “Learning defined as the process of making a new or revised interpretation of the meaning of an experience which guides subsequent understanding, appreciation, and action” (Mezirow, 1990, p. 1); a deep structural shift in basic premises of thoughts, feelings, and actions (Kitchenham, 2008); “processes that result in significant and irreversible changes in the way a person experiences, conceptualizes, and interacts with the world” (Hoggan, 2016a, p. 77).

**Transformative learning theory.** An adult learning theory that focuses on how individuals construe meaning from experiences and how the act of reinterpreting meanings guides decisions and actions (Mezirow, 1991a). First posited in 1978 by Jack Mezirow, this theory suggests that sometimes learning more, solving problems more effectively, or acquiring a new skills or behaviors will not resolve certain dilemmas we face (Mezirow, 1978a). Instead, resolving the dilemma requires expansion or alteration of our mental model, and this resolution is a special type of learning called transformative learning.

### **Assumptions**

The following research assumptions were implicit in this study. First, the researcher assumed, based on a systematic literature review and discussions with two subject matter experts, that the disorienting dilemma has not been adequately defined nor understood. It is referred to in numerous studies, but the common attributes of this phenomenon have not been conceptualized across studies (Hoggan, personal communication, 2018; Taylor, personal communication, 2018). Second, the researcher assumed that a review of a sample of existing

literature would assist in better understanding how scholars conceptualize the disorienting experience.

### **Limitations**

Certain limitations are inherent in qualitative descriptive studies. Leedy and Ormrod (2015) suggest four categories of limitations: the study sample, data collection, measurement techniques, and personal biases. The limitations of this study are as follows. First, the study sample was limited to a dataset consisting of existing archived articles which refer to transformative learning in three peer-reviewed journals dedicated to adult learning. It did not include books or other types of literature such as conference proceedings. Second, there were no measurement instruments required for this study. Third, the researcher's personal bias was considered with respect to positionality. The researcher has personal experience with transformative education such that she brings a personal, positive bias to the study which could, potentially, impact discrepant aspects important to the study. The researcher's positionality is addressed in more detail a section of this study dedicated to positionality in Chapter Three. In addition to the researcher's bias, authors of the publications comprising the dataset may have personal biases which are inherent limitations of this study. Therefore, the researcher attempted to mitigate these limitations to the best extent possible through a carefully thought out and documented research design.

### **Delimitations**

In addition to assumptions and limitations, there were several delimitations in this study. Delimitations establish a study's boundaries by explaining what is included in a study and what is excluded. The first delimitation is the scope of the study. While this study may ultimately prove useful across disciplines, it was designed within the context of transformative learning,

which is situated in the field of adult learning. This study was also delimited in scope to the first phase in Mezirow's transformative learning theory, the disorienting experience. This is an important delimitation because much of the transformative learning literature focuses on the entire process of transformation. For this study, there was a firm boundary between phase one, the disorienting experience, and phases two through ten of Mezirow's transformative learning theory. This study did not seek a better understanding of the other phases of the theory nor of other previously researched topics such as the validity of the theory, applications of the theory, origins of the theory, tangential streams of the theory, or critiques of the theory. It was not concerned with transformative learning outcomes including if they occurred or not. It was not concerned with the role of critical reflection in transformative learning nor the relationship between critical reflection and disorientation. The scope of this study was deliberately limited to a deep dive into the disorienting experience itself.

Second, transformative learning as a subset of the broader concept of transformation also delimited this study. In contrast, a related field, transformational leadership theory/transformational leadership, is an area of research in the domain of leadership studies originating from the seminal efforts of scholars such as Bernard Bass (Bass & Bass, 2009), who articulated the conceptual space and developed leadership measures. Scholarly work related to transformational leadership is distinct and separate from transformative learning theory which originated with Jack Mezirow (1978a). However, because of the similarity in syntax, these terms are sometimes interchanged either mistakenly or in the context of the generic verb "transform." Transformational leadership was not within the scope of this study.



## **Organization of the Study**

This study is organized into five chapters. Chapter One introduced the idea that opportunities for transformation are all around us and often involve some form of disorientation as a catalyst. It also highlighted the problem: namely, that relatively little is known about the disorienting experience, and the field of transformative learning lacks a common language or set of attributes to describe this initiating circumstance. The chapter presented Mezirow's transformative learning theory as an appropriate lens through which to study disorientation because this theory has generated rich stream of research that includes a wide variety of studies describing the disorienting experience. This section offered a topic funnel leading to the topic of the study: step one of transformative learning theory, the disorienting dilemma.

Next, Chapter One introduced the study's guiding research question, which focused on gaining an understanding of scholars' conceptualization of the disorienting dilemma through a basic qualitative study using qualitative content analysis to explore, understand, and interpret the existing scholarly literature. This study is situated in a constructivist world view and is potentially significant for both practitioners and scholars in fields drawing on transformative learning. Additionally, Chapter One noted areas where both scholars and practitioners in learning and education, global leadership development, and change management might benefit from the findings of this study. The next section defined terms, then stated the assumptions, limitations, and delimitations of this study.

Chapter Two includes an in-depth review of literature related to the study, specifically the evolution of transformative learning theory, studies that specifically focus on the disorienting experience, and other learning theories that point to the disorienting experience; this review was critical to provide the context for the study and also articulate the problem herein. Chapter Three

restates the research question, design and the process for cultivating the sample of scholarly articles comprising the dataset for the study. It also explains the analysis approach. Chapter Four presents the three major findings of the study, and Chapter Five offers a discussion of these findings, implications for scholars and practitioners, and suggestions for future research.

## **Chapter 2: Review of Relevant Literature**

The purpose of this qualitative descriptive study was to better understand the first of Mezirow's ten phases of transformative learning, the disorienting experience (Mezirow, 1978a, 1991a), via the following guiding research question: how do scholars conceptualize the disorienting experience in the transformative learning scholarly literature? To answer this question, the researcher examined 53 studies published from 2003 through 2017 that yielded 82 instances of disorienting experiences. These studies were written by 114 authors who represented every continent except Antarctica. This sample of studies provided a rich dataset describing a wide variety of disorienting experiences. The following section describes the substantive areas of literature related to this study.

### **Literature Review Methodology**

The methodology for the literature review followed a systematic mapping process developed and refined by the Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre), Institute of Education, London. According to Grant and Booth (2009), the purpose of a systematic literature review (SLR) is "to map out and categorize existing literature on a particular topic, identifying gaps in research literature from which to commission further reviews and/or primary research" (p. 97). This literature review revealed that the disorienting experience as a catalyst for transformative learning has not been critically analyzed across studies and, as a result, is not adequately defined by a common language; nor are the attributes of the disorienting experience fully understood.

Three key aspects of SLRs were adopted for this study. First, SLRs seek to "systematically search for, appraise and synthesize research evidence" (Grant & Booth, 2009, p. 95). The systematic examination of literature included cross-referenced searches in several

academic databases accessed via Pepperdine University's library system, journal databases, and Google Scholar; extensive reviews of bibliographies and reference lists in journal articles, books, and dissertations; reviews of conference proceedings; and discussions with the researcher's faculty, colleagues, dissertation chair, and dissertation committee. Second, the SLR "aims for exhaustive comprehensive searching, is typically narrative with tabular accompaniment, and analyzes both what is known and what remains unknown" (Grant & Booth, 2009, p. 94). Each narrative section of this review summarizes what is known and still unknown, and each is accompanied by a table of literature. Third, a SLR characterizes studies according to a theoretical perspective and can help a researcher understand whether the available studies will help answer a research question (Grant & Booth, 2009). The literature reviewed assisted the researcher in developing both the research question and the research methodology for this study.

### **Chapter Structure**

The academic literature related to transformative learning is extensive and spans more than four decades. The objective of this SLR was threefold, and each part comprises one section of this chapter. The first objective was to review the evolution of transformative learning theory in order to understand the arc of the theory and identify what is known and what remains unknown about the disorienting experience. The second was to understand what has been written with a specific intention to better understand Mezirow's disorienting dilemma phase. The third was to point to the concept of the disorienting experience in other learning theories.

**Explanation of first-wave and second-wave literature.** Within this chapter's first section, which describes the evolution of transformative learning theory, there are two subsections, 1a and 1b. Subsection 1a includes first-wave literature, and subsection 1b includes second-wave literature. Gunnlaugson (2006) categorized first-wave literature as "inspired by the

contributions of Jack Mezirow's [1978 study that] identified [transformative learning by] critically examining our adopted beliefs, values, and frames of reference—a process that leads to developing more open, coherent, and comprehensive ways of thinking and acting” (p. 334). Gunnlaugson (2006) categorized a second wave of “more integrative, holistic and integral theories [that] have emerged within the recent decade, attempting to give voice to the varied perspectives on [transformative learning] that have been overshadowed by Mezirow's seminal contribution” (p. 334). In this SLR, the researcher utilized Gunnlaugson's terminology of first-wave and second-wave literature as a starting point. However, the researcher used slightly different criteria than Gunnlaugson for categorizing articles as first-wave or second-wave. For purposes of this literature review, first-wave literature included the historical evolution of transformative learning theory focusing on Mezirow's writings and critiques of the theory. Second-wave literature included scholars seeking to integrate the theory, scholars who have summarized the theory via literature reviews, empirical study reviews, publications suggesting metatheory approaches, and books summarizing applications of transformative learning. Divergent interpretations of and approaches to transformative learning are touched upon; however, the second-wave literature review does not examine these other, sometimes overlapping, streams of the theory in depth, as they are not the focus of this study. Similarly, several scholars have conducted extensive literature reviews of transformative learning theory (Baumgartner, 2012; Calleja, 2014; Cranton, 2016; Dirkx, 1998; Kitchenham, 2008; Taylor, 1997, 2007; Taylor & Snyder, 2012), and this SLR does not attempt to repeat these exhaustive efforts. Instead, the literature review of transformative learning theory included a review of both first-wave and second-wave literature as a lens for understanding the evolution of the theory. This review highlighted areas where the disorienting experience was discussed.

**Distribution of first-wave and second-wave literature by publication year.** To assist in gaining an understanding of a high-level arc or maturity path of the theory, the researcher plotted the frequency of articles reviewed, by type and by publication date, in a histogram. This provided a visual image of publishing surges and gaps. This histogram does not include the many empirical studies that have been conducted utilizing transformative learning theory as a framework. Figure 2 shows the frequency distribution by publication date of the first-wave and second-wave articles reviewed and highlights some of the peak publishing periods over time.

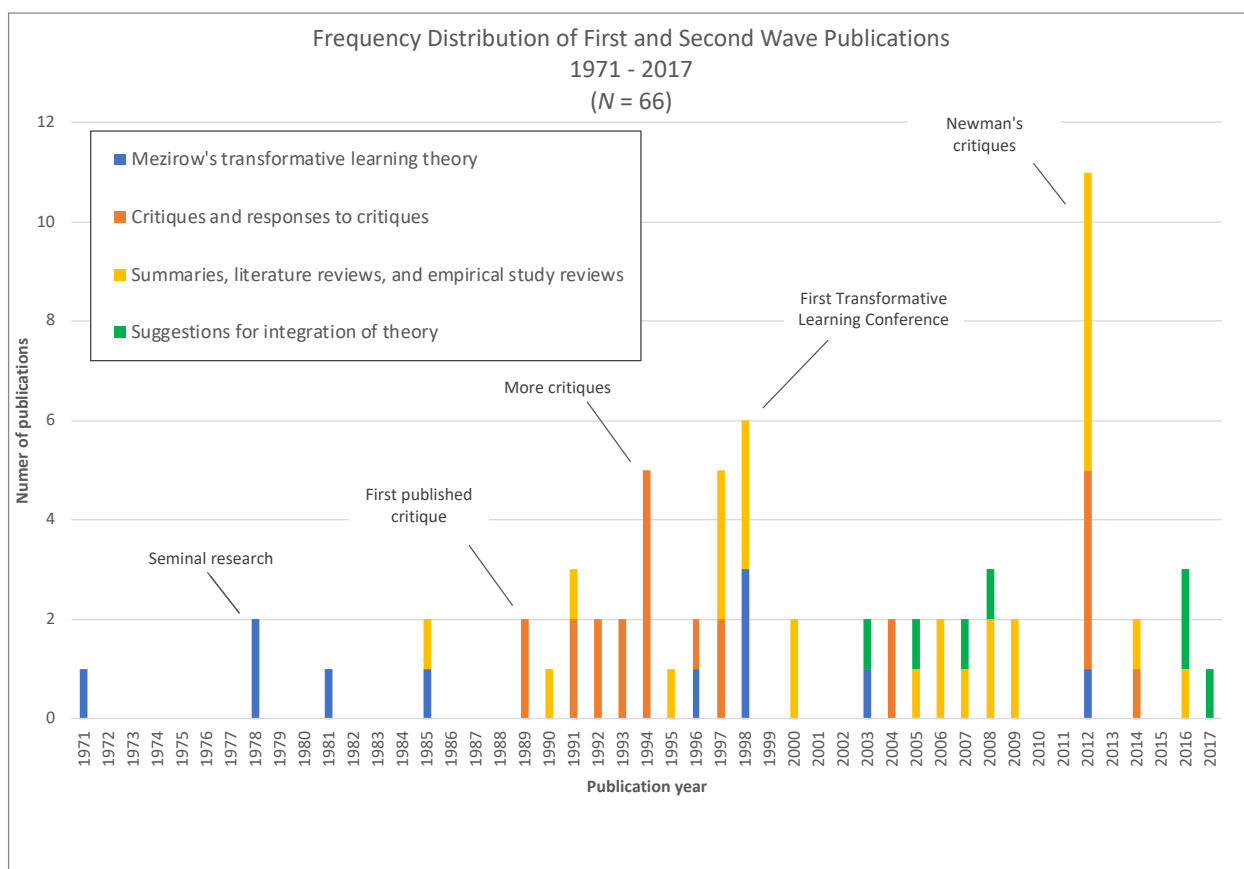


Figure 2. Frequency distribution of first-wave and second-wave publications (1971–2017).

Table 2 displays the components of this SLR, which are also the four main sections of this chapter.

Table 2

*Structure of the Literature Review*


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 Systematic Literature Review
 

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1. Evolution of transformative learning theory including critiques
    - a. First-wave literature – the evolution of transformative learning theory, focusing on Mezirow’s writings and critiques of the theory
    - b. Second-wave literature – articles summarizing transformative learning theory via integrative approaches, reviews of literature, reviews of empirical studies, publications suggesting metatheory approaches and books summarizing applications of transformative learning; an overview of divergent approaches
  2. Literature focusing on the disorienting dilemma
  3. The concept of the disorienting dilemma in other learning theories
- 

**Section 1a: The Evolution of Transformative Learning Theory – First-wave**

Jack Mezirow (1923-2014) is widely regarded as the father of transformative learning. According to WorldCat Identities (2019), he authored 65 works included in 190 publications (accounting for multiple editions and international reprints) in six languages and 4,246 library holdings. To place the disorienting dilemma in context and understand what is known and not known about it, the researcher found it imperative to understand the birth and evolution of Mezirow’s writings on transformative learning theory in a chronological and historical manner, beginning with Mezirow’s seminal research.

To review the first-wave literature, the researcher conducted a comprehensive search of Mezirow’s contributions to transformative learning theory, resulting in chronology of articles that presents the arc of the theory from Mezirow’s pre-theory thoughts in 1971 to 2016 (two years after Mezirow’s passing). The methods used were cross-referencing published literature reviews focusing on Mezirow’s writings (Calleja, 2014; Kitchenham, 2008; Taylor, 1997, 2007,

2008; Taylor & Snyder, 2012), searching Sage Journals for articles authored by Mezirow (this search included three journals where much of Mezirow's transformative learning publications reside: *Adult Education Quarterly*, *Adult Learning*, and *The Journal of Transformative Education*), and searching Amazon.com for books authored by Mezirow. The resulting review included Mezirow's original study of women's re-entry programs in community colleges (Mezirow 1978a), which led to development and refinement of transformative learning theory over time, and several critiques and debates that emerged as the theory matured. Publications were reviewed with the goal of gaining a high-level understanding of the theory's lifespan while also searching for mentions of the disorienting dilemma anywhere in the theory's evolution. Table 3 displays a chronology of these 43 publications from 1971 to 2016. In addition to Mezirow's seminal publication, five books, five book chapters, 29 journal articles, and three letters to the editor are included. Table 3 displays the publication year, article title and publication, publication type and author(s). Additionally, this table provides a brief explanation of the focus of the publication (advancing the theory, critiquing the theory, or responding to critiques of the theory). This table is followed by a summary and synthesis of first-wave articles. Additionally, Appendix A lists the first-wave literature with full citations included.

Table 3

*Evolution of Transformative Learning Theory: First-wave Literature (1971–2016)*

Count	Year	Title	Publication Type	Author(s)	Focus
1	1971	Toward a Theory of Practice, <i>Adult Education Journal</i>	Journal article	Mezirow	Pre-seminal
2	1978	Education for Perspective Transformation: Women's Re-entry Programs in Community Colleges, <i>Center for Adult Education, Teacher's College, Columbia University</i>	Research study	Mezirow	Seminal

(Continued)



Count	Year	Title	Publication Type	Author(s)	Focus
3	1978	Perspective Transformation, <i>Adult Education</i>	Journal article	Mezirow	Seminal
4	1981	A Critical Theory of Adult Learning and Education, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Theory
5	1985	A Critical Theory of Self-Directed Learning, in S. Brookfield (Ed.) <i>Self-directed Learning: From Theory to Practice</i>	Book chapter	Mezirow, Brookfield	Theory
6	1985	Concept and Action in Adult Education, <i>Adult Education Quarterly</i>	Journal Article	Mezirow	Theory
7	1989	The Limits of Perspective Transformation: A Critique of Mezirow's Theory, <i>Adult Education Quarterly</i>	Journal article	Collard & Law	Critique
8	1989	Transformation Theory and Social Action: A Response to Collard and Law, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Response to Collard & Law
9	1990	<i>Fostering Critical Reflection in Adulthood</i>	Book	Mezirow (Editor)	Theory
10	1991	<i>Transformative Dimensions in Adult Learning</i>	Book	Mezirow	Resource book
11	1991	Context and Rationality in Mezirow's Theory of Transformational Learning, <i>Adult Education Quarterly</i>	Journal article	Clark & Wilson	Critique
12	1991	Transformation Theory and Cultural Context: A Reply to Clark and Wilson, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Response to Clark & Wilson
13	1992	From Freire to Feminism: The North American Experience with Critical Pedagogy, <i>Adult Education Quarterly</i>	Journal Article	Cunningham	Critique
14	1992	Transformation Theory: Critique and Confusion, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Response to Cunningham
15	1993	Perspective Transformation and Adult Development	Journal article	Tennant	Critique
16	1993	<i>The Third Contract: Theory and Practice in Trade Union Training</i>	Book	Newman	Critique
17	1994	Understanding Transformation Theory, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Response to Tennant and Newman
18	1994	Response to "Understanding Transformation Theory," <i>Adult Education Quarterly</i>	Journal article	Tennant	Response to Mezirow

(Continued)

Count	Year	Title	Publication Type	Author(s)	Focus
19	1994	Response to "Understanding Transformation Theory," <i>Adult Education Quarterly</i>	Journal article	Newman	Response to Mezirow's response
20	1994	Response to Mark Tennant and Michael Newman, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Response to Tennant and to Newman's book
21	1994	<i>Defining the Enemy: Adult Education in Social Action</i>	Book	Newman	Critique
22	1995	Transformation Theory of Adult Learning, in M.R. Welton (Ed.) <i>In Defense of the Lifeworld</i>	Book chapter	Mezirow, Welton	Theory
23	1996	Knowledge and Power in Adult Education: Beyond Freire and Habermas, <i>Adult Education Quarterly</i>	Journal article	Pietrykowski	Critique
24	1996	Contemporary paradigms of learning, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Theory
25	1997	Transformative Learning: Theory to Practice, in P. Cranton (Ed.) <i>Transformative Learning in Action: Insights from Practice - New Directions for Adult and Continuing Education</i>	Book chapter	Mezirow, Cranton	Theory
26	1997	Empowerment and Emancipation, <i>Adult Education Quarterly</i>	Journal article	Inglis	Critique
27	1997	Transformation Theory Out of Context, <i>Adult Education Quarterly</i>	Letter to the editor	Mezirow	Response to Newman's book
28	1998	On Critical Reflection, <i>Adult Education Quarterly</i>	Journal article	Mezirow	Theory
29	1998	Postmodern Critique of Transformation Theory: A Response to Pietrykowski, <i>Adult Education Quarterly</i>	Letter to the editor	Mezirow	Response to Pietrykowski's critique
30	1998	Transformative Learning and Social Action: A Response to Inglis, <i>Adult Education Quarterly</i>	Letter to the editor	Mezirow	Response to Inglis' critique
31	1998	Cognitive Processes: Contemporary Paradigm of Learning, in P. Sutherland (Ed.) <i>Adult Learning: A Reader</i>	Book chapter	Mezirow, Sutherland	Theory
32	2003	Transformative Learning as Discourse, <i>Journal of Transformative Education</i>	Journal article	Mezirow	Theory

(Continued)

Count	Year	Title	Publication Type	Author(s)	Focus
33	2004	The Role of Cognitive Development in Mezirow's Transformational Learning Theory, <i>Adult Education Quarterly</i>	Journal article	Merriam	Critique
34	2004	Forum Comment on Sharan Merriam's "The Role of Cognitive Development in Mezirow's Transformational Learning Theory," <i>Adult Education Quarterly</i>	Journal article	Mezirow	Response to Merriam's critique
35	2006	An Overview of Transformative Learning, in P. Sutherland & J. Crowther (Eds.) <i>Lifelong Learning: Concepts and Contexts</i>	Book chapter	Mezirow, Sutherland & Crowther	Theory
36	2009	<i>Transformative Learning in Practice: Insights from Community, Workplace, and Higher Education</i>	Book	Mezirow, Taylor	Theory
37	2012	Calling Transformative Learning into Question: Some Mutinous Thoughts, <i>Adult Education Quarterly</i>	Journal article	Newman	Critique
38	2012	A Response to Michael Newman's "Calling Transformative Learning into Question: Some Mutinous Thoughts," <i>Adult Education Quarterly</i>	Journal article	Cranton, Kasl	Response to Newman's critique
39	2012	Self-Formation and Transformative Learning: A Response to "Calling Transformative Learning into Question: Some Mutinous Thoughts" by Newman, <i>Adult Education Quarterly</i>	Journal article	Dirkx	Response to Newman's critique
40	2012	Michael Newman's Final Comments in the Forum on his Article "Calling Transformative Learning into Question: Some Mutinous Thoughts," <i>Adult Education Quarterly</i>	Journal article	Newman	Response to Cranton, Kasl, Dirkx
41	2012	Critically Questioning the Discourse of Transformative Learning Theory, <i>Adult Education Quarterly</i>	Journal article	Cranton, Kucukaydin	Discourse embedded in transformative learning theory
42	2014	Transformative Learning: Mutinous Thoughts Revisited, <i>Adult Education Quarterly</i>	Journal article	Newman	Reflections on former critiques
43	2016	Developing the Theory of Perspective Transformation: Continuity, Intersubjectivity, and Emancipatory Praxis, <i>Journal of Transformative Education</i>	Journal article	Hoggan, Mälkki, Finnegan	Critiques via three dimensions

**Seminal research within the first-wave literature.** Mezirow was interested in the ways in which people understand and make meaning of their world. His early research revolved around youth, community development, and social change. In his book, *Transformative Dimensions of Adult Learning*, Mezirow (1990) stated that he had a life crisis, or disorienting dilemma, in his own career when he was exposed to Paulo Freire and Ivan Illich's writings in the early 1970s; he was particularly affected by these authors' thoughts on social action and conscientization. Freire (1970) described conscientization as "the process by which adults achieve a deepening awareness of both the sociocultural reality which shapes their lives and... their capacity to transform that reality through action upon it" (p. 27). Their writings also shed light on the entrenched power structures in education and community development. This eureka moment transformed Mezirow's basic way of looking at the world and making meaning of it. Upon his appointment to Columbia University, he began to further explore theoretical ideas on perspective and meaning.

In the early 1970s, Mezirow took an interest in the unique characteristics of adult learners. He published an article titled "Toward a Theory of Practice" (Mezirow, 1971), in which he formulated initial thoughts on what would later become transformative learning theory. Glaser and Strauss's (1967) assertion of grounded theory as a qualitative methodology was relatively new at this time, and Mezirow incorporated their principles into his thinking. This was also a time when Malcolm Knowles (1975) and others were developing thoughts on the distinctive characteristics of adult learning, which would become known as andragogy. Theories of learning differ from theories of teaching, and both Mezirow and Knowles were interested in how adults learn. Theorists researching similar topics at the time included Allman and Mackie (1983), who examined self-learning and group learning in andragogy; Brookfield (1984, 1987), who

researched individual growth and development; and Knowles (1975) and Suanmali (1981), who focused on self-directed learning.

In 1975, Mezirow and his colleagues published the findings of a large study titled *Last Gamble on Education* (Mezirow, Darkenwald & Knox, 1975). In this study, Mezirow worked closely with Glaser and Strauss (1967) and employed their grounded theory methodologies. About this time, Mezirow's wife, Edee, decided that after many years away from formal schooling, she would re-enroll in college to complete her undergraduate education. Edee's experience re-entering college and the life changes she encountered afterward were profoundly transformative. Mezirow does not elaborate on specific aspects of Edee's transformation except to allude to a period in time when the women's movement was taking hold and Edee was becoming aware of social and cultural meaning schemes that were part of her mental model. Mezirow does tell us that it wasn't simply her attitudes and behaviors that changed, *she* changed. As Mezirow witnessed the changes his wife was experiencing, he decided to launch an ambitious national study of women returning to college. He wanted to understand what he had experienced (while studying Freire and Illich), and what his wife had experienced (while returning to college), that led them each to transform their perspectives or their mental models. In 1978, with the assistance of Victoria Marsick, Mezirow published the findings of this study, titled *Education for Perspective Transformation: Women's Re-entry Programs in Community Colleges*. The study provided Mezirow with a rich dataset for analysis that led him to formulate the theory of perspective transformation. A key theoretical finding of this study was "the identification of perspective transformation as the central process occurring in the personal development of women participating in college re-entry programs" (Mezirow, 1978a, p. 7).

In this study, Mezirow posited that a life crisis or disorienting dilemma was the first step and catalyst for perspective transformation. He noted a disorienting dilemma occurred when something a person held as a certainty became uncertain (Mezirow, 1991a). Mezirow (1978a) suggested that his findings with the women in re-entry programs could be generalizable to other populations across adult education, and he claimed that the “transforming of meaning perspectives [may be] a salient dimension of adult development and a significant function of continuing education” (p. 7). This landmark study positioned perspective transformation (later referred to as transformative learning theory) squarely in the discipline of education, particularly in adult education. Mezirow (1991a) theorized that transformative learning involved ten phases:

1. Experiencing a disorienting dilemma
2. Undergoing self-examination
3. Conducting a critical assessment of internalized assumptions and feeling a sense of alienation from traditional social expectations
4. Relating discontent to the similar experiences of others – recognizing the problem is shared
5. Exploring new ways of acting
6. Building competence and self-confidence in new roles
7. Planning a course of action
8. Acquiring the knowledge and skills for implementing a new course of action
9. Trying out new roles and assessing them
10. Reintegrating into society with the new perspective. (p. 168-169)

Table 4 lists several of the ways Mezirow (1978a) described the disorienting dilemma in his seminal work.

Table 4

*Mentions of the Disorienting Experience: Mezirow’s (1978a) Seminal Study*

Mentions of the disorienting experience
“life-crises” (p. 7)
“disorienting dilemmas” (p. 7)

(Continued)

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Mentions of the disorienting experience

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“feeling of discontent... problem without a name” (p. 7)

“personal reappraisal” (p.11)

“For a perspective transformation to occur, a painful reappraisal of our current perspective must be thrust upon us” (p. 12)

“The disturbing event was often external in origin – the death of a husband, a divorce, the loss of a job, a change of city of residence, retirement, an empty nest, a remarriage, the near fatal accident of an only child, or jealousy of a friend who had launched a new career successfully” (p. 12)

“These disorienting dilemmas of adulthood can disassociate one from long-established modes of living and bring into sharp focus questions of identity, of the meaning and direction of one’s life” (p. 12)

“Whether or not a woman comes into the program in response to a disorienting dilemma makes a crucial difference” (p. 12)

“*Conventional learners* who are still fully assimilated within a traditional cultural perspective, may well complete the re-entry program with enhanced self-confidence, having made progress toward their objectives and perhaps having acquired a useful skill” (pp. 12-13)

“In contrast... *threshold learners* whose participation in a program is prompted by a disorienting dilemma” (p. 13) will be strongly influenced by the source of the dilemma

“Two types [of dilemma] can be distinguished. One is an external event – the death of a husband, divorce, loss of a job, moving to a new city. The other is an internal, subjective experience – the feeling that life is not fulfilling, a sense of deprivation, the conviction that being only a housewife forecloses access to other rewarding experiences” (p. 13)

“Because the externally caused dilemma is likely to be less negotiable and to be more intense, it will more frequently lead to a perspective transformation. When the dilemma has an internal source, the degree of intensity accompanying it matters considerably and is often difficult to evaluate” (p. 13)

[Women responding to an internal event] “may be responding to changing social norms that require them to define their situation in this way and to explore other options actively. The women responding to an external dilemma, on the other hand, are likely to come into the program more traumatized and in a stage of panic about the urgent need to change” (p. 14)

“Freire has shown that disorienting dilemmas can be induced to produce perspective transformation though adult education in illiterate adults in traditional societies” (p. 55)

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With the benefit of 40 years of hindsight, several observations arose in the researcher's mind when reading these passages. First, the importance of context and personal experience became obvious. The same potentially disorienting event will likely be experienced differently by different people. It is a person who brings meaning to an otherwise benign event. This led the researcher to ponder questions about various aspects of meaning that people bring to the event, degrees of disorientation, the probability or frequency of certain attributes of disorientation occurring, and the possibility of a disorientation gradient scale or measure. Additionally, the types of disorientation experienced by adult American women re-entering college in the 1970s have their own contextual implications. Mezirow alluded to this point when he discussed the importance of cultural and psychological assumptions that create a personal context. Some of the researcher's thoughts are similar to Clark and Wilson's (1991) critique of transformative learning theory, which asserts that this theory does not put enough emphasis on context. Second, Mezirow makes a clear distinction between internal and external disorienting events, asserting that external events will more likely lead to a perspective transformation (p. 13); however, the researcher wonders if this causal claim is supported by Mezirow's data or if he intended to suggest a possible correlation rather than causation. It is unclear how this data was collected and analyzed in Mezirow's study. In the appendix of his study publication, Mezirow (1978a) describes the research procedures he used as grounded theory to construct a "normative description that was derived inductively" (p. 56) without mention of correlative or causative analysis. He mentions a telephone survey and a mail inquiry; however, his data collection instruments are not included nor described fully. Third, the idea of categorizing learners based on the type of disorienting dilemma they experienced is interesting. Mezirow claimed that threshold learners who experience external events are more likely to experience perspective



transformation. In his seminal study, he does not elaborate on threshold learners who experience internal events or conventional learners; however, he implies that these types of learners are less likely to experience perspective transformation. Again, the researcher is curious about the strength of these claims as well as the amount of inference and generalizability that is appropriate relative to the actual study data. With the exception of Clark and Wilson's (1991) critique on context, there appears to be a void of published literature on the above-mentioned topics the researcher brings forward. Mezirow does not refer to the disorienting dilemma again until the study's conclusion. In this section, he summarizes, "Freire has shown that disorienting dilemmas can be induced to produce perspective transformation through adult education in illiterate adults in traditional societies" (Mezirow, 1978a, p. 55). However, the rest of the conclusion focuses on positioning perspective transformation as a grounded theory with important educational implications.

Mezirow (1978b) also published a journal article the same year, stemming from the study and simply titled "Perspective Transformation." In this article, he defined perspective transformation as "a structural change in the way we see ourselves and our relationships" (Mezirow, 1978b, p. 1), and he placed perspective transformation among various types of learning he had personally experienced, such as learning how to do something; learning how something works, how it relates to or fits with something else; social learning, such as how to relate to others' expectations, anticipate reactions from others, and cope with reactions from others; and how to continually evolve a self-concept with awareness of personal values. He suggested adult educators may be aware of these types of learning and address them appropriately; however, he also suggested that a new type of learning was essential to adult learning and was not being addressed. This type of learning, he proposed, entails being aware of

how we are reliving our personal history, including the psycho-cultural assumptions that shape our patterns of behavior. He posited that this type of learning requires being aware of meaning perspectives (Mezirow, 1978b) and explained, “a meaning perspective refers to the structure of cultural assumptions within which new experience is assimilated to—and transformed by—one’s past experience. It is a personal paradigm for understanding ourselves and our relationships” (Mezirow, 1978b, p. 101). A personal paradigm or thought paradigm might also be called a mental model (Forrester, 1971; Senge, 1990). Mezirow (1978b) mentions the disorienting dilemma four times in this article, positioning it as a catalyst. Mezirow provides examples of dilemmas and explains how they work, but notably, he does not address the generalizability of alternative types of disorienting experiences beyond the data available from his seminal study. Instead, Mezirow simply reports the types of dilemmas revealed by his dataset. The focus on a new inductively-derived grounded theory is applied to the theory of perspective transformation, not to the disorienting dilemma itself. As a result, the types of disorienting experience are limited to those experienced by the sample population of his seminal research. Table 5 presents Mezirow’s (1978b) description of the disorienting experience in this article.

Table 5

*Mentions of the Disorienting Experience: Mezirow’s (1978b) Seminal Journal Article*

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Mentions of the disorienting experience

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“There are certain challenges or dilemmas of adult life that cannot be resolved by the usual a way we handle problems – that is, by simply learning more about them or learning how to cope with them more effectively. Life becomes untenable, and we undergo significant phases of reassessment and growth in which familiar assumptions are challenged and new directions and commitments are chartered” (p. 101)

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(Continued)

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### Mentions of the disorienting experience

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“Such dilemmas are commonplace in adult lives, but some are more dramatic than others. Examples are found in what popular writers have referred to as ‘life crises.’ The sudden loss of a mate or a job, a change of residence, graduation from college, betrayal or rejection, and scores of less significant interpersonal encounters as well as rapidly changing behavioral norms can create social or personal problems for which there are no ready-made answers” (p. 101)

“When a meaning perspective can no longer comfortably deal with anomalies in a new situation, a transformation can occur. Adding knowledge, skills, or increasing competencies within the present perspective is no longer functional; creative integration of new experience into one’s frame of reference no longer resolves the conflict. One not only is made to react to one’s own reactions, but to do so critically” (p. 104)

“Transformation in meaning perspective is precipitated by life’s dilemmas which cannot be resolved by simply acquiring more information, enhancing problem solving skills or adding to one’s competencies. Resolution of these dilemmas and transforming our meaning perspectives require that we become critically aware of the fact that we are caught in our own history and are reliving it and of the cultural and psychological assumptions which structure the way we see ourselves and others” (pp. 108-109)

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In the early stages of transformative learning theory, Mezirow conceived of the disorienting dilemma as a discrete and crisis-like event. However, as time passed, scholars began to research varying contexts of transformative learning which involved many different types of dilemmas; some were not discrete events, and some did not involve a crisis. The concept of the disorienting dilemma is something most people have personally experienced, so it is both familiar and yet vague at the same time. It appears to be an intensely personal experience that is uniquely shaped by an individual’s cultural and psychological assumptions—by their personal meaning structures and mental models. Mezirow’s seminal work opened up vast new theoretical territory for exploration and debate. However, as the remainder of this section of literature review reveals, the need for a better understanding of the universal attributes of the disorienting experience appears to have been largely overlooked for the past 40 years.

**Mezirow continues to write about transformative learning.** In 1981, Mezirow published another article titled “A Critical Theory of Adult Learning and Education.” In this intellectually complex article, he explored perspective transformation in relation to the German critical thinker Habermas’ (1971) three domains of adult learning. Habermas is a world-renowned German philosopher and sociologist as well as a critical theorist. In 1981 (translated into English in 1984 and 1987), he published *The Theory of Communicative Action*, which grounded the social sciences in a theory of language. This two-volume publication addressed the concept of communicative reality and proposed a two-level concept of society and critical theory for modernity (Habermas, 1984, 1987). Habermas asserted that language is the foundation of society and human rationality and claimed that actions can be analyzed via linguistic structures (Habermas, 1984, 1987). Transformative learning is constructivist in nature, and while constructivism and critical theory may not be entirely mutually exclusive, reference to Habermas’s critical theory paradigm created some confusion for scholars who would, over time, try to understand Mezirow’s social action and emancipatory relationship to transformative learning. For example, Hoggan (personal communication, 2019) suggests that if language is, in fact, the foundation of society and rationality, then Habermas’s theory is consistent with a constructivist paradigm. In addition, Mezirow’s decision to link his own thinking to Habermas’s still-evolving thoughts caused some unforeseen pragmatic issues. Mezirow’s early thoughts involved self-directed learning as a factor in perspective transformation, furthering his reputation as a constructivist. However, in 1985 he contributed a chapter to Brookfield’s book on self-directed learning; in this chapter, titled “A Critical Theory of Self-Directed Learning,” Mezirow blended constructivism with critical theory. Based on evidence in the literature, Mezirow did not view concepts such as critical theory and constructivism as mutually exclusive.

**The inaugural critique of transformative learning theory.** It was not until 1989, nearly a decade after Mezirow's publication of the study of women's college re-entry programs, that two doctoral students from the University of British Columbia, Vancouver, B.C., Susan Collard and Michael Law, published the first formal critique of Mezirow's theory in an article titled "The Limits of Perspective Transformation: A Critique of Mezirow's Theory." They cited problems of misalignment between Mezirow's worldview and Habermas's critical theory worldview. They pointed out what they considered to be the fundamental problem in Mezirow's work: its lack of a coherent, comprehensive theory of social change (Collard & Law, 1989). Mezirow's response to this critique was telling of his gracious character. He quickly, formally, and publicly thanked Collard and Law for their inaugural critique of his work on perspective transformation and called for involvement from an even wider scholarly audience to flesh out these ideas further. In the opening remarks of his response, Mezirow (1989) states,

It is extremely gratifying to have two able colleagues take the trouble to carefully read and critically reflect on one's ideas. A decade has passed since I first suggested that critical reflection was central to adult learning and proposed transformation as a goal of adult education. (p. 169)

The essence of Mezirow's response to Collard and Law's critique was to correct their misinterpretation of the purpose of the theory. In his response, he clarified that the goal of his theory of perspective transformation was not to create a comprehensive theory of social change but, instead, to create a theory of adult learning. In his opinion, social action was only one of education's goals.

**Mezirow publishes two books.** In 1990 and 1991, Mezirow furthered his thoughts by publishing two books, *Fostering Critical Reflection in Adulthood* and *Transformative Dimensions in Adult Learning*. *Fostering Critical Reflection in Adulthood* is a resource for educators and other professionals who are interested in assisting people in understanding their

mental models and the meaning structures that influence their actions—essentially, a resource for those who induce and/or support the transformative learning process. About this same time, Peter Senge (1990) was developing a similar construct in the management sciences involving mental models. Senge's (1990) description of mental models closely resembled Mezirow's description of meaning perspectives. Senge (1990) defined mental models as “deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action” (p. 8). Senge (1990) was interested in mental models as a factor in organizational learning and systems thinking. Additionally, Chris Argyris (1982) developed a construct he called the Ladder of Inference that examined various types of meaning-making and tests of validity of reasoning within the context of executive decision-making and communication. These topics were emerging simultaneously across disciplines, and while Senge and Argyris pushed these concepts forward in the management sciences, Mezirow's focus in *Fostering Critical Reflection in Adulthood* (1990) provided a guide for emancipatory education in the field of adult education.

Mezirow (1990) defined emancipatory education as “an organized effort to precipitate or to facilitate transformative learning in others” (p. xvi). *Fostering Critical Reflection in Adulthood* consists of three sections authored by a variety of scholars and edited by Mezirow. Part One focuses on precipitating critical self-reflection and discusses exemplary programs in this regard. Part Two involves helping learners become critically reflexive and offers six approaches that are critically reflective and critically self-reflective. Part Three discusses four methods learners can use to uncover and map their personal perspectives. Mezirow concludes the text by looking toward the future of transformative learning. The disorienting dilemma is somewhat overlooked as critical reflection takes center stage in this book. An entire chapter is devoted to exploring

critical incident technique, in which learners analyze incidents that have had critical significance in their lives. However, this text leaves one important question about the disorienting dilemma unanswered: what are the universal attributes across a variety of types of disorienting experiences?

In 1991, Mezirow published *Transformative Dimensions of Adult Learning*. In contrast to his previous text, this book is authored solely by Mezirow and focuses on establishing transformative learning as a theory of adult learning. He begins with an overview of transformative learning theory and how it compares to other theories of adult learning, then discusses meaning perspectives and the nature of intentional learning versus unintentional learning. Next, Mezirow discusses reflection and its ability to change or transform meaning perspectives, then describes various distortions that can occur when creating meaning perspectives. The book continues with a chapter summarizing several authors' thoughts on perspective transformation, including citations of studies and the role perspective transformation plays in adult education. Finally, the book concludes with a discussion of ethical, methodological, social, and philosophical issues in adult education, as well as possible ways to resolve these issues. In this text, Mezirow summarizes three types of mental models (which he refers to as meaning perspectives or habitual sets of expectations): epistemic perspectives, sociolinguistic perspectives, and psychological perspectives.

Most often, the disorienting experience is mentioned simply as the first phase of the transformative learning process in this book. However, in Chapter Three, "Intentional Learning: A Process of Problem Solving," Mezirow (1991a) describes the catalyst for transformative learning as follows:

It begins when we encounter experiences, often in an emotionally charged situation, that fail to fit our expectations and consequently lack meaning for us, or we encounter an

anomaly that cannot be given coherence either by learning within existing schemes or by learning new schemes. Illumination comes only through a redefinition of the problem... such epochal transformations often are associated with a life crisis that impels us to redefine old ways of understanding. (p. 94)

Also, in Chapter Six, “Perspective Transformation: How Learning Leads to Change,” Mezirow provides a more in-depth explanation by drawing on Ross Keane’s (1985) description of disorientation with respect to the transformation encountered by a group of five men who were committed to a religious lifestyle. Mezirow (1991a) writes,

The transformative learning experience described by Keane [1985] involved four phases. It began with disorientation, or a disorienting dilemma, an "inner disequilibrium in which the harmony of the self is disturbed yet the problem is neither understood nor satisfactorily named." Disorientation started a doubting process in which old meaning perspectives were perceived as inadequate in the face of heightened awareness of inconsistencies within the self... disorientation could come gradually or, if the learner missed the accumulating signs of unease, disorientation could "explode into awareness," accompanied by emotional turmoil, disturbing dreams, and physical pain as well as cognitive confusion. (p. 177)

Similarly, in Chapter Seven, “Fostering Transformative Adult Learning,” Mezirow (1991a) refers to philosopher Maxine Greene’s conceptualization of meaningful learning as disclosure, reconstruction, and generation; according to Greene, people revise their mental models when “the recipes... inherited for solving problems no longer seem to work” (Greene, 1975, p. 307). Mezirow (1991a) writes, “what Greene calls dislocations are transformation theory’s ‘disorienting dilemmas’” (p. 197).

In summary, while the primary focus of this book is more centered on the entire learning process than on the disorienting dilemma, Mezirow does refer to others who are studying similar catalysts for transformation and these cross-references with other scholars confirm the universal nature of this initiating event.

**A season of critiques begins.** In 1991, the same year that Mezirow published *Transformative Dimensions in Adult Learning*, M. Carolyn Clark and Arthur L. Wilson, two



doctoral candidates in the Department of Adult Education at the University of Georgia, published a critique of Mezirow's work. Their primary complaint was that Mezirow's theory of transformative learning did not account for context (Clark & Wilson, 1991). Again, Mezirow responded promptly and graciously. He thanked these scholars for their views. He expressed regret that he had apparently failed to clearly communicate because he did, in fact, consider context to a great degree, in particular, cultural context and psychological assumptions. He argued that Clark and Wilson's points resulted more from a misunderstanding than from theoretical differences. The etiquette of this exchange is described here to exemplify the type of scholarly discourse that was common during this era and how academic critique played a role in the evolution of transformative learning theory.

In 1992, Phyllis Cunningham reviewed Mezirow's book, *Transformative Dimensions of Adult Learning*, and took issue with the idea that children and adults learn differently. Mezirow noted in his response to Cunningham that her contention discounted a wide body of adult learning research and she failed to offer contradicting evidence. Mezirow concluded by thanking Cunningham for her views and, once again, called for continued interest in and critical assessment of his own thoughts.

In 1993, Mark Tennant published an article titled "Perspective Transformation and Adult Development." In this article, Tennant (1993) struggled with Mezirow's theory as it related to the normal course of human development versus the "type of developmental shift implied by perspective transformation, which is more fundamentally transformative and involves some level of social critique (that is, the questioning of a given world view)" (p. 34). Tennant wrestled with the distinctions between normative human development events (such as leaving home, getting married, and having children) and events that may cause a more radical reflection (such as loss

of a spouse). Essentially, he was conceptualizing degrees of disorientation in an effort to determine the difference between normative human development and development that results in transformation. Also in 1993, Michael Newman wrote a book that established a theoretical framework for union representatives to conduct training sessions. In this framework, he drew heavily on Mezirow's transformative learning theory (Newman, 1993).

