

2021

Nurse Perspectives of Trauma-Informed Care

Lee Ann Blazejewski
Walden University

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Walden University

College of Health Professions

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Lee Ann Blazejewski

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Walden University

2021

Abstract

Nurse Perspectives of Trauma-Informed Care

by

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MPH, Walden University, 2011

AS, Brunswick College, 1996

MBA, Brenau University, 1992

BS, Western Michigan University, 1989

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Health

Walden University

November 2021

Abstract

There is growing interest in trauma-informed nursing methods to better respond to the needs of patients with histories of adverse childhood experiences and other traumatic events. Recent advances in the understanding of how trauma can negatively affect long-term health outcomes have fostered a shift towards trauma-informed care as a method to decrease patient retraumatization in nursing practice. With the implementation of trauma-informed care in many areas of healthcare and public health, several challenges have been exposed. The purpose of this study was to examine nurses' lived experience of implementing trauma-informed care into nursing practice for the care of patients with physical disabilities, known or unknown histories of adverse childhood or traumatic experiences, and secondary maladaptive coping behaviors at a skilled-nursing facility in a midsized city in the state of Michigan. A Gadamerian hermeneutic approach was used to collect and analyze data from 15 licensed nurses via in-depth interviews and reflexive methods. The belief-based model of the theory of planned behavior was used to elicit nurse participants' salient beliefs. Results from the interpreted coded textual data revealed four primary themes: nurses feeling empowered to avoid inadvertent patient retraumatization, enhanced empathy towards patients, uncertainty about referents' use of trauma-informed care, and the essential importance of being equipped and prepared. The results of this study may be used to improve nurses use of trauma-informed care, thereby decreasing patient retraumatization and potentially improving individual and community health outcomes.

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Dedication

I dedicate this dissertation to all people living with histories of adverse childhood experiences and other traumatic events and to those who have been retraumatized in the healthcare setting. Also, I dedicate the research presented here to all nurses who are on the front lines implementing trauma-informed methods of practice to prevent the retraumatization of patients with histories of trauma.

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Chapter 1: Introduction to the Study

Introduction

In the United States, 82.7% of adults have reported experiencing some type of traumatic event at least once in their lives, and over 71% of children have experienced a potentially traumatic event before age 17 (Benjet et al., 2016; Finkelhor et al., 2013b). In this qualitative study, I examined nurses' perceptions of implementing trauma-informed care (TIC) into nursing practice to mitigate patient retraumatization in the care of patients with disabilities, histories of adverse childhood experiences (ACEs) or traumatic events (TEs), and secondary maladaptive coping behaviors in a skilled-nursing facility (SNF). In this study, the term *TEs* refers to traumatic experiences that occur in adulthood, and the term *ACEs* signifies traumatic experiences that occur in childhood. Researchers have found that individuals with histories of ACEs/TEs are more at risk of poor health outcomes over their lifespan (Van der Kolk, 2014). As such, research has shown that traumatic experiences, such as child abuse and domestic violence, can impair cognitive, social, and emotional development, and result in adverse health outcomes and disabilities (Cronholm et al., 2015; Felitti & Anda, 2014; Schüssler-Fiorenza Rose et al., 2014; Williamson & Qureshi, 2015; Wolf et al., 2014). Moreover, an increased prevalence of ACEs/TEs within segments of the population can negatively affect public health outcomes in susceptible communities (Endres et al., 2015; Hales et al., 2017; Lowe et al., 2015; Magruder et al., 2017; Van der Kolk, 2005). For instance, earlier research that examined the associations between trauma experiences, maladaptive responses, and morbidity in adulthood described how ACEs/TEs adversely affected several social

determinants of health, including decreased economic productivity, elevated levels of health disparities, heightened social inequity, and increased pressure on limited health and social resources (Campbell et al., 2016; Larkin et al., 2014; Magruder et al., 2016).

With the growing recognition that ACEs/TEs can lead to negative health outcomes, many human service organizations and healthcare institutions have increasingly adopted systems of TIC to effectively respond to the needs of patients with histories of ACEs/TEs (Machtinger et al., 2019; Muskett, 2014; Schüssler-Fiorenza Rose et al., 2014; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014b; Wolf & Schnurr, 2016; Wolf et al., 2014). However, earlier studies that investigated the nursing professions' use of trauma-informed practices found that nurses were uncommunicative with their patients about the potential adverse impact of ACEs/TEs on health outcomes (Marcellus, 2014; Marsac et al., 2016; Strait & Bolman, 2017). Furthermore, other studies that addressed health professionals' attitudes toward patients with maladaptive coping skills found that patients who experienced stigmatization in the healthcare setting reported feeling retraumatized and had diminished access to proper care (de Jacq et al. 2016; van Boekel et al., 2015).