In an article titled "Understanding Transformation Theory," Mezirow (1994a) summarized transformative learning theory and responded to both Tennant and Newman. Mezirow's (1994a) crisp articulation of transformative learning theory in this article demonstrated his ability to explain it more clearly and succinctly over time; he gave an overview of the theory's intention as a "comprehensive, idealized and universal model consisting of the generic structures, elements and processes of adult learning" (p. 222). Mezirow (1994a) reaffirmed his responses to past critiques by reiterating the importance of context, critical reflection, and rational discourse as part of the learning process. He restated the definition of meaning structures as being two-dimensional: consisting of both meaning perspectives and meaning schemes. He also reiterated that transformation of meaning structures happens through reflection and reflection is triggered by a disorienting dilemma. This reflection might take place during problem-solving. Mezirow (1994a) then addressed Tennant's specific concerns with respect to worldview. Tennant (1993) asserted that "perspective transformation... represents a developmental shift (a new world view) rather than simply developmental progress" (p. 40) as he wrestled with the difference between transformations of meaning schemes versus transformations of meaning perspectives, where meaning schemes are the components or building blocks of larger meaning perspectives. Mezirow (1994a) responded that in his view, the developmental process in adulthood involves yet another hierarchical level of meaning: meaning

structures (comprised of meaning perspectives which are comprised of meaning schemes). Mezirow (1994a) went on to explain that, in his view, transformation in meaning schemes is inherent in both normative development and transformative learning. Mezirow (1994a) summarized that a new awareness may or may not trigger a comprehensive transformation. In the cases where it does not, normative development may or may not occur.

In the same paper, Mezirow (1994a) responded to Newman by praising his ability to apply transformative learning theory to a labor union adult training program. However, Mezirow attempted to clarify a misunderstanding about the role of the educator in social change. Mezirow (1994a) noted that his thoughts on social activism had evolved since writing the 1981 article focusing on Habermas (which was a primary source for Newman). In the summer of 1994, both Tennant and Newman published responses to Mezirow's responses to their critiques: Tennant (1994) in the form of further explanation and Newman (1994a) beginning with a personal tribute to Mezirow and an elaboration of his thoughts on the role of reflection and social action in adult learning. Subsequently, Mezirow (1994b) published yet another response to Tennant and Newman, thus concluding the conversation.

In 1996, Bruce Pietrykowski, an Assistant Professor of Economics in the Department of Social Sciences at the University of Michigan – Dearborn, published a paper intended to better understand knowledge and power in adult education via a postmodernist lens. Pietrykowski (1996) stated that one purpose of the paper was to extend the transformative learning debate to include “a postmodern analysis of the role of power and knowledge in educational practice in order to signal the limits of the modernist narrative in adult education” (p. 82), and he claimed that transformative learning theory was stalled in modernism. Pietrykowski's complex narrative made several assumptions and critiques about Mezirow's theory regarding stages of

development, the role of the educator in transformative learning, the role of emancipatory social and political values, the role of critical discourse, and power structures. Mezirow (1998b) responded to each of Pietrykowski's claims, methodically refuting them.

**Mezirow's publications in the mid-1990s.** In 1996, Mezirow examined contemporary paradigms of learning in an article by the same name. Specifically, he examined the objectivist paradigm (which he referred to as the western rationalist tradition) and the interpretivist paradigm (which he referred to as the cognitive revolution). He then presented transformative learning theory as a new paradigm he called "the emancipatory paradigm" (Mezirow, 1996).

In 1997, Mezirow contributed a chapter to Patricia Cranton's book *Transformative Learning in Action*. In the opening remarks of this book, Cranton describes how transformative learning theory changed her practice as an educator. As the editor of this publication, she compiled eight chapters, each of which features a story of transformative learning in action. These eight examples span rational, practical, intuitive, and emotional processes, and Cranton (1997) suggested that there is more than one way to experience transformative learning in personal, professional, and social contexts. The diversity of transformative learning theory is illustrated by stories that are rational and analytical in nature, whereby learners critically reflect on their assumptions and beliefs, as well as stories that are imaginative and soulful illustrations of change. The first chapter is a summary of transformative learning theory by Mezirow, and the final chapter is a summary of the various perspectives in the volume as well as common themes across the stories. Cranton's focus on practical applications of transformative learning legitimized transformative learning theory in a new way. In this book, Cranton made transformative learning theory tangible via real examples of application; it was no longer simply a theoretical concept.

**The late 1990s: more critiques and Mezirow's responses to the critiques.** In 1997, Tom Inglis, a Lecturer in the Department of Sociology at University College, Dublin, examined empowerment and emancipation as they relate to transformative learning theory. He claimed there is a difference between those seeking empowerment within a defined social system and those seeking to change the system (Inglis, 1997). Inglis (1997) asserted empowerment can live within existing power systems, while emancipation seeks to change existing power systems. He advocated for a theory that included an analysis of power and its role in empowerment and emancipation (Inglis, 1997). Similar to Pietrykowski (1996), Inglis (1997) found fault with transformative learning theory. He interpreted this theory as focusing primarily on the individual as the locus of social change, and he interpreted Mezirow's writings to mean that human consciousness determines social being, and not vice versa (Inglis, 1997). Mezirow responded to Inglis's (1997) critique by denying he had ever written such a thing. "This is totally off the wall," Mezirow (1997b) wrote, "I have never written about consciousness per se, nor have I ever been so blind as to imply that it is not determined by social being" (p. 70).

In 1994, Michael Newman wrote a book titled *Defining the Enemy: Adult Education in Social Action*. In this publication, Newman examined the type of learning that takes place when one is in the presence of enemies such as an oppressive employer or spouse, a bigot, or a racist. He referenced and criticized transformative learning theory as one of many contemporary learning theories that he considered lacking in focus or being too inward-looking or mechanical to help people who are engaged in social action. Again, it seemed transformative learning theory's position, with one foot in critical theory and social action and the other foot in constructivist theory, may have confused scholars. Newman critiqued transformative learning theory on the basis of lacking critical theory relating to social action. Mezirow (1997b)

responded that transformative learning theory is not a social action theory; it is a learning theory that may result in social action if the transformative learner's disorienting dilemma is caused by an oppressor or oppressive situation and if the transformative learner decides to take individual or social action.

In 1998, Mezirow published an article titled "On Critical Reflection" to clarify the major role of critical reflection in adult learning and examine differences among various types of critical reflection. In this article, Mezirow (1998a) proposed a distinction between critical reflection of assumptions (CRA) and critical self-reflection of assumptions (CSRA); he suggested CRA can be used for objective reframing and CSRA for subjective reframing; and he also suggested a taxonomy. Types of CRA include narrative and action; types of CSRA include narrative, systemic, organizational, moral-ethical, therapeutic, and epistemic (Mezirow, 1998a). Of particular note in this article is that Mezirow (1998a) acknowledges Taylor's (1994) challenge to the idea that transformative learning requires CRA at all. Taylor (1994) conducted a study of twelve Americans who lived in another country for at least two years and concluded this experience produced a transformation of frames of reference (mental models) without the person being aware of it; hence, they experienced transformation by assimilation rather than because of CRA. Mezirow (1998a) responded by suggesting a series of implicit judgements might lead to CSRA; however, he is unclear about whether the CSRA is explicit or not:

As I have used the term in the context of adult education, transformative learning refers to effecting transformations in frames of reference within the scope of one's awareness through CRA. It is entirely possible that a progressive sequence of related tacit judgements, acquired through assimilation, might lead to CSRA and a mindful transformation in frames of reference. (p. 191)

***The Journal of Transformative Education.*** In 2003, a journal dedicated to transformative education launched its inaugural publication. In volume one, issue one of *The*

*Journal of Transformative Education*, Mezirow (2003) published an article titled

“Transformative Learning as Discourse” which elaborated on the epistemology of transformative learning. In this article, Mezirow (2003) defines transformative learning as:

Learning that transforms problematic frames of reference – sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets) – to make them more inclusive, discriminating, open, reflective, and emotionally able to change. Such frames of reference are better than others because they are more likely to generate beliefs and opinions that will prove more true or justified to guide action. (p. 58)

He also discusses transformative learning theory’s connection to Habermas’ (1984, 1987) distinction between instrumental learning (through controlling and manipulating the environment) and communicative learning (through understanding what someone means when they are communicating), reiterating that transformative learning theory is most closely related to communicative learning. Mezirow (2003) further clarifies the role of discourse in transformative learning theory, stating that to take the perspective of another requires an intrapersonal process. Here, he refers to Goleman’s (1995) publications on the role of emotional intelligence—specifically, the ability to listen to another empathetically and to exhibit self and social awareness, impulse control, persistence, and self-motivation in the transformative learning process. Next, Mezirow refers to Robert Kegan’s (2000) thoughts on critical self-reflection and King and Kitchener’s (1994) thoughts on reflective judgement. These capacities, Mezirow claims, are involved in critical-dialectical discourse, which is a uniquely adult capability (Mezirow, 2003). Mezirow then moves to social action and discusses critical-dialectical discourse as a necessary component of democratic citizenship (Mezirow & Taylor, 2009).

**Continued critique of transformative learning theory.** In 2004, Sharan Merriam, a Professor of Adult Education at the University of Georgia–Athens, raised the question of whether a more mature level of thinking may be both an outcome and a prerequisite to

transformative learning. Mezirow (2004) responded that this is indeed a good question, and he wrestled with this question himself. He spoke of a certain capacity, an unrealized potential for perspective transformation, that is required for transformative learning to take place and that occurs only in adulthood, but does not in occur in all adults or even in most adults. He believed the role of adult educators is to help adults develop and realize this capacity for transformative learning.

**Mezirow's final book.** In 2009, at the age of 86, Mezirow wrote his final book with longtime colleague Edward Taylor. The book is titled *Transformative Learning in Practice: Insights from Community, Workplace, and Higher Education*, and it is designed for all types of adult educators in a variety of settings, from college classrooms to corporate training programs and from workshops to community groups. It is meant to assist practitioners in understanding effective practices of transformative learning, including theoretical underpinnings and the learning setting. It covers the successes, strengths, challenges, and risks of practicing transformative learning.

**Transformative learning continued to provoke debate.** In 2012, more than 30 years after transformative learning theory was introduced, Michael Newman published an extensive and provocative article claiming that perhaps there is no such thing as transformative learning and that we might instead refer to this type of learning as, simply, good learning. Patricia Cranton and Elizabeth Kasl (2012) replied to Newman's critique by refuting each of his points, labeling them as fatal flaws in his logic. They also invited other scholars to join in this conversation and state their views. John Dirkx (2012) called Newman's article an intellectual spanking and agreed that the widespread use of the word *transformation* had muddied the original theoretical framework. Dirkx (2012) identified this as a central problem for the field and



stated, “much of what is referred to as transformative learning seems little more than another way to talk about learning and change” (p. 400). However, Dirkx (2012) stood firm in support of the central hallmark of transformative learning theory, which is to develop a conscious relationship with one’s subconscious in a way that allows a person to create new meaning schemes and ultimately make changes.

Kucukaydin and Cranton (2012) took on the question of how discourse enters into and becomes embedded in the transformative learning theory in their article “Critically Questioning the Discourse of Transformative Learning Theory.” They acknowledged the multi-disciplinary interest the theory gained from scholars in education, psychology, sociology, philosophy, and other fields, who viewed it through a variety of ontological and epistemological lenses and who taught and practiced in a wide variety of settings in countries around the world (Kucukaydin & Cranton, 2012). This broad-based interest gave transformative learning theory multiple tentacles as it evolved over the past 40 years. In this article, Kucukaydin and Cranton (2012) called for critical examination as a methodological necessity to integrate new perspectives into transformative learning theory. Without critical reflection and questioning, concepts cannot be considered legitimate.

Most recently, Hoggan, Mälkki, and Finnegan (2017) categorized critiques of Mezirow’s theory of perspective transformation via three categories of praxis: continuity, intersubjectivity, and emancipatory. Their article pointed out that critiques of Mezirow are often repeated, like a kindergarten game of telephone, causing important nuances of the critique and/or the theory to be simplified and dichotomized. Their aim in this article was to assist theorists of transformative learning in developing more effective responses to these recurring critiques.

**Summarizing thoughts on transformative learning and critiques in first-wave literature.** The field of transformative learning has been characterized as conceptually and methodically loose (Dirkx, 2012). However, the fact remains that in the 1970s, prior to the advent of the formal field of adult learning, Mezirow essentially discovered a key distinction related to adult learners that the field of adult learning had yet to uncover. He discovered that people first possess the ability to realize their personal history and how they are reliving it during late adolescence or adulthood; in other words, it is only at these developmental stages that people can first become aware of their own mental models. The emancipatory nature of his work at an individual level involved learning as a path to freedom, or emancipation, from reliving the past.

Although today transformative learning theory is applied across many disciplines, the theory was born and has strong roots in the field of adult learning. Mezirow did not place black and white boundaries on disciplines such as human development and learning theory, nor on worldviews such as constructivism and critical theory. He thought of transformative learning as “the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation, and action” (Mezirow, 1990, p. 1). He noted that this type of learning can take place during human development but is not a requirement of human development. Drawing on Habermas’s (1984, 1987) thoughts, Mezirow considered transformative learning to draw on communicative learning (involving discourse and interrelationships) and emancipatory learning (freeing). Transformative learning occurs when an individual becomes aware of their place in their own personal history, realizes they are reliving it and become disoriented in this realization; then, they critically reflect and they make changes, thus transforming their mental model. This process may involve emancipation and/or social change, it may involve individual change, and it may also involve group change. These outcomes

are dependent on the person, the dilemma they are facing, and the context in which their learning is taking place. Another common occurrence in transformative learning is when a person recognizes their own place in their personal history and realizes that they are trapped within the structures of their own cultural assumptions and norms. This realization is another facet of emancipatory transformative education.

When transformative learning takes place, these meaning structures are redefined and revised. Perspective transformation describes the process of how adults redefine and revise these meaning structures and the subcomponents of meaning structures, which Mezirow (1991a) called meaning schemes and meaning perspectives. This mental scaffolding forms a mental model that a person uses to navigate their life. When faced with an incongruence in a person's meaning structures (a disorienting dilemma), the person faces a choice: to transform or to remain closed to change. Mezirow (1991a) asserted that if a person becomes critically aware and changes their meaning perspective, then they experience transformative learning. This perspective transformation can occur as a result of a series of events or as the result of a single event, but the process typically feels disorienting either way. While there is much discussion about meaning structures in the literature, there is little discussion about the catalyst for changing the meaning structure (the disorienting dilemma) which, therefore, is the focus of this study. In fact, most of the academic articles reviewed in this section have been theoretical critiques of transformative learning theory as it relates to social action (Collard & Law, 1989; Mezirow, 1989); context and rationality (Clark & Wilson, 1991; Mezirow, 1991b); critical pedagogy (Cunningham, 1992; Mezirow, 1992); adult development (Mezirow 1994a, 1994b; Tennant, 1993, 1994); reflection (Newman, 1993, 1994a, 1994b); knowledge, power, and empowerment (Pietrykowski, 1996; Inglis, 1997; Mezirow, 1998b, 1998c); and the role of cognitive development in transformative

learning theory (Merriam, 2004; Mezirow, 2004), with little discourse on the disorienting experience. It was prudent for the researcher to conduct this historical and chronological SLR in order to confirm this gap. Table 6 summarizes these critiques and Mezirow's responses.

Table 6

*Major Critiques of Transformative Learning Theory and Mezirow's Responses*

Year	Author(s)	Article Title	Focus of Critique(s)	Mezirow's Response
1989	Collard & Law	The Limits of Perspective Transformation: A Critique of Mezirow's Theory	Lack of a coherent, comprehensive theory of social change; lack of focus on context	Perspective transformation is not a social change theory, it is a learning theory
1991	Clark & Wilson	Context and Rationality in Mezirow's Theory of Transformational Learning	Does not give enough consideration to context	This is more of a misunderstanding than a theoretical difference of opinion; context is very much considered
1992	Cunningham	From Freire to Feminism: The North American Experience with Critical Pedagogy	Cunningham takes issue with the idea that children and adults learn differently	Cunningham is discounting a wide body of research in adult learning and fails to assert her own evidence
1993	Tennant	Perspective Transformation and Adult Development	Distinctions between normal course of human development vs. a more fundamentally transformative type of development involving social critique and questioning of world view	Transformation in meaning schemes are inherent in both normative and transformative human development; transformation may or may not involve some level of social critique or change in world view; this, or the absence of it, does not define the transformative learning experience
1993	Newman	The Third Contract: Theory and Practice in Trade Union Training	A misunderstanding regarding the role of the educator in social change	The role of the educator in social change is to present new ways of seeing the world, not necessarily to prescribe their own views

(Continued)

Year	Author(s)	Title	Focus of Critique(s)	Mezirow's Response
1994	Newman	Defining the Enemy: Adult Education in Social Action	Transformative learning theory is unsatisfactory because Mezirow asserts it is possible for transformative learning to occur in someone without focusing on those in their life such as their partner or employer	Denies ever writing about this in his seminal work or since then; takes issue with Newman quoting him out of context to twist meaning
1996	Pietrykowski	Knowledge and Power in Adult Education: Beyond Freire and Habermas	Finds fault with several intellectually complex aspects of transformative learning theory	These are misinterpretations of the theory's intent
1997	Inglis	Empowerment and Emancipation	Finds fault with the construction of the notion of self as the locus for social change and emancipation	Denies ever writing about this topic and suggests Inglis is mistaken
2004	Merriam	The Role of Cognitive Development in Mezirow's Transformational Learning Theory	One must be at a mature level of cognitive functioning (able to critically reflect and engage in rational discourse) to engage in the transformative learning process; a more mature level of thinking may be both an outcome of and a prerequisite to transformative learning	Agrees and states he has many of the same questions as Merriam; speaks of having a "capacity" for transformative learning to take place
2012	Newman	Calling Transformative Learning into Question: Some Mutinous Thoughts	States six flaws that commonly occur in explanations of transformative learning and suggests transformative learning may not exist as an identifiable phenomenon; proposes substituting "good learning" for "transformative learning"	Response by Cranton, Kasl, and Dirkx: identify fatal flaws in Newman's challenge to transformative learning theory
2016	Hoggan, Mälkki, Finnegan	Developing the Theory of Perspective Transformation: Continuity, Intersubjectivity, and Emancipatory Praxis	The authors conceptualize perspective transformation, the underlying omission or weakness in Mezirow's theory, and offer revised conceptualizations of the theory in relation to three forms of praxis: continuity, intersubjectivity, and emancipatory	N/A

With adult learning as the setting, the first-wave literature tells a story with characters and a plot. In reviewing the literature in chronological order, the researcher began to appreciate the academic persona of these key contributors relative to their points of view, their questions about transformative learning theory, and their contributions to transformative learning theory. Their motives, stages in life, and relationships with each other tell a tale of interrelationships, innovation, collaboration, and sometimes even disorientation. When reviewing the literature, one can almost imagine these scholars on university campuses and at academic conferences, debating, questioning and evolving transformative learning theory. Academic journals were the arena for critical discourse regarding Mezirow's early views on critical theory and social action, emancipatory education, and human development. In the late 1970s, Mezirow (1978a, 1978b) boldly introduced a new language when he described transformative learning theory, and it took decades for others to catch up with his thinking. Mezirow himself also became better at articulating and explaining his thoughts on the theory as time went on. Mezirow was in his fifties when he conducted his seminal research, and he remained dedicated to transformative learning theory throughout his career, indeed, throughout his entire life. He passed in 2014 at age 91, leaving a tremendous contribution and legacy in the field of adult education. Cranton entered the field of education late in her career and was instrumental in clarifying and unifying the theory. Cranton also recently passed in 2016. As the torch is handed to the next generation of scholars, it is imperative that the same diligent standards of scholarly research and discourse continue. Based on the literature reviewed so far, Mezirow's (1978a, 1991a) new theory of perspective transformation has taken center stage, leaving some of the individual ten phases of the transformative learning process—including the disorienting experience—largely overlooked in academic research and discourse.

## **Section 1b: The Evolution of Transformative Learning Theory – Second-wave**

Perhaps because transformation itself has no disciplinary boundaries, transformative learning theory may have been destined from the beginning to splinter in many directions. A chronological examination of the transformative learning literature reveals a story of the first two decades largely focused on defining and redefining an evolving theory. Olen Gunnlaugson (2006) calls this period the first wave of transformative learning theory, and he posits that transformative learning theory is now experiencing a second wave, which is more focused on uniting scholars in an attempt to find a holistic perspective. As reported by Taylor and Cranton (2012), “Gunnlaugson suggests that Taylor’s (2006, 2008) integrative overview of the field is one example of how this supportive yet critical picture of the theory is beginning to emerge” (p. 12). The researcher of this study included Taylor’s extensive empirical and literature reviews in the review of second-wave scholarship, as well as other literature reviews and articles advancing thoughts on transformative learning theory as a metatheory. A mix of seasoned and new scholars’ publications was reviewed as part of the second-wave literature review as the researcher continued to understand the arc of transformative learning theory. These sources were cultivated via searches for publications by authors who included transformative learning as a major component of their career; via searches for literature reviews, critical study reviews, integrative pieces and metatheory pieces, and via extensive cross-referencing of studies and bibliographies. Second-wave literature is listed in Table 4. Appendix A lists the second-wave literature with full citations included.

Table 7

*Evolution of Transformative Learning Theory: Second-wave Literature (1997–2017)*

Count	Year	Title	Publication Type	Author(s)	Focus
1	1997	<i>Transformative learning in action: Insights from practice</i>	Book	Cranton	Collection of transformative learning experiences
2	1997	A Critical Review of the Empirical Studies of Mezirow's Transformative Learning Theory, <i>Adult Education Quarterly</i>	Journal Article	Taylor	Review of empirical studies from 1978-1997
3	1998	The Theory and Practice of Transformative Learning: A Critical Review, <i>ERIC Information Series No. 374</i>	Information Series	Taylor	Review of literature and empirical studies
4	1998	Transformative Learning Theory in the Practice of Adult Education: An Overview, <i>PAACE Journal of Lifelong Learning</i>	Journal Article	Dirkx	Summary of major theoretical perspectives
5	2000	<i>Learning as Transformation: Critical Perspectives on a Theory in Progress</i>	Book	Mezirow (Ed.)	A forum for scholars to share views on transformative learning theory
6	2003	When the Bottom Falls Out of the Bucket: Toward a Holistic Perspective on Transformative Learning, <i>Journal of Transformative Education</i>	Journal article	Cranton, Roy	Integration of various theoretical perspectives
7	2005	Making Meaning of the Varied and Contested Perspectives of Transformative Learning Theory, <i>Proceedings of the Sixth International Conference on Transformative Learning</i>	Conference proceeding	Taylor	Seven theoretical perspectives beyond Mezirow's seminal theory
8	2005	Toward Integrally Informed Theories of Transformative Learning, <i>Journal of Transformative Education</i>	Journal article	Gunnlaugs on	Four recommendations to inspire future integrally informed theories

(Continued)



Count	Year	Title	Publication Type	Author(s)	Focus
9	2006	Musings and Reflections on the Meaning, Context, and Process of Transformative Learning, <i>Journal of Transformative Education</i>	Journal article	Dirkx, Mezirow, Cranton	Discussion between Dirkx and Mezirow facilitated by Cranton
10	2007	An Update of Transformative Learning Theory: A Critical Review of the Empirical Research, <i>International Journal of Lifelong Education</i>	Journal article	Taylor	Review of empirical studies from 1998-2005
11	2007	Shedding Light on the Underlying Forms of Transformative Learning Theory, <i>Journal of Transformative Education</i>	Journal article	Gunnlaugson	Response to call for second wave research
12	2008	Metatheoretical Prospects for the Field of Transformative Learning, <i>Journal of Transformative Education</i>	Journal article	Gunnlaugson	Examines first wave and second-wave theories and recommends metatheorizing
13	2008	The Evolution of John Mezirow's Transformative Learning Theory, <i>Journal of Transformative Education</i>	Journal article	Kitchenham	Review of Mezirow's interpretation of the theory from inception to the latest definition
14	2008	Transformative Learning Theory, <i>New Directions for Adult and Continuing Education</i>	Book chapter	Taylor	Update of research including emerging alternative theoretical conceptions, current research findings and implications for practice
15	2009	<i>The Handbook of the Evolving Research of Transformative Learning Theory: Based on the Learning Activities Survey</i>	Book	King	Summarizes research with a focus on the Learning Activities Survey
16	2012	A Critical Review of Research on Transformative Learning Theory, 2006-2010 in <i>The Handbook of Transformative Learning Theory</i>	Book chapter	Taylor & Snyder in Taylor & Cranton	Review of empirical studies from 2006-2010

(Continued)

Count	Year	Title	Publication Type	Author(s)	Focus
17	2012	Mezirow's Theory of Transformative Learning from 1975 to Present in <i>The Handbook of Transformative Learning Theory</i>	Book chapter	Baumgartner in Taylor & Cranton	History of Mezirow's transformative learning theory
18	2012	<i>The Handbook of Transformative Learning: Theory, Research, and Practice</i>	Book	Taylor & Cranton	Calls for a more unified theory; brings various perspectives together
19	2014	Jack Mezirow's Conceptualization of Adult Transformative Learning Theory, <i>Journal of Adult and Continuing Education</i>	Journal article	Calleja	Traces the evolution of Mezirow's theory and discusses three influences – Kuhn, Freire, Habermas
20	2016	A Typology of Transformation: Reviewing the Transformative Learning Literature, <i>Studies in the Education of Adults</i>	Journal article	Hoggan	Review of literature as it relates to outcomes authors claimed transformative
21	2016	Transformative Learning as a Metatheory: Definition, Criteria, and Typology, <i>Adult Education Quarterly</i>	Journal article	Hoggan	Suggests a metatheory perspective
22	2016	<i>Understanding and Promoting Transformative Learning Theory: A Guide to Theory and Practice</i>	Book	Cranton	Review of seminal theory and guide to application
23	2017	Developing the Theory of Perspective Transformation: Continuity, Intersubjectivity, and Emancipatory Praxis. <i>Adult Education Quarterly</i>	Journal article	Hoggan, Mälkki, Finnegan	Categorizes critiques of transformative learning theory by: continuity, intersubjectivity and emancipatory praxes

**Taylor's critical review of empirical studies in transformative learning.** In 1997, Edward Taylor published an extensive review of empirical studies that utilized transformative learning in *Adult Education Quarterly*. This brought the dearth of linkage between theory and

practice to the attention of the scholarly community. Taylor (1997) stated,

Interesting as... discussions have been, there is almost no discussion (in publication) about transformative learning theory as a viable model for adult learning or about implications for practice based on empirical studies. There is a real need to build upon the theoretical discussion and explore what the empirical studies say about transformative learning. (p. 35)

Taylor (1997) identified 39 empirical studies to analyze; however, he was forced to obtain many of the studies by contacting the authors personally, as only approximately 10% of them were published in journals. The studies considered in Taylor's project included: "three published journal articles, two Masters theses, 10 conference proceedings, and 30 dissertations" (Taylor, 1997, p. 36). Taylor (1997) pointed out to the academic community that there was "not only a lack of publication of empirical studies, few studies, especially those prior to 1989 made any serious effort to critique previous empirical studies of Mezirow's theory" (p. 35).

Taylor referenced the disorienting dilemma in three sections in this article. First, he devoted a section of his study findings to the disorienting dilemma. In this section, he explained that the findings of his study supported Mezirow's model regarding the catalyst of perspective transformation; however, some studies he reviewed broadened the definition of disorienting dilemma. Mezirow (1978a) describes the disorienting dilemma as an acute internal or external personal crisis. However, Taylor (1997) cited, as an example, Clark, M.C.'s (1991, 1993) thoughts on integrating circumstances that unfold over a long time as triggers, hence, the catalyst does not need to be a one-time, acute experience. As reported by Taylor (1997), Clark, M.C. (1991, 1993) defined integrating circumstances as "indefinite periods in which the persons consciously or unconsciously search for something which is missing in their life; when they find this missing piece, the transformation process is catalyzed" (p. 117-118). Taylor (1997) also cited Scott's (1991) study, which identified two types of disequilibrium necessary for initiating a

change in beliefs. Taylor (1997) summarized these two types as “(a) an external event that provokes an internal dilemma, and (b) an internal disillusionment whereby the participants recognize that previous approaches and solutions are no longer adequate” (p. 45). Pope’s (1996) study found the trigger event to be more gradual and suggested an unfolding evolution. This view is similar to that of Courtenay, Merriam, and Reeves (1996), whose study found an initial reaction (that lasted between six months and five years) to a terminal illness in study participants was followed by a catalytic experience that helped patients view their diagnosis differently. Thus, Taylor’s (1997) study offered a bit more insight into the disorienting dilemma, albeit limited, since the disorienting dilemma was not the focus of the overall study. Nevertheless, by examining the disorienting experience across cases, Taylor (1997) revealed they can be internal or external, and they can be acute or a series of dilemmas with an integrating circumstance. His findings did, however, confirm a lack of understanding of this important event and raised more questions such as:

Why [do] some disorienting dilemmas lead to a perspective transformation and others do not? What factors contribute to or inhibit this triggering process? Why do some significant events, such as the death of a loved one or personal injury, not always lead to a perspective transformation, while seemingly minor events, such as a brief encounter or a lecture, sometimes stimulate transformative learning? (Taylor, 1997, p. 45)

As a result of his findings, Taylor (1997) called for “greater understanding of the varying nature of the catalyst of the learning process (disorienting dilemma)” (p. 55).

**The critical role of transformative learning conferences.** In 1998, the first National Conference on Transformative Learning convened at Teacher’s College, Columbia University. The focus of the conference was Changing Adult Frames of Reference, and 150 scholars and scholar-practitioners participated in research and discourse on the theory and practice of transformative learning. This conference provided an opportunity for scholars who had been

discussing, debating, applying, and researching transformative learning in all corners of the world to gather and exchange ideas. Extensive research was shared at the conference and, in 2000, partially as a result of the conference, Mezirow wrote another book on transformative learning theory titled *Learning as Transformation: Critical Perspectives on a Theory in Progress*. This book continued the work he began over twenty years prior and also responded to the call to action from Taylor by inviting 15 of the world's top scholars and practitioners to include their reviews of the core principles of transformative learning theory, analyze the process of transformative learning, describe different types of learning and learners, suggest key conditions for socially responsible learning, explore group and organizational learning, and present revelations from the latest research (Mezirow, 2000). In this book, scholars and educators also shared real-world examples of transformative learning theory from their personal experiences and looked toward the future of transformative learning theory by assessing the evolution of the theory. Key perspectives of transformative learning theory were explored in the book and are summarized in Table 8.

Table 8

*Perspectives of Transformative Learning Scholars and Practitioners (Mezirow, 2000)*

Scholar	Perspective
Mary Field Belenky, Ann V. Stanton	Inequality, development and connected knowing
Stephen Brookfield	Ideology critique
Judith Beth Cohen, Deborah Piper	Residential adult learning community
Patricia Cranton	Individual differences and transformative learning
Laurent Parks Daloz	The common good

(Continued)

Scholar	Perspective
Mary Field Belenky, Ann V. Stanton	Inequality, development and connected knowing
Stephen Brookfield	Ideology critique
Judith Beth Cohen, Deborah Piper	Residential adult learning community
Patricia Cranton	Individual differences and transformative learning
Laurent Parks Daloz	The common good
Elizabeth Kasl, Dean Elias	Creating new habits of mind in small groups
Robert Kegan	Constructive-developmental approach
Kathleen Taylor	Teaching with developmental intention
Lyle Yorks, Victoria Marsick	Organizational learning

Chapter Eleven of the book, *Analyzing Research on Transformative Learning Theory*, was authored by Edward Taylor. In this chapter, Taylor describes two general patterns of research on transformative learning from 1978 to 2000 (Taylor, 2000). The first pattern involves research focusing on theoretical critique, and the second pattern involves empirical studies (Taylor, 2000). Taylor (2000) goes on to summarize triggering events in seven studies; this summary is part of his ongoing, comprehensive contributions to the field and is further explained in the next section.

**Taylor's ongoing, comprehensive contributions to the field.** In 1998, Taylor published an extensive critical review entitled *The Theory and Practice of Transformative Learning*. This 90-page document provided an overview of transformative learning theory, a review of the theoretical and empirical literature including unresolved issues he published in his 1997 article, a section on fostering transformative learning (the practice of transformative pedagogy), and an

appendix listing practices of transformative pedagogies. Then, in 2005, Taylor summarized various theoretical views of transformative learning as published in the Sixth International Transformative Learning Conference proceedings. These views, which diverge from Mezirow's original cognitive-rational approach, are included here because they are an important part of the evolution of transformative learning theory; however, they are not explored in depth because they are not the primary focus of this study. They provide a glimpse into the tremendous amount of energy put into developing the overall theory as opposed to closely examining the catalyst or first phase. A summary of these views is included in Table 9.

Table 9

*Seven Theoretical Views of Transformative Learning (Taylor, 2005)*

Scholar	Theoretical View	Locus of Control	Goal
Boyd, Cranton, Dirkx	Psychoanalytic	Individual	Self-analysis
Brooks, Tisdell	Cultural-spiritual	Socio-cultural	Cultural-spiritual consciousness
Freire	Social-emancipatory	Socio-cultural	Conscientization
Johnson-Bailey, Sheared	Race-centric	Socio-cultural	Race-consciousness
Kegan, Daloz	Psycho-developmental	Individual	Lifelong personal development
Mezirow	Psycho-critical	Individual	Autonomy/Independence
O'Sullivan	Planetary	Socio-cultural	Planetary-consciousness

Taylor also conducted two more extensive studies which greatly contributed to understanding the state of transformative learning theory. In 2007, he updated his critical review of the empirical research covering the period 1998-2005. In this study's findings, Taylor (2007)

noted a study conducted by Lange (2004) in which the term “crossroads” (p. 131) was used to describe a point of disorientation in the lives of study participants. According to Lange (2004) as reported by Taylor (2007), “the student’s disillusionment and fragmentation [were] not only signs of a disorienting dilemma, but as a ‘pedagogical entry point,’ where students were consciously engaging their personal dilemma as a potentially transformative experience” (p. 183). Taylor (2007) also notes Berger’s (2004) research reporting that students in a Master’s program identified the “edge of [their] meaning” (p. 338), described as a type of transitional zone bounded by students’ knowing and meaning-making. Taylor (2007) also quoted Berger (2004) who explained,

It is in this liminal space that we can come to terms with the limitations of our knowing and thus begin to stretch those limits. Interviews reveal students at their edge having difficulty articulating ideas and coherent thoughts, particularly when discussing ontological issues about their personal lives—the way they make sense of their world. Also, the affective tone of the students varied widely, from frightening and unpleasant feelings to excitement and joy. The implication for practice is the importance of developing an awareness of students who are at the edge of their knowing, as well as helping them become self-aware, and providing support as students work through the discomfort. (p. 338)

Taylor (2007) also reported findings on the influence of self-control. In a study of women in prison, Kilgore and Bloom (2002) found that although subjects experienced a disorienting dilemma, their environment required self-control such that they did not truly experience a transformation.

In 2012, Taylor partnered with Snyder and conducted another immensely valuable update of critical research of empirical studies, this time spanning 2006-2010. In this study, Taylor and Snyder (2012) report on the disorienting dilemma in a study by Magro and Polyzoi (2009), who found the early stages of disorientation among war-affected refugees in Canada and Greece lasted longer than just one single event and were reoccurring. They also observed multiple



simultaneous disorienting dilemmas among the refugees, such as loss of culture, family, and language. Merriam and Ntseane (2008) also examined disorienting events in their study of Botswanans, which found that lived events triggered a transformational process in participants. In this study, typical triggers such as death of a loved one, a disrupted relationship, or a health crisis catalyzed Mezirow's transformative learning phases; however, there was a culturally unique contextual element in this study. The unique context was the emphasis on the interactive aspects of spiritual, community and gender roles in Botswanan society that shaped the subjects' experiences. Tisdell's (2008) study found that pleasure, such as experiencing humor through watching television or movies, could also foster transformative learning. Thus, Taylor and Snyder (2012) called for increased research to examine whether the catalyst for transformative learning must involve physical or emotional pain.

Taylor's (1997, 2007) and Taylor and Snyder's (2012) glimpses into how scholars are conceptualizing the disorienting dilemma lays the foundation for this research, which is to explore this specific topic in greater depth through a larger dataset.

**Three extensive literature reviews.** Significant literature reviews by Baumgartner (2012), Calleja (2014), and Kitchenham (2008) also contributed to a summary of the theory. Baumgartner provided a review of Mezirow's work from 1975 to 2012 in a chapter of Taylor and Cranton's (2012) *Handbook of Transformative Learning*. In her review, she includes Mezirow's seminal thoughts and early research in the 1970s, the refinement of the theory in the 1980s, and revisions of the theory in the 1990s; she also presents transformative learning theory as a theory in progress in the 2000s. Calleja's (2014) review also traces the evolution of the theory from its conceptualization and focuses on three major influences: Kuhn, Freire, and Habermas. In the section on Freire, Calleja (2014) explains Freire's three stages of conscious growth: intransitive

thought (with feelings of disempowerment), semi-transitive thought (accompanied by some thoughts about action and change), and critical transitivity (involving critical reflection, critical self-reflection in assumptions and critical discourse). According to Calleja (2014), Freire's notion of critical transitivity influenced Mezirow's notion of the disorienting dilemma. Calleja (2014) also discusses the main concepts of transformative learning theory, including the disorienting dilemma. Here he cites Mezirow's definition, references to Taylor and Elias's (2012) thoughts on disorienting dilemmas illuminating and challenging invisible and unquestioned assumptions, Boyd and Myers' (1988) example of grieving as a disorienting dilemma, and Clark, M.C.'s (1991, 1993) claim that a trigger can extend beyond a single event, include integrating circumstances, and occur over a longer period of time. Kitchenham's (2008) thorough account of Mezirow's transformative learning theory from seminal research through 2008 is unique in that it was written based on Mezirow's own account, rather than simply the extant literature. Kitchenham summarized Mezirow's own thoughts in this document. The disorienting dilemma is briefly noted only twice: as the first stage in the transformative learning process and again when it is attributed to Freire's (1970) thoughts on conscientization.

**Scholars' thoughts on integrating various streams of transformative learning theory.** Scholars have begun to suggest ways in which the field might integrate various streams of transformative learning theory. For example, both Gunnlaugson (2005, 2008) and Hoggan (2016b) have suggested metatheoretical approaches. Gunnlaugson's (2005) article, titled "Toward Integrally Informed Theories of Transformative Learning," suggested making use of Ken Wilber's (1997) integral theory of consciousness as an approach to metatheorizing transformative learning theory. In this article, Gunnlaugson (2005) examined Wilber's All Quadrants, Levels, Lines, States, and Types (AQAL) integral framework as a possible

framework for integrating transformative learning theory. Gunnlaugson (2005) defined first-wave theories as those that build on, critique, or depart from Mezirow's seminal account. Alternatively, he defined second-wave scholarly work as attempting "to bring together competing views and expand initial conceptions of [transformative learning yielding] broader – integrative, holistic, and integral – theoretical perspectives" (Gunnlaugson, 2005, p. 124). In 2007, Gunnlaugson published an article broadening the scope beyond Mezirow's cognitive-rational approach to transformative learning. Gunnlaugson (2007) describes several variations of transformative learning theory that are:

...more 'integrative' (e.g. Illeris, 2004; Taylor, 2005), 'holistic' (e.g. Cranton & Roy, 2003; Dirks, 1997), and 'integral' (e.g. Ferrer, Romero & Albareda, 2005; Gunnlaugson, 2004, 2005; O'Sullivan, 1999; O'Sullivan, Morrell & O'Connor, 2002) perspectives that expand beyond the scope of Mezirow's (1978) seminal contribution to offer a more comprehensive account of transformative learning. (p. 135)

Gunnlaugson (2007) also discusses Kegan's constructive developmental framework, in which Kegan asks us to consider what form transforms during the transformative learning process. Kegan was wrestling with understanding what form is undergoing change: our frame of reference, our form of knowing, or something else? He suggests that without form, there cannot be transformation. These various streams differ in their approaches to aspects of transformative learning such as the roles of rationality, emotion, ways of knowing, and context; however, they agree on the disorienting experience as a potential catalyst. Additionally, in 2008, Gunnlaugson published "Metatheoretical Prospects for the Field of Transformative Learning," in which he examined first-wave and second-wave theories and recommended meta-theoretical discourse and more comprehensive metatheoretical frameworks.

Hoggan (2016b) also proposed a transformative learning metatheory, suggesting the term "perspective transformation" be used when referring to Mezirow's original theory and that

“transformative learning” be used to refer to the broader range of theories that address personal, social, or cultural transformation.

**Thoughts on creating common constructs and language across streams of transformative learning theory.** Hoggan (2016a) created a typology of transformative learning outcomes by reviewing journal articles where authors utilized a transformative learning framework; he searched for “explicit definitions or descriptions of learning outcomes that the authors claimed were transformative” (p. 68). The findings of this study yielded six types of transformative learning outcomes as described in the transformative learning literature: a shift in worldview, self, epistemology, ontology, behavior, and capacity. While Hoggan was not attempting to integrate the theory, the use of this typology of transformative outcomes would provide a common language for discourse. The dataset Hoggan cultivated and used in the study to identify transformative learning outcomes is embedded in the content analysis dataset for this study.

As recently as 2016, the late Patricia Cranton published another guide to understanding the theory and practice of transformative learning with the intent of building bridges across theoretical streams. In this book titled *Understanding and Promoting Transformative Learning: A Guide to Theory and Practice*, she included a section on how psychological type may influence a person’s reaction to a disorienting event. She posited that those with a preference for the feeling function would perhaps be more sensitive to disorientation, as they are more in tune with social norms and the reactions of others. Those with a preference for thinking may not be impacted by the same disorienting event unless it was accompanied by a logical and convincing argument. Even then, thinking types may choose to respond with a counterargument rather than engage in new ways of making meaning. Cranton (2016) makes less of a connection to the

sensing and intuitive functions, speculating that an intuitive individual may be more open to possibilities for change and that sensing-oriented individuals would be less open to these possibilities.

This passage in Cranton's (2016) text caused the researcher of this study to examine her own depth of experience in researching personality typology and how she might utilize this as a tool in her executive coaching and consulting practice. It reminded her of work by Naomi Quenk, a Jungian psychologist well versed in psychological typing, who described a condition she referred to as *the grip* that occurs when everyday stress brings out our hidden personality. According to Quenk (2002), when a person's hidden personality (technically called their nondominant or inferior function) erupts, they become unbalanced. Jung referred to this process as a transfer of energy from a person's preferred ways of thinking and behaving to a focus on unfamiliar and nonpreferred ways of thinking and behaving (Samuels, Shorter, & Plaut, 1986). This state is similar to a disorienting dilemma, and Quenk (2002) claims it "can be triggered by fatigue, illness, stress, or the use of alcohol or other mind-altering drugs" (p. 46).

**Summarizing thoughts on second-wave literature.** The second wave includes scholars who integrated various streams of transformative learning, summarized empirical studies, published extensive literature reviews and metatheory approaches, and communicated applications of transformative learning. These publications have contributed greatly to the field. Taylor's empirical study reviews provide more insight into the disorienting dilemma; however, they also pose even more questions about the phenomenon. The 20<sup>th</sup> International Transformative Learning Conference took place in November 2018 at Teacher's College, Columbia University in New York, New York, and over 200 global scholars gathered to continue discourse about transformative learning. As the *Journal of Transformative Education* enters its

15<sup>th</sup> year of publication, it also provides an arena for continued scholarly discourse. Momentum in the direction of continued integration and metatheory approaches will undoubtedly continue into the future as the theory continues to evolve.

### **Concluding Thoughts on First-wave and Second-wave Literature**

The researcher deemed it prudent to examine first-wave and second-wave literature to gain an overall understanding of the evolution of transformative learning theory including where, when, and by whom disorienting dilemmas were mentioned (or not mentioned). Five conclusions were drawn after synthesizing and summarizing this body of literature.

First, the 1970s were a time when theorists such as Mezirow, Knowles, and others were grappling with the idea of adult learning as a distinct form of learning. Both andragogy and transformative learning theory emerged in this decade. In the 1980s, Mezirow looked to scholars such as Habermas and Kuhn to deepen, expand, and refine his thoughts. The 1980s also brought the first critique of the theory by two doctoral students, Collard and Law. By the 1990s, the theory had gained more widespread attention, and a series of critiques and responses were published. Critiques centered on themes such as the role of social action, context, rationality, critical reflection, and power.

Second, the publication of Taylor's (1997) critical analysis of empirical research between 1978 and 1997 pointed out the basic components of the transformative learning theoretical framework as: the ten-step model of perspective transformation; the roles of the disorienting dilemma, context, and critical reflection; Mezirow's emphasis on rationality in the process versus other ways of knowing; outcomes of perspective transformation; and how to foster transformative learning. Taylor's (1997) publication highlighted a gap between published scholars and a host of graduate students who had conducted empirical research which largely

remained unpublished. Recognition of this gap prompted the first transformative learning conference in 1998 and Mezirow's (2000) book, *Learning as Transformation*, which captured a collection of the perspectives of 15 of the field's top scholars and practitioners in transformative learning as a way to integrate research and discourse. This era demonstrated the academic community's efforts to begin to bridge transformative learning theory and practice.

Third, Taylor published a second critical analysis of empirical research in 2007, which examined studies from 1997-2005, and Taylor and Snyder updated the research again in 2012. Both of these contributions highlighted the need for further research on the disorienting experience.

Fourth, while some scholars have advocated for integration for many years, there is a surge of more recent interest in integrating various streams of transformative learning theory and suggestions of a metatheory.

Fifth, in examining over 40 years of discourse, the researcher did not uncover a single study designed to compare the disorienting experience across a large number of diverse cases with the intent to reveal the common attributes of the phenomenon. When the disorienting dilemma is mentioned in the literature, a search for the terms "disorient," "dilemma," "trigger," "catalyst," and "crisis" in the electronic versions of these publications most often returned passages referencing the first phase for potential transformative learning, or these terms were briefly referenced when summarizing the findings of an empirical study. Other instances where the disorienting experience was more fully described have been highlighted in this literature review.

Based on the vast empirical research and hundreds of studies that have been conducted, it is widely accepted that disorienting dilemmas, perhaps more appropriately called catalytic life

events, vary widely and occur frequently. Yet it is evident from this review of literature that the common attributes of this important aspect of life-span development and learning are still unknown. Thus, without a critical examination of the disorienting dilemma itself, this phase will remain fragmented, inadequately defined, and poorly understood. The next section of this chapter reviews articles in which scholars directly discussed the disorienting dilemma.

## **Section 2: Scholarly Articles Addressing the Disorienting Dilemma**

The literature review thus far has established a broad understanding of the transformative learning theory research including first and second waves. This section focuses specifically on articles that address the disorienting experience in transformative learning. To conduct this stage of the SLR, three journals dedicated to adult education and transformative learning were searched with a goal of capturing as many relevant articles as possible. The journals searched were *Adult Education Quarterly*, *Adult Learning*, and *The Journal of Transformative Education*. Articles not captured in the previous searches were desired. A search for “Mezirow” anywhere in the text and “disorient” in the abstract yielded relevant articles for review. The researcher’s logic was that many empirical studies briefly refer to the disorienting dilemma when noting the first phase of transformative learning; however, if the focus of the article was in fact the disorienting dilemma itself, then the term “disorient” would likely appear in the abstract. The keywords were intentionally left broad (for instance, searching for the root word “disorient” versus searching “disorienting *dilemma*”) in order to be as thorough as possible while still screening for only those articles with a focus on the disorienting experience as it relates to transformative learning.

All journals were searched in their chronological entirety, from their inaugural issue through December 2018, spanning 28 years. Prior to the search for articles specifically focusing on the disorienting experience, the researcher assumed there would be a good deal of literature



considering the rich theoretical history of transformative learning. Surprisingly, the search returned only 15 articles. Even more surprising was that nine were empirical studies that matched the search criteria, however, these studies did not specifically focus on better understanding the disorienting dilemma. The remaining six articles are reviewed in the next section of this chapter. Table 10 summarizes the search process. Table 11 provides details of the six articles reviewed in this section and Appendix A lists these six articles with full citations.

Table 10

*Search Results: Articles Whose Purpose is to Understand the Disorienting Dilemma*

Journal Title	Dates of publication (dates of search)	“Mezirow” anywhere; “disorient” in abstract	Purpose to better understand the disorienting dilemma
<i>Adult Education Quarterly</i>	September 1996 – December 2018	5	4
<i>Adult Learning</i>	September 1990 – December 2018	2	1
<i>Journal of Transformative Education</i>	January 2003 – December 2018	8	1
Total		15	6

Table 11

*Six Articles that Assist in Better Understanding the Disorienting Dilemma*

Count	Year	Article Title	Author(s)
1	2008	Celebrating disorienting dilemmas: Reflections from the rearview mirror, <i>Adult Learning</i>	Clark [M.A.]
2	2010	Measuring the importance of precursor steps to transformative learning, <i>Adult Education Quarterly</i>	Brock

(Continued)

Count	Year	Article Title	Author(s)
3	2012	Rethinking disorienting dilemmas within real-life crises: The role of reflection in negotiating emotionally chaotic experiences, <i>Adult Education Quarterly</i>	Mälkki
4	2013	Dead wolves, dead birds, and dead trees: Catalysts for transformative learning in the making of scientist-environmentalists, <i>Adult Education Quarterly</i>	Walter
5	2016	Transformative learning in postapartheid South Africa: Disruption, dilemma, and direction, <i>Adult Education Quarterly</i>	Cox, John
6	2017	Pathways of transformational service learning: Exploring the relationships between context, disorienting dilemmas, and student Response, <i>Journal of Transformative Education</i>	Shor, Cattaneo, & Calton

The first article reviewed was “Celebrating Disorienting Dilemmas: Reflections from the Rearview Mirror” by Mavis A. Clark, a Professor of Adult Education at the University of Missouri–St. Louis (not to be confused with M. Carolyn Clark who, with Wilson, wrote the first critique of Mezirow’s theory in 1991 and who also wrote about the disorienting dilemma as a series of integrating circumstances in 1993). In this article, Clark, M.A. (2008) reflected on her life journey as a single, adoptive mother. She described her experience as “a series of personal, unending, multiple and sometimes simultaneous disorienting dilemmas... related to a sense of loss of balance or normalcy complicated by a problem that seemingly has an unsatisfactory solution” (Clark, M.A., p. 47). As she reflected on the totality of living through each of these disorienting dilemmas, Clark, M.A. (2008) reached a conclusion that “how you respond and learn through these moments... determines your power for learning from a life’s event” (p. 47). She also noted, as did Cranton (2016), that her personal disorienting experiences and subsequent perspective transformations have shaped her philosophical belief and practice as an adult

educator. In this article, Clark, M.A.'s departure from previous descriptions of the disorienting event was significant. As mentioned above, it is similar to Clark, M.C.'s (1993) study of nine adults. In this study, her findings revealed two types of disorienting events. The first is the disorienting dilemma as described by Mezirow's early work: an acute, crisis-like, epochal experience, or a serious challenge to life as a person has known it (Clark, M.C., 1993). Clark, M.C. (1993) referred to the second type of trigger as the integrating circumstance and described it as "an event which provides a missing and yet sought after piece in the person's life" (p. 79). Mezirow (1981) also wrote about this second type of event. He acknowledged that the catalyst for transformative learning might be gradual, occurring "by a series of transitions which permit one to revise specific assumptions about oneself and others until the very structure of assumptions becomes transformed. This is perhaps a more common pattern of development" (Mezirow, 1981, p. 7-8). Clark, M.A.'s (2008) account is an interesting and descriptive reflection of a series of personal dilemmas and their effects. Clark, M.C.'s (1993) study does focus on understanding the disorienting event; however, it was published in the AERC Conference proceedings and therefore not captured in the journal search for this section of the SLR. Nevertheless, her findings influenced the researcher in the design and analysis of this study.

The next article reviewed was Sabra Brock's 2010 study of 256 graduate students. In this study, Brock (2010) measured the incidence of each of the ten phases predicted by Mezirow to lead to transformative learning. Brock's (2010) findings revealed the most prevalent precursor phase students experienced was a disorienting dilemma. However, of those experiencing disorienting dilemmas related to normal action ( $n = 144$ ), only 59% reported transformative learning outcomes, and of those experiencing disorienting dilemmas related to social roles ( $n = 112$ ), only 67% reported transformative learning outcomes (Brock, 2010). The results of this

study led to questions in the researcher's mind regarding the relationship, if any, between the trigger event and probability of transformative outcomes. This study offers interesting insight into this relationship as well as an examination of the relative importance of Mezirow's ten phases; however, the purpose of the study did not actually include examining or describing the disorienting dilemma itself. Brock (2010) called for more research to explore how an induced disorienting dilemma might be utilized in an educational setting.

In 2013, Pierre Walter, of the University of British Columbia, conducted a historical study to identify the catalysts for transformative learning in the lives of three environmental activists: Aldo Leopold, Rachel Carson, and David Suzuki. He wanted to understand how disorienting experiences led to a sense of calling for these activists. Walter's (2013) findings were that Leopold and Suzuki experienced commonly described episodic disorienting dilemmas, but Carson's experience was a series of smaller disorientations over time. Leopold and Suzuki's disorienting dilemmas were also drastic and life-changing followed by fairly linear developmental phases, while Carson's was a series of mini-challenges that added up to an integrating circumstance similar to the phenomenon described by Clark, M.C. (1993) and Clark, M.A. (2008). Walter (2013) reported, "Carson's transformative learning, as a meticulous scientific researcher, follows a similar linear pattern of thinking, albeit with an 'integrating circumstance' (dead birds and a poignant letter) as a culminating catalyst for action (publishing *Silent Spring*) rather than a disorienting dilemma" (p. 38). This study represents an interesting comparison of the disorienting dilemma's role in the lives of three environmental activists, which is similar to the present study's purpose; however, it uses a much smaller sample size of three individuals.

In 2012, Kaisu Mälkki published a study that sought to understand how a disorienting experience, described as a life crisis, leads to reflection. Mälkki's (2012) study specifically focused "on the emotional and social dimensions of the relation between disorienting dilemma and reflection" (p. 210). Mälkki's (2012) study revealed "disorienting dilemmas appear to be inherently emotional experiences" (p. 223) and reported four intertwined themes: the role of reflection in a facilitated educational setting was distinctly different from the role of reflection in crisis; negative emotions associated with a disorienting dilemma may encourage formation of new meanings; the role of reflection varied throughout the emotionally chaotic disorienting dilemma phase; and social dimensions of the disorienting dilemma may trigger iterative rounds of reflection. Mälkki (2012) called for further research to discern differences between the disorientation-reflection relationship in the crisis context versus in a facilitated educational context.

In 2016, Amanda Cox and Vaughn John of the University of KwaZulu-Natal in South Africa, studied the disorienting dilemma from a new perspective. In a time and place where disorientation was the norm, they wondered if a program designed to equip young adults with positive and healthy life choices—essentially an orienting program—might act as an *orienting dilemma* triggering transformative learning. This again reveals the importance of context in the study of the disorienting dilemma. Cox and John (2016) posited "not all life crises initiate perspective transformation and... conceptions of disorientation are inextricably tied to conceptions of what is normal and stable in life" (p. 308). Their study revealed that when disoriented lives encounter educational programs designed for stability and orientation in life, transformative learning is also triggered. This study pointed out a new lens with which to study disorientation.

In 2017, Rachel Shor, of the Department of Psychology at George Mason University, and her colleagues investigated the relationship between context, disorienting dilemmas and dissonance, and student response (Shor, Cattaneo, & Calton, 2017). Their findings revealed the context of student placement in a service-learning program shapes the type of disorienting dilemma the student encounters, and educators play a vital role in preparing students for these inevitable dilemmas. This study identified six ways students described their disorienting dilemmas when interacting with service-learning clients (Shor et al., 2017). For example, students described the process of learning about a client's difficult life as disorienting dilemma. They also described the process of making a personal connection with a client as disorienting. Shor et al. (2017) also reported 11 thematic ways in which students reacted to their disorienting dilemmas and noted, "these reactions reflect the ways in which students were trying to make sense of their experiences" (p. 164). The reactions ranged from judgments to curiosity, a desire for more understanding, and personal behavior changes.

Shor et al.'s (2017) findings support Kiely's (2005) longitudinal study, in which he developed a transformative learning model for service-learning. However, their findings indicate the context of the service-learning program may place students on varying paths of transformation. Shor et al.'s (2017) study also asserted that educators may be able to intentionally design customized service-learning programs to cause specific transformative learning outcomes. Again, similar to findings from Brock (2010), this study hints at a potential relationship between the disorienting event and transformative learning outcomes which merits further research. Shor et al.'s (2017) findings also confirm the role of discomfort as a catalyst for the transformative process. This reinforces Mezirow's (1991) claim about the negative nature of

the disorienting event and also Mälkki's (2012) findings that negative emotions associated with a disorienting dilemma may encourage formation of new meanings.

Shor et al.'s (2017) study goes on to emphasize the important role of educators in designing disorientation into programs (inducing disorientation), preparing students for the experience, supporting students during the experience, and assisting with reflection post-experience. A limitation cited by the authors of this study was that the transformative experience was analyzed retrospectively. This is a common limitation of studies specifically seeking to understand the disorienting experience. Their research methodology included analysis of student essays at the end of the service-learning program, which created a qualitative dataset representing the entirety of the student experience captured in hindsight at a single point in time, rather than a longitudinal dataset exploring how the student experienced the disorienting dilemma as it evolved over time. The very act of researching at the moment of disorientation may, in fact, alter the disorienting experience and, hence, alter the research itself. This is a methodological dilemma the researcher of this study also wrestled with over a period of several months while assessing various research designs.

Reviewing these six articles, where authors specifically took an interest in addressing the disorienting dilemma, shed more light on the varied nature of this phenomenon. The researcher found it encouraging that a few like-minded scholars have also focused on better understanding the disorienting experience as the topic of their study. The present study adds to this body of research by seeking to understand how a large group of scholars conceptualize the disorienting experience, thereby contributing a greater depth of understanding to this topic.

**Five unique articles contributed to the dataset for this study.** The search for articles focusing on the disorienting experience not only served the literature review, but also served as

an additional validation step to ensure a thorough search was conducted of studies to include in the dataset for this research. The search uncovered five unique articles (of the 15 total articles) that were added to the primary dataset of articles used in this study. These five articles are referred to as the Ensign dataset. The remaining 10 articles were already captured as part of the study dataset (referred to as the Hoggan dataset). The dataset is described more fully in Chapter Three: Research Methodology.

### **Section 3: Pointing to the Disorienting Dilemma in Other Learning Theories**

This section of the SLR first reexamines Habermas, Kuhn, and Freire—early influencers of transformative learning theory and the concept of the disorienting dilemma. Next, this section summarizes the researcher’s review of 114 learning theories as summarized by Illeris (2009), Aubrey, and Riley (2016), as well as the extensive inventory of learning theories cataloged in *Learning Theories in Plain English Volume One* (Learning-Theories.com, n.d.) and *Learning Theories in Plain English Volume Two* (Learning-Theories.com, n.d.). A complete literature review of learning theories was outside the scope of this SLR; therefore, the delimited purpose of this section of the review is to point to examples of the disorienting dilemma in other learning theories.

#### **Early influences on transformative learning theory and the disorienting dilemma.**

Three theorists heavily influenced Mezirow’s early thoughts on transformative learning theory. While considered more of a critical theorist and philosopher than a learning theorist, Jürgen Habermas (1984, 1987) nevertheless outlined three types of learning: instrumental (task-oriented or focused on a skill acquisition), communicative (involving discourse and interrelationships), and emancipatory (freeing). Both communicative and emancipatory types of learning were foundational components for Mezirow’s transformative learning theory. In these types of



learning, learners utilize discourse to wrestle with potentially disorienting questions of norms, power, and legitimacy, and the encounter with these questions creates the space for potential perspective transformation. Paulo Freire (1970, 1973), a Brazilian educator, philosopher and leading proponent of critical pedagogy, developed the concepts of conscientization and conscious growth, which also informed Mezirow's development of transformative learning theory. Conscientization is the process of becoming critically aware, or conscious. Disorientation may occur in the process of conscientization, or it may be the catalyst for conscientization. Finally, Thomas Kuhn (1962), an American physicist, philosopher and historian who first developed the notion of the paradigm, also influenced Mezirow's conception of the disorienting dilemma. Recognition of one's view of the world as a thought paradigm, meaning structure, or mental model in which one lives can cause disorientation, which, in turn, may initiate the transformative learning process.

**At the edge of learning.** Berger (2004) studied students in a Master's program and described their disorientation as being in a type of transitional zone, bounded by students' knowing and meaning-making. He noted that within this liminal space, students came to terms with the limitations of knowing and began to stretch their limits (Berger, 2004). This transitional zone is similar to Vygotsky's (1978) Zone of Proximal Development, which is a conceptual area between what a learner can do without assistance and what they cannot yet do. When a student is in the Zone of Proximal Development and assisted by a teacher or peer with a higher-level skill set, they are often able to move to the next level. This would imply that a person experiencing a disorienting dilemma who is at their edge of learning, or in the Zone of Proximal Development, may benefit from assistance or coaching during this time. Executive coaching and organizational development are fields with a focus in this area. While these concepts are similar to Mezirow's

disorienting dilemma, the primary difference is that Mezirow's disorienting dilemma acts as an initiator for transformative learning, while these concepts do not specify transformation as an outcome.

**Experiential learning.** David Kolb's work is based on the premise that people learn through experience, and he was conducting early work on experiential learning theory in the 1970s at the same time Mezirow was formulating thoughts on transformative learning theory. Kolb's (1984) experiential learning model and Mezirow's (1978a, 1991a) transformative learning model share many similarities. Kolb (1984) posited learning occurs progressively through four stages. These stages comprise what he called a Lewinian experiential model, derived from his use of Kurt Lewin's organizational behavior work on action research and group dynamics. The first stage in this cyclical model is concrete learning, which may involve a new experience or reinterpretation of a familiar experience. These experiences may or may not be disorienting, and Mezirow (1991a) might classify learners at this stage as either conventional learners (in that their experience is not disorienting) or threshold learners (a disorienting experience initiates the learning); each of these learner types is primed differently for the learning experience. The next stage in Kolb's (1984) model is reflective observation, in which the learner reflects on their experience (similar to transformative learning's self-examination and critical reflection), followed by abstract conceptualization, in which the learner learns from the experience by drawing conclusions (similar to critically reflective thought in transformative learning), followed by active experimentation, in which the learner tries out what they have learned (similar to integrating the learning in transformative learning). In a 1997 response to a critique by Newman, Mezirow simplified and condensed transformative learning theory into four phases: disorienting experience, critical reflection on one's assumptions, discourse to validate the

critically reflective insight, and reintegration into one's life. Mapping Mezirow's simplified terminology onto Kolb's model, the similarities are striking. Figure 3 depicts this graphically.

**Comparison of  
Transformative Learning and Experiential Learning**

	Transformative Learning Theory (Mezirow, 1978a, 1991a)	Experiential Learning Cycle (Kolb, 1984)
<i>Experience</i>	A disorienting experience (phase 1)	A concrete experience (may or may not be disorienting)
<i>Reflection</i>	Critical Reflection on one's assumptions (phases 2, 3)	Reflective observation (reflecting on the experience)
<i>Learning</i>	Discourse to validate the critically reflective insight (phases 4, 5, 6, 7)	Abstract conceptualization (learning from the experience)
<i>Action</i>	Integration of the learning into one's life (phases 8, 9, 10)	Active experimentation (trying out what you have learned)

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*Figure 3.* Comparison of transformative learning and experiential learning models.

There are, however, some differences between Kolb and Mezirow's approaches. Mezirow's initial disorienting experience may be an external event or an internal (psychological) event, whereas Kolb's concrete experience is described as being engaged in first-hand, concrete experience (Aubrey & Riley, 2016, p. 158), implying it is an externally generated, concrete event. Kolb does not specify the type of experience (he simply states that a person does it or has it). In contrast, Mezirow's original theory referred to the catalyst as a life crisis, although subsequent research has broadened his conception of the triggering event. Another difference is that Kolb proposes a cyclical model and asserts it is possible to begin the cycle at any stage because, in this model, learning is an integrative process and each stage mutually supports and naturally leads to the next. In this sense, the researcher pondered whether a reflective observation that is disorienting in nature during Kolb's reflection stage might equate to an internal disorienting experience in Mezirow's experience stage. Mezirow also described the phases of

transformative learning as nonlinear, yet he numbered them sequentially, causing some to interpret the transformative process as linear. However, studies have described perspective transformation as a series of integrating, unending, multiple, and sometimes simultaneous events (Clark, M.C., 1991, 1993; Clark, M.A., 2008; Walter, 2013). Additionally, Mälkki (2012) reports changes resulting from reflection may “bring about new disorienting dilemmas, triggering further reflection” (p. 223), implying an iterative or cyclical nature to the process of transformative learning.

Another difference between these two models pertains to the evolution or the maturity of the theory itself. Working with colleague Roger Fry, Kolb identified four distinct learning styles based on the model of experiential learning, and together they operationalized these learning styles into inventories for both learners and teachers (Kolb & Fry, 1975). In this way, they provided a channel for research and validation of the theory over the past 30 years via operationally standardized instruments. As a result, Kolb’s seminal theory moved relatively quickly to operationalization and application. In contrast, Mezirow’s stream of theoretical discourse on transformative learning theory remained largely separate from public empirical study and application for many years (Taylor, 1997). Without an operationalized measure, transformative learning theory lacked standardized data for systematic continuous improvement and refinement. In a search of measures for transformative learning theory, the researcher found four published measurement instruments; however, more are currently being tested, and research on operationalizing the transformative learning process is underway (Synder, 2008). The four measurement instruments briefly reviewed were: Kember et al.’s (2000) and Kember, McKay, Sinclair, and Wong’s (2008) Measure of Reflective Thinking (which measures the critical reflection stage and is designed for use with reflective essays); Kathleen King’s (1997, 2009)

Learning Activities Survey; and Stuckey, Taylor, and Cranton's (2014) Survey of Transformative Learning Outcomes. King's (1997, 2009) Learning Activities Survey is the only instrument that directly measures the disorienting experience (i.e. whether this experience occurred or not). Without a common, operationalized measure of transformative learning, scholars over four decades have collected data by creating their own surveys, many of which are based on Mezirow's original ten phases. The problem with this approach, from a research perspective, is that the wording of surveys (or interviews) is critical to ensure both validity and reliability of results across studies. Without a widely operationalized instrument, significant variation in survey wording and data collection methods has occurred across the field. To add to this variation in wording, Mezirow himself modified the language of the ten phases over time (and in fact, reordered and modified the phases themselves).

Thus, the evolutionary paths of transformative learning theory and experiential learning theory have been starkly different. With respect to experiential learning theory, David and Alice Kolb have developed an entire organization dedicated to supporting development of the theory. Their website states:

The purpose of this site is to host a space where scholars, practitioners and students of experiential learning can join together to share their research and practice. Our mission is to create an exchange through which we may support each other in our mutual interests and collectively advance the theory and practice of experiential learning. (Kolb & Kolb, n.d., para 2)

In contrast, transformative learning theory has organically evolved via studies with conceptual and methodical variation, leading to a fertile environment for creativity and innovation, whereas experiential learning theory was standardized and operationalized, perhaps contributing to a simplified understanding of the concept and associated business model. Each

approach has pros and cons. With respect to transformative learning theory's un-operationalized evolution, Taylor (2005) noted,

The exciting part of this diversity of perspectives is that it has the potential to offer a richer view of transformative learning, beyond the dominant paradigm. Unfortunately, there has been little effort to critically analyze these diverse perspectives through shared constructs, synthesizing their underlying assumptions, and most significantly drawing conclusions about how they inform our understanding of transformative learning and the practice of fostering transformative learning in the classroom. (p. 459)

In conclusion, while there have been benefits to a non-standardized approach, the lack of operationalization of transformative learning theory has contributed to the convoluted and fragmented descriptions of the first phase, the disorienting experience.

**Cognitive dissonance.** Theorist and social psychologist, Leon Festinger (1962), is credited with the seminal work on cognitive dissonance. Festinger defined cognitive dissonance as the process in which an incongruence in a person's own beliefs results in psychological discomfort and this state motivates a person to try to reduce the discomfort by achieving congruence. Festinger (1962) suggests that people possess an innate and universal desire to return to a state of cognitive balance. Application of this view to transformative learning theory implies there is embedded inertia or motivation for an individual to resolve the disorienting dilemma, rather than remaining in a state of disorientation or cognitive dissonance. Taking this reasoning one step further, if a person in a state of disorientation or cognitive dissonance does not experience transformative learning, then perhaps (a) the forces preventing transformative learning from occurring are greater than the innate desire to return to a state of cognitive balance (and the person remains in a state of disorientation), or (b) the person resolves their cognitive dissonance in a manner that does not involve transformation.

Mälkki's (2012) study of how disorienting dilemma (in the form of a life crisis) relates to critical reflection pinpointed the emotional distress of the dilemma as the trigger for reflection as

a person strives to relieve the uncomfortableness of the distress. This claim supports the idea of innate inertia toward resolving the dilemma or the cognitive dissonance. Additionally, Kiely's (2005) study of transformative learning in service learning revealed several types of dissonance and explored their relationship to transformative learning:

Dissonance constitutes incongruence between participants' prior frame of reference and aspects of the contextual factors that shape the service-learning experience. There is a relationship between dissonance type, intensity, and duration and the nature of learning processes that result. Low to high intensity dissonance acts as triggers for learning. High-intensity dissonance catalyzes ongoing learning. Dissonance types are historical, environmental, social physical, economic, political, cultural, spiritual, communicative, and technological. (p. 8)

Thus, the concept of dissonance is closely tied to the concept of disorientation and its role as a trigger for learning.

**Mental models.** In Chapter 9 of the *Cambridge Handbook of Thinking and Reasoning*, Johnson-Laird (2005) presents a history of mental models. As early as 1943, Kenneth Craik's seminal research introduced the concept of a mental model; however, he passed shortly thereafter without fully developing his ideas. Craik (1943) described mental models as small-scale models of reality that a person utilizes to make meaning of events. This definition is similar to Mezirow's definition of meaning structures. Johnson-Laird (2005) reports a resurgence of interest in mental models in the 1970s, the same time Mezirow was developing transformative learning theory. Peter Senge, who earned a Bachelor of Science degree in aerospace engineering and a Master of Science in social systems modeling, was earning his Ph.D. at MIT's Sloan School of Management in the 1970s. He was fascinated with the concept of learning as metanoia (a Greek theological term for a transformative change of the heart and/or mind). Senge believed the meaning of metanoia was to "grasp the deeper meaning of learning... real learning gets to the heart of what it means to be human... through learning we re-create ourselves... through

learning we re-perceive the world and our relationship to it” (Senge, 1990, p. 13). At MIT, Senge was drawn to the work of Jay Forrester, who was the pioneer of systems dynamics in computer engineering. Forrester (1971) humanized the concept of the computer model, naming it a mental model. In his book *The Fifth Discipline*, Senge (1990) devoted an entire chapter to mental models and described them as “deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting” (p. 164). This concept is similar to Mezirow’s meaning structures, meaning perspectives, meaning schemes. Recall, Mezirow (1991a) posited that meaning structures are made up of multiple meaning perspectives which are made up of meaning schemes; this is the mental scaffolding of our unique and personal views of reality. In Senge’s work, as in Mezirow’s, these mental models are an integral aspect of the learning process, and it is these models that are disrupted during the disorienting dilemma phase.

**Other related learning theories.** Other scholarly and theoretical work that overlaps with this study include John Heron’s (2009) work on life cycles and learning cycles, in particular concepts such as reorganization of the psyche and the distressed ego; Erikson’s (1994) stages of development, which involve potential disorientation as one transitions from stage to stage; and Argyris and Schön’s (1974, 1978, 1996) research on reflective practices as a method of engaging in continuous learning. Additionally, Turner and Tajfel’s (1986) social identity theory, in which a person’s sense of who they are depends on the groups to which they belong, may involve a disorienting phase when a person changes groups (hence, experiences a change in identity). Similarly, Bandura’s (1977) social learning theory posits that a person observes another, forms an idea or opinion about the observation and uses this observation of another person’s behavior as the basis for changing their own behavior. Finally, Schank’s (1982, 1999) concept of expectation failure also resembles Mezirow’s disorienting dilemma. Schank (1982, 1999) asserts



that for learning to take place, expectation failure must occur; we do not learn when life conforms to our expectations.

Based on this examination of a wide range of learning theories, it is evident that many researchers regard disorientation as an integral part of the learning, development, and change process even if they do not explicitly use the language of disorientation. In addition to Mezirow, other theorists have also grappled with a common theme involving changing mental models (or meaning structures) as an essential component of learning. Learning and human development are inextricably linked, and many learning theories involve inner work, which often includes reflection, to arrive at new consciousness and sometimes even new identity. This study is positioned to add to the transformative learning theory literature and may also assist scholars and practitioners who utilize other learning theories.

### **Chapter Summary**

This chapter included a review of the extensive body of literature related to transformative learning theory. Because transformative learning theory is a complex theory spanning four decades, the researcher utilized a SLR strategy to guide the review. This chapter began with a review of the evolution of transformative learning theory through a systematic examination of both first-wave and second-wave literature. Next, studies that focused on the disorienting dilemma were reviewed. Finally, the researcher pointed to examples of the disorienting dilemma (and other closely related concepts) in other learning theories. This process resulted in a comprehensive and methodical review of the literature and confirmed that scholars have yet to conduct a critical examination of the disorienting dilemma phase of transformative learning theory. This lack of critical examination across studies has resulted in an inadequate

understanding and definition of this phase. The next chapter describes the research methodology that the researcher of this study employed to better understand the disorienting dilemma phase.

### **Chapter 3: Research Methodology**

The disorienting experience is widely accepted as a catalyst for learning, development, and transformation in the fields of learning and education, global leadership development, change management, and beyond. The purpose of this study was to better understand this phenomenon via a basic qualitative study with a qualitative descriptive design. Utilizing transformative learning as a theoretical framework, and drawing on a rich stream of transformative learning scholarly research, this study sought to understand how scholars conceptualize the disorienting experience. The following research question guided the study: how do scholars conceptualize disorienting experience in the scholarly literature on transformative learning? Topics in this chapter include the research methodology and rationale, research design, data collection methods, instrumentation, data analysis method, reliability and validity, researcher reflexivity / positionality, and human subject considerations.

#### **Research Methodology and Rationale**

To answer the research question, numerous research methodologies, designs, and methods were considered, including qualitative, quantitative, and mixed methods approaches. In order to identify the most effective research methodology, the purpose of the study, access to data, time considerations, privacy protection, and cost implications were considered. During multiple conversations with faculty, colleagues, experts in research methodology, and transformative learning subject matter experts, many approaches were explored over an eight-month research design period. Ultimately, a qualitative descriptive design was selected. The following section describes the rationale for this research method.

The first decision involved whether a quantitative, qualitative, or mixed methods approach would be most appropriate. To determine this, the constructivist philosophical

approach of the study and the research question were considered. Creswell (2014) describes quantitative research as “an approach for testing objective theories by examining the relationship among variables” (p. 4). In contrast, he describes qualitative research as “an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (Creswell, 2014, p. 4). Qualitative research is, by its very nature, a constructivist approach, based on the belief that knowledge is constructed by people (Merriam & Tisdell, 2016). Additionally, constructivist researchers believe there is no single reality, and, in the research process, the researcher elicits participants' views of reality. Qualitative research generally draws on post-positivist or constructivist beliefs, while quantitative research is based on positivist beliefs that there is a singular reality that can be discovered with the appropriate experimental method (Teherani, Martimianakis, Stenfors-Hayes, Wadhwa, & Varpio, 2015). Sandelowski (2000) adds that qualitative research is intended to generate knowledge grounded in human experience. The researcher initially developed a mixed-methods study, but decided not to pursue this design after consulting with her dissertation chair and committee. Qualitative approaches to research have established a distinctive place in research literature and fit well with this study's worldview. Additionally, given that the research question is exploratory in nature, it was determined that a qualitative approach was the best fit.

Next, various types of qualitative studies were considered. A review of several types of qualitative studies was conducted, including narrative, phenomenology, grounded theory, case study, and ethnography (Creswell, 2013). First, a narrative approach was thoroughly considered. This approach would entail collecting a story or stories from individuals about their lived disorienting experiences (Clandinin & Connelly, 2000; Patton, 2002). Narrative research often takes place in specific places or situations where the context is important to interpretations of

findings (Creswell, 2013), and the disorienting dilemma is a widespread phenomenon that spans many types of situations. Therefore, a narrative approach would not satisfy the need to examine the disorienting dilemma across a wide range of contexts, however, this research method may prove useful in the future to better understand personal accounts of the disorienting dilemma.

A phenomenological study was also considered. A phenomenological study focuses on the lived experience of a heterogeneous group of individuals who have experienced the same phenomenon and strives to understand the essence of their experience (Moustakas, 1994; Creswell, 2014). The phenomenon of interest is the disorienting experience. However, it would be difficult for the researcher to personally examine, via empirical research, enough individual, lived, disorienting experiences to thoroughly understand the diverse nature of this phenomenon. Thus, by examining how the disorienting dilemma is described via a large, existing dataset of published articles instead, the researcher can categorize, understand, and interpret scholars' descriptions of the phenomenon across many more cases. A phenomenological research method may be useful in the future to explore specific types of disorienting experiences in more depth (for example, with specific demographic groups such as executive coaching clients, students experiencing study abroad, or global leaders). It may also be an appropriate methodology for exploring types of disorienting experiences in more depth (for example, voluntary positive experiences or involuntary negative experiences).

The researcher also considered a grounded theory approach, in which the research moves beyond description and theory is generated or discovered (Charmaz, 2006; Corbin & Strauss, 2007). The purpose of this foundational study was descriptive in nature: to better understand and interpret scholarly accounts of the disorienting dilemma itself. Utilizing the findings of this study, a grounded theory approach is the next logical step to subsequently begin to correlate the

identified types of dilemmas with each other and with other transformative learning variables such as reflection, context, and outcomes. Theory might also be developed to explain support activities and techniques that foster various transformative learning outcomes.

A case study approach was also considered. Case study research is bounded by time and activity (Creswell, 2014). In a case study, a specific program, activity, course, process, or similarly bounded situation is studied via multiple forms of data collection (Stake, 1995; Yin, 2009). This approach was thoroughly considered in several conversations with the researcher's dissertation chair and committee. A potential case was even identified, and the outline of a potential methodology was defined. The potential case involved a cohort of Master's-level students in a U.S. university program designed to achieve transformative learning outcomes. As part of the program, the cohort participates in a short-term study abroad trip to Central America. During this trip, an expertly facilitated session occurs in which the program faculty instigates a disorienting dilemma via a trip to a slum. The students are already primed for disorientation since they are in a foreign country. This situation would provide the researcher a bounded case with which to study the disorienting dilemma; however, a primary challenge the researcher faced with this case study approach was that her very presence as a researcher might alter the disorienting experience or potentially alter the transformative experience for the students. Even if she were to silently observe and survey the group after the fact, her questioning and known observation might change the student experience. She considered, if data could not be collected while the participants were actually experiencing the disorienting dilemma, then perhaps surveying the students immediately after the facilitated disorienting experience would be possible. However, if the participants knew of the impending survey, this too was deemed to be potentially intrusive to the intended programmatic experience. While these are issues are present

in a number of studies, they posed a particular problem for this study because the students in the program were highly self-aware, non-traditional students who were deepening their organizational development skills. Hence, they represented a group highly tuned in to their surroundings. Ultimately, the researcher could not locate another case with which to use this approach. However, a scenario could be constructed as part of the researcher's future agenda in which a case study approach would be an appropriate sequel to this foundational study.

An ethnographic study was also considered; however, an ethnographic study seeks to develop a comprehensive picture of the culture of a group (Fetterman, 2010). This research approach poses many of the same problems as the case study, in that it would require locating a group of people who are predicted to be disoriented at a predetermined time and place that the researcher could access and would have permission to access. Due to these unrealistic parameters, the researcher decided against an ethnographic approach for this study.

After an extensive process of considering these various approaches in discussions with the researcher's dissertation chair and committee members as well as discussions with subject matter experts in transformative learning, a basic qualitative methodology was determined to be the most appropriate research approach in order to access and interpret the depth and richness of scholars' conceptualizations of the disorienting dilemma. In this study, the researcher sought to describe, understand, and interpret how existing scholars have conceptualized the disorienting dilemma as foundational research to inform future studies. In a basic qualitative design, researchers describe their study as a "qualitative research study without declaring it a particular type of qualitative study-such as a phenomenological, grounded theory, narrative analysis, or ethnographic study" (Merriam & Tisdell, 2016, p. 23). Additionally, in a basic qualitative design, "the researcher is interested in understanding the meaning a phenomenon has for those involved"

(Merriam & Tisdell, 2016, p. 24). In this case, those involved are scholars and the subjects experiencing disorientation in their studies. Merriam and Tisdell (2016) claim that “basic qualitative studies can be found throughout the disciplines and in applied fields of practice. They are probably the most common form of qualitative research found in education” (p. 24). This approach was also deemed most appropriate because it allows for data collection methods and analysis methods that align with the research question. As Merriam and Tisdell (2016) explain, “data are collected through interviews, observations, or document analysis. The analysis of the data involves identifying recurring patterns that characterize the data. Findings are these recurring patterns or themes supported by the data from which they were derived” (p. 25). They continue explaining the analysis process as, “the overall interpretation will be the researcher's understanding of the participants' understanding of the phenomenon of interest” (Merriam & Tisdell, 2016, p. 24).

### **Research Design**

Several research designs, which Denzin and Lincoln (2018) refer to as strategies of inquiry, were considered for this study, and a qualitative descriptive study design was deemed the most appropriate research design. The inquiry method in this research design drew on existing data in published academic journals.

### **Data Collection Methods**

Transformative learning has a rich 40-year research stream that includes hundreds of empirical studies published in academic journals, books, and conference proceedings. Here, scholars have examined many diverse populations to understand whether and/or how they experienced transformative learning. The researcher determined that the best method for



understanding how a variety of scholars conceptualize the disorienting dilemma was to examine a sample of these publications.

**The initial dataset.** The dataset for this study fits Patton's (2002) definition of a purposeful, theory-based sample (in this case, a sample of existing academic journal articles) in which a theoretical construct of interest is manifested. In this case, the theoretical construct in question is transformative learning—specifically, phase one, the disorienting experience. The dataset has two sources.

The first source is derived from a set of scholarly articles originally cultivated by C. D. Hoggan (2016a) that was used to create a typology of transformative learning outcomes. All articles in this group are from three peer-reviewed journals dedicated to adult education where much of the transformative learning literature has been published. Hoggan's selection process was designed to capture as many articles as possible. First, using the journal's websites, the search term "transformative" appearing anywhere in the article was used to find articles published between 2003–2014 in *Adult Education Quarterly (AEQ)* and *Adult Learning (AL)*. Next, all articles in the *Journal of Transformative Education (JTE)* from 2003–2014 were selected because this journal is dedicated to the subject of the study and the inaugural issue was published in 2003. These searches resulted in 423 documents. Next, each abstract was manually screened, and non-peer reviewed contributions (e.g. opinion pieces, book reviews) and articles with other uses of the word "transformative" (such as transformative leadership and organizational transformation) were excluded. The articles retained needed to address learning that the authors claimed was transformative as defined by transformative learning theory, although they did not need to explicitly build on Mezirow's account of transformative learning theory. This resulted in 251 articles. Hoggan's (2016a) study sought to answer a different

research question than this study, and he narrowed the dataset further. However, for purposes of this study, these 251 articles comprise the corpus of data referred to as the Hoggan dataset.

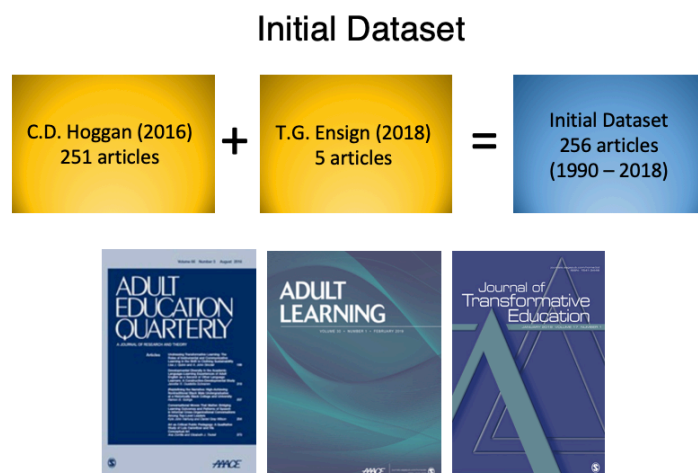
The second source of the initial dataset, and an additional validation step, was derived from an unpublished search in the same three peer-reviewed journals, from the journals' initial publication dates through December 2018, with the search terms "Mezirow" appearing anywhere in the text and "disorient" anywhere in the abstract. This search sought to capture articles specifically focusing on the disorienting experience as well as articles more recent than 2014. This search resulted in five unique articles, which are referred to as the Ensign dataset.

Table 12

*Additional Validation Step - Five Unique Articles (Ensign Dataset)*

Journal Title	Dates of publication (dates of search)	"Mezirow" anywhere; "disorient" in abstract	Unique articles (Ensign dataset)
<i>Adult Education Quarterly</i>	September 1996 – December 2018	5	1
<i>Adult Learning</i>	September 1990 – December 2018	2	1
<i>Journal of Transformative Education</i>	January 2003 – December 2018	8	3
Total		15	5

Together, the Hoggan dataset (251 articles) and the Ensign dataset (5 additional articles) comprise the initial dataset (256 total articles). The initial dataset is described graphically in Figure 4.



*Figure 4.* Sources of data.

**Filtering for Mezirow’s research stream and for empirical studies.** In order to prepare the initial dataset for purposes of this research, two phases of filtering the data occurred. Phase one filtered the articles (within the dataset of 256 articles) that referenced the disorienting experience ( $n = 103$ ) from those that did not include the root word “disorient” ( $n = 153$ ). Mezirow’s stream of research consistently refers to the first phase of transformative learning as the disorienting dilemma. Therefore, searching on the root word “disorient” intended to capture articles with Mezirow’s original stream of research. Cases in the dataset could refer to other transformative learning streams, for example, Kegan’s (2000) constructive-developmental approach, Dirkx (2006b), Boyd and Myers (1988) Jungian approach, Brookfield’s (1984, 1987) social emancipatory approach, or others, in addition to Mezirow’s stream. However, some engagement with Mezirow’s cognitive-rational theoretical framework was a requirement for the article to be included in the dataset.

Phase two captured articles that were empirical studies (versus other types of articles). To do this, the researcher read the article abstract and scanned each of the 103 articles grounded in Mezirow’s stream of transformative learning to gain an understanding of the type of article. If

the article was a study, the researcher learned the problem, purpose, method, research question(s), theoretical framework used, population studied, and results of the study. After reading several studies and 12 articles that were literature reviews, conceptual pieces, reflections, and other non-study articles, the researcher determined that the studies offered the best conceptualizations of the disorienting experience. In the non-study pieces, authors mostly cited others' conceptualization of the phenomenon – reworking, rethinking the same ideas. Thus, in this phase, the researcher filtered the articles that were studies from those that were non-studies. For purposes of this research, Taylor's (2007) criteria were used to determine whether or not an article was a study. To be considered a study, the article needed to have a definitive methodology and findings. Of the 103 articles, 53 articles were studies and 50 articles were other pieces such as personal reflections, literature reviews, and theoretical propositions. The 53 empirical studies derived from phases one and two of filtering the material constitute the data corpus. Figure 5 explains the data collection process graphically.

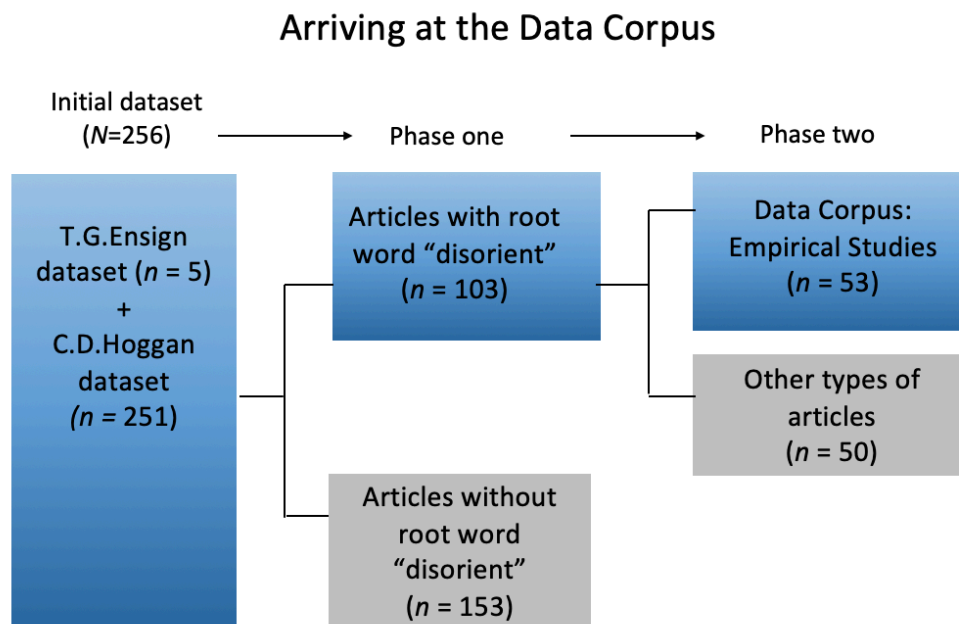


Figure 5. Arriving at the data corpus (n = 53).

## Data Analysis

Data analysis utilized qualitative content analysis (QCA) and directly answered the research question. Table 13 summarizes this study's research question, data collection methods, dataset, and analysis method.

Table 13

### *Research Question, Data Collection Method, Dataset, and Analysis Method*

Research Question	Data Collection	Dataset	Analysis Method
How do scholars conceptualize the disorienting experience in the scholarly literature on transformative learning?	Existing, archival dataset of scholarly articles (Ensign, 2018, unpublished; Hoggan, 2016a)	53 empirical studies published in three peer-reviewed academic journals dedicated to adult learning	QCA (Schreier, 2012)

The data were analyzed via qualitative content analysis (QCA) using NVivo and Microsoft Office software. "QCA is a method for describing the meaning of qualitative material in a systematic way" (Schreier, 2012, p. 1). This is an appropriate method when dealing with rich data that requires interpretation. According to Schreier (2012), there are eight steps in QCA:

1. Deciding on the research question(s)
2. Selecting the dataset material
3. Building a coding frame
4. Dividing the material into units of coding
5. Trying out the coding frame
6. Evaluating and modifying the coding frame
7. Conducting the main analysis
8. Interpreting and presenting findings. (p. 6)

There are several benefits and at least one drawback to using QCA. The first benefit is that QCA is a systematic process for understanding, describing, and interpreting qualitative data, which is in direct alignment with the purpose of this study. Schreier (2012) stresses that the systematic nature of QCA is its most distinctive feature. Regardless of the study material or research question, the same systematic eight-step process can be applied. It does not matter how

the dataset is cultivated; QCA can be applied to existing documents such as articles or newspapers, interview transcripts, focus groups, observation notes, entries on social media sites, diaries, websites, photo or video archives, audio recordings, emails, etc. The researcher of this study deemed this aspect of QCA an important benefit because she is positioning this as a foundational study, and future research may involve adding more articles to broaden the data corpus and analyzing the additional articles using the same QCA method of analysis.

The second benefit is that QCA is a highly flexible method because it enables researchers to tailor coding frames to the specific data in the study. Saldaña's (2016) *Coding Manual for Qualitative Researchers* was a guide for developing the tailored code book for this study. In this extensive reference book, Saldaña (2016) explains first and second cycle coding methods, common coding errors, and how to write analytic memos. Schreier (2012) notes, "your coding frame can be regarded as valid to the extent that your categories adequately represent the concepts in your research question" (p. 7). She prefers the use of inductive coding frames and cautions that adopting coding frames developed by other researchers (deductive coding) requires the researcher to modify and adapt them to the material they are studying (Schreier, 2012).

A third benefit of QCA is that it inherently reduces data. Schreier (2012) states, "in this respect it is different from other methods for qualitative data analysis... most methods for qualitative data analysis are concerned with opening up your data, discovering new things about it, bringing it together in novel ways" (p. 7). Specifically, QCA reduces data in two ways. First, data analysis is not performed on the entire content of data; only the data that is relevant to the research question need be analyzed. The research question guides the researcher in deciding what data are relevant and fit for inclusion. In the case of this study, this meant that the entirety of each journal article was not necessarily analyzed, but instead, only those sections of the article

where the scholar was conceptualizing the disorienting dilemma (see Chapter Four, Step Four – Dividing the Data). Second, in QCA the coding categories are often at a higher level of abstraction than the actual qualitative data. Sometimes, specific nuances of the actual qualitative data can be lost in this process, and this is the trade-off of using QCA as a data analysis method. In this study, however, special care was taken in an effort to capture the nuances of the disorienting dilemma, and the researcher used these nuances to inform the coding structure. Neuendorf's (2002)'s recommendations in *The Content Analysis Guidebook* were also used for quantitative analysis of the qualitative data.

### **Reliability and Validity**

**Reliability.** When a measuring procedure yields the same results over repeated trials, it is considered reliable (Carmines & Zeller, 1979). Similarly, Boyatzis (1998) defined reliability as consistency of judgement, or more specifically, “consistency of observation, labeling, or interpretation” (p. 144). Schreier (2012) stressed that reliability in qualitative analysis is concerned with consistency, and this consistency can be measured across persons (coders) or across points in time (via the same coder). According to Schreier (2012), “In QCA, a consistency check is built into the procedure: you either have part of your material coded by another person or you recode part of the material yourself after approximately 10–14 days” (p. 34). If consistency is measured across multiple coders, then “two (or more) coders use the same coding frame to analyze the same units of coding and they do so independently of each other (‘blind coding’)” (Schreier, 2012, p. 167). In this study, both of these consistency checks were utilized. A second coder coded approximately 5% of the material, and interrater reliability was calculated using Cohen's Kappa. In addition, the researcher recoded part of the material herself after 12 days to ensure consistency in coding. Schreier (2012) specifies that “whether the coding is

compared by different persons or by one person at different points in time, the coding frame is considered reliable to the extent that the coding is consistent” (p. 167).

**Validity.** “Qualitative validity means the researcher checks for the accuracy of the findings by employing certain procedures” (Creswell, 2014, p. 201). Validity is described in many ways in the qualitative research literature. Creswell (2014) offers terms such as trustworthiness, authenticity, and credibility. This study adopted Nowell, Norris, White, and Moule’s (2017) description of trustworthiness and Creswell’s (2014) eight aspects of validity, which are described below.

According to Nowell et al. (2017), “Each qualitative research approach has specific techniques for conducting, documenting, and evaluating data analysis processes, but it is the individual researcher’s responsibility to assure rigor and trustworthiness” (p. 2). Thus, trustworthiness must be built into the research design, and detailed descriptions of the data collection, instrumentation, and analysis methods are key to preparing the study for a test of trustworthiness. In their article, “Thematic Analysis: Striving to Meet the Trustworthiness Criteria,” Nowell et al. (2017) point out that “if readers are not clear about how researchers analyzed their data or what assumptions informed their analysis, evaluating the trustworthiness of the research process is difficult” (p. 2). Additionally, “when conducting data analysis, the researcher becomes the instrument for analysis, making judgments about coding, theming, decontextualizing, and re-contextualizing the data” (Starks & Trinidad, 2007). Nowell et al. (2017) offer practical steps for demonstrating trustworthiness that include disclosing and following a systemic method of analysis and recording steps taken during the analysis. These steps were followed in this study.



Additionally, Creswell (2014) suggests employing one or more of the following eight strategies, which may be incorporated into studies to ensure validity and trustworthiness: triangulation of different data sources; using member checking to determine the accuracy of the final report; using a rich, thick description to convey the findings; clarifying the bias the researcher brings to the study; presenting negative or discrepant information that runs counter to the themes; spending prolonged time in the field; using peer debriefing to enhance the accuracy of the account; and using an external auditor to review the entire project. Like Nowell et al., Yin (2009) suggests that qualitative researchers document the steps of their research design and analysis in addition to employing at least one of the validation steps Creswell listed.

In considering these eight options, the researcher came to the following conclusions. This study was based on one corpus of data, so triangulation was not possible. Additionally, since there were no human participants in the study, member checking was not possible. Similarly, prolonged time in the field did not apply to this study. Therefore, via a process of elimination of three validation strategies, this study used the five remaining strategies. First, rich, thick descriptions were used to convey the findings. According to Creswell (2014), “this description may transport readers to the setting and give the discussion an element of shared experiences. When qualitative researchers provide detailed descriptions of the setting... the results become more realistic and richer. This procedure can add to the validity of the findings” (p. 202). Second, clarification of bias of the researcher was part of the research design and is addressed in the next section of this chapter. Third, negative or discrepant information that ran counter to the themes was reported as an additional validity step. Fourth, peer debriefing was employed and consisted of multiple, in-depth conversations during the research design and analysis process with faculty, colleagues, and friends who had no knowledge of the subject matter. In this validity

step, a peer debriefer reviewed and asked questions about the qualitative study so the account would resonate with people other than the researcher. “This strategy—involving an interpretation beyond the researcher and invested in another person—adds validity to an account” (Creswell, 2014, p. 202). Finally, the researcher’s dissertation chair and committee served as three external auditors who reviewed the entire project, and an additional subject matter expert plus an additional methodology expert served as two external auditors who reviewed sections of the study related to their fields of expertise.

### **Researcher Positionality**

A core competency of research is the researcher’s ability to be aware of and communicate their position relative to the research conducted (Creswell, 2014). The researcher in this study is a doctoral candidate in Pepperdine University’s Ph.D. in Global Leadership and Change program. She is a certified executive coach and organizational development consultant. In addition, she taught for five years as an adjunct professor. As both a scholar and a practitioner, she is experienced in teaching and curriculum development in international education, global leadership development, and change management with for-profit companies, not-for profit organizations, and academic institutions. She has been a practicing executive coach and consultant for over two decades and has drawn on transformative learning techniques in her work. For example, her coaching clients often seek her services when experiencing a disorienting dilemma, such as a transition between professional roles or a desire to understand what meaningful work might look like. As a consultant, she has worked with numerous leadership teams during acquisitions, mergers, downsizing, entry into new markets, significant strategic shifts, and other organizational changes that cause disorientation. In addition, she developed college and corporate curricula that induced a disorienting experience as a pedagogical primer

for learning and development. She also drew on her professional coaching skills for reflection exercises with high school and college students at various points in their study abroad experiences (pre-departure, while experiencing disorientation abroad, and upon return). She has similar reflective coaching experience with global executives who travel abroad for extended assignments or take expatriate roles. In both academic and practitioner settings, the researcher has developed critical thinking, synthesis, and qualitative analysis skills that were useful for this study. These firsthand experiences with disoriented populations who are at the threshold of potential transformation were essential to development of the research question and study design. In this study, the researcher sought to better understand the disorienting experience from a scholarly perspective, and her future research agenda includes developing applications for practitioners.

### **Human Subject Considerations**

This research was conducted in a manner consistent with Title 45, Part 46 of the U.S. 63 Code of Federal Regulations, Pepperdine University's IRB, and ethical principles of the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978). Prior to analyzing data, the researcher applied for permission to conduct this study with the Pepperdine University IRB. When IRB approval was received, the researcher commenced research and analysis. This nonhuman subject study utilized only existing data in the form of published academic journal articles. IRB approval is found in Appendix C.

### **Chapter Summary**

This chapter summarized the research methodology and rationale for the study. It began with a review of the study's purpose and research question. The research methodology was a basic qualitative design. This methodology supported the study's constructivist epistemological

worldview. Next, it covered the research design and data collection method. QCA is the data analysis method and was discussed. Finally, reliability and validity, researcher positionality, and human subject considerations were covered.

Chapter Four reports the findings of the study. In this chapter, the study's aim to explore, understand, and interpret how scholars conceptualize the disorienting experience answers the guiding research question. Both qualitative summaries (narrative examples) and quantitative summaries (frequencies and graphs) are reported in Chapter Four. Chapter Five presents a discussion of findings and recommendations for future research, including suggestions for research stemming from the findings of this study.

## **Chapter 4: The QCA Process and Findings**

### **Introduction**

The disorienting experience is widely accepted as a catalyst for learning, development, and transformation in the fields of learning and education, global leadership development, change management, and beyond. The purpose of this basic qualitative study was to better understand this phenomenon via a qualitative descriptive design. Utilizing transformative learning as a theoretical framework, and drawing on a rich stream of scholarly research in the field of transformative learning, this study sought to understand how scholars conceptualize the disorienting experience. The following research question guided the study: how do scholars conceptualize the disorienting experience in the scholarly literature on transformative learning? This chapter explains (in more depth than in Chapter Three) the eight QCA steps used in this study according to Schreier (2012). Three key findings are presented in Step Eight. First, however, the analysis performed for Steps One through Seven is described and findings resulting from analysis at these stages, if any, are reported. A summary of the analysis process and the findings concludes this chapter.

### **The QCA Process**

QCA was used to arrive at the findings. Schreier (2012) explains QCA as “a method for describing the meaning of qualitative material in a systematic way. You do this by assigning successive parts of your material to the categories of your coding frame” (p.1). According to Hsieh and Shannon (2005), “Conventional content analysis is generally used with a study design whose aim is to describe a phenomenon” (p. 1279), in this case the disorienting experience. “This type of design is usually appropriate when existing theory or research literature on a phenomenon is limited” (Hsieh & Shannon, 2005, p.1279). Thematic analysis (Boyatzis, 1998) is

an aspect of QCA focusing on theming the material to arrive at categories. Schreier's (2012) eight steps in QCA were followed:

1. Deciding on the research question
2. Selecting the dataset material
3. Building a coding frame
4. Dividing the material into units of coding
5. Trying out the coding frame
6. Evaluating and modifying the coding frame
7. Conducting the main analysis
8. Interpreting and presenting findings. (p. 6)

Steps One (decide on research question) and Two (select dataset material) were completed prior to analysis. The following sections explain the research process in each phase and the findings of the study (Step Eight). Additional interpretation and a discussion of the findings are included in Chapter Five.

**Step one: The research question.** Creswell (2013) explains that the purpose of research questions is to narrow the focus of the study. Further, Creswell (2013) advocates for the use of a guiding or central research question. Mezirow's (1978a, 1991a) theory of transformative learning posits ten phases. The research question in this study drew a hard boundary around the first phase and catalyst, the disorienting experience. The guiding question was: how do scholars conceptualize the disorienting experience in the scholarly literature? This study did not seek to address tangential topics such as the other phases of transformative learning, whether transformative learning occurred or not, or possible types of transformative learning outcomes. Thus, a tight scope was maintained throughout this study, with a focus on data that revealed how scholars conceptualize the disorienting experience across a diverse set of studies.

**Step two: Selecting the dataset material.** According to Schreier (2012), "QCA is a suitable method for describing material that requires some degree of interpretation" (p. 2). Schreier provides several textual examples such as interview transcripts, transcripts of focus

groups, contracts, diaries, websites, and newspaper articles. The dataset selected for this study was a sample of published, academic journal articles from three journals dedicated to the field of adult learning. The initial filtering process to arrive at this dataset was for a prior study conducted by C.D. Hoggan; the purpose of the Hoggan study was to better understand transformative learning outcomes (Hoggan, 2016a). Using qualitative content analysis, the Hoggan (2016a) study revealed six learning outcomes described in the transformative learning literature. This study serves as a bookend to the Hoggan study by examining the catalyst for transformative learning as described in the literature.

Using the same core dataset as the Hoggan (2016a) study was considered advantageous for several reasons, and it also posed one drawback. First, an advantage of the initial Hoggan dataset (N=251) was its global reach. The dataset represented a stream of scholarly research dedicated to transformative learning by 191 authors representing every continent except Antarctica. Second, the dataset provided 12 years of recent research on transformative learning (2003 - 2014). Third, it provided a body of textual data describing a diverse set of disorienting experiences. Fourth, using the same basic dataset as the Hoggan's (2016a) study provided consistency across research on the theory itself. And fifth, use of a content analysis approach made it possible to develop an index of the disorienting experience grounded in the data.

The primary disadvantage of utilizing the same dataset was that the Hoggan (2016a) dataset was not cultivated for the purpose of examining the disorienting experience specifically. Because the Hoggan (2016a) dataset was cultivated for the purpose of understanding transformative learning outcomes, the researcher of this study took an additional validation step to capture any additional articles with a specific focus on better understanding the disorienting experience. This search also expanded the time period by going back to each journal's inaugural

issue and extended the search from 2014 to December, 2018. This additional validation step provided 15 articles, of which 10 were already included in the Hoggan (2016a) dataset of 251 articles. The five unique articles (referred to as the Ensign dataset) were added to the Hoggan dataset, resulting in 256 total articles spanning the years 1990-2018. Additionally, the Hoggan (2016a) dataset included both studies and other types of articles such as conceptual pieces, reflections, and literature reviews. The initial dataset (Hoggan plus Ensign) was further filtered to exclude articles that did not reference Mezirow's stream of transformative learning and articles that were not studies (see Chapter Three: The initial dataset and Filtering for Mezirow's research stream and for empirical studies; see Figure 4 Sources of data). The resulting data corpus comprised 53 empirical studies.

**Steps three and four: Building the coding frame and dividing the material.** Steps three and four were iterative and are described together in this section. In the process of building the initial coding frame, the material was divided, which then impacted the coding frame.

*The initial coding frame.* Schreier (2012) states "the coding frame is at the heart of the method" (p. 58). She reinforces that QCA is a method that helps researchers focus on certain key aspects of the material so as to not get lost in the data. "It is these aspects around which you build your coding frame. In the literature, these are called the dimensions or the main categories of the coding frame" (Schreier, 2012, p. 59). The researcher used an inductive coding process that allowed categories and names for categories to emerge from the data, as opposed to using preconceived categories (Kondracki & Wellman, 2002). According to Schreier (2012), using an inductive coding process "is one of the most important strengths of QCA: the method allows you to describe and classify large amounts of qualitative data" (p. 33) and develop codes customized to the dataset. To complete this step, the researcher utilized NVivo qualitative analysis software



and Microsoft Office suite to manage the 256 articles, the data dividing process, and the coding process. The researcher began to build the initial coding frame by creating a query in the NVivo software program to search for the following words in each study: disorient (root word), dilemma, crisis, trigger, and catalyst. For each article, the researcher considered the author(s) and their affiliation(s), the year the study was published, the title of the article, the journal, and the overall context of the study. Next, the researcher read the abstract to understand the problem, purpose, research question, method, population, and findings. If this information was not available in the abstract, she scanned the article to obtain it. Next, the researcher scanned the article for mentions of the search words which were highlighted in each article by the NVivo software program. With an overall understanding of the study and the author's broad conceptualization of the disorienting experience, the researcher then read in depth large portions of the study (or, in many cases, the entire study), to understand how the author was specifically conceptualizing the disorienting experience. These findings became the basis for the initial coding frame.

***Dividing the material.*** The process of QCA calls for dividing the material. Schreier (2012) explains that QCA is a process that reduces data:

Most methods for qualitative data analysis are concerned with opening up your data, discovering new things about it, bringing it together in novel ways. This usually involves producing even more data – data about your data... QCA is different. It focuses your analysis on selected aspects, and in this process, it reduces your material. (p. 7)

With QCA, in the process of reducing through classification, new information is produced (Früh 2007). “This information is across cases telling you how your cases compare to each other with respect to the categories in your coding frame” (Schreier, 2012, p. 8). When creating the initial coding frame, the researcher divided the data into manifest and latent data.

***Definitions of manifest and latent data.*** Manifest coding was factual in nature and contributed to the initial coding frame. Schreier (2012) defines manifest data as data with obvious and literal meanings. Examples of manifest data are the year the article was published and the authors' institutional affiliations. To answer the research question, the coding frame also captured the authors' conceptualizations of the disorienting experience. This coding required exploration, understanding, and interpretation and is referred to as latent data analysis. Schreier (2012) explains, "to detect latent meaning... you often have to take context into account. This can be the entire text from which a passage is taken – or even the publication venue or additional background information" (p. 15). Manifest data assisted in providing context for latent data coding. The following sections present an explanation of manifest data analysis and manifest data findings, followed by an explanation of latent data analysis and latent data findings.

***Manifest data analysis.*** The process of building a coding frame began by first understanding the manifest meaning in each of the 53 studies in order to establish the context for coding latent data. The guiding research question of this study relied on understanding and interpreting scholars' conceptualizations of the disorienting experience. Hence, the authors of the articles were akin to interviewees or survey respondents in other types of qualitative studies, and the text of the articles was analogous to interview transcripts or qualitative survey responses (Schreier, 2012). Therefore, the researcher examined each of the 53 studies to learn the about the author demographics via the information provided. It was not possible to know the authors' specific demographics (such as age, gender, ethnicity, etc.); however, manifest data in each article provided the author names, institutional affiliations and locations, the years the article were published, and the journals in which the articles were published. The researcher coded this

manifest data to provide the initial context of the authors' conceptualizations of the disorienting experience.

***Manifest data results.*** The results of the manifest data analysis revealed three important findings: first, the results confirmed the global demographics of the authors of the studies; second, the results indicated the recent and relevant time frame of the studies; and third, the results assisted the researcher in understanding some of the relationships between authors and studies.

The authors of the studies represent diverse global affiliations. The 53 studies were authored by 114 individuals representing Africa, Asia, Australia, New Zealand, South America, Europe, Canada and the U.S. Thirty-three percent of the authors were from outside of the U.S., and sixty-seven percent were from the U.S. This finding confirmed that the study was global in nature and represented authors' conceptualizations of the disorienting experience from several international perspectives. These demographics are displayed in Figure 6 and Table 14.



*Figure 6.* Countries of authors' affiliations.

Table 14

*Authors' Global Affiliations*

Number of Authors	Global Region	Country	Province, State or City
3	Africa	Africa	Botswana South Africa
6	Asia	Malaysia Taiwan	Perak Changhua Taichung Taipei
6	Australia & New Zealand	Australia New Zealand	Queensland Sydney Dunedin
7	Europe	Finland United Kingdom	Helsinki Huddersfield Newcastle Nottingham Tyne West Yorkshire
91	North America	Canada United States	Alberta British Columbia Nova Scotia Winnipeg 27 states
1	South America	Ecuador	Guayaquil
114	Total Authors		

*Note.* For each global region, the number of authors affiliated with the region as well as the country, province, state or city is listed. The table is in alphabetical order by global region.

Second, the manifest data analysis revealed that the 53 studies spanned fifteen years of research (2003 – 2017). This ensured that the authors' conceptualizations of the disorienting experience were both recent and extensive. Figure 7 displays the frequency of articles by publication year.

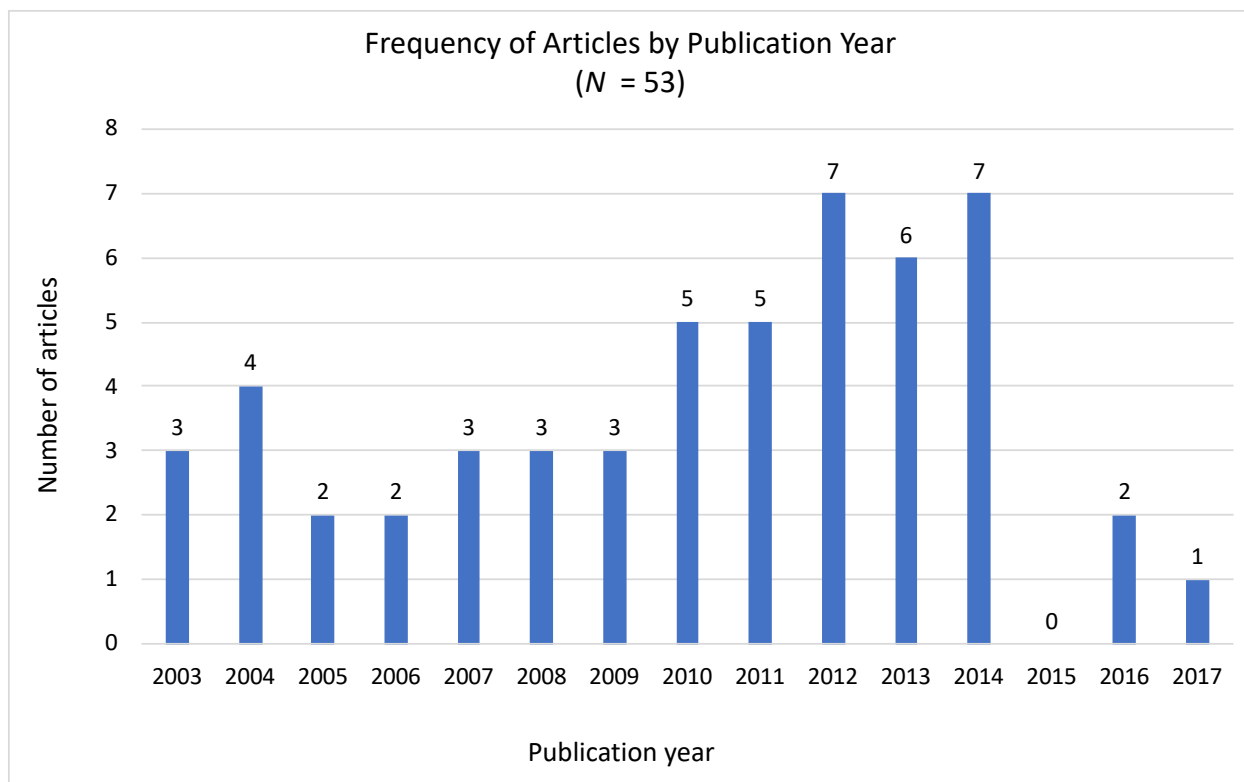


Figure 7. Frequency of articles by publication year.

Third, the findings from the manifest data analysis assisted the researcher in understanding some of the relationships between authors as well as studies by the same author over time, studies that used the same dataset, or studies that built on the same theme (such as disorientation a result of a cancer diagnosis). With manifest data analysis complete, the researcher then moved to latent data analysis.

**Latent data analysis.** As mentioned above, latent data are not as obvious as manifest data. Schreier (2012) explains that latent data analysis involves subjectivity and interpretation. Latent meaning can be obscure, and a high degree of critical thinking is required to explore, understand, and interpret the textual data.

Armed with context about each author and study, the researcher then searched for and read, in depth, passages mentioning the disorienting experience, then coded these excerpts. In

addition to explicit references to the disorienting experience, the researcher scanned for similar terms such as crisis, catalyst, trigger, and dilemma, as well as implied disorientation where none of these terms were used. In many cases, it was necessary to fully read large portions of the study or the entire study (more than once) in order to thoroughly understand the disorienting experience of the population being studied. This is because authors' descriptions of the disorienting experience varied considerably and were often convoluted and intertwined with information about other phases in the transformative learning experience. Understanding the nuances of the phenomenon required substantial comprehension and critical thinking. The researcher explored using automated text analysis software (Sketch Engine), however, the software proved unsuccessful due to the high level of interpretation required.

*Defining the unit of analysis: The disorienting experience.* In some studies, the author described more than one disorienting experience within the same study. In these cases, the researcher analyzed each experience provided. As a result, the unit of analysis in this study was not each empirical study, but instead, each instance where a disorienting experience was uniquely conceptualized by the author.

Specifically, in 29 of the 53 studies, authors pointed out how individuals within the sample being studied had differing disorienting experiences even though they were part of the same sample. For example, in Kitchenham's (2006) study on professional development for teachers integrating technology into their classrooms, he described both negative and non-negative disorienting experiences encountered by the teachers. Thus, in the 53 studies analyzed, authors described 82 total instances of the disorienting experience. Each of the 82 disorienting experiences was coded and analyzed. Table 15 lists the number of studies, the studies where

authors conceptualized more than one disorienting experience resulting in additional units of disorienting experiences, and the total units of disorienting experience.

Table 15

*The Disorienting Experience Unit of Analysis*

Description	Count
Number of studies	53
Additional instances of disorienting experiences:	
Chang (2012)	3
Cohen (2004)	3
Hanlin-Rowney (2006)	3
Kitchenham (2006)	2
Magro (2009)	3
Merriam (2008)	11
Teng Yan Fang (2014)	1
Walter (2013)	<u>3</u>
Total additional instances of disorienting experiences:	29
Total instances of disorienting experiences	82

*Note.* The table lists the number of studies, then lists the lead author and year of studies that provided additional instances of disorienting experiences, then lists the total instances of disorienting experiences that were analyzed in this research ( $N = 82$ ).

Both the authors' words as well as authors' quotations and paraphrases of the populations studied were coded. Without access to the raw data from each study, the researcher of this study could not presume to report on the populations directly, except for the information each author chose to include in his or her publication. This information represented the authors' conceptualization of the raw data in their study. Therefore, the researcher considered passages quoted from populations studied as part of the authors' conceptualization. Additionally, the purpose of all but five of these studies involved aspects of transformative learning other than the disorienting experience, that is, the disorienting experience was not the focus of the study. Therefore, in some cases, the authors of the studies only briefly describe the disorienting

experience or identify that a disorienting experience occurred, however, they do not provide details of the experience. This contributes to the problem statement and purpose of this research. To address this challenge, the researcher of this study developed default coding rules to use in the absence of more elaborate descriptions of the disorienting experience by the authors. These rules are explained in detail as part of the findings of the study.

***Latent data analysis results: The initial codebook and index.*** From this deep exploration, the experiences were coded, and a typology of eight dimensions emerged. Initially, each dimension held several sub-codes. After coding about half of the material, the researcher made the decision to adopt a dichotomous coding process because the breadth and potential number of subtopics and ideas became unwieldy and were not appropriate for the qualitative descriptive study design and QCA methodology. Dichotomous coding forces one of only two possible values (Lewis-Beck, Bryman, & Futing Liao, 2004). For example, in analyzing *Affect*, dozens of descriptors could be utilized. However, for the sake of simplification and clarity, the researcher chose to display *Affect* in terms of the binary states: *Negative* or *Not negative*. The researcher acknowledges the value in further stratification of these dimensions, however, this qualitative descriptive study sought to reveal overarching dimensions of the disorienting experience, whereas a further stratification of each dimension would be better investigated via a study targeting each specific dimension with a more appropriate research method such as phenomenology or case study.

The initial code book was developed over a period of several weeks. Throughout the coding process, codes were renamed, grouped, and split. As new codes and categories emerged, previously coded articles were recoded to include these updated coding schemes. The result of Steps Three and Four was an initial coding frame.



**Steps five and six: Trying it out, evaluating, and modifying the coding frame.** Once the material is narrowed and the coding frame is developed, Schreier (2012) suggests trying out, evaluating, and modifying the coding to frame prior to the main analysis. This is called trial coding (Früh, 2007; Neuendorf, 2002), and it is essential for understanding the shortcomings of the code book at an early stage. Shreier (2012) also states:

There is nothing to prevent you from using the same material for trying out the coding frame and for doing the main coding at a later stage. Because you are concerned with obtaining an in-depth description, one might even say that it is *better* to try out your coding frame on part of the very material on which you will carry out the main coding. (p. 148)

The process of trial coding was utilized in this study prior to the main analysis and is described in the following sections.

**Reliability.** Schreier (2012) stresses that reliability in qualitative analysis is concerned with consistency, and this consistency can be measured across persons (coders) or across points in time (via the same coder). According to Schreier (2012), “In QCA, a consistency check is built into the procedure: you either have part of your material coded by another person or you recode part of the material yourself after approximately 10 to 14 days.” In this study, both of these measures were taken to ensure reliability. Shreier (2012) recommends that the criteria for determining how much material to include in the trial coding should be based on the unique properties of the study, including variability in the dataset and practicality. After discussions with the researcher’s chair and committee members, it was determined that 5% of the dataset would be double-coded by a second coder, and 10% of the dataset would be double-coded by the primary researcher.

Prior to the main analysis, the researcher engaged a second coder who coded 5% of the material using the researcher’s initial coding frame. The researcher and the second coder

reviewed the codes together and a Cohen's Kappa of .722 was calculated indicating moderate agreement. In instances of a mismatch, the coding categories were discussed, and discrepancies were resolved. The majority of discrepancies stemmed from the second coder considering the entire transformative learning experience (phases one through ten of Mezirow's steps) when assigning codes instead of only considering the first phase, the disorienting experience, when assigning codes. These discrepancies were easily resolved in the discussion. The codebook was then updated to reflect agreed-upon modifications that would best serve the intent of the study. As an additional reliability step, the researcher recoded 10% of the material herself after 12 days and made minor adjustments to the wording of the coding categories.

**Validity.** This study used five strategies for validity in qualitative analysis as described by Creswell (2013). They were: rich, thick descriptions to convey the findings (see Step Eight: Findings), clarification of bias of the researcher (see Chapter Three), reporting of negative or discrepant information that ran counter to the themes (see Step Eight: Findings), peer debriefing so the study resonates with people other than the researcher (see Chapter Three), and external auditors who reviewed the entire project (the researcher's chair and committee). To ensure trustworthiness, a detailed account of the study design and analysis was documented and serves as an audit trail (Nowell et al., 2017).

**Step seven: The main analysis.** At this point, preparation for analysis was complete. Schreier (2012) explains the activities in the main analysis phase as applying the coding frame to the material, deciding upon the final names of codes, and transforming results from the codes to final units of analysis (if not already reported in the final units of analysis). In this stage of analysis, the researcher opened each article in NVivo and coded to appropriate categories in the codebook. The researcher also developed a spreadsheet organized by article, author, and journal

to track coding progress and capture the researcher's thoughts pertaining to each article. The main coding and analysis occurred over a period of several weeks.

**Step eight: Findings.** Schreier (2012) offers instructions for presenting findings both quantitatively and qualitatively and states, “your coding frame itself may be your most important finding. This is the case whenever you want to explore or describe your material in certain respects and are using data-driven categories to do so” (p. 219). The coding frame itself is one of three main findings of this study and provides a new typology of the disorienting experience. The three main findings revealed by the data in this study answer the research question by explaining, in depth, how scholars conceptualize the disorienting experience in the scholarly literature.

**Three main findings.** In the next section, the three main findings are discussed. First, a new index of the disorienting experience is presented and the most common type of disorienting experience revealed by this dataset is uncovered. Second, a list of 16 contexts of disorienting experiences described by the studies is presented. Third, a description of each dimension in the Disorientation Index is presented. For each dimension, the coding rule used, instances of disorienting experiences organized by context, and specific examples from the studies in the dataset that are demonstrative of each Disorientation Index dimension are discussed.

### **Finding One: The Seed of Transformation – A Disorientation Index**

The primary finding that emerged from this study and answered the guiding research question was a new index of the disorienting experience grounded in the data: The Disorientation Index. The Disorientation Index provides attributes of the disorienting experience and a common language to describe these dimensions. Specifically, 16 categories of the disorienting experience emerged from the data. These categories, organized into eight dimensions and listed in order of frequency, are shown in Table 16.

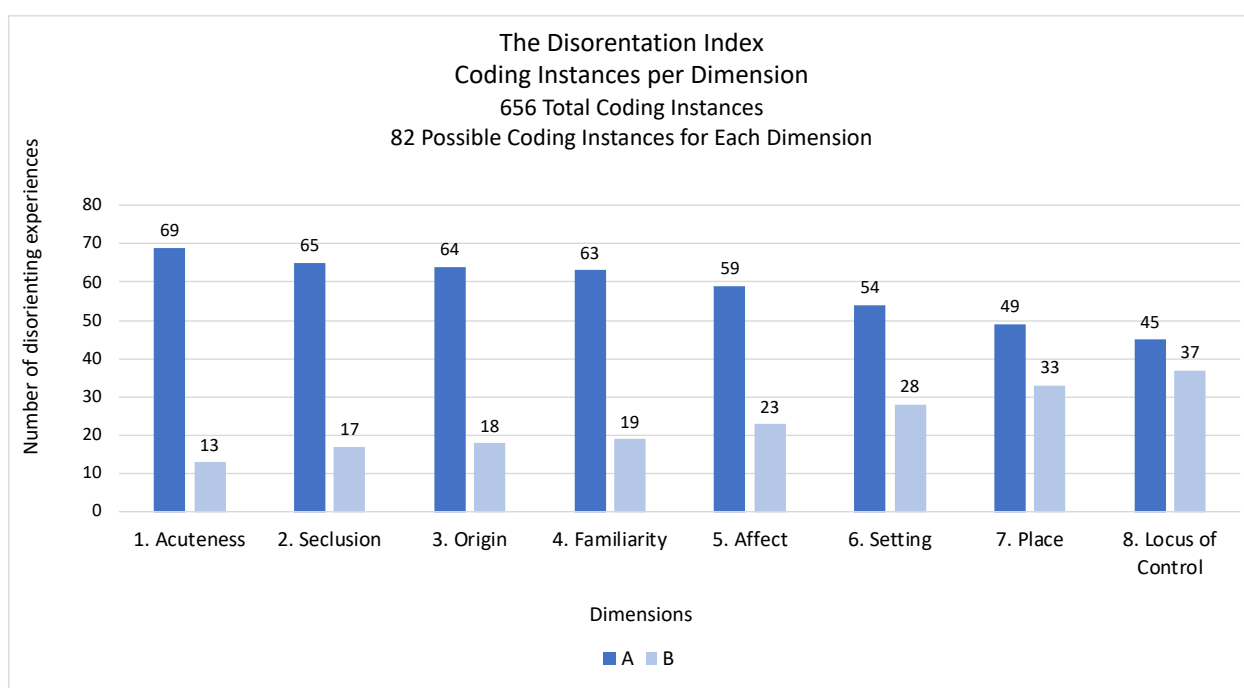
Table 16

*The Disorientation Index*

Dimensions	Categories	Frequency (N = 82)	Point Spread
1. Acuteness	A. Acute or epochal	84%	68
	B. Not acute nor epochal	16%	
2. Seclusion	A. Alone	79%	58
	B. Not alone	21%	
3. Origin	A. Externally generated	78%	56
	B. Internally generated	22%	
4. Familiarity	A. No prior experience	77%	54
	B. Prior experience	23%	
5. Affect	A. Negative affect	72%	44
	B. Not negative affect	28%	
6. Setting	A. Not an educational setting	66%	32
	B. Educational setting	34%	
7. Place	A. Not new location	60%	20
	B. New location	40%	
8. Locus of Control	A. Voluntary	55%	10
	B. Involuntary	45%	

The most common type of disorienting experience was an acute or epochal, externally generated, negative experience, that was experienced alone but in a familiar place, by someone who had no prior experience with this type of dilemma. In just over half of the studies, the person or population chose this general experience, and in just under half of the studies, the experience was thrust upon them. The data also revealed that most disorienting experiences in this dataset did not take place in educational settings.

The dimensions of The Disorientation Index are, in order of point spread, *Acuteness*, *Seclusion*, *Origin*, *Familiarity*, *Affect*, *Setting*, *Place*, and *Locus of Control*. Dimension One: *Acuteness* had the highest point spread (68 points), and Dimension 8: *Locus of Control* had the lowest point spread (10 points). All dimensions and categories are evident and meaningful when describing how authors conceptualized the 82 disorienting experiences in the transformative learning scholarly literature. The dimensions, categories, and number of coding instances per dimension are presented in Figure 8.



*Figure 8.* Coding instances per dimension. The figure demonstrates the eight dimensions encompassing 16 categories that emerged from the data. Data are presented in decreasing order from the highest point spread to the lowest point spread. The numbers in each dimension represent the number of times the theme was coded in the data. *Dimension 1. Acuteness: A. Acute or epochal, B. Not acute nor epochal; Dimension 2. Seclusion: A. Alone, B. Not alone; Dimension 3. Origin: A. Externally generated, B. Internally generated; Dimension 4. Familiarity: A. No prior experience, B. Prior experience; Dimension 5. Affect: A. Negative, B. Not negative; Dimension 6. Setting: A. Not an educational setting, B. Educational setting; Dimension 7. Place: A. Not a new location, B. New location; Dimension 8. Locus of Control: A. Voluntary, B. Involuntary.*

Figure 8 illustrates how the categories of the dimensions of the disorienting experience present a smooth slope relative to each other. On the left, some of the themes are clearly more prevalent than others; however, as we move toward the right side of the graph, the categories of dimensions occur closer to 50% of the time.

### **Finding Two: Sixteen Contexts of Disorienting Experiences**

The 82 disorienting experiences examined in this study provided both breadth and depth for the study. Breadth was provided by the vastly different contexts of disorientation experienced by diverse groups of people in diverse regions of the world. Depth was provided by the number of experiences in each category. Table 17 displays the 16 contexts of disorienting experiences included in the dataset, the number of times each context occurred, and examples of each context. Data are displayed in descending order by number of times each type occurred (count).

Table 17

#### *Contexts and Examples of Disorienting Experiences in the Dataset*

Context of disorienting experience	Count	Examples in the dataset
Study abroad or international service	12	<ul style="list-style-type: none"> <li>• International students studying the U.S.</li> <li>• U.S. students studying abroad</li> <li>• Professionals providing international service</li> </ul>
Identity and human development	11	<ul style="list-style-type: none"> <li>• Spirituality's influence</li> <li>• Feminist consciousness</li> <li>• Soul work</li> <li>• Becoming a Sangoma (African healer)</li> </ul>
Career	8	<ul style="list-style-type: none"> <li>• Graduate students transitioning to the workplace</li> <li>• Being laid off due to downsizing / restructuring</li> <li>• Transition from working to retirement</li> </ul>
Death	8	<ul style="list-style-type: none"> <li>• Death of a loved one</li> <li>• Witnessing death in a car accident</li> <li>• Bereavement</li> </ul>

(Continued)

Context of disorienting experience	Count	Examples in the dataset
Professional development for educators	8	<ul style="list-style-type: none"> <li>• Misalignment of expectations</li> <li>• Intercultural communications</li> <li>• Adopting a critical pedagogy</li> </ul>
Race, class, gender or political experiences	7	<ul style="list-style-type: none"> <li>• Refugee experiences</li> <li>• Everyday life for poor women of color</li> </ul>
Adult learning class or experience	4	<ul style="list-style-type: none"> <li>• A prison GED program</li> <li>• An “orienting” youth development program in a place in South Africa where disorientation is the norm</li> </ul>
Entire college experience	4	<ul style="list-style-type: none"> <li>• Undergraduate, graduate, and doctoral experiences</li> </ul>
Illness	4	<ul style="list-style-type: none"> <li>• A serious health event</li> <li>• Diagnosis with cancer, HIV/AIDS</li> </ul>
Abuse	3	<ul style="list-style-type: none"> <li>• Marital abuse, child abuse</li> </ul>
Reading, poetry, television	3	<ul style="list-style-type: none"> <li>• Seeking out poetry during life transitions</li> <li>• Strongly identifying with characters facing complex moral dilemmas who behaved in ways contrary to the reader/viewers’ espoused values</li> </ul>
Environmental experience	2	<ul style="list-style-type: none"> <li>• Shooting a wolf in the wild</li> <li>• Seeing a forest clear cut</li> </ul>
Generally emotionally chaotic	2	<ul style="list-style-type: none"> <li>• Being an orphan</li> <li>• Involuntary childlessness</li> </ul>
Higher education class	2	<ul style="list-style-type: none"> <li>• Videotaping a student exam to induce disorientation</li> <li>• A graduate course</li> </ul>
Natural disaster	2	<ul style="list-style-type: none"> <li>• Surviving a tsunami</li> </ul>
Workplace	2	<ul style="list-style-type: none"> <li>• Intra-organization partnerships</li> <li>• Discourse during a workforce council meeting</li> </ul>
Total disorienting experiences	82	

### **Finding Three: A Description of Each Dimension by Disorienting Experience Context**

This section presents more information about each of the eight dimensions and their associated categories including the coding rule used, the number of disorienting experiences coded to each dimension and category organized by the context of the experience, and examples from the studies in the dataset that are demonstrative of the dimension and category. Due to the repetitive nature of the data, examples from the study dataset are not provided for every possible context. Instead, they are provided when useful to further illustrate findings. Both qualitative and quantitative findings are presented.

**Dimension 1: Acuteness.** The theme *Acuteness* consisted of experiences that were *Acute or epochal* ( $n = 69, 84\%$ ) or *Not acute nor epochal* ( $n = 13, 16\%$ ). This section describes the coding rule, presents the coding results for this dimension by the context of the disorienting experience, and provides examples from the study dataset that are demonstrative of the dimension.

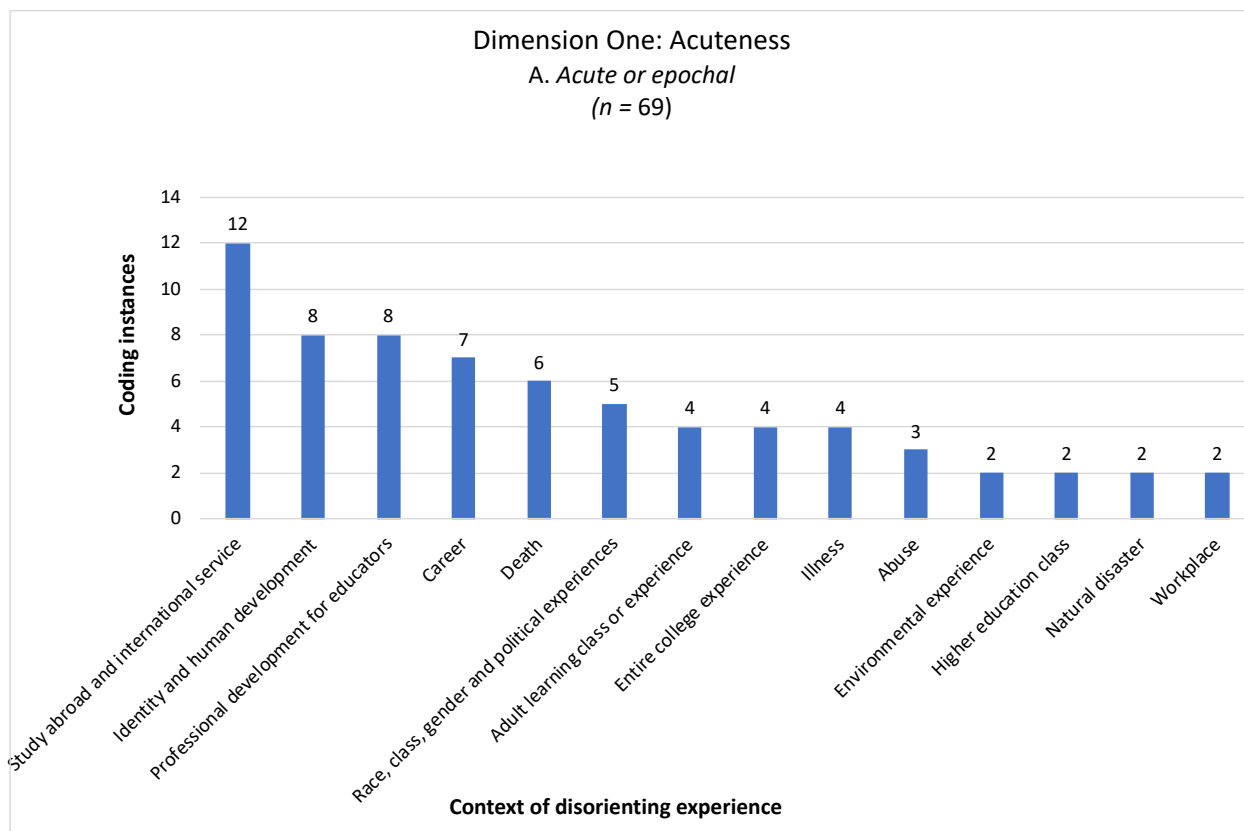
**Coding rule–Acuteness.** This theme captured how sudden or defining the disorienting experience was. The language used to describe this dimension draws on Mezirow’s language used to describe the disorienting dilemma, however, other descriptors that may be more appropriate could be “bounded” and “unbounded.” This dimension seeks to capture an aspect of the disorienting experience that is defined by time: a sudden onset, or a defining period of time in one’s life versus a more undefined, or unending type of experience. For purposes of consistency in coding, following definitions of acute and epoch were adopted:

*Acute.* Characterized by sharpness or severity of sudden onset (example: acute pain). Acute does not always describe troublesome matters. It may also describe keenness of perception (an acute observer or an acute sense of smell), the demand for urgent attention (acute participation), or to indicate intense focus (a politically acute film). (Acute [Def 1], n.d.)

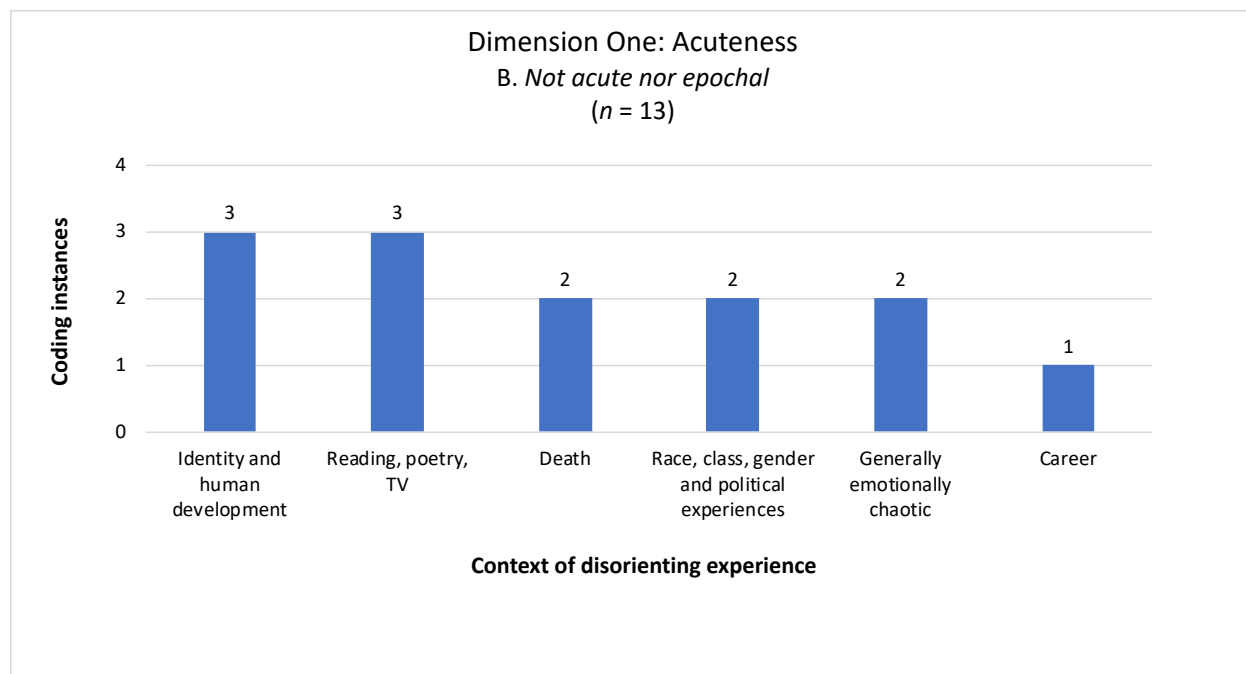


*Epoch*. A memorable event or date. Since the 17<sup>th</sup> century, the word epoch has been used in the English language to describe defining moments or periods of time. (Epoch [Def. 1], n.d.)

Events that came on suddenly were coded as *Acute or epochal* (for example a natural disaster or cardiac event). Additionally, experiences where participants could look back on the experience as a defining, bounded period of time that was highly significant and had an end point were coded as *Acute or epochal* (for example a study abroad experience or a college course). *Acute or epochal* also captured deep, meaningful human development and identity-related experiences that were induced in a bounded classroom setting and distinct moments when a person's identity was questioned or changed. Other types of events that were more indefinite in nature were coded as *Not Acute nor epochal* (such as prolonged or indefinite bereavement or illness). If the author did not mention a sudden onset or a clear period of time with a start and end, the default code was *Not acute nor epochal*. Figure 9 displays *Acute or epochal* experiences, and Figure 10 displays *Not Acute nor epochal* experiences.



*Figure 9.* Dimension One: Acuteness—*Acute or epochal*. The figure demonstrates 69 instances across 14 contexts of disorienting experience. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme.



*Figure 10. Dimension One: Acuteness–Not acute nor epochal. The figure demonstrates 13 instances across six contexts of disorienting experience. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.*

***Examples from the studies–Acute or epochal.*** The type of *Acute or epochal* experience most often described by authors was a study abroad or international service experience. For example, Tan (2009) discusses culture shock, a term widely used to describe the disorientation experienced upon arrival in a foreign land. Tan (2009) writes, “International students commonly experience culture shock in coming to the U.S. to study. Promoting cultural understanding in the classroom is one way to alleviate such disorientation” (p. 39).

Hoggan’s (2014) study of breast cancer survivors is a study that illustrates the acute nature of illness as a disorienting experience, explaining how women feel normal one day and then suddenly take on the identity of a cancer patient the day they are diagnosed. Hoggan (2014) writes, “The first defining experience, Crisis, refers to experiences when the participants felt acute distress because of their life changes, difficulties, existential crises, or other unsettling

challenges or concerns brought about by cancer” (p. 5). This Crisis stage, as described by Hoggan (2014), can be a trigger for transformative learning.

*Examples from the studies–Not acute nor epochal.* Disorienting experiences that did not come on suddenly or with no definitive start or end were classified as *Not acute nor epochal*. Disorienting experiences related to identity and human development (such as spiritual development and feminist consciousness) and disorienting experiences due to reading, being involved with poetry, or watching television were tied for the most occurrences. Together, these categories comprise 46% of the *Not acute nor epochal* experiences. These experiences were not discrete nor bounded by a sudden onset or period of time, but instead were more subtle and tended to ebb and flow over an undefined period of time.

Jarvis and Burr’s study (2011) described *Not acute nor epochal* disorienting experiences that involved television viewing. In this research, Jarvis and Burr (2011) studied people who were regular viewers of the television program *Buffy the Vampire Slayer* (BtVS) for the purposes of better understanding how television can contribute to learning. Jarvis and Burr (2011) note, “Some programs, like BtVS, are constructed in ways that make them more likely than others to challenge existing sociolinguistic and moral-ethical frames of reference, to create dissonance, to offer alternative perspectives to accepted social beliefs and culturally approved aspirations, and to illuminate contemporary dilemmas” (p. 169). Jarvis and Burr (2011) conceptualize the disorienting experience by explaining, “Viewers’ frames of reference were challenged when they identified strongly with characters facing complex moral dilemmas, who behaved in ways that contravened viewers’ espoused values” (p. 165). Jarvis and Burr continue articulating the disorienting experience by stating, “viewing [the television series BtVS] acted as ‘disorienting dilemmas’ (Mezirow, 1991) and the cognitive and/or emotional and imaginative learning

processes [were] triggered” (p. 167). Thus, the authors in this study provide a description of how, over an unbounded period of time, these regular viewers of BtVS repeatedly experienced disorientation when exposed to the moral dilemmas depicted in the program.

***Examples from the studies—overlapping contexts.*** An interesting finding is that disorienting experiences in the contexts of *Career* and *Death* were conceptualized by authors as both *Acute or epochal* and *Not acute nor epochal*. In the context of *Career*, Walter (2013) provides a good example of both an *Acute or epochal* disorienting experience and a *Not acute nor epochal* disorienting experience in his study of catalysts for transformative learning in the lives and careers of three environmentalists: Aldo Leopold, David Suzuki, and Rachel Carson. He describes these figures’ evolving identities as follows:

While Suzuki and Leopold appeared to experience distinct disorienting dilemmas as dramatic, life-changing events, followed by fairly linear developmental phases, Carson’s transformative learning was more along the lines of ‘the continual encounter with a multitude of mini-challenges’ described by Newman (2010, p. 9); it was the culmination of a gradual process of ‘assimilative learning,’ with an ‘integrating circumstance’ (Schugurensky, 2002). (Walter, 2013, p. 37)

Thus, Walter conceptualizes Leopold and Suzuki’s experiences as *Acute or epochal* and conceptualizes Carson’s experience *Not acute nor epochal*. Even though Carson experienced an integrating circumstance in the form of a letter from Olga Owens Huckins who witnessed the destruction of her bird sanctuary due to spraying of the toxic chemical dichlorodiphenyltrichloroethane, Carson’s journey to environmentalism had begun long before that and continued long after. It was unbounded and perhaps punctuated by several integrating circumstances. Carson’s career as an environmentalist involved many disorienting challenges such as Ms. Huckins letter, Carson’s work in marine biology, her diagnosis with breast cancer, and the backlash she received upon publishing her book, *Silent Spring*.

Disorientation in the context of *Death* was also described as both *Acute or epochal* and *Not acute nor epochal*. When described as *Acute or epochal*, the defining moment of disorientation was death of a husband, child, or mother; or witnessing death in a car accident (Merriam & Ntseane, 2008). In these instances, grave and sudden shock occurred. In the *Not acute nor epochal* category, authors conceptualized disorientation in the context of *Death* as an indefinite period of bereavement. Sands and Tennant's (2010) study of suicide bereavement captures this type of disorientation. Sands and Tennant (2010) explain how those who are grieving due to a friend or family member's suicide experience profound confusion,

Engagement with the intentional nature of the death provokes the “why” questions, and engagement with the “why” questions challenges the way the bereaved experience their assumptive world, prompting attempts to reconstruct the death story. This experience is frequently described by the bereaved as a shattering of their known world... that leaves them forever in an unfamiliar and changed landscape. (p. 107)

A mother describes this feeling of indefinite disorientation concerning her daughter's suicide,

I don't really care what happens in the future that much. I feel that I'm just really waiting to get old so that I can kind of join her, without particularly wanting to die but I just want to get to that stage. I can't do the things I used to do. . . I know now that nothing, no one will ever hurt me. I just feel like that the pain would be so insignificant compared to this that it's just like Ground Zero the day that she took her life. (p. 110)

Sands and Tennant (2010) summarize this mother's disorientating state of limbo as, “Her life has irrevocably changed; there is no other map for the future, which has been overtaken by the enormity of her daughter's death” (p. 110).

***Summary of Dimension One: Acuteness.*** In summary, this theme offers an insight into the *Acuteness* dimension of the disorienting experience. Both *Acute or epochal* and *Not acute nor epochal* experiences were described in the dataset. An *Acute or epochal* experience was described by authors in the dataset far more often (84%) than a *Not acute nor epochal* experience (16%). Two contexts of experience, *Career* and *Death*, were found to be both *Acute or epochal*

and *Not acute nor epochal*. More research is needed to further understand how “time” plays a role in the disorientation experience.

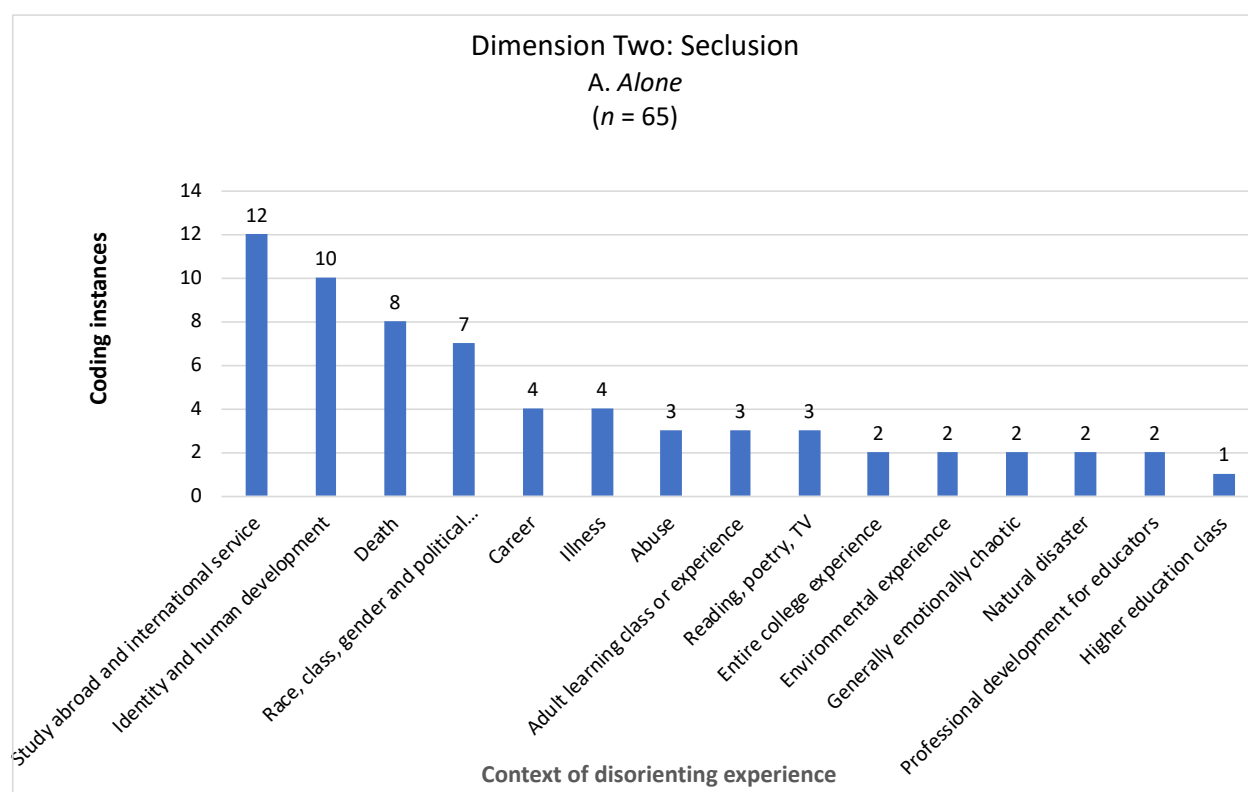
**Dimension Two: Seclusion.** The theme *Seclusion* consisted of experiences that occurred *Alone* ( $n = 65, 79\%$ ) or *Not alone* ( $n = 17, 21\%$ ). This section describes the coding rule, presents the coding results for this dimension by disorienting experience context, and provides examples from the study dataset that are demonstrative of the dimension.

**Coding rule–Seclusion.** This dimension captured disorientation that was experienced either uniquely and individually or with others as a shared group disorientation. In many disorientating situations, people have a unique and individual experience. This happens even if the person is with others when the disorientation occurs. For example, two people who enter a mountain bike race may have vastly unique experiences – one may experience disorientation triggering transformation and the other may not. The disoriented mountain biker’s experience is distinctive due to the personal meaning this person brings to the event even though they are amongst other people. In studies where the authors described disorienting experiences in this way, the disorienting instance was coded *Alone*. Thus, the term “alone” is operationalized in this study to have a specific meaning. It does not necessarily mean isolated from other people (although the disoriented person may be isolated). A person may have an experience that is classified as *Alone* even if they are in the company of other people. Instead, it means an individual, unique experience.

There are other cases, however, when persons in a group experience a common disorienting event and discuss this event in the context of a group experience. This often occurs in facilitated, group experiential education. For example, a group of people are taxed with solving a riddle or other experiential problem and they have a common disorienting experience

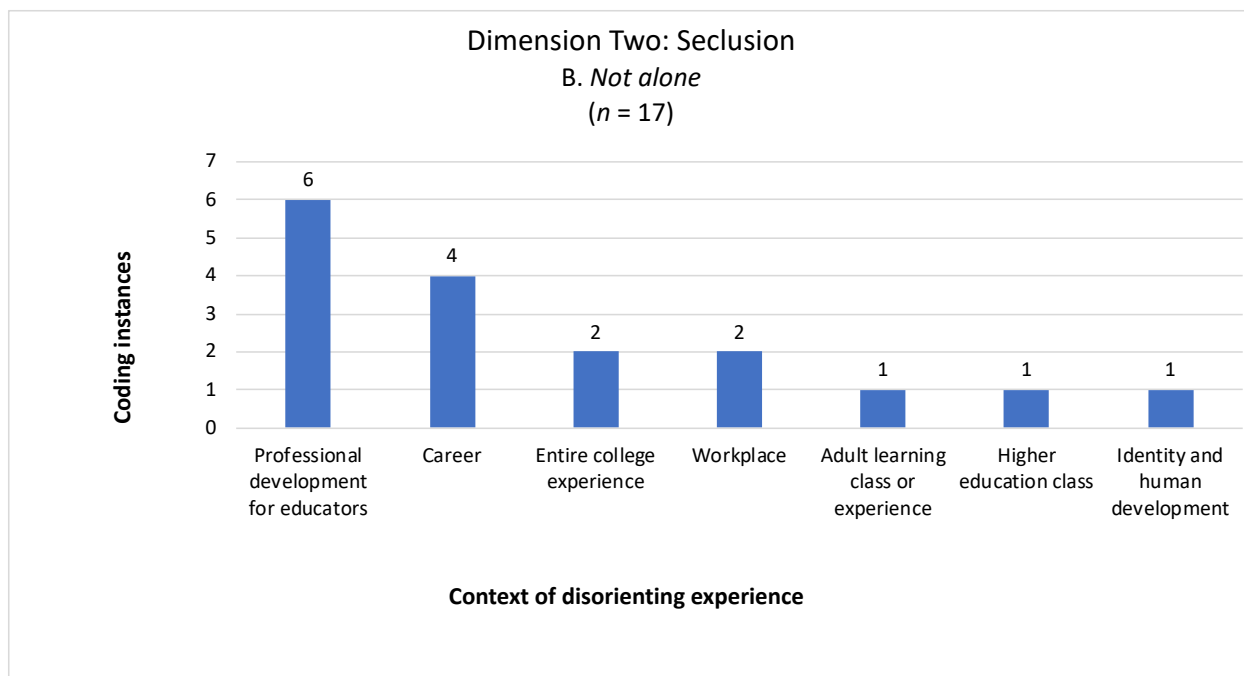
that is shared and discussed as such. When authors of the studies conceptualized a process in which the group experienced commonalities and characterized the disorienting experience as shared, these instances were coded *Not alone*.

As previously mentioned, there is a dearth of studies that focus on describing the disorienting event in detail. Thus, the researcher was limited to the information provided by the authors of the studies in the dataset. With this in mind, the default code for this category was *Alone* if the author did not provide sufficient evidence of shared disorientation experienced and discussed as a group. Figure 11 displays *Alone* experiences, and Figure 12 displays *Not alone* experiences.



*Figure 11.* Dimension Two: Seclusion–*Alone*. The figure demonstrates 65 instances across 15 contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.





*Figure 12.* Dimension Two: Seclusion–*Not alone*. The figure demonstrates 17 instances across seven contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.

**Examples from the studies–Alone.** When the disorienting experience happened *Alone*, or as an individual experience, it was most often in the context of study abroad or international service. Even though a group may have traveled together, not every student (in the case of study abroad) or professional (in the case of international service) experienced disorientation and so the disorientation instances were unique and occurred individually. Chang, Lucy Chen, Huang, and Yuan (2012) studied professionals who traveled abroad to provide international service and explains how some faced an interpersonal vacuum:

Another important trigger for transformation identified in the... study was self-revelation... while they received more and greater challenges in the new cross-cultural environment, they also faced a significant reduction in their external connections. This created an interpersonal vacuum, which caused individuals to become more self-reliant and to engage in mental dialogue with themselves. Although the interviewees reported feeling lonely sometimes, they all reported that they understood themselves much more than before. (p. 245)

Chang et al. (2012) continues to explain, “When international service participants stepped out of their country, their connection with their original interpersonal network decreased, whereas their new network in the local area was not yet established” (p. 245). This contributed to feelings of seclusion and aloneness during the disorienting experience.

The second most common type of disorienting experience that was experienced *Alone* involved identity development or human development. Ashby’s (2013) study on soul work encountered in a college course is a good example. In this study, Ashby (2013) utilizes John Dirkx’s (2001, 2006a, 2006b, 2008) concept of transformative learning soul work which involves “the conscious attempt to bring to the surface myths, images, and metaphors from the unconscious through imaginative writing and thinking processes” (p. 26). Ashby (2013) explains, “The struggle for students who want to reach down through the conscious barriers poses a disorienting dilemma for learners” (p. 35). This soul work is individualized and unique.

In addition to the examples provided above, disorientation was also most frequently experienced *Alone* in the context of death of a loved one; isolation due to race, gender, class, or political circumstances; illnesses in studies involving breast cancer, HIV/AIDs, and cardiac health events; abusive situations; adult learning; and reading, experiencing poetry and/or watching television.

***Examples from the studies–Not alone.*** Educators who participated in professional development workshops together were the most commonly described type of disorienting experience that occurred *Not alone*. In these cases, there was some dialogue among study participants about the common disorientation they were experiencing. One example included teachers who felt disoriented while learning how to use technology and integrate it into their classrooms (Kitchenham, 2006).

In another study involving a professional development workshop for educators where they developed a technology-based curriculum, a misalignment of participant expectations and the workshop experience caused the disorienting experience (Whitelaw, Sears, & Campbell, 2004). Whitelaw et al. (2004) explain, “for some faculty members, developing technology-based curriculum became the disorienting dilemma or the trigger point to challenge their teaching and learning paradigm, prompting them to reflect on their experiences and practice” (p.12).

Another study, involving transitioning from graduate school to career, demonstrates how a career-related disorientation can be experienced as a group. In this study, a group of students utilized collaborative inquiry as a framework to explore their transformative learning experience (Hanlin-Rowney et al., 2006). The authors of the study were also the study participants and explained, “We recognized that significant changes were occurring in our relationships as a result of our work together in the ways we related both with group members and with those in other areas of our lives” (Hanlin-Rowney et al., 2006, p. 329). Hanlin-Rowley et al. (2006) continues, “As we attempted to make sense of our own changes and disorienting dilemmas, we noted that a general trend seemed to be an increase in self-confidence and in trusting ourselves and our capacities to make valuable contributions” (p. 328). These examples demonstrate that it is possible for the disorienting event to occur as part of a shared, common, group experience.

***Examples from the studies—overlapping contexts.*** An interesting finding in this theme is that many of the contexts overlapped; that is, they could either be experienced *Alone* or *Not alone* depending on the specific type of experience, how it was facilitated (or not facilitated), and how the author conceptualized the experience in their study design. All contexts of *Not alone* were also coded as *Alone* except for the *Workplace* context which included two studies: Franz’s

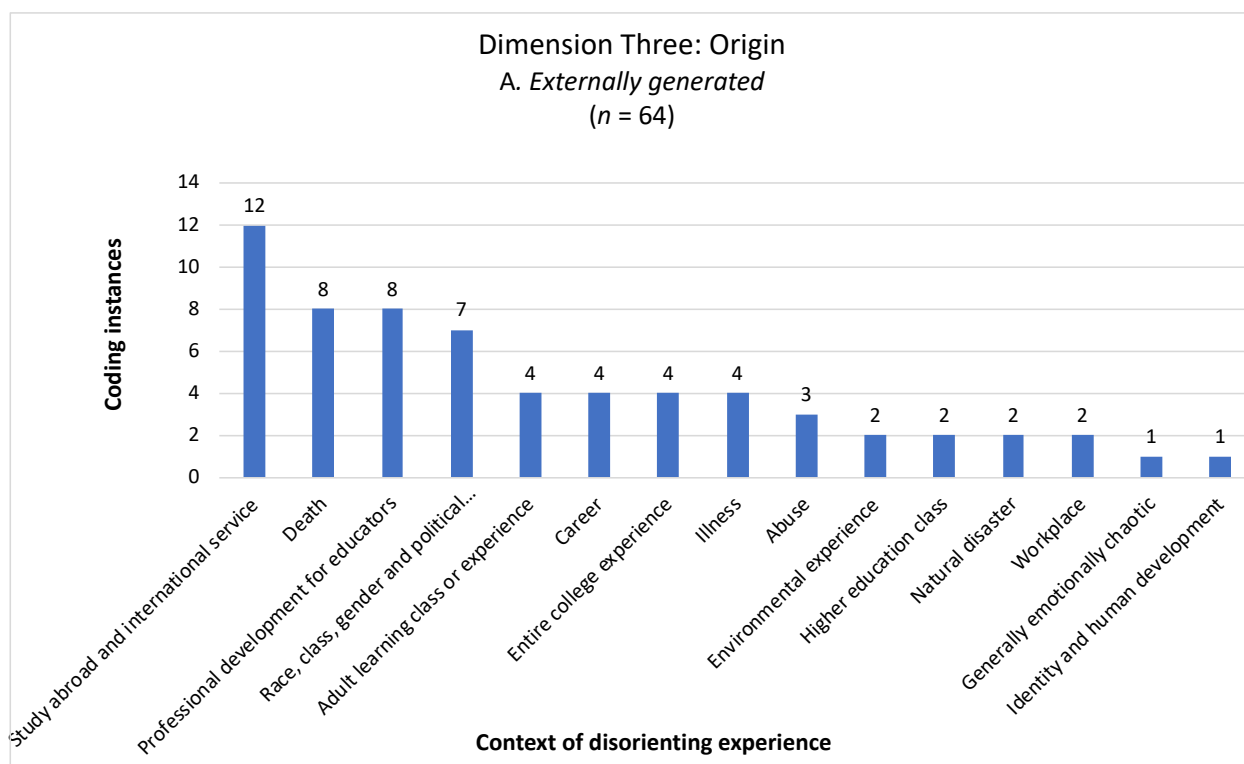
(2005) study of successful intraorganization partnerships and Choy's (2009) study of discourse among adult workers in a Workforce Council class.

***Summary of Dimension Two: Seclusion.*** The data revealed that some disorienting experiences are experienced individually, even though they may take place with a group of people. These were coded *Alone*. Other times, the disorientation is shared by a group, brought out into the open, and discussed. These were coded as *Not alone*. Many contexts of disorienting experiences, such as professional development, career, the entire college experience, adult learning classes or experiences, higher education classes, and identity and human development experiences, can be experienced either *Alone* or *Not alone* depending on whether and/or how the experience is designed. The discovery of this dimensions in this research raises questions about the differences, if any, in experiencing disorientation as an individual versus as a group, including how each of these categories may lead to transformative outcomes.

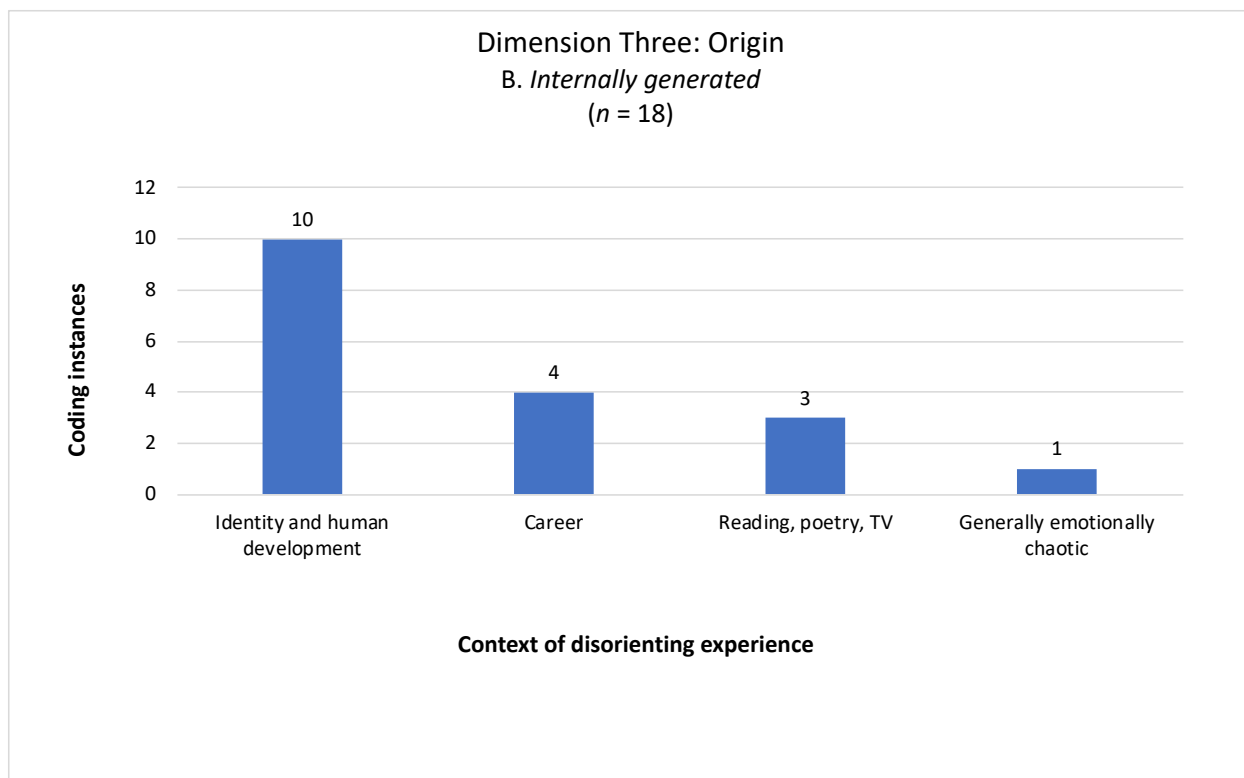
**Dimension Three: Origin.** The theme *Origin* consisted of experiences that were *Externally generated* ( $n = 64, 78\%$ ) or *Internally generated* ( $n = 18, 22\%$ ). This section describes the coding rule, presents the coding results for this dimension by disorienting experience context, and provides examples from the study dataset that demonstrate the dimension.

***Coding rule–Origin.*** This dimension captures the origin of the disorienting experience. Specifically, it indicates whether the experience was triggered by something in the individual's external surroundings (such as something present in the environment or a physical phenomenon visible to others), or alternatively, whether it was triggered by an instance where the individual was no longer in internal harmony (hence, an *Internally generated* experience). The default coding rule was an *Internally generated* disorienting experience unless the author provided a

description of an external origin. Figure 13 displays *Externally generated* experiences, and Figure 14 displays *Internally generated* experiences.



*Figure 13. Dimension Three: Origin—Externally generated.* The figure demonstrates 64 instances across 15 contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.



*Figure 14.* Dimension Three: Origin–*Internally generated*. The figure demonstrates 18 instances across four contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.

***Examples from the studies–Externally generated.*** Externally generated disorienting experiences were visible to others. Examples of externally generated disorienting experiences included: traveling to a foreign land for a study abroad or international service experience, death of a loved one, participating in a professional development program or an adult learning class, or surviving a natural disaster. Magro and Polyzoi (2009) studied refugees in Greece and in Canada who were taking part in an adult learning program. Their experiences as refugees provide examples of externally generated disorienting dilemmas. Magro and Polyzoi (2009) write:

In their interviews, the adults described multiple disorienting dilemmas that included witnessing loved ones being killed by rebel forces in the war, relocating in several countries before settling in one place, the loss of one’s livelihood and profession, learning a new language and navigating an unfamiliar culture, and reestablishing a new life without familiar support systems. (p. 95)

Walter's (2013) account of David Suzuki's externally generated disorienting dilemma, which led him to environmentalism, is another example. Suzuki wrote of this experience in the book, *Catching an Epiphany*. It occurred one normal day when Suzuki took his two children fishing. While walking along a logging road in the Vancouver mountains, Suzuki and his children came upon a large clear-cut forest. In Suzuki's words, as reported by Walter (2013),

I was dumbstruck... In those few minutes that my children and I had entered into the forest temple, I had recognized the terrible hubris of the human economy. To transform this matrix of life forms, soil, water, and air into a war zone where soil, air, water, and life were so degraded was a travesty of stewardship and responsibility to future generations. I didn't articulate it that way at the time. I only knew in a profoundly visceral way that industrial logging was not right, that the magnificent forest we had entered was an entity far beyond our comprehension and was worthy of our respect and veneration . . . that encounter with an ancient forest on the edge of a clear-cut was my moment of enlightenment (Suzuki, 2002, pp. 223-224). (p. 36)

*Externally generated* disorienting experiences were described by authors of the studies as events that occurred in the physical world and were visible to others. The external event itself, is benign. It has no meaning until a person gives it meaning. A clear-cut forest means different things to different people. To a logger it may mean an income, however, to Suzuki, it meant something quite different. So, a person brings meaning to an event which then creates an experience. This experience may or may not be disorienting depending on the person involved and the meaning they bring. Suzuki experienced this moment in the clear-cut forest as disorienting—perhaps he experienced it differently than his children with him that day; for him, it was a disorienting event because of the meaning he attributed to the event.

***Examples from the studies—Internally generated.*** In contrast, internally generated disorienting events described in the study dataset were not obvious to others. For example, Tisdell and Tolliver (2003) studied the role of spirituality in identity development. Tisdell and Tolliver (2003) explained,

...the pressure to adopt the views from the dominant culture about one's identity group can result in the internalized but mostly unconscious belief in the inferiority of one's ethnic group and/or in being exposed to little or no information about one's cultural group if one's parents, family, or immediate community overemphasized assimilation. Unlearning these internalized oppressions is often connected to spirituality and, for most people, is a process. (p. 377)

It is this recognition of cultural and societal norms and the subsequent unlearning that provides the internal disorienting experience.

Another example of an internally generated disorienting experience was discussed in Mälkki's (2012) study of involuntarily childless women who were negotiating emotionally chaotic experiences. To others, it was not obvious that these women were involuntarily childless. Mälkki (2012) found "disorienting dilemmas are manifested in various emotional experiences" (p. 207). One of the women in the study demonstrated the feeling of carrying the disorientation internally and in a way that others could not understand by sharing:

Even quite unfamiliar people may come to ask 'well do you not have kids' and then when I say that we don't have then they go like 'well you still can get one.' But you don't bother to explain [to] everyone that we can't, you just don't bother. (Mälkki, 2012, p. 222)

Mälkki (2012) continues,

It appeared that the interviewees had reflected on their own assumptions, but as the contradiction remained, they ended up reflecting on other people's assumptions to understand why these contradictions and unpleasant situations keep arising. In a sense, they were dealing with the situation to accept the continuous contradictions and to understand their unpleasant feelings within these situations. (p. 222)

Thus, the origin of the experience—whether internally generated or externally generated—may play a role in how a person moves through the disorientation process.

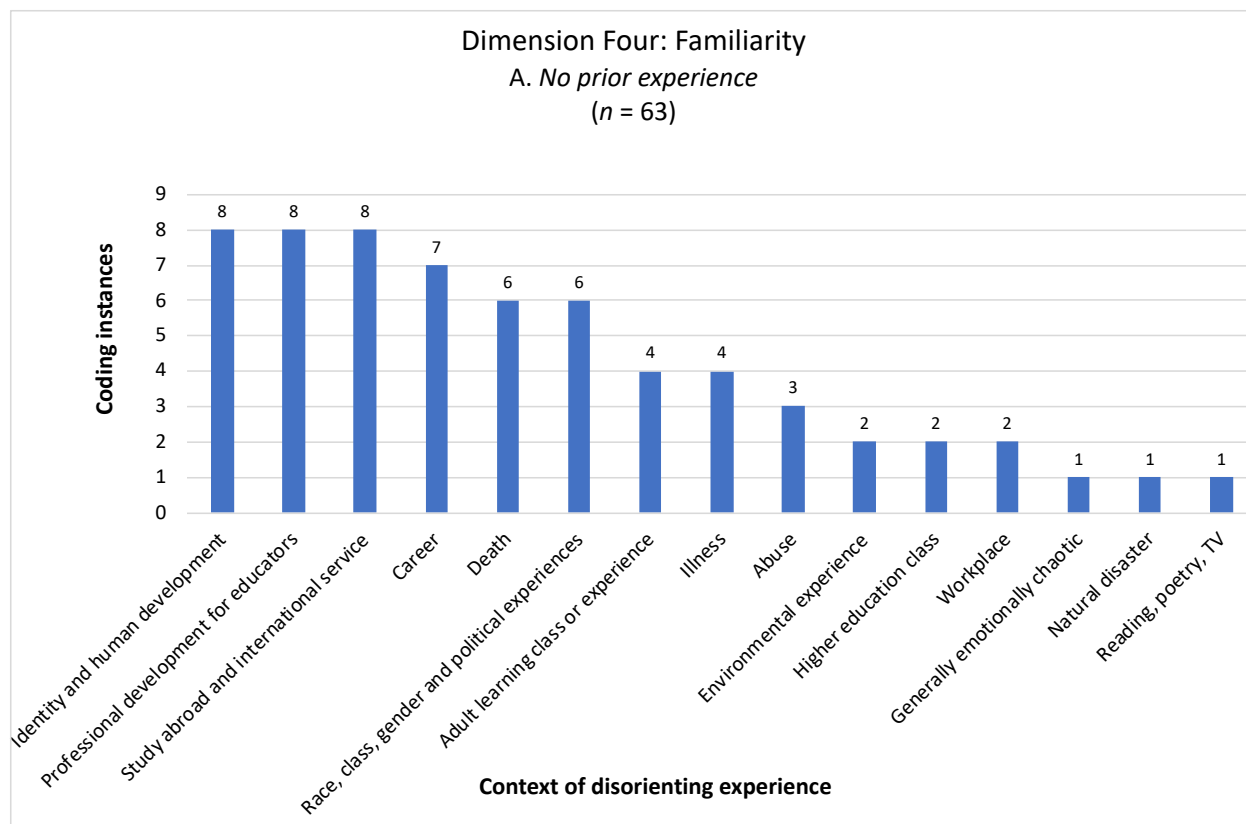
*Examples from the studies—overlapping contexts.* Externally generated disorienting experiences occurred in every context except reading, being involved with poetry, and watching television, which only occurred in an *Internally generated* way.



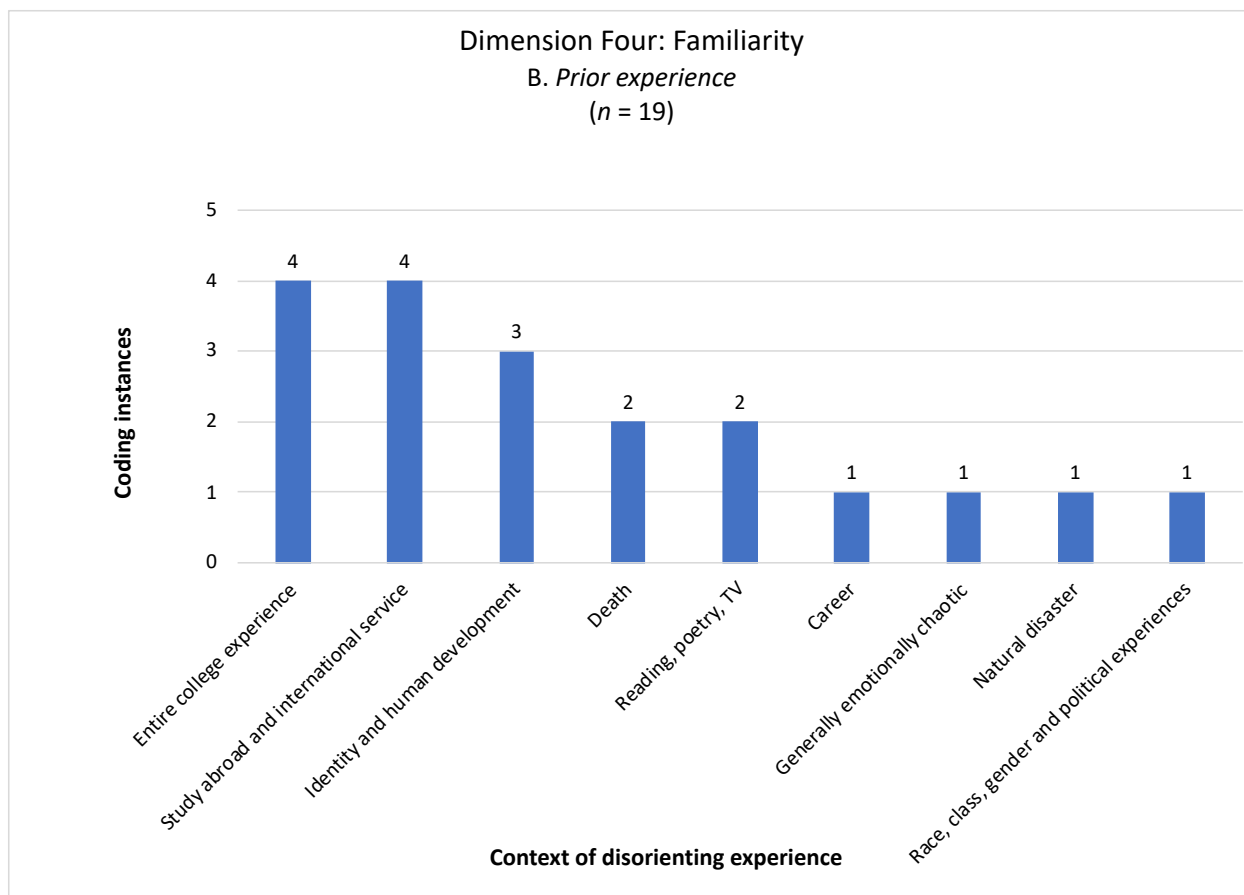
**Summary of Dimension Three: Origin.** This theme of the disorienting experience revealed that some experiences are generated by external events and others are internal experiences not visible to others. An *Externally generated* event does not always provoke disorientation for all who experience it. A person must bring meaning to an otherwise benign event in order for it to be disorienting for the person. *Internally generated* disorientation is not as apparent, and thus more difficult to detect, unless it is discussed or displayed externally in a way that others can recognize the person is experiencing disorientation. This theme clearly demonstrates that an event is simply an event, and unique meaning is brought to the event by each person. As a result, some events are quite disorienting for some people, while not at all to others.

**Dimension Four: Familiarity.** The theme *Familiarity* captured whether the person or sample population had *No prior experience* ( $n = 63, 77\%$ ) or *Prior experience* ( $n = 19, 23\%$ ) with this type of disorienting experience. This section describes the coding rule, presents the coding results for this dimension by disorienting experience context, and provides examples from the study dataset that demonstrate the dimension.

**Coding rule–Familiarity.** This dimension captured how familiar the person or population was with the disorienting event. If there was no mention of prior experience by the author, the study was coded as *No prior experience*. Figure 15 displays *No prior experience* experiences, and Figure 16 displays *Prior experience* experiences.



*Figure 15.* Dimension Four: Familiarity—*No prior experience*. The figure demonstrates 63 instances across 15 contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.



*Figure 16.* Dimension Four: Familiarity–*Prior experience*. The figure demonstrates 19 instances across nine contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.

***Examples from the studies–No prior experience.*** This theme and category provided a wide array of contexts. Most frequently appearing in this study’s dataset were instances involving identity and human development, such as an interrupted life narrative where the population studied had started college but could not finish college; new and novel soul work taken on by students in a course; and the life calling of an African woman to become a Sangoma (African healer). Professional development for educators also provided several examples of cases where educators had no prior experience with the workshop content, hence, it caused a

disorienting experience. Additionally, first-time study abroad and international service experiences provided the context for several disorienting experiences.

Kumi-Yeboah and James (2012) provided a specific example involving a school teacher's evolving identity in a situation in which this teacher had *No prior experience*. In this study, Kumi-Yeboah and James (2012) examined the process of moving from being a novice teacher (without prior experience) to being a more experienced teacher. This typically occurs when "facing challenges such as classroom management, integration of technology, and lack of support in the transformation of pedagogy of teaching" (Kumi-Yeboah & James, 2012, p. 175). Kumi-Yeboah and James (2012) explain, "A common assumption is that teacher education programs at the various universities prepare preservice teachers for these real classroom challenges. However, most new teachers tend to experience difficulty in their 1<sup>st</sup> year of teaching" (p. 173). Kumi-Yeboah and James (2012) found, "These factors served as a disorienting dilemma, a trigger event to stir their self-examination and critical reflection on their teaching" (p. 176).

In another study that examined how a serious health event may initiate transformative learning for people in a cardiac rehabilitation program, Coady (2013) stated, "A major heart event, or threat of one, provided a wake-up call and a 'disorienting dilemma' (Mezirow, 2009) for them, challenging their taken-for-granted assumptions of good health" (p. 325). In both of these examples, the author conceptualized the research participants as experiencing a disorienting event that they had never encountered before.

***Examples from the studies–Prior experience.*** Some studies examined a sample population who had prior experience or whose disorienting experience occurred over long period of time, enabling the population to gain prior experience with the dilemma. Taylor's (2003)

study of the graduate school experience, Glisczinski's (2007) study of the college experience as a whole for teacher education students, and Brock's (2010) study of the undergraduate business school experience are three examples. Brock's (2010) study, for instance, found that after students had completed at least four semesters of college, "levels of reporting transformative learning can be as high as two thirds of the population. It may be a sudden change in perspective or a more subtle reframing of the world" (p. 137). This finding demonstrates that prior experience is a factor in disorientation as well as in transformative outcomes.

Similarly, Sands and Tennant's (2010) study of suicide bereavement and Moon's (2011) study of late-life bereavement demonstrate how bereavement over an extended period of time provides prior experience with disorienting emotions. It is unknown at this time what role prior experience may play in the disorienting experience or transformative outcomes, if any.

***Examples from the studies—overlapping contexts.*** Within the category *No prior experience*, 15 of the possible 16 contexts were reported by authors, and within the category *Prior experience*, nine contexts were reported by authors. This finding demonstrates that Dimension 4: *Familiarity* spans a wide variety of circumstances. Similar to Dimension 3: *Origin*, the context is highly dependent on the person facing the event and the meaning (in this case the prior experience or lack of prior experience) they bring to the event.

***Summary of Dimension Four: Familiarity.*** This dimension revealed that the most common disorienting experience was encountered by people who had *No prior experience* with the event; however, some disorienting experiences occurred with people who did have *Prior experience*. This means that disorienting experiences do not have to be new experiences. Several types of experiences related to identity and human development, death, career, emotionally chaotic experiences, natural disasters, and disorientation resulting from reading, engaging in

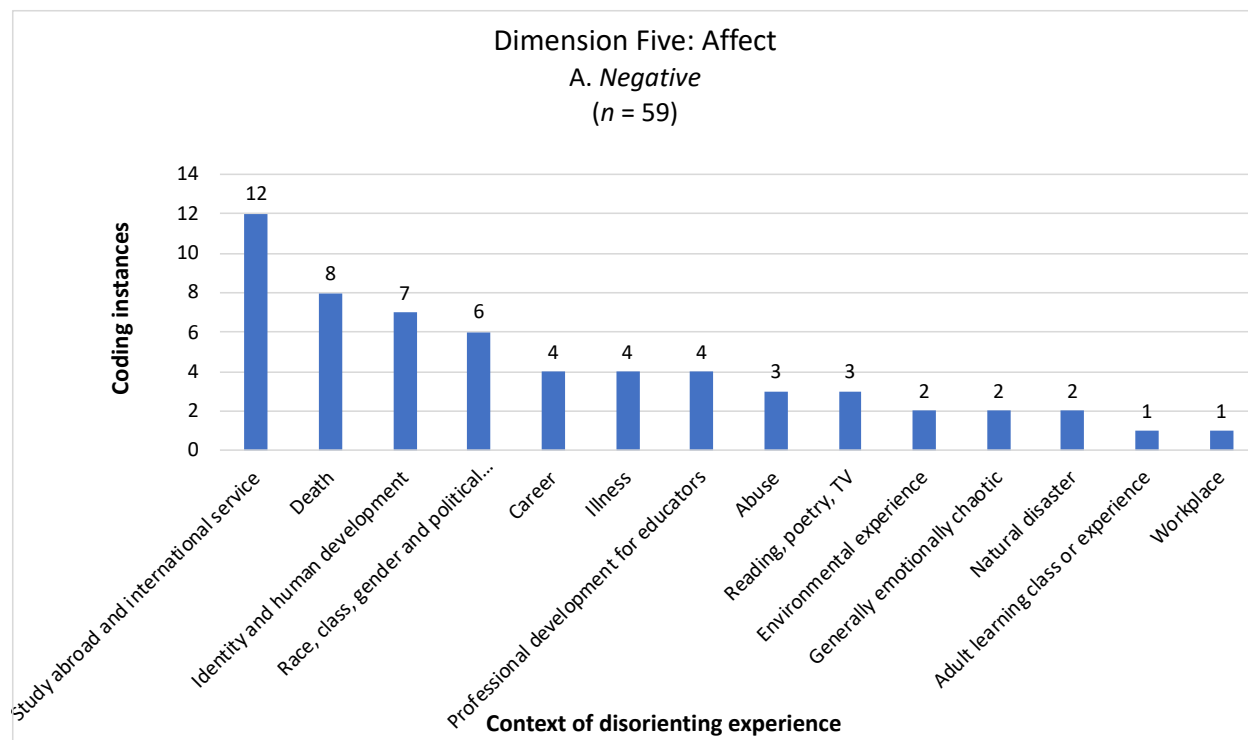
poetry, or watching television offered examples of populations both with prior experience and without prior experience.

**Dimension Five: Affect.** The theme *Affect* captured whether the disorienting experience was *Negative* ( $n = 59, 72\%$ ) or *Not negative* ( $n = 23, 28\%$ ). This section describes the coding rule, presents the coding results for this dimension by disorienting experience context, and provides examples from the study dataset that demonstrate the dimension.

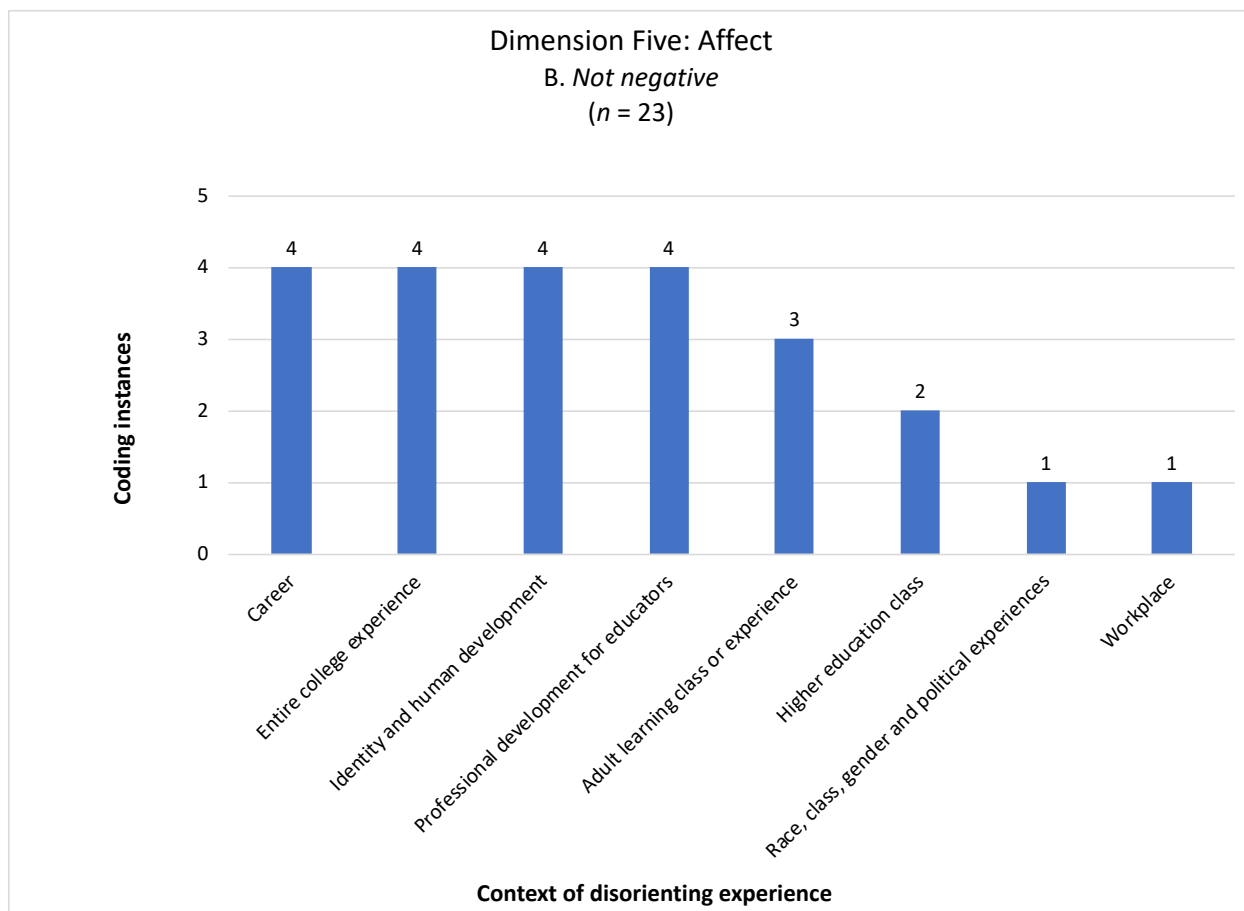
**Coding rule–Affect.** This dimension captured the *Affect* related to the experience as *Negative* or *Not negative*. There are dozens of emotions that are *Not negative* and categorizing them was outside of the scope of this qualitative descriptive study and the QCA process, therefore, dichotomous coding was adopted and *Negative* was the default category in line with Mezirow’s (1978a, 1991a) original description of the disorienting dilemma as a painful experience. Some adjectives used by authors to describe the disorienting experience were clearly negative, for example: horrific, frustrating, angry, uncomfortable, or inept. When authors conceptualized the disorienting experience using adjectives such as confused, bewildered, or disoriented, the default code was also negative based on Merriam-Webster’s (n.d.) definition of the verb disorient:

*Disorient.* To cause to lose bearings: displace from normal position or relationship; to cause to lose the sense of time, place, or identity; to make (someone) lost or confused. (Disorient [Def. 1], n.d.)

Only when the emotions were clearly not negative were they coded as such, for example: happy or inspired. Figure 17 displays *Negative* experiences and Figure 18 displays *Not negative* experiences.



*Figure 17.* Dimension Five: Affect–Negative. The figure demonstrates 59 instances across 14 contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.



*Figure 18.* Dimension Five: Affect–*Not negative*. The figure demonstrates 23 instances across eight contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.

***Examples from the studies–Negative.*** The most obvious examples of *Negative* disorienting experiences were presented in studies involving death, illness, abuse, natural disasters, refugee experiences, and other difficult experiences. Surprisingly, each of the 12 studies examining study abroad and international service also portrayed disorienting experiences as *Negative*. For example, in Tan’s (2009) personal narrative research describing her experience as a Chinese international graduate student studying in the U.S., she speaks of “feelings of stress and disorientation” (p. 39).



Similarly, Kumi-Yeboah and James (2014) describe the international student experience this way:

Upon arrival to the United States, international students constantly reexamine and readjust their prior assumptions, values, and belief systems in order to understand the novel cultures and living conditions. These situations allow them [the opportunity] to adapt to the disorienting dilemmas and fit into the host country's culture, living environment, and educational system. (p. 28)

Kumi-Yeboah and James (2014) also discuss challenges international students face, such as “the ability to adapt to the host country's educational system and to cope with issues related to self-esteem and self-identity (Gonzalez, 2004)” (p. 28). In this dataset, a wide variety of contexts produced *Negative* disorienting experiences (14 of 16 possible contexts).

***Examples from the studies–Not negative.*** Surprisingly, just over a quarter (28%) of the disorienting experiences were *Not negative*. Two examples of studies that clearly demonstrate how disorienting experiences can be a positive catalyst for perspective transformation are Kitchenham's (2006) study of teachers who learned to use technology and integrate it into their classroom and Cox and John's (2016) study of an “orienting” program in South Africa.

Kitchenham's (2006) study utilized King's (2009) Learning Activities Survey to measure the phases of transformative learning. In phase one, the disorienting experience, Kitchenham (2006) revealed teachers who considered the disorienting experience a positive experience. One participant in the study commented, “The real spur [was], my ability to think through my learning and realizing that I was intelligent and talented so I could [use technology]” (p. 209).

Transformative learning theory was developed in a relatively stable, Western context, and the phenomenon of disorientation was conceived relative to a stable life. Ntseane (2011) argued for the importance of cultural sensitivity as part of the context of transformative learning. In an interesting study, and Cox and John (2016) explored this further. Cox and John (2016) found a positively *orienting* experience in a specific setting in South Africa, where poverty and

unemployment was the norm, to provide a catalyst for transformation. Cox and John (2016) stated,

Those that experience the most significant levels of stress and disruption do so on an ongoing basis, such that this becomes their normal way of life. In this context, the notion of disorientation is a misnomer as it presumes a good measure of a stable life, something that is nonexistent for the poor and unemployed citizens of South Africa. (p. 305)

Cox and John (2016) explained how their study, “shows how an early life of repeated disruption and difficulty can be transformed through emancipatory education initiatives. Such programs can introduce orienting dilemmas, which catalyze transformative learning” (Cox & John, 2016, p. 303). After reviewing hundreds of studies, this is the only study of this kind that the researcher has come across. It clearly demonstrates the necessity of context in defining the trigger for transformative learning and the need for further research in non-Western settings.

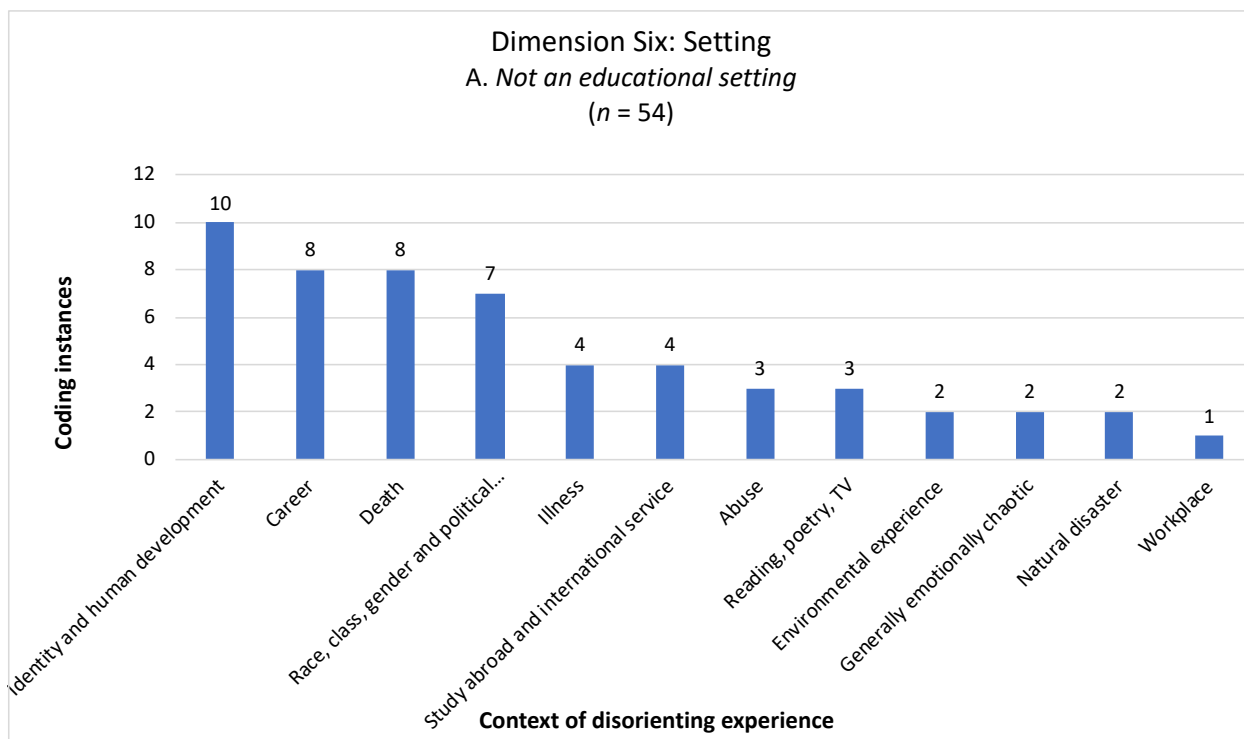
***Examples from the studies—overlapping contexts.*** As with several of the other dimensions, Dimension Five: *Affect*, specifically, *Negative* experiences, encompasses nearly every context (14 of 16 possible contexts). Some of these contexts are inherently tragic and negative; however, others are actually benign events, but the populations studied brought meaning in the form of *Negative* affect to them. For example, career, reading, poetry, watching television, and the workplace are all contexts in which it is possible for people to experience a variety of emotions. This again reinforces the finding that an individual can bring about a disorienting experience by imparting meaning to an otherwise unemotionally charged event.

***Summary of Dimension Five: Affect.*** This dimension captured an affective dimension of the disorienting experience. In most cases, authors conceptualized the disorienting event as *Negative*; however, the authors also conceptualized some instances of disorientation that were *Not negative*, indicating that the trigger or catalyst for transformative learning does not have to be a negative or painful experience as Mezirow initially described (1978a, 1991a).

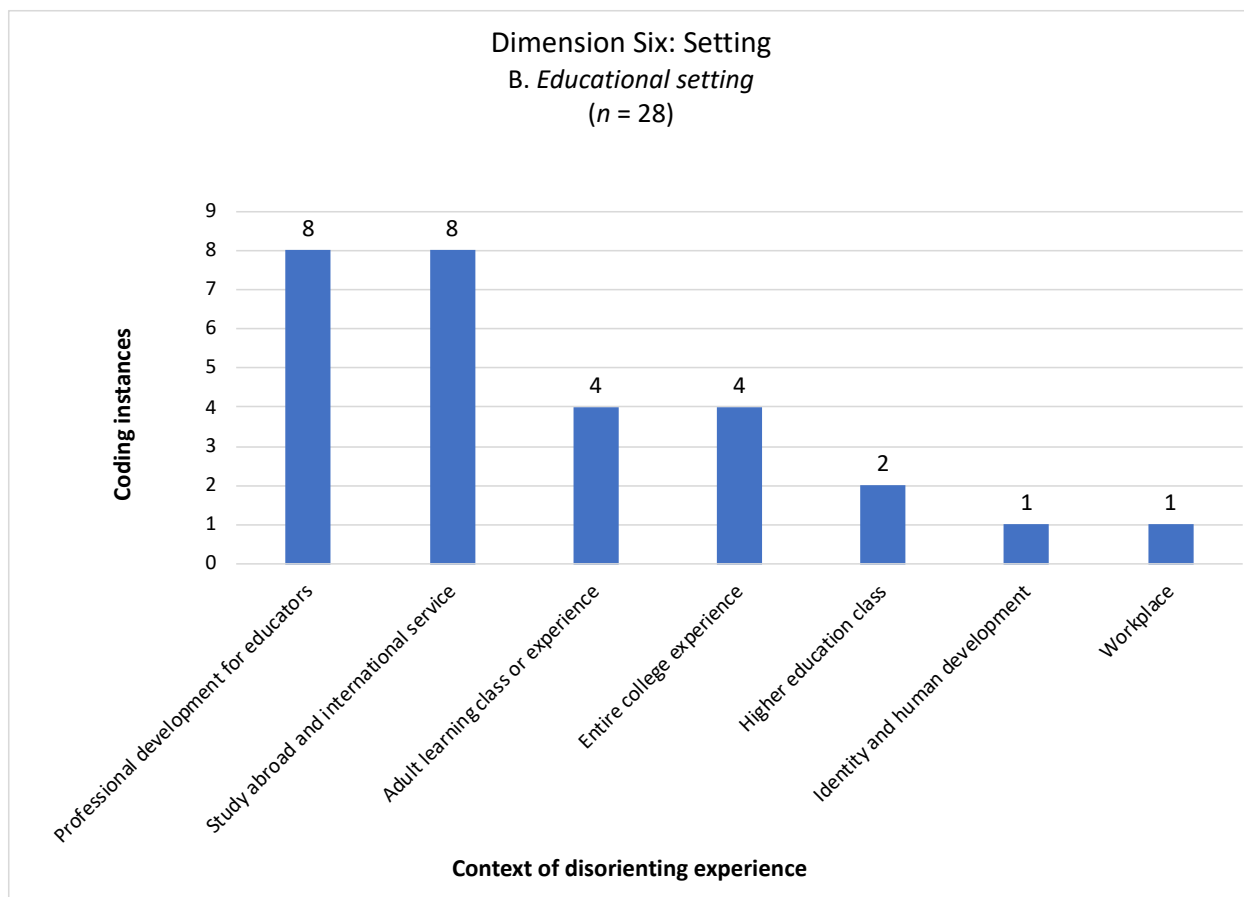
**Dimension Six: Setting.** The dimension *Setting* captured whether the disorienting experience occurred *Not in an educational setting* ( $n = 54, 66\%$ ) or in an *Educational setting* ( $n = 28, 34\%$ ). This section describes the coding rule, presents the coding results for this dimension by disorienting experience context, and provides examples from the study dataset that demonstrate the dimension.

**Coding rule–Setting.** This category captured where the disorienting experience occurred and presented two dichotomous coding choices: *Not in an educational setting* or in an *Educational setting*. Studies that involved a disorienting experience due to a teacher-student relationship, and studies conducted on a sample population of teachers who experienced disorientation while teaching, were coded as *Educational setting*. All other studies were coded as *Not an educational setting*. In some cases, the disorienting experience occurred outside of an educational setting, though the study itself took place in an educational setting. These were coded as *Not an educational setting* because the disorienting experience itself was outside of the educational setting. Therefore, due to the tight scope of this study (focusing on isolating the disorienting experience), even if a classroom or workshop facilitated reflection or other phases of transformative learning, but the disorienting experience occurred prior to or outside of the educational experience, the disorienting experience was coded as *Not an educational setting*. As previously mentioned, most studies were designed to explore facets of transformative learning other than the disorienting experience such as if the ten phases took place or not, or if transformative outcomes were realized. So, in cases where the population being studied came to the study already disoriented, the author may not have provided much detail about the disorienting circumstances. In these situations, the researcher in this study could only glean from information provided by the author and, in many cases, wishes there were more details

available. Figure 19 displays experiences *Not in an educational setting* and Figure 20 displays *Educational setting* experiences.



*Figure 19.* Dimension Six: Setting–*Not an educational setting*. The figure demonstrates 54 instances across 12 contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.



*Figure 20.* Dimension Six: Setting–*Educational setting*. The figure demonstrates 28 instances across seven contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.

***Examples from the studies–Not an educational setting.*** Disorienting experiences related to identity and human development were the most frequently described experience outside of an educational setting. Examples of these types of developmental experiences are having one’s life narrative interrupted, developing consciousness as a feminist, realizing a calling to be a Sangoma (African healer), and having one’s identity as a scientist questioned. The second most frequent type of disorienting experience outside of educational settings was career-related. Contextual, career-related examples include workers being laid off due to organizational downsizing and restructuring, workers transitioning into retirement, and students transitioning from a graduate

program to the workplace. Disorientation described as a result of professional international service was also coded as *Not an educational setting*. Other examples of disorienting experiences outside of educational settings involved death, illness, abuse, experiences as an environmentalist, and generally emotionally chaotic experiences, such as having a lover who is married to another person. Race, class, gender, and political circumstances also provided the context for disorientation outside of an educational setting. For example, Bridwell (2013) researched transformation triggered by disorienting experiences in everyday life for poor women of color. These women attended a shelter-based literacy program, and it was the disorienting nature of their everyday life that brought them to the program. Thus, the disorientation occurred outside of an educational setting, even though Bridwell's (2013) research was conducted in the setting of the literacy program. Unfortunately, Bridwell (2013) does not elaborate on the specific disorienting circumstances of the everyday lives of the women in the study.

***Examples from the studies—Educational setting.*** Professional development for educators tied with study abroad settings for the most frequently described type of *Educational setting*. In Tanaka et al.'s (2014) study of professional development for preservice teachers, teachers were exploring the complexities of learning~teaching landscapes. Tanaka et al. (2014) wrote, "all engaged deeply in their topic exploration, noted challenges akin to 'disorienting dilemmas' (Mezirow, 1991) and described their inquiry journeys in ways that reflected transformative, autopoietic experience" (p. 208).

In some *Educational settings*, disorientation was induced as a pedagogical primer. Sands and Tennant (2010) note, "in some instances, a 'disorientation' of a particular mindset is actually seen as part of the educator's role. That is, an educator may set out to disrupt comfortable world views held by participants" (p.100).

In another example, Cranton and Wright (2008) describe a literary program that allowed adult learners to be listened to, respected, trusted, and heard which was an unusual experience for this population. As a result, this experience proved to be disorienting for them. Cranton and Wright (2008) state,

It seems that the defining moments occurred once the participants were in the learning context. People were listened to, respected, trusted, and heard. It was then that they could see the possibility that they could hold a different point of view, that they could learn, and that they could change as a person. It seems it was not so much the event itself but rather the relationship they developed with the educator that created the potential for transformation. (p. 44)

Keen and Woods' (2016) study of a prison General Education Diploma (GED) program is another example of an induced disorienting experience in an educational setting. Keen and Woods (2016) write,

Cranton (2002) focused on the power teachers have to create... a disorienting dilemma or what she called an "activating event" that sparks dialogue and fresh thinking because of the discrepancy it creates. For instance, a learning exercise that leads to a new moment of academic success can allow inmate learners to have to rethink their definitions of themselves as failures in the classroom. (p. 18)

Keen and Woods (2016) explain how prisoners are disoriented in the prison GED program because they are not used to being cared for. They quote one of the prison educators describing uncertainty and disorientation experienced by inmates in the program when someone takes an interest in them and cares for them,

They know they can learn from me and feel safe, comfortable, and know that I am helping them get their GED. Because they feel that people have given up on them and nobody really wants to help them, they ask me why. (Keen & Woods, 2016, p. 21)

***Examples from the studies—overlapping contexts.*** A variety of noneducational settings provided the context for disorienting experiences to occur. Researchers (who are often also educators) generally gain access to these disoriented populations via educational settings; thus, the study of the transformative experience is itself situated within an educational setting. Taylor

(1997, 2007) noted this in his empirical review of studies and called for more studies outside of educational settings. It appears that disorientation is commonplace outside of educational settings, and more fieldwork is required to better understand these noneducational contexts.

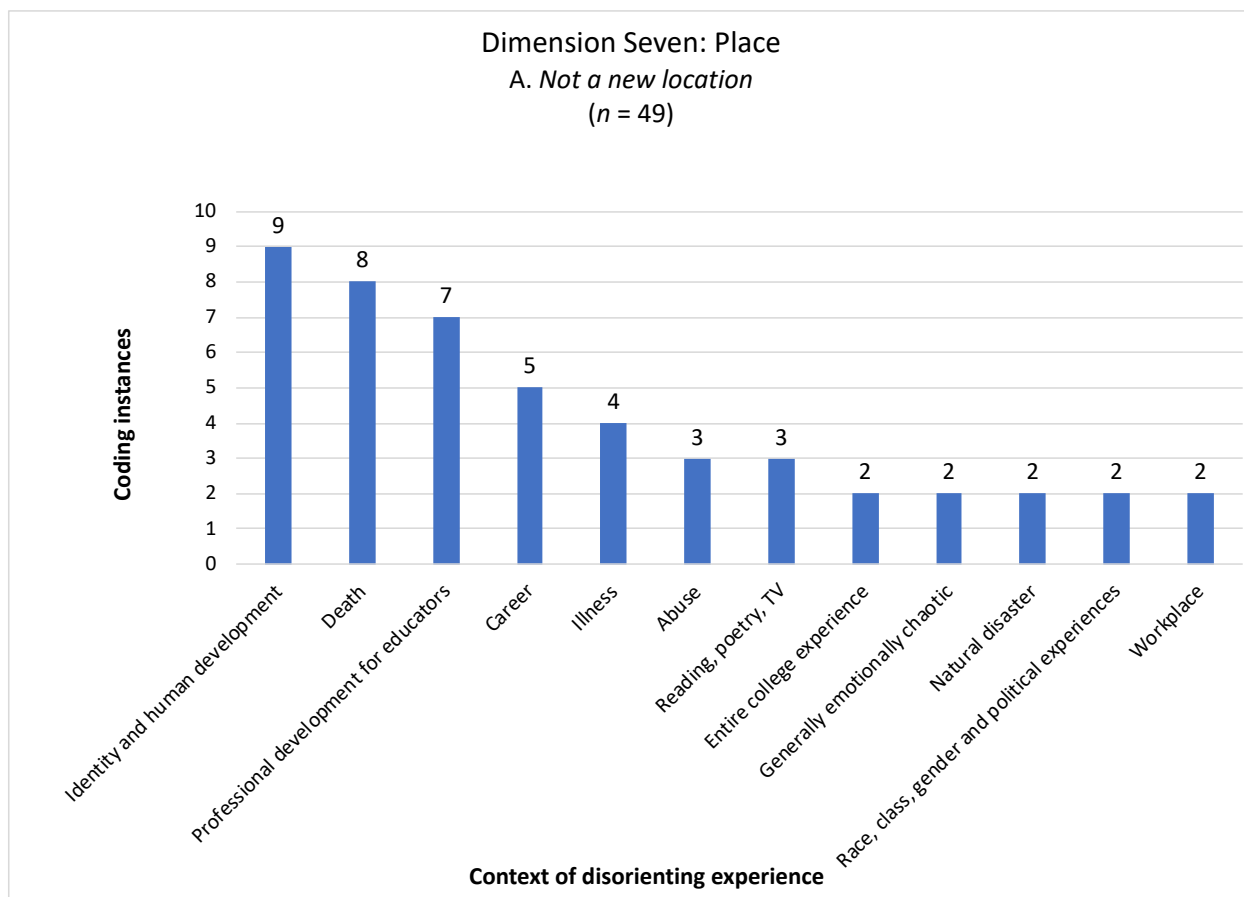
**Summary of Dimension Six: Setting.** In this dataset, disorienting experiences occurred in both in an *Educational setting* and *Not in an educational setting*. Most experiences were *Not in an educational setting* and spanned a diverse set of circumstances. Experiences that did occur in an *Educational setting* sometimes involved induced disorientation. Several scholars have written about the power educators have in this regard, as well as their corresponding ethical responsibility to students (Cranton & Wright, 2008; Keen & Woods, 2016; Sands & Tennant, 2010). This is clearly a dimension of disorientation that merits more research.

**Dimension Seven: Place.** The dimension *Place* captured whether the disorienting experience occurred *Not in a new location* ( $n = 49$ , 60%) or in a *New location* ( $n = 33$ , 40%). This section describes the coding rule, presents the coding results for this dimension by disorienting experience context, and provides examples from the study dataset that illustrate the theme.

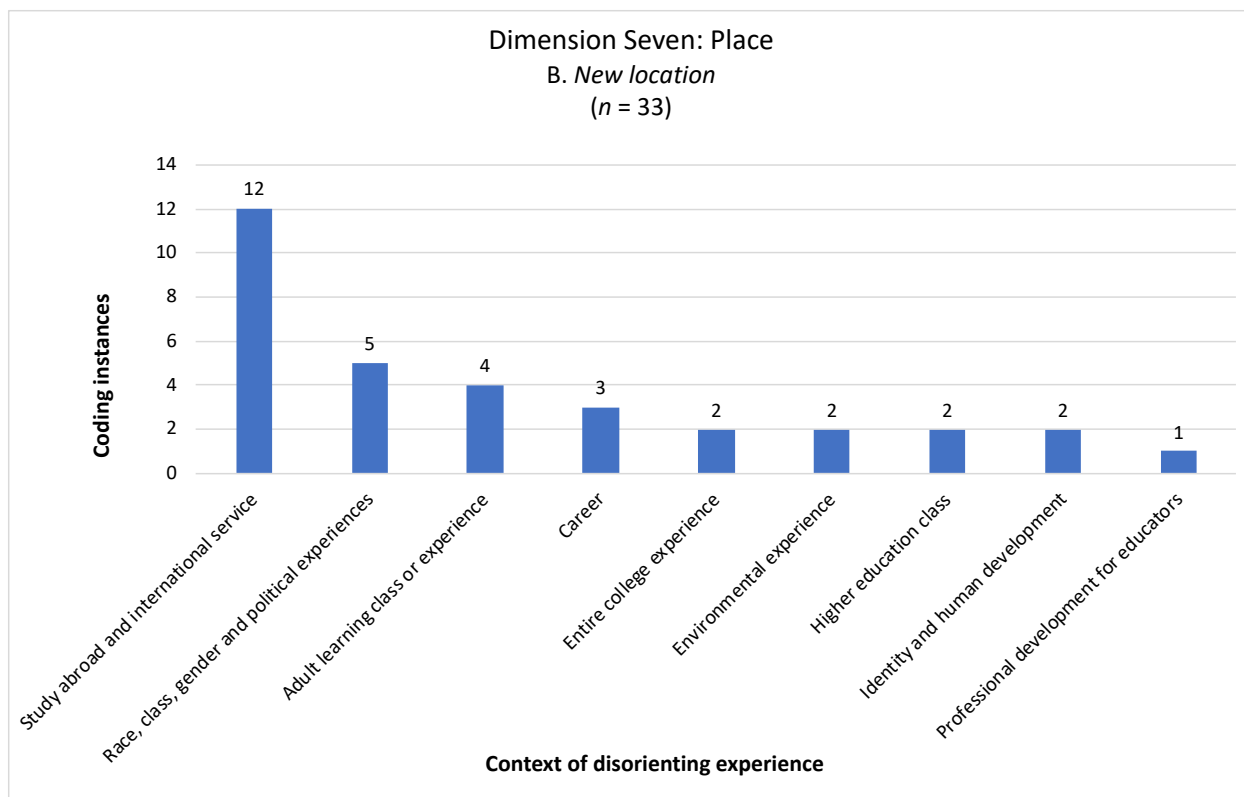
**Coding rule–Place.** This dimension was concerned with the space in which the disorienting experience took place. The category *Not a new location* included familiar places like home and place of work. If the disorienting experience took place in a new geographical location, such as leaving home to attend college, studying abroad, or moving to another country as a refugee, it was coded as *New location*. Additionally, and more figuratively, if a self-contained classroom or learning environment provided a new and intentionally designed space for transformative learning to occur, it was also coded as *New location* based on the assumption that these types of spaces are very purposefully architected to allow people to move out of their



ordinary situations and into a figuratively “new” space. Figure 21 displays experiences that took place *Not in a new location* and Figure 22 displays experiences that took place in a *New location*.



*Figure 21.* Dimension Seven: Place–*Not a new location*. The figure demonstrates 49 instances across 12 contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.



*Figure 22.* Dimension Seven: Place–*New location*. The figure demonstrates 33 instances across nine contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.

***Examples from the studies–Not a new location.*** The studies in this dataset typically described disorienting experiences such as abuse, death, illness, and natural disasters as occurring near the home. Similarly, the literature often highlighted career, identity and human development, and professional development experiences that occurred close to home. This finding suggests that our everyday lives are filled with potential opportunities for transformation. Although disorientation also occurred in new locations (as explained in the next section), the majority (60%) of experiences described in this dataset did not occur in a new location.

An example in the dataset of a disorienting experience that was *Not in a new location* was Kovan and Dirkx (2003) study on transformative learning in the lives of activists. Kovan and Dirkx (2003) write,

...various “disorienting dilemmas” or catalytic events... seem more the result of an attitude or a stance toward one’s life... The form of deep learning revealed in the activists’ stories of their struggle to sustain their commitment and passion for their work suggests an active engagement with the everydayness of their lives, a struggle to answer the call within their work. This deep learning is intimately bound up with and embedded in the historical, developmental, and social contexts and movements of their lives. The processes of transformation reflected in this movement are not stop-and-start events, bounded by a “trigger” at one end and a remarkable conversion at the other. Rather than epochal happenings, the activists’ experiences of transformation suggest a lived stance toward a sense of call, a form of practice reflective of deep spiritual commitments (Teasdale, 2002), and a gradual unfolding of the self. (p. 114)

This study exemplifies how a *Not acute nor epochal* series of disorienting experiences over the span of an entire career – or an entire lifetime – can occur *Not in a new location* which is the everydayness of our lives.

***Examples from the studies–New location.*** A geographical change in location was coded as a *New location*. This occurred when obvious geographical movements such as study abroad, international service, or refugee experiences were the focus of the research. Additionally, a new and foreign work environment was coded as *New location*.

One example of this is Snyder’s (2011) three-year study that “followed three women career-changers from [science, technology, engineering and math] STEM fields as they entered the MAT [Master of Arts in Teaching] program, graduated, and entered the work force as secondary teachers” (p. 247). These women went from a STEM environment to a teaching environment that was a completely new and foreign environment for them. In this example of career-related, individual disorientation, Snyder (2011) describes Mary’s experience. Mary was a naval engineer for 13 years prior to becoming a secondary teacher. Snyder (2011) writes:

The angst Mary expressed points to the fragility of the adult learner when encountering a new environment. As Mezirow explains, it is precisely because of the well-established frame of reference Mary has with regard to technology and engineering that she felt this angst. The potential to have to understand what she knows in a different way was destabilizing, even for an experienced engineer. (p. 251)

In Mary's words, she explains, "I expect that I will feel nervous and overwhelmed. I will be nervous because I am entering into a complete unknown. . . it seems that technology teachers are teaching a much more advanced curriculum than I ever learned. The experience will be a lot to take in and absorb" (Snyder, 2011, p. 251).

*Examples from the studies—overlapping contexts.* *Not a new location* occurred more often and in the specific contexts of death, illness, abuse, reading, experiencing poetry or watching television. Disorienting experiences described by authors as generally emotionally chaotic experiences, natural disasters, and experiences in the workplace were also *Not a new location*. Alternatively, study abroad and international service, adult learning classes, and higher education classes, as well as environmental experiences were presented exclusively as in a *New location*.

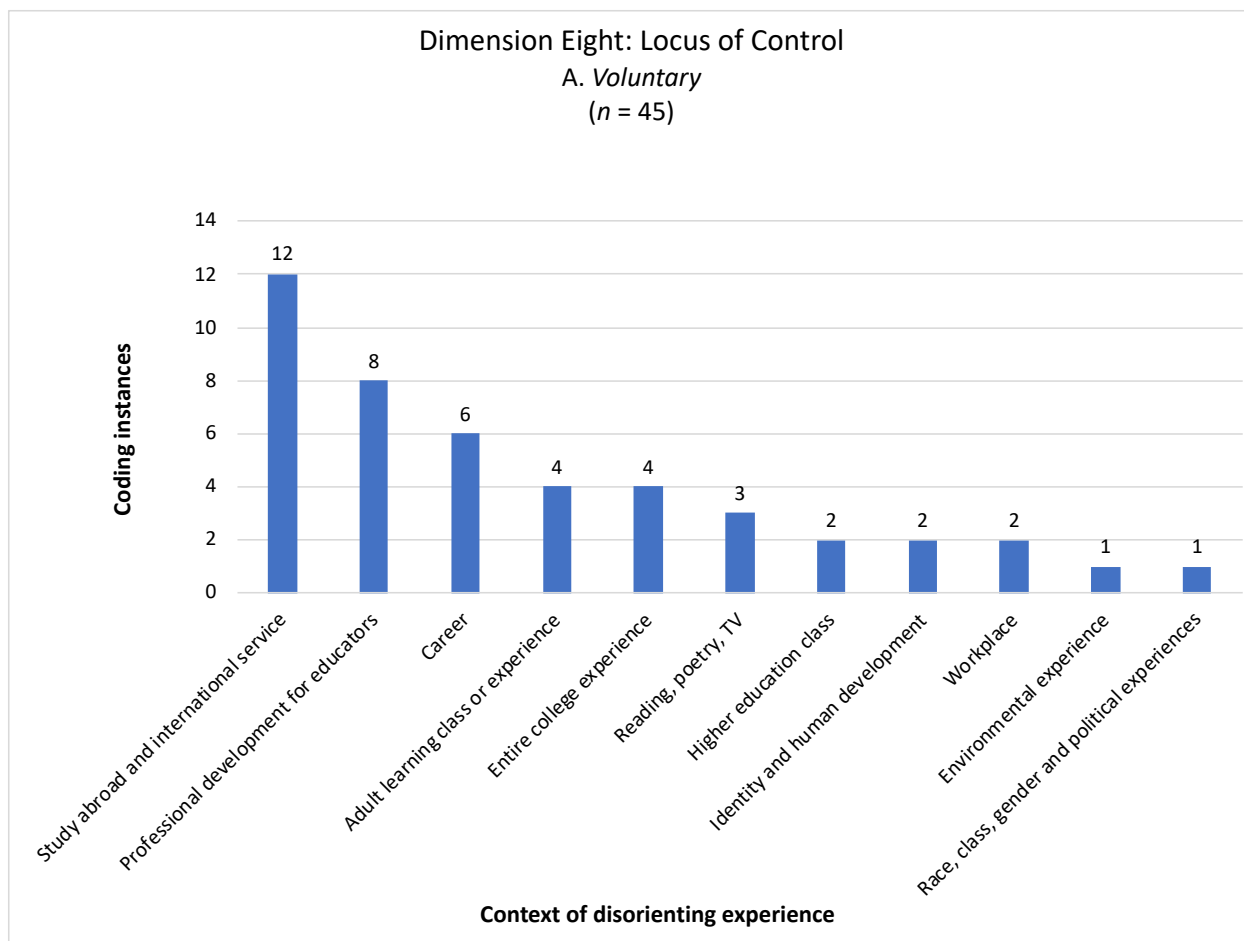
***Summary of Dimension Seven: Place.*** Place may play a distinctive role in disorientation and may influence the probability of transformative outcomes. In the international education literature as well as the global leadership development literature, a change in physical location has a large impact because it has the potential to create substantial disorientation. However, more research is needed to understand this area better.

Some disorienting experiences that took place in a *New location* were voluntary (such as adult learning classes or study abroad), and some were involuntary (refugee experiences for example); some were negative (a Japanese-American being held in a Japanese incarceration camp), and some were not negative (undergraduate business school experience); most were acute experiences, but a few were not acute, (such as identity development and the growth of feminist

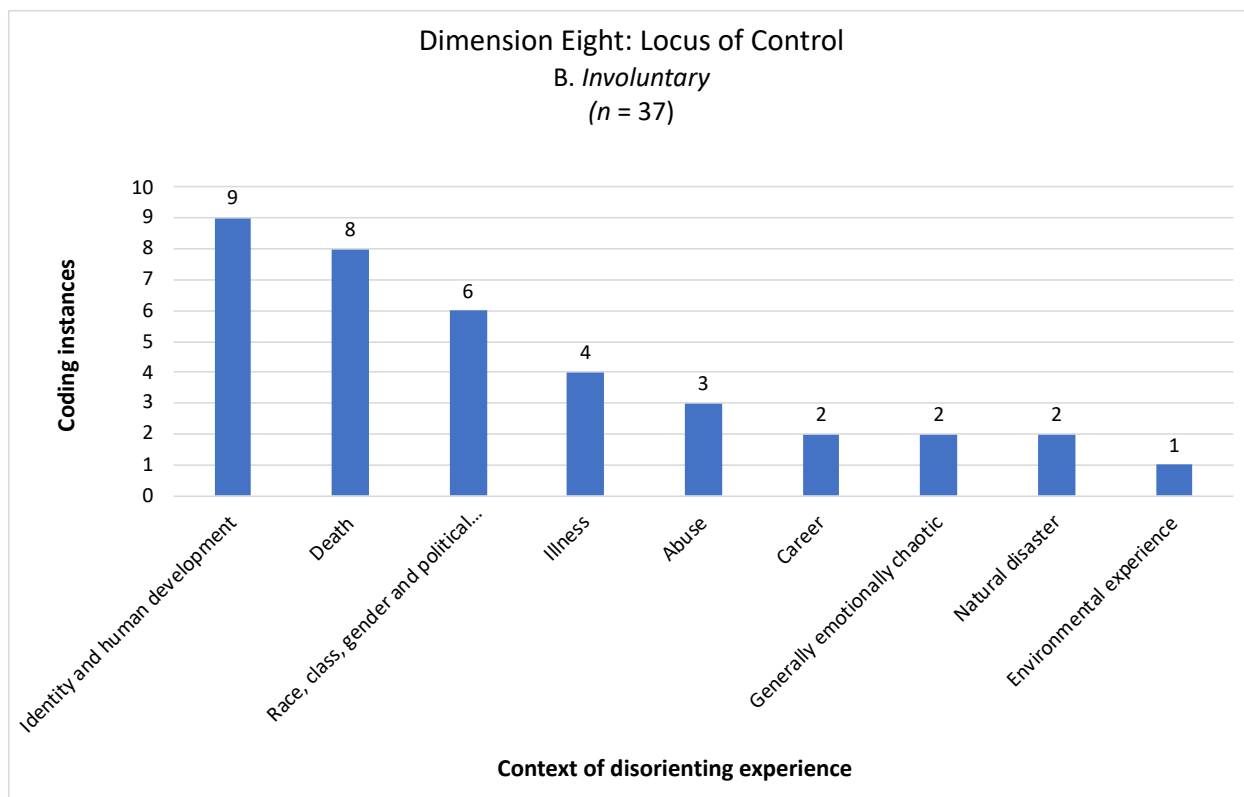
consciousness among participants in a women's enclave). Almost all experiences that took place in a *New location* occurred alone (individual experiences) with no prior experience, and about half occurred in an educational setting. Interestingly, all of the experiences that occurred in a *New location* were externally generated experiences.

**Dimension Eight: Locus of Control.** The dimension *Locus of Control* captured whether the disorienting experience was *Voluntary* ( $n = 45, 55\%$ ) or *Involuntary* ( $n = 37, 45\%$ ). This section describes the coding rule, presents the coding results for this dimension by disorienting experience context, and provides examples from the study dataset that illustrate the dimension.

**Coding rule–Locus of Control.** This dimension captured the participants' *Locus of Control*: did they chose the disorienting experience (*Voluntary*), or was it thrust upon them (*Involuntary*)? Educational experiences where the disorienting experience was induced as a pedagogical primer were coded as *Voluntary* based on the assumption that the student entered the class voluntarily. Experiences related to the natural course of human development over a long period of time were coded as *Involuntary* based on the assumption that throughout life, we experience developmental events that are outside of our control. Figure 23 displays *Voluntary* experiences, and Figure 24 displays *Involuntary* experiences.



*Figure 23.* Dimension Eight: Locus of Control–*Voluntary*. The figure demonstrates 45 instances across 11 contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.



*Figure 24.* Dimension Eight: Locus of Control–*Involuntary*. The figure demonstrates 37 instances across nine contexts of disorienting events. Data are presented in decreasing order of frequency. The numbers in each category indicate the number of times a disorienting experience related to this theme occurred.

***Examples from the studies–Voluntary.*** Authors in this dataset conceptualized slightly more disorienting experiences as *Voluntary* than as *Involuntary* including several voluntary educational settings such as adult learning classes or experiences, higher education classes, the college experience as a whole, and professional development for educators. An example of a *Voluntary* disorienting experience in a non-educational setting is Eichler’s (2010) phenomenological study of the lived experience of straight people who became LGBTQ ally activists. In this study, Eichler (2010) describes Brenda’s experience as a straight woman who became a leader in a religious organization that held weekend retreats. Brenda helped organize and teach the retreats and, while in this position, she “met a large number of people with several becoming close friends, including a lesbian couple” (p. 94). At one of the retreats, another retreat

leader learned of the lesbian couple and, in Brenda's words, "All hell broke loose" (Eichler, 2010, p. 94) as the retreat leader called the regional director of the program and requested an intervention. Eichler (2010) describes how Brenda believed the organization's mantra "God loves you and so do I" (p. 94) was for all people, and she was confused by the response from the religious organization's leadership. Brenda was faced with the disorienting dilemma of trying to pick up the pieces of a broken retreat that she had volunteered to lead. According to Eichler (2010), this experience caused Brenda to change her view of this religious organization and even change her view of formal religion as a whole. Her conceptual feelings of acceptance toward all people regardless of their sexual preference were put to the test in this disorienting situation and, as a result, she made changes to the groups in which she participated.

***Examples from the studies–Involuntary.*** Most of the *Involuntary* disorienting events were also associated with *Negative* affect. These are situations involving abuse, death, generally emotionally chaotic experiences (such as being an orphan or involuntary childlessness), illnesses, natural disasters, and other experiences related to negative race, class, gender, and political circumstances. Examples of studies that analyzed *Involuntary, Not negative* disorienting experiences include Tisdell and Tolliver's (2003) study of the role of spirituality and cultural identity and Walter's (2013) study of Rachel Carson's journey to becoming an environmentalist. In each of these contexts involving identity and human development, disorientation occurred individually (*Alone*). In addition, these instances constitute *Internally generated* experiences that were *Not acute nor epochal*, but instead occurred over extended, undefined periods of time.

***Examples from the studies–overlapping contexts.*** These categories (*Voluntary* and *Involuntary*) occurred nearly 50% of the time and only four of the 16 (25%) of the contexts overlapped: identity and human development; race, class, gender and political experiences;



career; and environmental experiences. All other studies were coded to unique contexts in this dimension.

***Summary of Dimension Eight: Locus of Control.*** Of the eight dimensions, *Voluntary* or *Involuntary* categories of disorienting experiences were each reported close to 50% of the time in this dataset. This finding demonstrates the wide variability of experiences studied and the wide range of disorienting experiences that may lead to transformative outcomes. It also demonstrates that not all triggers of transformation must be externally thrust upon a person and implies that we may voluntarily seek transformative experiences by designing our own personal disorienting events.

### **Chapter Summary**

Chapter Four began by presenting and describing the eight steps of QCA according to Schreier (2012) that were followed in this study. Although Step Eight revealed the key findings, some of the earlier steps also revealed findings as noted in the manifest data analysis. Next, this chapter presented three key findings of the study which included a new Disorientation Index that includes eight dimensions and 16 categories of disorienting experiences; this key finding also revealed the most common type of disorienting experience. The second finding was a list of 16 different contexts in which the disorienting experience was conceptualized by authors in the dataset of articles. The third finding described, in detail, each dimension and category across context of disorienting experiences and gave examples demonstrative of the themes. Chapter Five will discuss the implications of these findings and present recommendations for future research.

## Chapter 5: Discussion and Conclusions

### Introduction

At times, certain events occur in our lives where our current mental model - the scaffolding of meaning schemes through which we experience reality - cannot make sense of the event. When these events do not fit our current thought paradigm, we may become disoriented. This often happens when we discover that something we thought was certain is now uncertain (Mezirow, 1978a, 1991a). For example, we may travel to a foreign land where practices and customs do not fit our thought paradigms, or we may read an eye-opening book that leaves us bewildered. This state of disorientation is an invitation to transform. In the field of adult education, a disorienting experience is the first phase of a special type of learning called transformative learning. When transformative learning occurs, we are reworking and transforming our mental models. This transformation involves a thorough and dramatic change that is irreversible; reverting to an earlier form would require another distinct transformation. During this process, not only do our attitudes and behaviors change, *we* change.

The disorienting experience is frequently referenced in over 40 years of research as the first phase of transformative learning. Hundreds of studies have been conducted in diverse, global settings and with diverse populations who experienced disorientation as a catalyst for transformation, yet, until now, the field of transformative learning has lacked a common language or index to better understand this initiator of the transformative learning process. The purpose of this basic qualitative study was to better understand the catalyst for transformative learning, the disorienting experience, via a qualitative descriptive research design that answered the following guiding research question: how do scholars conceptualize the disorienting experience in the transformative learning literature? This question was answered by utilizing

transformative learning as a theoretical framework and by drawing on 53 empirical studies yielding 82 cases of disorienting experiences spanning 15 years (2003-2017) where the disorienting experience was conceptualized by 114 authors representing every continent except Antarctica.

### Restatement of Findings and Chapter Overview

This study yielded three findings: The Disorientation Index (Figure 25) and the most common type of disorienting experience in the dataset (Figure 26), 16 contexts of disorienting experiences described by the studies (Figure 27), and 656 coding instances (82 instances of disorienting experiences across eight dimensions) displayed by dimension, category and type of experience.

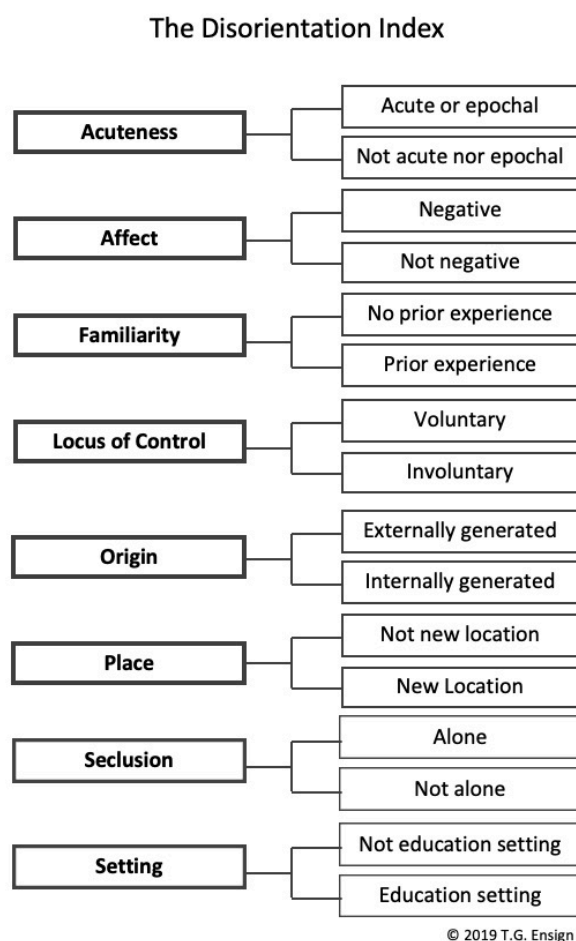


Figure 25. The Disorientation Index.

**The Disorientation Index  
Most Common Occurrence**

The most common type of disorienting experience was an acute or epochal, externally generated, negative experience, that was experienced alone but in a familiar place, by someone who had no prior experience with this type of dilemma.

In just over half of the instances, the person or population chose this experience and in just under half of the instances, the experience was thrust upon them.

The data also revealed that most disorienting experiences in this dataset did not take place in educational settings.

*Figure 26.* The most common type of disorienting experience in the dataset.

Contexts of Disorienting Experiences	
1. Abuse	9. Identity and human development
2. Adult learning	10. Illness
3. Career	11. Natural disasters
4. Death	12. Professional development for educators
5. Entire college experience	13. Race, class, gender, and political experiences
6. Environmentalism	14. Reading, poetry and television
7. Generally emotionally chaotic experiences	15. Study abroad and international service
8. Higher education classes	16. Workplace

*Figure 27.* Contexts of disorienting experiences revealed by the studies in the dataset.

This chapter includes eight sections. First, the Disorientation Index is positioned in phase one of Mezirow's transformative learning process. The second section presents a formula for the disorienting experience. The third section discusses the process of pulling together this fragmented area of literature. In the fourth section, the researcher maps Mezirow's disorienting dilemma to The Disorientation Index. The fifth section includes a brief discussion of each dimension of The Disorientation Index. Sixth, implications for scholars and practitioners are presented. Seventh, recommendations for future research is presented. Lastly, the chapter closes with concluding thoughts.

## Positioning The Disorientation Index in Mezirow's Transformative Learning Process

As previously discussed, Mezirow's (1978a, 1991a) transformative learning process consists of ten phases beginning with the disorienting experience. In 1997, Mezirow simplified the transformative learning process into four phases: disorienting experience, critical reflection, learning, and reintegration into one's life. Figure 28 shows graphically how The Disorientation Index is positioned as a tool to better understand this key phase of the process.

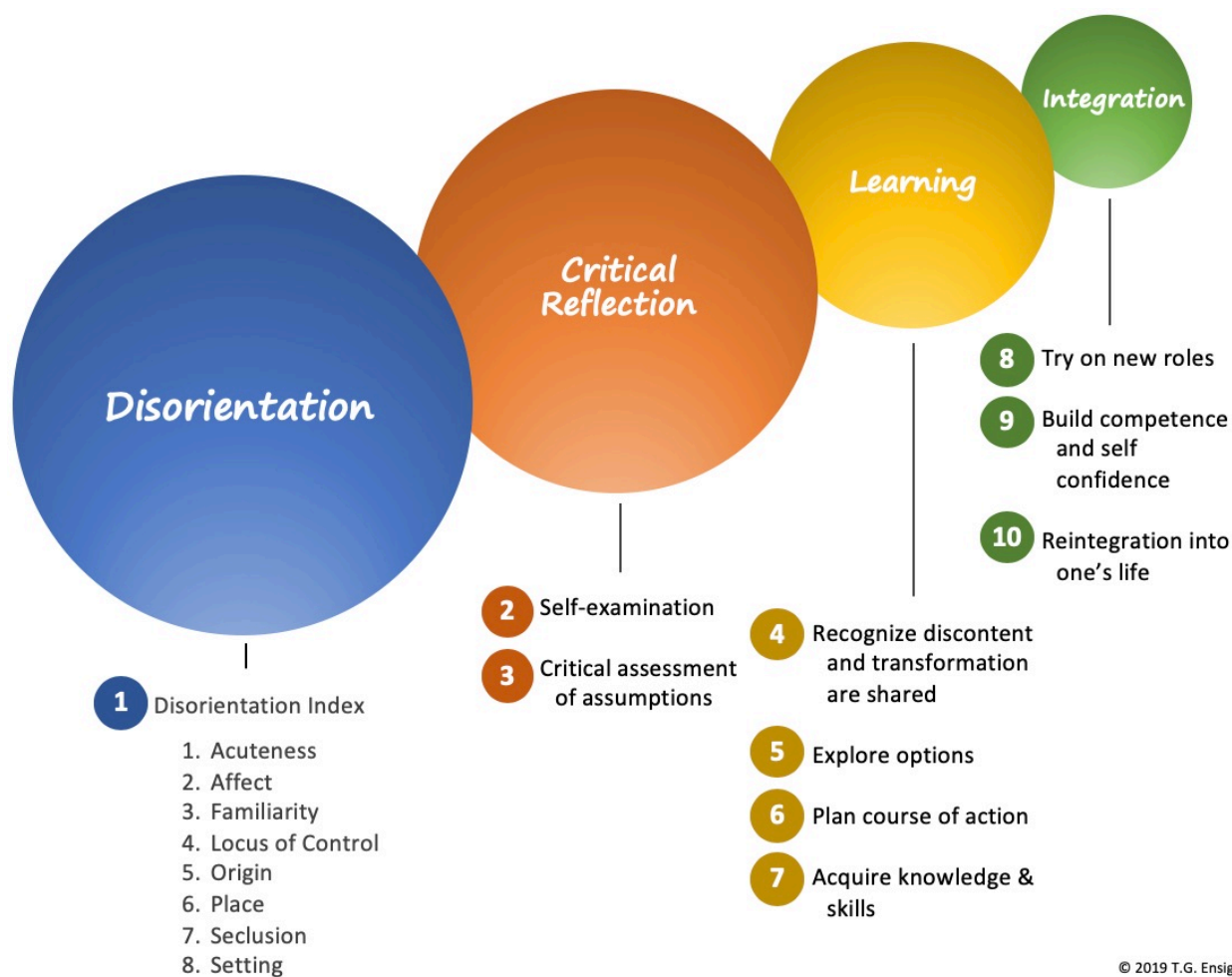
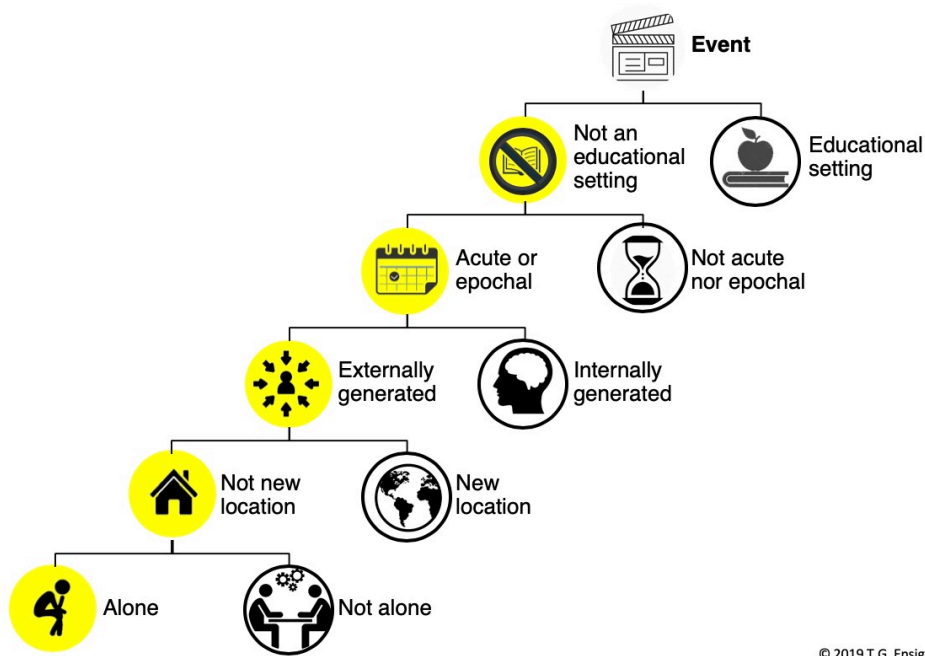


Figure 28. The Disorientation Index in the first phase of the transformative learning process.

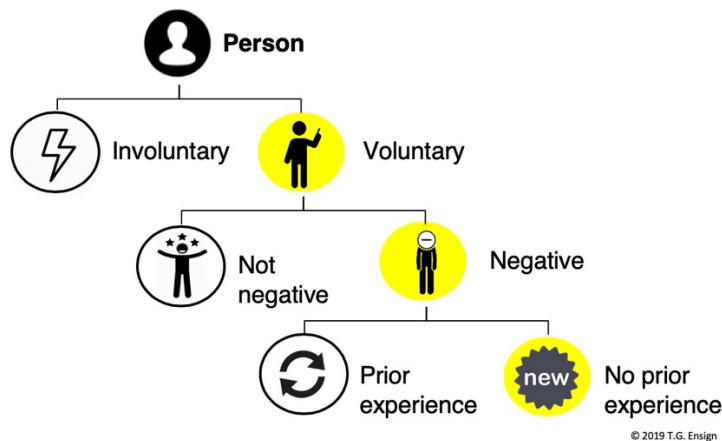
### A Formula for Disorientation: Event + Personal Meaning = Disorienting Experience

As previously mentioned, Mezirow's stream of transformative learning research has been criticized for lack of attention to the role of context and emotion (Clark & Wilson, 1991; Cranton

& Wright, 2008; Illeris, 2004, 2007; Sands & Tennant, 2010; Taylor, 1998, 2007). A closer look at The Disorientation Index may shed light on these areas of transformative learning. The eight dimensions of The Disorientation Index can be divided into five dimensions of a benign, unemotionally charged event and three dimensions of personal meaning brought to the event. Dimensions of the most common event as revealed by the data in this research (*Not an educational setting, Acute or epochal, Externally generated, Not new location, and Alone*) are highlighted in Figure 29, and dimensions of the most common meaning brought to the event by a person (*Voluntary, Negative, No prior experience*) are highlighted in Figure 30.



*Figure 29.* Dimensions of the most common event revealed by the dataset: noneducational setting, acute or epochal, externally generated, not a new location and alone.

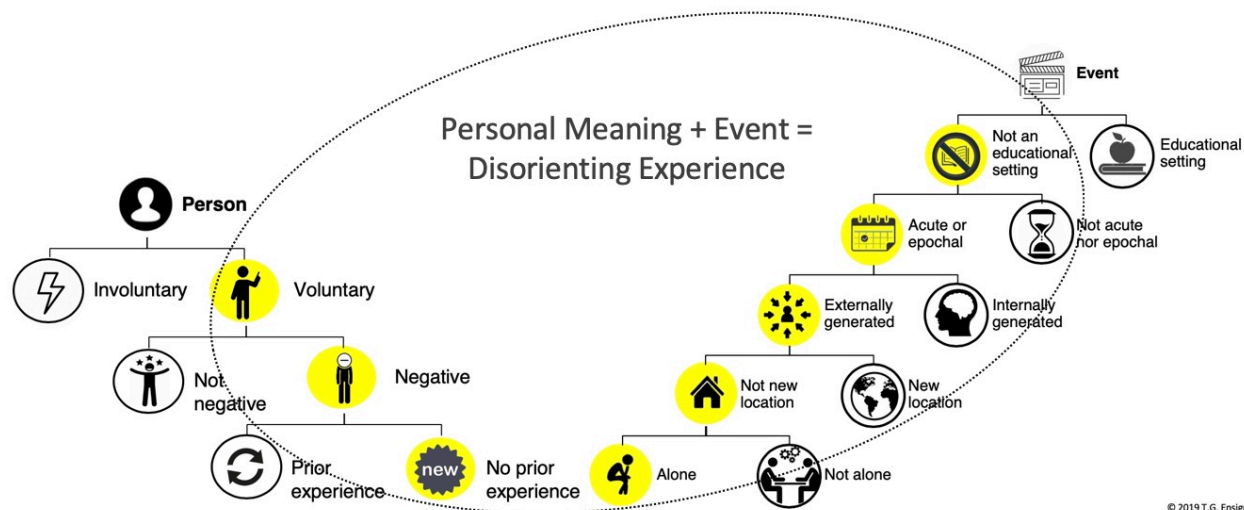


*Figure 30.* Dimensions of the most common meaning brought to the event as revealed by the dataset: voluntary, negative, no prior experience.

This research suggests a formula for disorientation: Event + Personal meaning = Disorienting experience. When personal meaning is brought to an otherwise benign or unemotionally charged event, the potential for disorientation exists. It is the intersection of the event and the personal meaning each individual brings to the event that creates a disorienting experience. The experience may be disorienting for some and not for others as we saw over and over in Chapter Four. Thus, The Disorientation Index provides a way to better understand both the context and emotion of the trigger and begins to move the field of transformative learning closer to some previously unanswered questions, specifically, how the very same event may trigger the transformative learning experience for one person and not for another person. It addresses Taylor's (1997) questions:

...there is little understanding of why some disorienting dilemmas lead to a perspective transformation and others do not. What factors contribute to or inhibit this triggering process? Why do some significant events, such as the death of a loved one or personal injury, not always lead to a perspective transformation, while seemingly minor events, such as a brief encounter or a lecture, sometimes stimulate transformative learning? (p. 45)

The factors (or some of the factors) that contribute to or inhibit the triggering process are now documented in The Disorientation Index. Figure 31 displays the disorienting experience formula with the most common categories from the dataset highlighted.



*Figure 31.* Formula for disorientation: Personal meaning + Event = Disorienting experience. The figure illustrates how personal meaning applied to an event can result in a disorienting experience.

In summary, The Disorientation Index, situated in step one of the transformative learning process, sheds light on questions that have hitherto remained unanswered about the contextual and emotional aspects of transformative learning in Mezirow's model as both of these dimensions are embedded in The Disorientation Index.

### **Pulling Together a Fragmented Area of Literature**

This study began with Mezirow's seminal research on transformative learning theory, which has been described as "the most researched and discussed theory in the field of adult education" (Taylor, 2007, p. 173). Specifically, the study started by focusing on how Mezirow (1978a, 1991a) described phase one, the disorienting dilemma. The researcher then examined



how 114 global authors have subsequently conceptualized the disorienting experience in empirical studies spanning a wide variety of contexts over a 15-year period.

In the 53 studies examined, most often, authors referenced the disorienting experience in two ways. First, as appropriate in good scholarship, authors typically quoted a version of Mezirow's definition of the first phase of transformative learning, the disorienting dilemma, within the context of the ten phases. A typical example of this and a frequently cited passage is one from Kumi-Yeboah and James' (2012) study on the transformational teaching experience of a novice teacher. In the following passage, Kumi-Yeboah and James (2012) describe phase one of the transformative learning process:

Mezirow's original research explained 10 phases of perspective transformation: (a) a disorientating dilemma; (b) self-examination with feelings of guilt or shame; (c) recognition that one's discontent and the process of transformation are shared and others have negotiated a similar change; (d) exploration of options for new roles, relationships, and actions; (e) a critical assessment of assumptions; (f) provisional trying of new roles; (g) planning of a course of action; (h) acquisition of knowledge and skills for implementing one's plans; (i) building of competence and self-confidence in new roles and relationships; and (j) a reintegration into one's life on the basis of conditions dictated by one's new perspectives (Mezirow, 2000; Taylor, 1998). (pp. 171-172)

Second, in a more precise and often more complex and fragmented narrative, the authors typically described a more contextual account of the disorienting experience as it related to their specific study. Choy's (2009) study of transformative learning in the workplace is a good example. In the following passage, Choy (2009) describes part of a workforce council seminar in which learners were asked to review and reflect on current organizational thinking, cultures, and practices. This reflection process led to a disorienting experience:

This exercise alluded to surprisingly discomforting conclusions and "embarrassments." For instance, the very candid statements and descriptions of recent experiences by a learner, who came to Australia as a refugee and for whom English was a second language, raised awareness of the sensitivities that others in the cohort had not imagined to be significant. An emotional presentation at the beginning of the course by this learner created the "disorienting dilemma" that sparked emotional intelligence capacities of everyone in the cohort. (Choy, 2009, p. 75)

Thus, the analysis and inductive coding conducted in this study involved the process of searching for both types of descriptions of the disorienting experience: the more generic theoretical description and the study-specific description. Sometimes the disorienting experience was referred to as a crisis, trigger event, initiating event, catalyst, dilemma, or by other synonyms, and sometimes it was implied without reference to any of these terms. The researcher examined references that drew on Mezirow's description and references that described the disorienting experience within the specific context of the study.

Next, the researcher inductively coded these specific instances, identifying dimensions of disorientation that were revealed by the studies in the dataset. This process required the researcher read and re-read portions of the articles, or in many cases the entire article, multiple times during the analysis process. As new dimensions emerged, the researcher went back to all previously coded studies, re-read them, and coded them for the new dimension. In this study, every disorienting instance was coded to every dimension; hence, each of the resulting eight dimensions and 16 categories represent the specific context of each of the 82 disorienting experiences described across 53 studies. This process generated The Disorientation Index and the list of 16 contexts of disorienting experiences represented in the dataset, thereby pulling together this cross-section of fragmented literature.

### **Mapping Mezirow's (1991a) Disorienting Dilemma to The Disorientation Index**

In 1978, Mezirow's seminal research revealed a specific trigger for perspective shift that he described as a painful, acute, life crisis (Mezirow, 1978a). As early as 1981, he began to broaden his description. In Mezirow's (1991a) landmark book, *Transformative Dimensions of Adult Learning*, he wrote a passage that represented a general description of the dilemma that has had foundational status in the field:

Perspective transformation can occur either through an accretion of transformed meaning schemes resulting from a series of dilemmas or to an externally imposed epochal dilemma such as a death, illness, separation or divorce, children leaving home, being passed over for promotion or gaining a promotion, failing an important examination, or retirement. A disorienting dilemma that begins the process of transformation also can result from an eye-opening discussion, book, poem, or painting or from efforts to understand a different culture with customs that contradict our own previously accepted presuppositions. Any major challenge to an established perspective can result in a transformation. These challenges are painful; they often call into question deeply held personal values and threaten our very sense of self. (p.168)

This passage suggests the existence of both epochal and not epochal events but it is unclear if the epochal dilemma must be externally imposed or not. It also states dilemmas are life challenges and they are painful. Examples are provided for externally imposed, epochal-type dilemmas and some of these appear to be potentially not painful (such as gaining a promotion or retirement), thus making the previous statement about painfulness confusing. To add to this contradiction, the passage continues with more potentially non-painful examples such as an eye-opening discussion, book, poem, or painting. Unfortunately, this passage is representative of much of the literature describing the disorienting experience. With Mezirow's description setting the example, many scholars have, perhaps unintentionally, described this phenomenon in similarly fragmented and incomplete ways.

Table 18 maps The Disorientation Index onto Mezirow's (1991a) above passage. The researcher acknowledges that this passage is only one of Mezirow's descriptions of the disorienting experience, however, for illustrative purposes it covers most of the points he routinely emphasized in his publications. The researcher also acknowledges that The Disorientation Index, in its current form, was derived from the dataset utilized for this study and is intended to contribute to the research, not complete the research. The researcher welcomes collaboration to continue research this area.

Table 18

*Mezirow's (1991a) Disorienting Dilemma Mapped to The Disorientation Index*

Dimension	Category	Mezirow's (1991a) description (p. 168)
1. Acuteness	A. Acute or epochal	"an...epochal dilemma"
	B. Not acute nor epochal	"accretion of transformed meaning schemes resulting from a series of dilemmas"
2. Seclusion	A. Alone	
	B. Not alone	
3. Origin	A. Externally generated	"an externally imposed... dilemma"
	B. Internally generated	
4. Familiarity	A. No prior experience	
	B. Prior experience	
5. Affect	A. Negative	"These challenges are painful... and threaten our very sense of self"
	B. Not negative	"gaining a promotion" or "an eye-opening... book, poem, or painting"
6. Setting	A. Not educational setting	"retirement"
	B. Educational setting	"failing an important examination"
7. Place	A. Not new location	"children leaving home"
	B. New location	"efforts to understand a different culture with customs that contradict our own previously accepted presuppositions"
8. Locus of control	A. Voluntary	
	B. Involuntary	"death, illness... being passed over for promotion"

The descriptors mentioned by Mezirow in the above passage were captured by The Disorientation Index confirming them across studies, and new facets were also revealed, thus fulfilling one objective of this research which was to provide a more comprehensive and common language to describe this phase.

### **Discussion of Each Dimension of The Disorientation Index**

This examination of the disorienting experience across studies sheds light on the phenomenon and, at the same time, raises more questions and exposes areas that remain poorly understood. In the following section, each dimension of The Disorientation Index is discussed. References to these categories from the scholarly literature as well as the researcher's thoughts are provided.

**Dimension One: Acuteness.** The acuteness theme highlights a dimension of the disorienting experience that has long been pondered, namely, whether the disorienting experience (and entire transformative learning experience) is an acute or epochal experience or, alternatively, if it can occur over time (Kovan & Dirkx, 2003). While Mezirow's seminal work described the disorienting dilemma as an acute life crisis, he later began to describe it as either an accretion of multiple events, an epochal moment, or both (Mezirow, 1985), and other scholars have supported this broader view (Brock, 2010). Clark, M.C.'s (1993) research revealed two types of initiating events: the disorienting dilemma as originally described by Mezirow and a type of catalyst she called the "integrating circumstance." Clark, M.A.'s (2008) narrative account of disorienting dilemmas in her own life also provides support for a non-acute and non-epochal type of disorienting experience.

This study's findings confirm that both types of catalysts are possible: *Acute or epochal* as well as *Not acute nor epochal*. However, accounts of the *Acute or epochal* type of disorienting experience were far more prevalent in the literature examined for this study (occurring 84% of the time). It is possible that *Acute or epochal* events appear more often in the study dataset simply because they are more obvious to researchers when they occur, which makes them easier to identify for studies. Additionally, researching disorienting experiences that are *Not acute nor*

*epochal* is perhaps more challenging because it requires either a longitudinal research design or a sound methodology that draws on memory or historical data.

**Dimension Two: Seclusion.** There has been little discussion in the transformative learning literature about the catalyst for transformative learning being experienced *Alone* or *Not alone*. In this study, the descriptor “alone” was operationalized to mean an individual and unique experience. It did not mean isolated from other people. Only when a disorienting experience was explicitly described by authors as a shared and discussed experience was it coded *Not alone*.

There may be a transformational advantage to discussing disorientation in a group (i.e. providing an environment to experience disorientation *Not alone*). The discussion could be a facilitated, programmatic element or a self-directed group activity. Mezirow (1991a) describes the importance of critical discourse and dialogue in later stages of the transformative learning process—might discourse also be important in the initiating phase? A discussion about disorientation may raise awareness by offering a “subject-object” perspective as described by Kegan’s (2000) work in constructive-developmental theory. Kegan (2000) explains,

Constructive-developmental theory invites those with an interest in transformational learning to consider that a form of knowing always consists of a relationship or temporary equilibrium between the subject and the object in one’s knowing. The subject-object relationship forms the cognate or core of an epistemology... What is “object” in our knowing describes the thoughts and feelings we say we have; what is “subject” describes the thinking and feeling that has us. (p. 53)

For those who are unable to distinguish between subject and object (i.e. unable to examine a meaning structure or mental model as the object separate from self as subject), a discussion about the state of disorientation with another individual, a group, or a professional (such as a professional coach, therapist or teacher) who has the ability to frame the experience with a subject-object lens and see the experience as an opportunity for transformation may assist in reframing the disorienting experience. This type of discussion may be a valuable precursor to

the critical reflection phase in the larger transformation process. It was one aim of this study to bring this aspect of the disorienting experience to the attention of scholars and practitioners and call for more research in this area.

**Dimension Three: Origin.** Mezirow's (1978a) seminal research posited the disorienting dilemma could be either an *Externally generated* event or an *Internally generated* event. He gave examples of *Externally generated* events such as "the death of a husband, divorce, loss of a job, moving to a new city" (p. 13) and described an *Internally generated* event as a "subjective experience – the feeling that life is not fulfilling, a sense of deprivation, the conviction that being only a housewife forecloses access to other rewarding experiences" (p. 13). Both categories were confirmed in this study, with *Externally generated* events occurring most often (78% of the time), however, the higher frequency of *Externally generated* events may be, in part, because these visible events are easier to identify (hence, easier to study).

Mezirow (1978a) also claimed that "because the externally caused dilemma is likely to be less negotiable and to be more intense, it will more frequently lead to a perspective transformation" (p. 13). With The Disorientation Index, researchers may now quantitatively test this assertion by stating the assertion as a hypothesis (an analysis step seemingly not reported in Mezirow's original study). If it is in fact true that *Externally generated* events really do lead to perspective transformation more frequently than *Internally generated* events, then this finding has important implications. For example, it could impact programmatic designs that induce disorientation for the purposes of producing transformative outcomes (such as service-learning programs or any program with transformation as a desired learning outcome). It could also play a role in inducing global leadership development and organizational change. Future research in

this area would be an important contribution to understanding the relationship between the disorienting experience and transformative outcomes.

**Dimension Four: Familiarity.** Because the disorienting experience is so personal and contextual, *Prior experience* is another dimension uncovered by The Disorientation Index that may assist in understanding the relationship between the trigger event and potential transformation. A study abroad trip to Asia may be intensely disorienting for an American student who has never left the U.S.; however, it may not be disorienting at all for a student with Asian ancestry who has traveled there before, understands the culture, and speaks the language. Thus, it is possible, and perhaps even likely, that the level of familiarity a person has with the event influences transformative outcomes; however, this relationship remains unknown at this time. Identifying familiarity as a dimension of The Disorientation Index and a variable is the first step toward further exploring this potential relationship. Similar to Dimension 3. *Origin*, this exploration could prove beneficial for those developing programs where transformation is a desired outcome—for example, educators in international education, or for educators, trainers, and consultants who are inducing a disorienting experience as a pedagogical primer. In 77% of the studies reviewed in this research, the populations studied did not have prior experience with the type of disorienting experience they were faced with. The study also found that in 19 instances, transformation occurred even though the population did have prior experience with the disorienting event.

**Dimension Five: Affect.** Mezirow's (1978a, 1991) writings are fairly consistent in asserting that the disorienting experience is a painful, negative experience. This is also evident in that he named it a *dilemma*. According to Merriam-Webster's dictionary, a dilemma is "a usually undesirable or unpleasant choice" (Dilemma [Def. 1], n.d.). The researcher of this study has



intentionally referred to the first phase of transformative learning as a disorienting *experience* instead of a disorienting *dilemma*. This is because of known instances where the experience was *Not negative*, such as Kitchenham's (2006) study of teachers who had positively disorienting experiences integrating technology into their curriculum, and Cox and John's (2016) study that uncovered a positive and *orienting* program as a catalyst in a community in South Africa where disorientation was the norm due to poverty and unemployment.

In the research contained herein, 23 of the 82 disorienting experiences (28%) examined were coded as *Not negative*. Somewhat confusing is how Mezirow (1978a) alludes to this possibility when he suggests that a job promotion may be a trigger for transformative learning; however, he writes in the same paragraph that all disorienting dilemmas are painful.

Carol Dweck's research on fixed and growth mindset may be helpful for understanding this theme. Dweck (2008) describes a fixed mindset as a mental model built on scarcity—for example, believing one has a fixed amount of intelligence, a certain personality, and a certain moral character, and believing these qualities are fixed or carved in stone. People with this type of mindset are threatened by change and avoid disorientation at all costs; hence, they may be more likely to frame disorientation as *Negative*. In contrast, people with a growth mindset believe their “basic qualities are things [they] can cultivate though [their] efforts” (Dweck, 2008, p. 7). These types of people may be more likely to frame disorientation as *Not negative*. We currently do not know whether there is a correlation between Dimension 5. *Affect – Negative or Not negative* and a growth or fixed mindset. One aim of this study is to present this question and suggest future research in this area. A better understanding of this relationship would inform the work of educators, trainers, professional coaches, consultants, and therapists.

**Dimension Six: Setting.** In their extensive reviews of empirical studies on transformative learning, Taylor (1997, 2007) and Taylor and Snyder (2012) repeatedly call for studies outside of educational settings. In this study's dataset, the majority of disorienting experiences (66%) occurred outside of the educational setting. An important point is that many of the studies in the dataset were conducted by educators in educational settings, however, authors indicated that the adult students accessible for research arrived at the study already having experienced disorienting circumstances (for example, refugees in adult education classes, poor women of color in a literacy program, prison inmates in a GED program); in fact, in many cases, they were purposely sampled *because* they were already disoriented. Hence, the transformative learning process was already set in motion prior to the study commencing. As a result, there remains a need for more studies to be conducted completely outside of educational settings. Additionally, studies within educational settings where disorientation is specifically induced may further validate or add to The Disorientation Index presented in this study.

**Dimension Seven: Place.** The location of the disorienting experience emerged as a theme across studies and seems to play a role in fostering transformative outcomes. However, more research is needed to fully understand this relationship. Mezirow (1978a) informally hypothesized that the more intense the experience, the more likely transformation might occur. Similar to Dimension 4. *Familiarity*, perhaps the more unique and unfamiliar the physical location, the more intense and fertile the opportunity for a transformative experience. This would seem the case in fields such as international education and global leadership development, where students and employees are purposely placed in foreign environments to stimulate growth, development, and transformation. Intercultural experiences are a natural trigger for disorientating experiences which, may lead to transformative outcomes related to global citizenry (Tarrant,

2010; Tarrant et al., 2014). Yet, the role that familiarity and intensity play is currently unknown in the context described herein. In this study's dataset, the majority of studies did not involve a new location (60%). Interestingly, for every instance of a disorienting event in a *New location* in this dataset, the experience was also *Externally generated*. This dataset produced a 100% correlation between these two themes, suggesting there may be a relationship. Some instances that were *Not a new location* were *Externally generated*, and some were *Internally generated*.

**Dimension Eight: Locus of Control.** The final dimension is the *Locus of Control*. Once again, Mezirow (1978a, 1991a) was somewhat inconsistent in his description as he alternated between describing the disorienting dilemma as something that was thrust upon person and providing examples of seemingly voluntary scenarios such as eye-opening discussions, reading a book or poem, or seeing a painting (Mezirow, 1991a). These latter examples would seem to be more voluntary in nature. In this study, instances of both *Voluntary* and *Involuntary Locus of Control* were confirmed, and these categories occurred 55% and 45% of the time, respectively.

Mezirow (1978a, 1991a) often positioned the disorienting experience more as something that often happens *to* us, as if we are passive travelers in life and events occur that don't match our mental models and cause disorientation. However, the researcher of this study proposes that the *Voluntary* category in this typology may be more important than previously considered. There are times in our lives when we may choose to put ourselves in a disorienting setting. Further, some people actually seek out disorienting settings for the (conscious or unconscious) purpose of attaining transformation. With *Voluntary* disorientation established as a distinct dimension of disorientation, could disorientating experiences be used as a *proactive* self-help tool for personal growth and transformation? Is it possible we might self-induce transformation? In an age of customization, is it possible to design our own customized experience that fosters

transformation, suited to our personal and unique circumstances and developmental stage? Is it possible to engineer our own epiphanies, rather than waiting (or hoping) for them to occur by chance? Even though the process of transformation may be uncomfortable, it is possible that people who conceptualize disorientation through a return-on-investment lens may seek these experiences for the purposes of gaining the larger reward? This is a fascinating area to ponder. This theme certainly requires more research to better understand the full potential of the disorienting experience as a catalyst for proactive transformation as well as the full affective range of the disorienting experience.

### **Implications of the Findings**

Due to the personal nature of the catalyst for transformation, it is impossible to describe the disorienting experience via fragmented descriptions and examples alone, as there are infinite possibilities. The Disorientation Index is helpful in this regard, as it captures aspects of the phenomenon that span various contexts and provides a common language across the differences. The following sections offer implications of this study for researchers and practitioners.

**A common language for researchers.** If researchers use The Disorientation Index, or a similar clear set of criteria, to more fully describe the disorienting experience(s) in their studies, then scholarship in this area may advance even further. A common language to describe phase one of transformative learning provides integration across the theory, thereby addressing a need identified by Hoggan (2016a), Gunnlaugson (2005, 2008), and Taylor and Cranton (2012). Additionally, if scholars use The Disorientation Index, their research would generate more data to validate the dimensions uncovered herein and learn whether there are others not yet identified.

**Increased efficacy in international education.** As mentioned in Chapter One, international education and study abroad are areas of education that are growing exponentially.

These experiences are expensive as they require time, money, and considerable effort on the part of the educational institution, the instructor or leader of the program, the students, and often the students' families. The area of international education is fertile for transformative learning if designed as part of the desired program outcomes and if fostered appropriately. Whether instructors are aware of it or not, they are likely inducing disorientation when sending students abroad, and this type of educational programming necessitates an ethical responsibility as an educator (Cranton & Wright, 2008). Likewise, when U.S. colleges and universities host international students in American campuses, students will most likely experience disorienting dilemmas.

Therefore, when designing experiences and teaching classes that challenge students' assumptions and cause disorientation, educators must possess a genuine concern for the learners' betterment. There is still much that is unknown about the process of fostering transformative learning and this type of pedagogy should not be practiced naively or without intention and extensive planning. Educators who create a transformative learning environment must have a variety of methods and techniques to draw upon during the transformative learning process in order to support the personal growth that takes place during the transformative experience. Thus, a better understanding of the student's disorienting experience will inform program design and methods to assist in ethically foster transformative learning. Left unaddressed, study abroad may simply be a vacation or, worse, a bad experience that reinforces attitudes that are not desired as program outcomes.

**Catalyzing global leadership development.** It is widely known that globalization has infiltrated nearly every level in organizations in the U.S., and today, a variety of professional jobs are impacted by global factors. For example, a purchasing agent is likely to source raw

materials from vendors in other countries; a controller is likely to account for currency fluctuations and international taxes with foreign corporate entities; and an engineer is likely to work on a global design team to develop new products. Thus, global leadership development is needed now more than ever before in history (Mendenhall et al., 2013, 2018). Business schools and consulting firms are working to create global leadership development models to do this. An encounter with a foreign culture through extensive or extended international business travel, working with colleagues in foreign divisions or subsidiaries, or working on projects that span cultures and geographic borders all may provide disorienting experiences that may trigger transformation, specifically as it relates to global leadership development (Kozai Group, 2008; Mendenhall et al., 2013, 2018). However, simply providing the experience does not ensure that the intended development will occur. Beckett's (2018) research on the intersection of global leadership development and transformative learning offers insight into the role of the disorienting experience in corporate programs. Beckett (2018) references Mendenhall et al. (2013), who question the efficacy of corporate global leadership development programs at Price Waterhouse Cooper (PwC), IBM, and UBS. Mendenhall et al. (2013) write,

Were the employees of PwC, IBM, and UBS simply those who were more predisposed to develop global competencies than their counterparts due to personality make-up? ... Or, did the design of these programs elicit deeper level competency triggering processes within people *despite* their developmental predispositions? ... In the end, this is an empirical question, and a gap in the literature exists on this issue that needs filling by future research studies. (p. 237)

Beckett (2018) goes on to say,

Mezirow's (2000) ten phases are recognized when they occur, but little research has been tied to understanding how to cause a disorienting dilemma other than, by example, putting someone in a highly unfamiliar situation and waiting to see what (read: hope that something) happens. (p. 164)

It is crucial for companies that are providing international interactions with the intention of global leadership development to understand the importance of disorientation, as well as the

types of disorientation that may trigger development. The Disorientation Index generated by this study may be a useful construct in this regard.

**A new tool for change management.** The field of change management is concerned with assisting persons and organizations through the change process. As mentioned in Chapter One, the change process is often initiated by a disorienting experience; this experience may take the form of dissatisfaction or a pressing urgency to change due to economic, social, political, technological, environmental, or other reasons. The Disorientation Index gives organizational leaders and consultants a researched-back tool to use when facilitating change. Practitioners in these areas can benefit from evidence-based tools such as this index because it assists in bringing credibility to real-world practice and efficacy to change management initiatives.

### **Suggestions for Future Research**

There are hundreds of studies that utilize transformative learning theory as a framework. Most of these studies apply Mezirow's ten steps to determine whether transformative learning occurred or not, and if it did, which of the ten phases occurred. This study sought to advance transformative learning theory itself by examining phase one, the disorienting experience, across studies. This study does not claim to create a complete or exhaustive list of attributes of the disorienting experience; rather, it is positioned as a foundational study to bring forth dimensions revealed by 53 studies yielding 82 instances of the disorienting experience, and it offers a common language to describe these aspects of the first phase of transformative learning. Additionally, the frequency of occurrence of dimensions and categories are this study is not as important as the index itself. While the frequency of occurrence is interesting, it is only based on the studies in this dataset. The dimensions, however, are predicted to be more enduring aspects of the disorienting experience. From this strong foundation, propositions, relationships, and

correlations among these dimensions and between these dimensions and transformative outcomes may be tested in future studies. The following sections offer suggestions for future research.

**Expansion of dichotomous coding.** Each of the dimensions in the index should be further explored. QCA was a useful research method to arrive at the overarching index, and a dichotomous coding scheme was adopted for this study; however, QCA was not an appropriate analysis method for delving into each category more deeply. Instead, phenomenological, case study, or other research methodologies would be more appropriate to better understand each category in follow-up research. For example, Dimension 5. *Affect*, was coded as *Negative* or *Not negative*. A follow-up study with a research design geared toward exploring the full range of affective responses captured by the *Not negative* category would provide more information.

**Relationships among thematic categories.** Most research on transformative learning has been qualitative, but quantitative research is also necessary for building and strengthening theory. This research birthed a new dataset consisting of eight dimensions and 16 categories of the disorienting experience grounded in 82 instances of disorienting experiences as conceptualized by 114 global authors. The dimensions and categories of The Disorientation Index may become variables for mixed methods or quantitative research to better understand the relationships between these aspects of the disorienting experience. One such relationship was obvious even in the qualitative analysis: all disorienting instances that occurred in a *New location* and were also *Externally generated*, thus revealing a 100% correlation.

**Relationships between thematic categories and transformative outcomes.** Hoggan (2016a) used the same core dataset to identify six transformative learning outcomes including changes in worldview, self, epistemology, ontology, behavior, and capacity. In some ways, the



Hoggan (2016a) study may be a bookend to this study, and a quantitative study might be designed to understand the relationship, if any, between the 16 categories of disorienting experience and the six transformative learning outcomes.

**Relationships between thematic categories and reflection.** Mälkki (2010, 2012) has conducted extensive research on the role of reflection in transformative learning. By analyzing findings on reflection in conjunction with findings on the disorienting experience from this study, there may be an opportunity to better understand how aspects of disorientation trigger (or do not trigger) reflection as part of the transformative learning process.

**Relationships between The Disorientation Index and country culture.** The Disorientation Index may be used as a framework to describe the trigger for transformative learning in relation to country cultures by examining the relationship, if any, between dimensions of The Disorientation Index and dimensions of cultural frameworks such as House, Hanges, Javidan, Dorfman, and Gupta's (2004) GLOBE study, Hofstede's (1984) Cultural Dimensions, or Meyer's (2014) Culture Map. For example, utilizing Hofstede's (1984) Cultural Dimension of Uncertainty Avoidance and The Disorientation Index Dimension 5. *Affect – Negative or Not negative*, researchers may explore questions such as: do people whose culture avoids uncertainty (prefers certainty) perceive disorientation negatively more often than people whose culture embraces uncertainty?

**Predictors of transformative learning.** The more hypotheses we explore about the relationships among the dimensions of disorientation (and between the dimensions of disorientation and transformative outcomes), the better we can predict and create conditions to foster desired outcomes. Further, the more we know about the various phases of transformative learning theory itself, the more we can foster positive and transformative outcomes. One aim of

this study was to highlight areas where transformative learning theory may evolve into a more operationalized and predictive theory that could better serve practitioners. This is an area fertile for more research.

### **Concluding Thoughts**

Chapter One of this study introduced the idea that transformation is all around us. It provided background on special type of learning called transformative learning where our mental models are transformed. When this occurs, not only our attitudes and behaviors change, *we* change. The catalyst for this unique type of transformation is a disorienting experience. Transformative learning theory provides a framework and a rich 40-year research stream through which this initiating experience was studied.

In an extensive and systematic literature review, Chapter Two of this study examined Mezirow's (1978a, 1991a) transformative learning theory from a historical and chronological perspective, from seminal research to the present. There was scant literature focusing on a better understanding of the disorienting experience; however, there are many empirical studies that reference Mezirow's first phase and describe a contextual disorienting dilemma specific to the study. These descriptions of the disorienting experience were found to be fragmented across hundreds of articles.

Chapter Three outlined a methodology to pull together this fragmented area of literature by examining how 114 global authors conceptualize 82 instances of the disorienting experience across 53 studies utilizing transformative learning as a framework. The aim of this research was to more clearly describe the universal conditions of disorienting experiences as initiators of transformation and discover the common dimensions, or language, that cuts across studies, geography, and time.

Chapter Four revealed three findings from this study. First, a new Disorientation Index grounded in the data was presented; it includes eight dimensions and 16 categories and the most common type of disorienting experience in the dataset was identified. Second, a list of 16 contexts for the disorienting experience in the study's dataset was revealed. Third, 656 coding instances were presented in a series of 16 graphs, which displayed each dimension and category of the disorienting experience across the contexts in which it appeared.

Chapter Five summarized the findings, positioned The Disorientation Index within Mezirow's transformative learning framework, suggested a formula for disorientation, discussed the process of pulling together this fragmented area of literature, mapped The Disorientation Index to Mezirow's description of the disorienting dilemma, discussed each of the dimensions and categories of The Disorientation Index relative to the literature, suggested implications of the findings for scholars and practitioners, and proposed future research.

The late Jack Mezirow (who passed in 2014) and the late Patricia Cranton (who passed in 2016), along with other pioneers in the field of transformative learning theory such as Victoria Marsick, Edward Taylor, Chad Hoggan, Elizabeth Kasl, Lyle Yorks, John Dirks, and many others have devoted much of their careers to providing the foundational research necessary to understand the complex topic of transformative learning. The researcher had a genuine desire to get to know each of these scholars, through their writings, and developed a deep respect for the insights they have contributed to this field. She also had a genuine desire to read the studies that utilized transformative learning and were conducted by so many scholars around the world. In reading study after study, she developed a deep respect for the depth of research that supports this theory.

The main contribution of this study is The Disorientation Index, which furthers the research on transformative learning theory by providing a better understanding of the disorienting experience as conceptualized in the literature. It was the aim of this research to discover a common language that scholars can continue to test and explore in future research and to unearth a new evidence-based tool that practitioners can begin using immediately in fields such as education, global leadership development, and change management. It is the researcher's hope that these insights will allow more people better understand the disorienting experience and to view disorientation as an invitation to transform.

## Epilogue

### Evaluation of the Study

In the *Sage Handbook of Qualitative Research*, Denzin and Lincoln (2018) describe some of the challenges of evaluating qualitative research. They point to various attempts to set standards; however, they also discuss the difficulties of setting these standards across a variety of qualitative methodologies and disciplines (such as anthropology, education, psychology, and sociology). An additional challenge is posed by studies conducted within a constructivist paradigm where multiple realities are possible. They present an obvious question about qualitative research, stating “Everything cannot be done; *choices* must be made: How are they to be made, and how are they to be justified?” (Denzin & Lincoln, 2018, p. 781). This section will review the major components of the research design of this study and provide a self-evaluation of major choices that were made. Some of the primary choices the researcher made were the topic to study, the research question, the research methodology, the dataset, and the analysis method.

**Topic and research question.** The decision to conduct a deep dive into the disorienting experience was the result of an extensive literature review that lasted more than one year and involved multiple discussions with Pepperdine University faculty, the researcher’s Ph.D. cohort colleagues, methodology experts, subject matter experts, as well as family and friends. As the researcher become more and more familiar with the evolution of transformative learning as a field, it became obvious that the disorienting experience was an area lacking in research, and an examination across studies had not been conducted for the purposes of better understanding this catalyst. The researcher confirmed this unexplored area with Dr. Chad Hoggan (Personal Communication, 2018, 2019) and Dr. Ed Taylor (Personal Communication, 2018, 2019) and the

research question was formulated: how do scholars conceptualize the disorienting experience in the transformative learning literature?

**Research methodology.** The researcher, her dissertation chair, and her dissertation committee thoroughly discussed several research methodologies including narrative, phenomenology, ethnography, case study, and grounded theory (see Chapter Three). These types of studies were vetoed due to practical and circumstantial reasons such as the difficulty of observing disorientation in a group of study abroad students without my presence as a researcher influencing the data and perhaps influencing the programmatic outcomes. Additionally, without a framework or common language to describe the disorienting experience, these types of studies seemed premature. What this fragmented area of literature required first was research that cut across a large number of studies and was qualitative, such that it explored, interpreted, and described the phenomenon. The researcher, her dissertation chair and her dissertation committee decided a basic qualitative study was most appropriate to develop a framework for the disorienting experience that might give rise to future studies which could utilize this common language.

**The dataset.** The plethora of transformative learning studies in the literature that have been conducted globally over the past 40 years provided a desirable dataset. Hoggan's (2016a) dataset of journal articles was used as a starting point (see Chapter Three). This research decision had both pros and cons (see Chapter Four) but, ultimately, there were more benefits than drawbacks.

**Analysis method.** Choosing to use Schreier's (2012) QCA process was another major decision in the research design. While this eight-step framework worked quite well for the purposes of this analysis, one critique is that the research process for this study was more

iterative than the process described in Schreier's (2012) text. Nevertheless, QCA provided a clear recipe and proved to be a good method for analysis to establish this disorientation framework and move toward a common language to describe the disorienting experience. As mentioned in Chapters Four and Five, QCA was not an appropriate analysis method to dive deeper into each of the dimensions of The Disorientation Index, thus, a dichotomous coding scheme was adopted. A phenomenological or case study research method would be more appropriate to better understand each of the 16 dimensions of The Disorientation Index. Inductive coding, versus deductive coding, was another significant analysis decision. Schreier (2012) advocates for inductive coding, claiming that it is, in fact, one of the benefits of the QCA method. The nature of the research question also made inductive coding a fairly straightforward choice.

In summary, the research topic, guiding question, methodology, analysis, and findings all aligned in a way that produced new knowledge, contributed to the field of transformative learning, and will assist both scholars and practitioners in their work. Overall, the researcher was pleased with the alignment, the methodological soundness of the study, and the outcomes of the study.

### **Personal Reflections of the Researcher**

At the conclusion of this study, I, the researcher, utilized transformative learning theory as a framework to reflect on my personal dissertation research experience. An unexpected outcome of this dissertation research was that conducting this study *transformed me*. The experience began with deciding on the topic, research question, and research design; then formulating the research methodology and cultivating the dataset; and finally analyzing the data, reporting the findings and drawing conclusions. As previously mentioned, this process lasted

over two years and it involved disorientation, critical reflection, learning, integration...and transformation.

Disorienting moments often occurred during marathon sessions that began before sunrise and lasted late into the night as one week rolled into the next. When reading and analyzing study after study during the analysis phase over a period of months, each time a new index dimension was discovered, I went back to all previously read studies and recoded for the new category. I “lived” in the data and wrestled with dimensions of The Disorientation Index as they emerged, naming and renaming them, and discussing them with professionals in speech therapy and communication to find accurate descriptors. This iterative and laborious process provided moments of critical self-reflection as I was required to draw on critical thinking and synthesis skills for an extended period of time. Thankfully, these skills had been cultivated during my Ph.D. coursework. Armed with these abilities and years of mindfulness training, there were moments when I intentionally engaged in self-examination to assess my personal biases and strive for the highest level of research within my ability as a doctoral student. In these moments, I recognized that the discomfort with the research process that I sometimes felt was an invitation to transform, and that other scholars have negotiated a similar change. I also accepted that, while this work is important, its primary role is to add to the conversation, not complete the conversation.

The transformation process also occurred during many eye-opening discussions about this study with colleagues, family, and friends confirming the importance of discourse. As I became better at articulating my research, others began to understand my mission and offer examples of disorienting experiences in their everyday lives. They sent me books and news articles, and told me personal stories confirming that disorientation and opportunities for



transformation are all around us. For example, my brother called me on his way home from work and shared a disorienting experience his immigrant employee had in an elevator; my husband's injured knee caused him disorienting moments as he was forced to accept its impact on his favorite pastime—mountain biking; and my son began to point out disorienting dilemmas in the plots of movies he watched. Learning how to explain this material to family and friends was a priceless endeavor for me as a researcher—and it has helped them see disorientation through a new lens too.

This research project also gave me the opportunity to develop new meaning structures by acquiring new cognitive skills and knowledge, planning a course of action, and exploring a new role as an emerging scholar. These new meaning structures are now a part of my revised mental model as I try on the role of scholar, build self-confidence in the new role, and begin to integrate it into my life.

Thus, applying The Disorientation Index to my personal dissertation experience, the two and a half years I spent conducting this dissertation research have provided me an acute or epochal, internally generated, voluntary disorienting experience that was experienced alone (individually) and in a familiar place. It was not negative, and it was in an educational setting. I had no prior experience with a research project of this magnitude.

This experience has permanently changed me; I have transformed from a student into a scholar. This experience has also changed how I perceive disorientation, confusion, and uncertainty. I have often looked to Rainer Maria Rilke's (1934) writings in times of confusion, and one particular passage was particularly helpful as I navigated the disorientation I experienced at times during this project:

Be patient toward all that is unsolved in your heart and try to love the questions themselves like locked rooms and like books that are now written in a very foreign

tongue. Do not now seek the answers, which cannot be given you because you would not be able to live them. And the point is, to live everything. Live the questions now. Perhaps you will then gradually, without noticing it, live along some distant day into the answer.  
(p. 13)

Sure enough, the distant day did come and with it came some answers as revealed by the data...and also with it came even more questions. Perhaps these new questions are confirmation that I am meant to be a researcher.

Due to my personal disposition and my profession as an educator and facilitator of transformation, I have always accepted change. However, I now welcome a disorienting experience with excitement—even if it is not something I chose and if I initially perceive it as negative—because I understand it is an invitation to love the questions themselves and an invitation to transform as I live into the answer. It is my hope that others who experience the gift of disorientation are also able to view it as an invitation – for it is the very seed of transformation.

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## APPENDIX A

## Literature Tables with Complete References

Table A1

*Evolution of Transformative Learning Theory: First-wave Literature (1971–2016)*

Count	Year	Title	Publication Type	Author(s)	Focus
1	1971	Mezirow, J. (1971). Toward a theory of practice. <i>Adult Education Journal</i> , 21(3), 125-147. <a href="https://doi.org/10.1177/074171367102100301">https://doi.org/10.1177/074171367102100301</a>	Article	Mezirow	Pre-seminal research on transformative learning theory
2	1978	Mezirow, J. (1978). <i>Education for perspective transformation: Women's re-entry programs in community colleges</i> . New York: Centre for Adult Education, Teachers College, Columbia University.	Publication	Mezirow	Seminal study: Women's college re-entry program
3	1978	Mezirow, J. (1978). Perspective transformation. <i>Adult Education</i> , 28(2), 100-110. <a href="https://doi.org/10.1177/074171367802800202">https://doi.org/10.1177/074171367802800202</a>	Article	Mezirow	Seminal research
4	1981	Mezirow, J. (1981). A critical theory of adult learning and education. <i>Adult Education</i> , 32(1), 3-24. <a href="https://doi.org/10.1177/074171368103200101">https://doi.org/10.1177/074171368103200101</a>	Journal article	Mezirow	Theory Habermas
5	1985	Mezirow, J. (1985). A critical theory of self-directed learning. In S. Brookfield (Ed.) <i>Self-directed Learning: From Theory to Practice</i> . San Francisco, CA: Jossey-Bass.	Book chapter	Mezirow, Brookfield	Theory
6	1985	Mezirow, J. (1985). Concept and action in adult education. <i>Adult Education Quarterly</i> , 35(3), 142–151. <a href="https://doi.org/10.1177/0001848185035003003">https://doi.org/10.1177/0001848185035003003</a>	Journal article	Mezirow	Theory Self-directed learning
7	1989	Collard, S., & Law, M. (1989). The limits of perspective transformation: A critique of Mezirow's theory. <i>Adult Education Quarterly</i> , 39(2), 99–107. <a href="https://doi.org/10.1177/0001848189039002004">https://doi.org/10.1177/0001848189039002004</a>	Journal article	Collard & Law	Critique Social Action

Count	Year	Title	Publication Type	Author(s)	Focus
8	1989	Mezirow, J. (1989). Transformation theory and social action: A response to Collard and Law. <i>Adult Education Quarterly</i> , 39(3), 169–175. <a href="https://doi.org/10.1177/0001848189039003005">https://doi.org/10.1177/0001848189039003005</a>	Journal article	Mezirow	Response to Collard & Law's critique
9	1990	Mezirow, J. (1990). <i>Fostering critical reflection in adulthood: A guide to transformational and emancipatory practice</i> . San Francisco, CA: Jossey-Bass.	Book	Mezirow (Editor)	Resource book
10	1991	Mezirow, J. (1991). <i>Transformative dimensions of adult learning</i> . San Francisco, CA: Jossey-Bass.	Book	Mezirow	Theory
11	1991	Clark, M. C., & Wilson, A. L. (1991). Context and rationality in Mezirow's theory of transformational learning. <i>Adult Education Quarterly</i> , 41(2), 75–91. <a href="https://doi.org/10.1177/0001848191041002002">https://doi.org/10.1177/0001848191041002002</a>	Journal article	Clark & Wilson	Critique Context Rationality
12	1991	Mezirow, J. (1991). Transformation theory and cultural context: A reply to Clark and Wilson. <i>Adult Education Quarterly</i> , 41(3), 188–192. <a href="https://doi.org/10.1177/0001848191041003004">https://doi.org/10.1177/0001848191041003004</a>	Journal article	Mezirow	Response to Clark & Wilson's critique
13	1992	Cunningham, P. M. (1992). From Freire to feminism: The North American experience with critical pedagogy. <i>Adult Education Quarterly</i> , 42(3), 180–191. <a href="https://doi.org/10.1177/074171369204200306">https://doi.org/10.1177/074171369204200306</a>	Journal article	Cunningham	Critique Principles of andragogy
14	1992	Mezirow, J. (1992). Transformation theory: Critique and confusion. <i>Adult Education Quarterly</i> , 42(4), 250–252. <a href="https://doi.org/10.1177/074171369204200404">https://doi.org/10.1177/074171369204200404</a>	Journal article	Mezirow	Response to Cunningham's critique
15	1993	Tennant, M. C. (1993). Perspective transformation and adult development. <i>Adult Education Quarterly</i> , 44(1), 34–42. <a href="https://doi.org/10.1177/0741713693044001003">https://doi.org/10.1177/0741713693044001003</a>	Journal article	Tennant	Critique - Individual vs. social & human development tensions

Count	Year	Title	Publication Type	Author(s)	Focus
16	1993	Newman, M. (1993). <i>The Third Contract: Theory and Practice in Trade Union Training</i> . Sydney, Australia: Stewart Victor.	Book	Newman	Critique – Conscientization
17	1994	Mezirow, J. (1994). Understanding transformation theory. <i>Adult Education Quarterly</i> , 44(4), 222–232. <a href="http://doi.org/10.1177/074171369404400403">http://doi.org/10.1177/074171369404400403</a>	Journal article	Mezirow	Clarification of transformative learning theory; Response to Tennant’s critique & Newman’s book
18	1994	Tennant, M. (1994). Response to “Understanding transformation theory.” <i>Adult Education Quarterly</i> , 44(4), 233–235. <a href="http://doi.org/10.1177/074171369404400404">http://doi.org/10.1177/074171369404400404</a>	Journal article	Tennant	Response to Mezirow’s response
19	1994	Newman, M. (1994). Response to “Understanding transformation theory.” <i>Adult Education Quarterly</i> , 44(4), 236–242. <a href="https://doi.org/10.1177/074171369404400405">https://doi.org/10.1177/074171369404400405</a>	Journal article	Newman	Response to Mezirow’s response
20	1994	Mezirow, J. (1994). Response to Mark Tennant and Michael Newman. <i>Adult Education Quarterly</i> , 44(4), 243–244. <a href="https://doi.org/10.1177/074171369404400406">https://doi.org/10.1177/074171369404400406</a>	Journal article	Mezirow	Response to Tennant and Newman
21	1994	Newman, M. (1994). <i>Defining the Enemy: Adult Education in Social Action</i> . Paddington, New South Wales, Australia: Stewart Victor Publishing.	Book	Newman	Critique
22	1995	Transformation theory of adult learning. In M.R. Welton (Ed.) <i>In Defense of the Lifeworld</i> .	Book chapter	Mezirow, Welton	Theory
23	1996	Pietrykowski, B. (1996). Knowledge and power in adult education: Beyond Freire and Habermas. <i>Adult Education Quarterly</i> , 46(2), 82–97. <a href="https://doi.org/10.1177/074171369604600203">https://doi.org/10.1177/074171369604600203</a>	Journal article	Pietrykowski	Critique – postmodern analysis of role of power and knowledge
24	1996	Mezirow, J. (1996). Contemporary paradigms of learning. <i>Adult Education Quarterly</i> , 46(3), 158–172.	Journal article	Mezirow	Theory

Count	Year	Title	Publication Type	Author(s)	Focus
		<a href="https://doi.org/10.1177/074171369604600303">https://doi.org/10.1177/074171369604600303</a>			
25	1997	Mezirow, J. (1997). Transformative learning: Theory to practice in Cranton, P. (Ed). <i>Transformative Learning in Action: Insights from Practice: New Directions for Adult and Continuing Education</i> . 74, 5-12. San Francisco, CA: Jossey-Bass.	Book chapter	Mezirow, Cranton	Theory
26	1997	Inglis, T. (1997). Empowerment and emancipation. <i>Adult Education Quarterly</i> , 48(1), 3–17. <a href="https://doi.org/10.1177/074171369704800102">https://doi.org/10.1177/074171369704800102</a>	Journal article	Inglis	Critique – empowerment and emancipation
27	1997	Mezirow, J. (1997). Transformation theory out of context. <i>Adult Education Quarterly</i> , 48(1), 60–62. <a href="http://doi.org/10.1177/074171369704800105">http://doi.org/10.1177/074171369704800105</a>	Letter to the editor	Mezirow	Response to Newman’s book
28	1998	Mezirow, J. (1998). On critical reflection. <i>Adult Education Quarterly</i> , 48(3), 185–198. <a href="https://doi.org/10.1177/074171369804800305">https://doi.org/10.1177/074171369804800305</a>	Journal article	Mezirow	Theory
29	1998	Mezirow, J. (1998). Postmodern critique of transformation theory: A response to Pietrykowski. <i>Adult Education Quarterly</i> , 49(1), 65–67. <a href="https://doi.org/10.1177/074171369804900107">https://doi.org/10.1177/074171369804900107</a>	Letter to the editor	Mezirow	Response to Pietrykowski’s critique
30	1998	Mezirow, J. (1998). Transformative learning and social action: A Response to Inglis. <i>Adult Education Quarterly</i> , 49(1), 70–72. <a href="http://doi.org/10.1177/074171369804900109">http://doi.org/10.1177/074171369804900109</a>	Letter to the editor	Mezirow	Response to Inglis’ critique
31	1998	Mezirow, J. (1998). Cognitive processes: Contemporary paradigm of learning. In P. Sutherland (Ed.). <i>Adult Learning: A Reader</i>	Book chapter	Mezirow, Sutherland	Theory
32	2003	Mezirow, J. (2003). Transformative learning as discourse. <i>Journal of Transformative Education</i> , 1(1), 58–63.	Journal article	Mezirow	Theory



Count	Year	Title	Publication Type	Author(s)	Focus
		<a href="https://doi.org/10.1177/1541344603252172">https://doi.org/10.1177/1541344603252172</a>			
33	2004	Merriam, S. B. (2004). The Role of cognitive development in Mezirow's transformational learning theory. <i>Adult Education Quarterly</i> , 55(1), 60–68. <a href="https://doi.org/10.1177/0741713604268891">https://doi.org/10.1177/0741713604268891</a>	Journal article	Merriam	Critique
34	2004	Mezirow, J. (2004). Forum Comment on Sharan Merriam's "The Role of Cognitive Development in Mezirow's Transformational Learning Theory." <i>Adult Education Quarterly</i> , 55(1), 69–70. <a href="https://doi.org/10.1177/0741713604268892">https://doi.org/10.1177/0741713604268892</a>	Journal article	Mezirow	Response to Merriam's critique
35	2006	An overview of transformative learning. (2006). In P. Sutherland & J. Crowther (Eds.) <i>Lifelong Learning: Concepts and Contexts</i> .	Book chapter	Mezirow, Sutherland & Crowther	Theory
36	2009	Mezirow, J., & Taylor, E. W. (Eds.). (2009). <i>Transformative Learning in Practice: Insights from Community, Workplace and Higher Education</i> . San Francisco: Jossey-Bass.	Book	Mezirow, Taylor	Theory
37	2012	Newman, M. (2012). Calling transformative learning into question: some mutinous thoughts. <i>Adult Education Quarterly</i> , 62(1), 36–55. <a href="https://doi.org/10.1177/0741713610392768">https://doi.org/10.1177/0741713610392768</a>	Journal article	Newman	Critique
38	2012	Cranton, P., & Kasl, E. (2012). A response to Michael Newman's "Calling Transformative Learning into Question: Some Mutinous Thoughts." <i>Adult Education Quarterly</i> , 62(4), 393–398. <a href="https://doi.org/10.1177/0741713612456418">https://doi.org/10.1177/0741713612456418</a>	Journal article	Cranton, Kasl	Response to Newman's critique
39	2012	Dirkx, J. M. (2012). Self-formation and transformative learning: A response to "Calling Transformative Learning into Question: Some Mutinous Thoughts," by Michael Newman. <i>Adult Education Quarterly</i> , 62(4), 399–405.	Journal article	Dirkx	Response to Newman's critique

Count	Year	Title	Publication Type	Author(s)	Focus
		<a href="https://doi.org/10.1177/0741713612456420">https://doi.org/10.1177/0741713612456420</a>			
40	2012	Newman, M. (2012). Michael Newman's final comments in the forum on his article "Calling Transformative Learning into Question: Some Mutinous Thoughts." <i>Adult Education Quarterly</i> , 62(4), 406–411. <a href="https://doi.org/10.1177/0741713612456421">https://doi.org/10.1177/0741713612456421</a>	Journal article	Newman	Response to response on Newman critique
41	2012	Kucukaydin, I., & Cranton, P. (2013). Critically questioning the discourse of transformative learning theory. <i>Adult Education Quarterly</i> , 63(1), 43–56. <a href="https://doi.org/10.1177/0741713612439090">https://doi.org/10.1177/0741713612439090</a>	Journal article	Cranton, Kucukaydin	Discourse embedded in transformative learning theory
42	2014	Newman, M. (2014). Transformative learning: Mutinous thoughts revisited. <i>Adult Education Quarterly</i> , 64(4), 345–355. <a href="https://doi.org/10.1177/0741713614543173">https://doi.org/10.1177/0741713614543173</a>	Journal article	Newman	Reflections on former critiques of transformative learning theory
43	2016	Hoggan, C., Mälkki, K., & Finnegan, F. (2017). Developing the theory of perspective transformation: Continuity, intersubjectivity, and emancipatory praxis. <i>Adult Education Quarterly</i> , 67(1), 48–64. <a href="https://doi.org/10.1177/0741713616674076">https://doi.org/10.1177/0741713616674076</a>	Journal article	Hoggan, Mälkki, Finnegan	Critiques of Mezirow's theory of perspective transformation in three praxis

Table A2

*Evolution of Transformative Learning Theory: Second-wave Literature (1997–2017)*

Count	Year	Title	Publication Type	Author(s)	Focus
1	1997	Cranton, P. (1997). Transformative learning in action: Insights from practice. <i>New Directions for Adult and Continuing Education</i> . No. 74. San Francisco, CA: Jossey-Bass.	Book	Cranton	Collection of transformative learning experiences
2	1997	Taylor, E. W. (1997). Building upon the theoretical debate: A critical review of the empirical studies of Mezirow's transformative learning theory. <i>Adult Education Quarterly</i> , 48(1), 34–59. <a href="https://doi.org/10.1177/074171369704800104">https://doi.org/10.1177/074171369704800104</a>	Journal article	Taylor	A critical view of empirical research 1978–1994 (39 studies)
3	1998	Taylor, E. (1998). <i>The theory and practice of transformative learning: A critical review</i> . Washington, DC: Office of Educational Research and Improvement.	Education Resources Information Center Publication; Ohio State University	Taylor	Overview of the theory, theoretical literature review & the empirical research reviewed in the 1978–1994 study
4	1998	Dirkx, J. M. (1998). Transformative learning theory in the practice of adult education: An overview. <i>PAACE Journal of Lifelong Learning</i> , 7, 1-14.	Journal	Dirkx	A summary of the major theoretical perspectives or strands
5	2000	Mezirow, J. (2000). <i>Learning as transformation: Critical perspectives on a theory in progress</i> . San Francisco, CA: Jossey-Bass.	Book	Mezirow (Ed) & Associates	A forum for scholars to share views on transformative learning theory
6	2003	Cranton, P., & Roy, M. (2003). When the bottom falls out of the bucket: Toward a holistic perspective on transformative learning. <i>Journal of Transformative Education</i> , 1(2), 86–98. <a href="https://doi.org/10.1177/1541344603001002002">https://doi.org/10.1177/1541344603001002002</a>	Journal article	Cranton, Roy	Integration of various perspectives on transformative learning theory

Count	Year	Title	Publication Type	Author(s)	Focus
7	2005	Taylor, E. (2005). Making meaning of the varied and contested perspectives of transformative learning theory. <i>The Proceedings of The Sixth International Conference On Transformative Learning</i> , 459-464.	Conference Proceeding	Taylor	A discussion of the varied perspectives of transformative learning theory beyond Mezirow's seminal theory and presentation of seven perspectives
8	2005	Gunnlaugson, O. (2005). Toward integrally informed theories of transformative learning. <i>Journal of Transformative Education</i> , 3(4), 331–353. <a href="https://doi.org/10.1177/1541344605278671">https://doi.org/10.1177/1541344605278671</a>	Journal article	Gunnlaugson	Four recommendations to inspire future integrally informed theories of TL
9	2006	Dirkx, J. M., Mezirow, J., & Cranton, P. (2006). Musings and reflections on the meaning, context, and process of transformative learning: A dialogue between John M. Dirkx and Jack Mezirow. <i>Journal of Transformative Education</i> , 4(2), 123–139. <a href="https://doi.org/10.1177/1541344606287503">https://doi.org/10.1177/1541344606287503</a>	Journal article	Dirkx, Mezirow, Cranton	Discussion between John Dirks and Jack Mezirow facilitated by Patricia Cranton
10	2007	Taylor, E. (2007). An update of transformative learning theory: A critical review of the empirical research (1999-2005). <i>International Journal of Lifelong Education</i> , 26(2), 173-191. <a href="https://doi.org/10.1080/02601370701219475">https://doi.org/10.1080/02601370701219475</a>	Journal article	Taylor	An update of transformative learning theory – A critical review of the research 1999-2005 (40 studies)
11	2007	Gunnlaugson, O. (2007). Shedding light on the underlying forms of transformative learning theory: Introducing three distinct categories of consciousness. <i>Journal of Transformative Education</i> , 5(2), 134–151. <a href="http://doi.org/10.1177/1541344607303526">http://doi.org/10.1177/1541344607303526</a>	Journal article	Gunnlaugson	Response to call for second-wave research and introduction of three categories of consciousness

Count	Year	Title	Publication Type	Author(s)	Focus
12	2008	Gunnlaugson, O. (2008). Metatheoretical prospects for the field of transformative learning. <i>Journal of Transformative Education</i> , 6(2), 124–135. <a href="https://doi.org/10.1177/1541344608323387">https://doi.org/10.1177/1541344608323387</a>	Journal article	Gunnlaugson	Examines first-wave and second-wave theories of transformative learning theory and recommends metatheorizing
13	2008	Kitchenham, A. (2008). The evolution of John Mezirow's transformative learning theory. <i>Journal of Transformative Education</i> . 6(104). 104-123. <a href="http://doi.org/10.1177/1541344608322678">http://doi.org/10.1177/1541344608322678</a> .	Journal article	Kitchenham	A review of Mezirow's transformative learning theory from inception to its latest definition building on Taylor's discussions but, unlike Taylor, relying on Mezirow's explanation
14	2008	Taylor, E. W. (2008). Transformative learning theory. <i>New Directions for Adult and Continuing Education</i> , 119, 5-15. <a href="http://doi.org/10.1002/ace.301">http://doi.org/10.1002/ace.301</a>	Book chapter	Taylor	An update of transformative learning theory including emerging alternative theoretical conceptions, current research findings, and implications for practice
15	2009	King, K. P. (Ed.). (2009). <i>The handbook of the evolving research of transformative learning: Based on the learning activities survey</i> . Charlotte, NC: Information Age Publishing.	Book	King	Summarizes research related to transformative learning theory with a focus on the Learning Activities Survey
16	2012	Taylor, E. W., & Snyder, M. J. (2012). A critical review of research on transformative learning theory, 2006-2010. In E. W. Taylor & P. Cranton (Eds.), <i>The handbook of transformative learning: Theory, research, and practice</i>	Book chapter	Taylor, Snyder	A critical review of empirical research 2006-2010

Count	Year	Title	Publication Type	Author(s)	Focus
		(pp. 37-55). San Francisco, CA: Jossey-Bass.			
17	2012	Baumgartner, L. M. (2012). Mezirow's theory of transformative learning from 1975 to present. In E. W. Taylor & P. Cranton (Eds.), <i>The handbook of transformative learning: theory, research, and practice</i> (pp. 99-115). San Francisco, CA: Jossey-Bass.	Book chapter	Baumgartner	History of Mezirow's transformative learning theory
18	2012	Taylor, E. W., & Cranton, P., Eds. (2012). <i>The handbook of transformative learning: Theory, research, and practice</i> . San Francisco, CA: Jossey-Bass.	Book	Taylor, Cranton	Calls for a more unified theory in which various perspectives can be brought together under one unified umbrella
19	2014	Calleja, C. (2014). Jack Mezirow's Conceptualization of adult transformative learning: A review. <i>Journal of Adult and Continuing Education</i> , 20(1), 117–136. <a href="http://doi.org/10.7227/JACE.20.1.8">http://doi.org/10.7227/JACE.20.1.8</a>	Journal article	Calleja	Traces the evolution of Mezirow's transformative learning theory and discusses three influences – Kuhn, Freire, Habermas
20	2016	Hoggan, C. D. (2016). A typology of transformation: Reviewing the transformative learning literature. <i>Studies in the Education of Adults</i> , 48(1), 65-82. <a href="http://doi.org/10.108002660830.2016.1155849">http://doi.org/10.108002660830.2016.1155849</a>	Journal article	Hoggan	Historical evolution of transformative learning theory, review of literature over past 12 years as it relates to outcomes authors claimed were transformative
21	2016	Hoggan, C. D. (2016). Transformative learning as a metatheory: Definition, criteria, and typology. <i>Adult Education Quarterly</i> , 66(1), 57–75. <a href="https://doi.org/10.1177/0741713615611216">https://doi.org/10.1177/0741713615611216</a>	Journal article	Hoggan	Suggests transformative learning theory is a metatheory and perspective transformation is Mezirow's theory
22	2016	Cranton, P. (2016). <i>Understanding and promoting transformative learning: A guide to theory and practice</i>	Book	Cranton	A review of the original theory as developed by Mezirow and

Count	Year	Title	Publication Type	Author(s)	Focus
		(3 <sup>rd</sup> Ed.). Sterling: Stylus Publishing.			updates over the past 20 years
23	2017	Hoggan, C., Mälkki, K., & Finnegan, F. (2017). Developing the theory of perspective transformation: Continuity, intersubjectivity, and emancipatory praxis. <i>Adult Education Quarterly</i> , 67(1), 48–64. <a href="https://doi.org/10.1177/0741713616674076">https://doi.org/10.1177/0741713616674076</a>	Journal article	Hoggan, Mälkki, Finnegan	Categorizes critiques of transformative learning theory by: continuity, intersubjectivity and emancipatory praxes

Table A3

*Scholarly Articles Addressing the Disorienting Dilemma*

Count	Year	Title	Author
1	2008	Clark, M. A. (2008). Celebrating disorienting dilemmas: Reflections from the rearview mirror. <i>Adult Learning, 19</i> (3–4), 47–49. <a href="https://doi.org/10.1177/104515950801900310">https://doi.org/10.1177/104515950801900310</a>	Clark [M.A.]
2	2010	Brock, S. E. (2010). Measuring the importance of precursor steps to transformative learning. <i>Adult Education Quarterly, 60</i> (2), 122–142. <a href="https://doi.org/10.1177/0741713609333084">https://doi.org/10.1177/0741713609333084</a>	Brock
3	2013	Walter, P. (2013). Dead wolves, dead birds, and dead trees: Catalysts for transformative learning in the making of scientist-environmentalists. <i>Adult Education Quarterly, 63</i> (1), 24–42. <a href="https://doi.org/10.1177/0741713611426348">https://doi.org/10.1177/0741713611426348</a>	Walter
4	2012	Mälkki, K. (2012). Rethinking disorienting dilemmas within real-life crises: The role of reflection in negotiating emotionally chaotic experiences. <i>Adult Education Quarterly, 62</i> (3), 207–229. <a href="https://doi.org/10.1177/0741713611402047">https://doi.org/10.1177/0741713611402047</a>	Mälkki
5	2016	Cox, A. J., & John, V. M. (2016). Transformative learning in postapartheid South Africa: Disruption, dilemma, and direction. <i>Adult Education Quarterly, 66</i> (4), 303–318. <a href="https://doi.org/10.1177/0741713616648376">https://doi.org/10.1177/0741713616648376</a>	Cox, John
6	2017	Shor, R., Cattaneo, L., & Calton, J. (2017). Pathways of transformational service learning: Exploring the relationships between context, disorienting dilemmas, and student Response. <i>Journal of Transformative Education, 15</i> (2), 156–173. <a href="https://doi.org/10.1177/1541344616689044">https://doi.org/10.1177/1541344616689044</a>	Shor, Cattaneo, Calton



## APPENDIX B

## IRB Documentation – Nonhuman Subjects Determination Notice

## PEPPERDINE UNIVERSITY

## Graduate &amp; Professional Schools Institutional Review Board

January 28, 2019

**Protocol #: 12820192**

**Project Title:** A Proposal for Understanding the Disorienting Dilemma in Mezirow's Transformative Learning Theory

Dear Tonya:

Thank you for submitting a "GPS IRB Non-Human Subjects Notification Form" related to your *A Proposal for Understanding the Disorienting Dilemma in Mezirow's Transformative Learning Theory* for review to Pepperdine University's Institutional Review Board (IRB). The IRB has reviewed your submitted form and all ancillary materials. Upon review, the IRB has determined that the above titled project meets the requirements for *non-human subject research* under the federal regulations 45 CFR 46.101 that govern the protection of human subjects.

Your research must be conducted according to the form that was submitted to the IRB. If changes to the approved project occur, you will be required to submit *either* a new "GPS IRB Non-Human Subjects Notification Form" or an IRB application via the eProtocol system (<http://irb.pepperdine.edu>) to the Institutional Review Board.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at <https://community.pepperdine.edu/irb/policies/>.

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval.

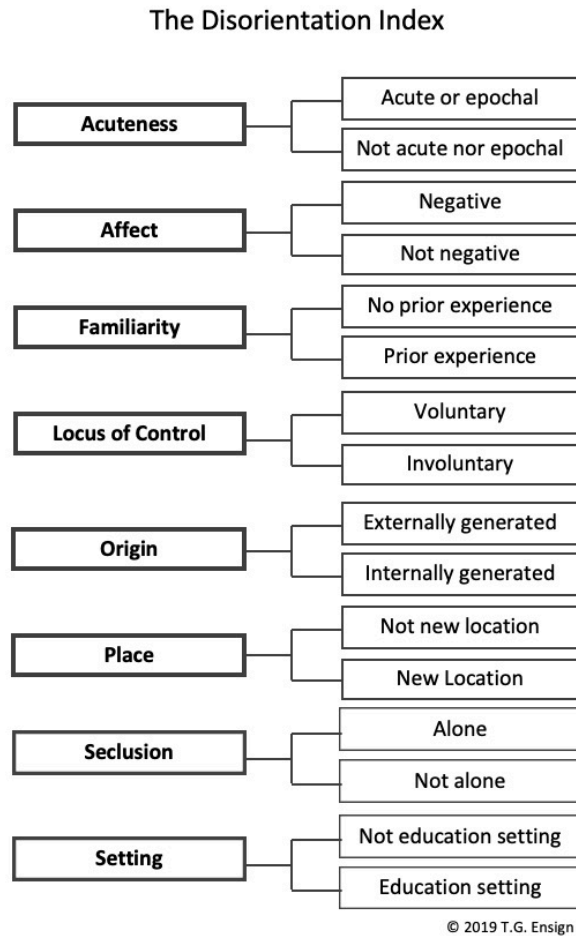
On behalf of the IRB, we wish you success in this scholarly pursuit.

Sincerely,

Institutional Review Board (IRB)  
Pepperdine University

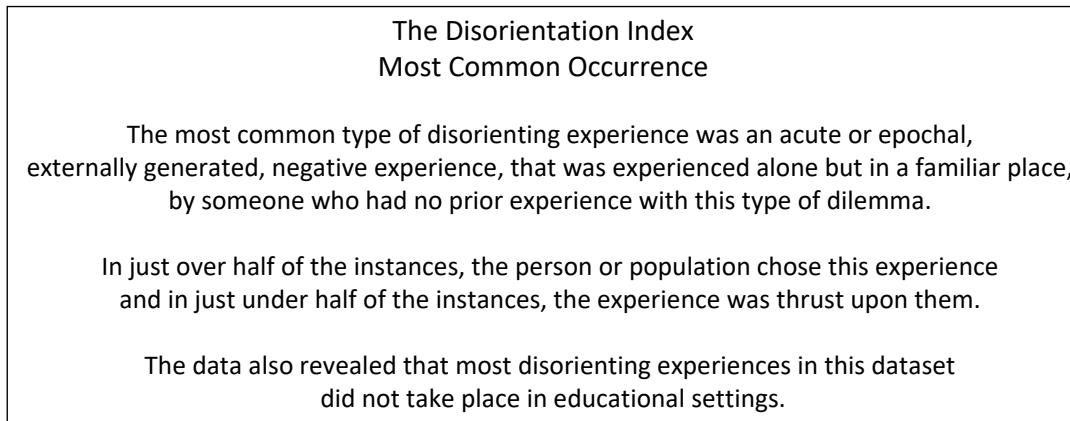
cc: Mrs. Katy Carr, Assistant Provost for Research  
Dr. Judy Ho, Graduate School of Education and Psychology IRB Chair

THE SEED OF TRANSFORMATION: A DISORIENTATION INDEX  
Selected Figures from the Research



*Figure 25.* The Disorientation Index.

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Selected Figures from the Research



*Figure 26.* The most common type of disorienting experience in the dataset.

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Selected Figures from the Research

Contexts of Disorienting Experiences	
1. Abuse	9. Identity and human development
2. Adult learning	10. Illness
3. Career	11. Natural disasters
4. Death	12. Professional development for educators
5. Entire college experience	13. Race, class, gender, and political experiences
6. Environmentalism	14. Reading, poetry and television
7. Generally emotionally chaotic experiences	15. Study abroad and international service
8. Higher education classes	16. Workplace

*Figure 27.* Contexts of disorienting experiences revealed by the studies in the dataset.

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Selected Figures from the Research

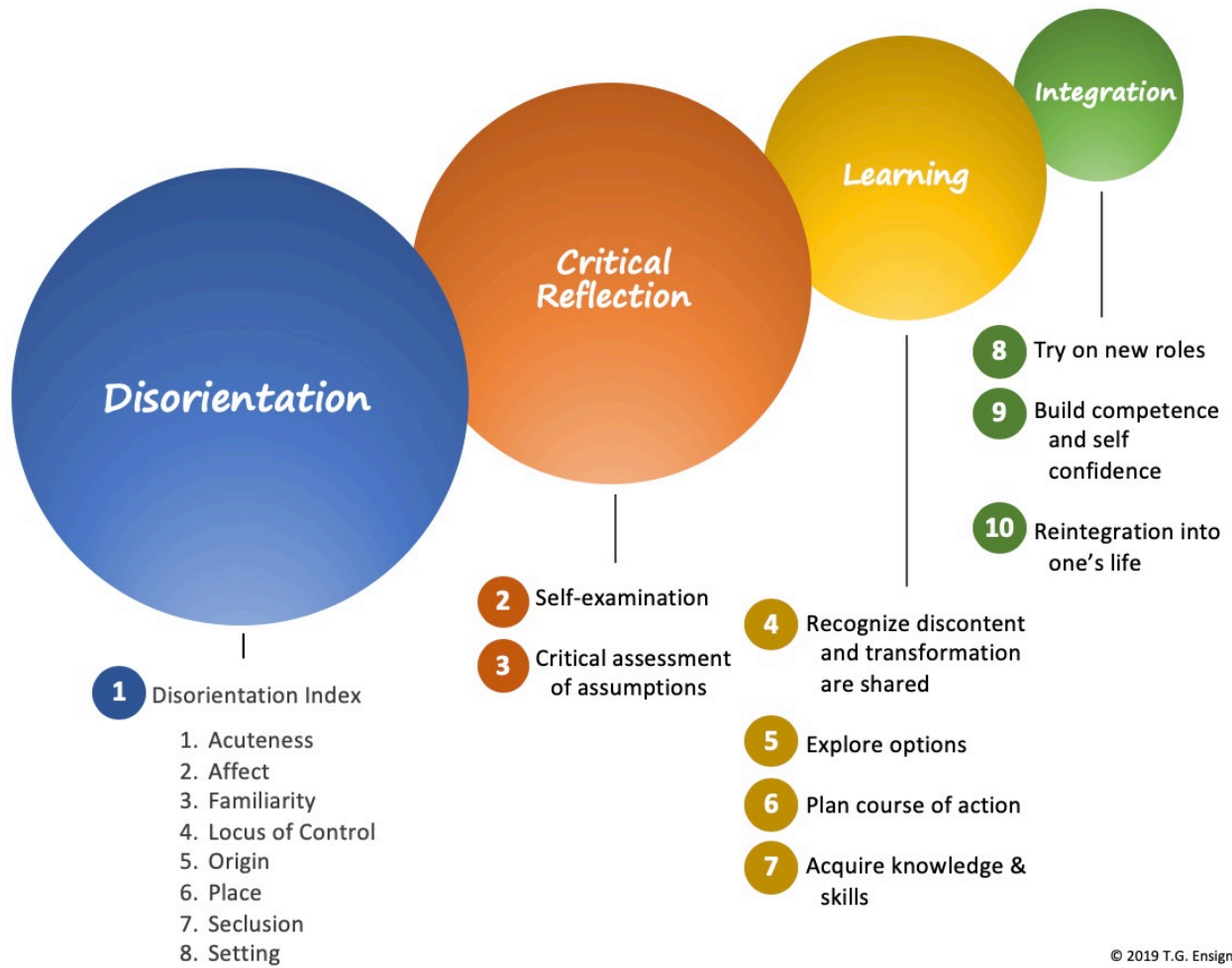


Figure 28. The Disorientation Index in Mezirow's ten phases of transformative learning process.

THE SEED OF TRANSFORMATION: A DISORIENTATION INDEX  
 Selected Figures from the Research

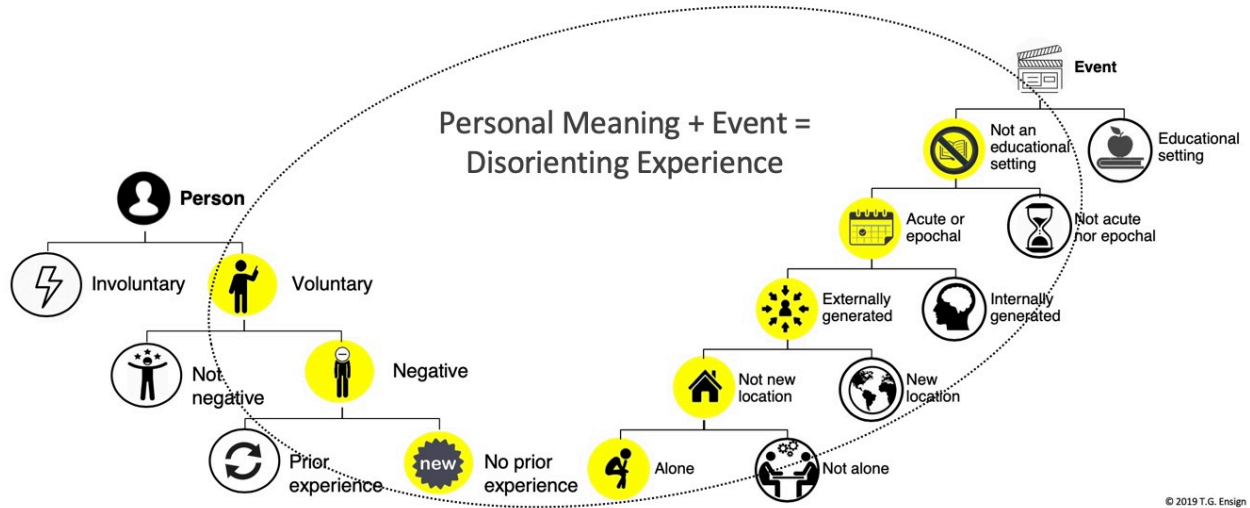


Figure 31. Formula for disorientation: *Personal meaning + Event = Disorienting experience.* The figure illustrates how personal meaning applied to an event can result in a disorienting experience.

For permission to use these figures, please contact the author:

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