Therefore, I conducted this study to understand what inspires or inhibits nurses' use of trauma-informed practice methods to mitigate inadvertent patient retraumatization. In this regard, the results of this study may have positive social change implications on nurses' implementation of TIC to decrease inadvertent patient retraumatization, rebuild trauma-exposed patients' sense of empowerment and control, and improve patients' use of adaptive coping skills, thereby improving individual and public health outcomes.

Chapter 1 begins with a background of the study and brief overview of the following elements of the study: historical roots of psychological trauma, Adverse Childhood Experience study, TE exposure, neurobiology of trauma, evolution of TIC, and TIC in nursing practice. Next, the problem statement and purpose of the study are presented followed by the research questions (RQs) and a brief description of the study's theoretical framework. Thereafter, the nature of the study is introduced, which describes the study's qualitative design and phenomenological approach. Lastly, the chapter closes with a description of the study's key definitions, assumptions, scope and delimitations, significance, limitations, and transition into Chapter 2.

Background of the Study

Several researchers described TIC as an approach that assumes the possibility that all patients may have been exposed to trauma and be at risk of the adverse effects of trauma, such as chronic neuro-dysregulation, psychosocial pathogenesis, and maladaptive behaviors (Hales et al., 2017; Kessler & Isham, 2017; Kusmaul et al., 2015; SAMHSA, 2014b; Wilson et al., 2015). The toxic stress of pervasive trauma can cause physiological changes in the brain and limbic system that can lead to health problems and underdeveloped—or maladaptive—coping skills throughout the lifespan (Centers for Disease Control and Prevention [CDC], 2016; Felitti & Anda, 2014; Hughes et al., 2017). Moreover, healthcare settings and medical procedures can be distressing for patients with histories of ACEs/TEs and may invoke memories of past traumatic experiences and subsequent retraumatization (Bloom & Farragher, 2013; Marcellus, 2014; Marsac et al., 2016; SAMHSA, 2014a, 2014b; Schnur, 2017; Wilson et al., 2015).

Research in the area of TIC has revealed how nurses who practice with a trauma-informed lens may prevent the retraumatization of vulnerable patients by implementing emotionally supportive trauma-informed nursing practices (Endres et al., 2015; Kassam-Adams et al., 2015; Kenny et al., 2017; Marcellus, 2014). However, there is a paucity of literature on nurses' perceptions about the implementation of TIC into nursing practice (Baker et al., 2016; Raja et al., 2015; Stokes et al., 2017). This study addressed this gap in the literature by building upon earlier studies that later influenced the development and implementation of TIC. Therefore, the study design process began with a thorough review of past research that most influenced the development of TIC and its use in nursing practice, which included the following domains: historical roots of psychological trauma, adverse childhood experience study, TE exposure, neurobiology of trauma, evolution of TIC, and TIC in nursing practice.

Historical Roots of Psychological Trauma

Within healthcare, trauma was historically described as a serious physical injury, such as multiple orthopedic fractures (Jennings & Mitchell, 2017). In the 1800s, the field of psychology began associating the term *trauma* with psychic wounds that stemmed from stressful psychological experiences (Marcellus, 2014). In addition, civilian and military populations began to record historical evidence of psychological trauma within society (Jones & Wessely, 2006; Lasiuk & Hegadoren, 2006). Throughout the past two centuries, psychiatry and medicine have advanced the understanding that psychological trauma can negatively affect physical health via a “mind-body” connection (Danese & Baldwin, 2017; Moss, 2014). Moreover, many advancements have been made in recent

decades that have increased the knowledge of the effects of psychological trauma on the body and how a dysregulated mind-body connection can lead to poor health outcomes (Clark & Power, 2005; Felitti et al., 1998; Forster et al., 2018; Magruder et al., 2016). In this regard, from here forth, “psychological trauma” and its effects are referred to as “trauma.”

Adverse Childhood Experiences Study

The landmark ACE study investigated the link between ACEs and the development of poor health outcomes in adulthood (Felitti et al., 1998). Specifically, the ACE study addressed the health impact of childhood adverse experiences, such as physical abuse, sexual abuse, emotional abuse, physical/emotional neglect, violence, household substance abuse, household mental illness, parental separation or divorce, and incarcerated household member (Felitti et al., 1998). The results of the ACE study revealed that 67% of the 17,337 participants had experienced some form of abuse, violence, neglect, or household dysfunction as children (CDC, 2014a; Felitti et al., 1998). Felitti et al. (1998) explained how a participant’s cumulative ACE score was calculated as a sum of their individual adverse experience categories, which ranged from 0 to 10. In this respect, the study revealed that cumulative individual ACE scores had a dose-dependent relationship on the development of maladaptive behaviors (e.g., smoking and drug use) and elevated adverse health outcomes (e.g., cardiovascular disease and obesity), which were principal determinants of premature adult mortality and morbidity (Cronholm et al., 2015; Gilbert et al., 2015).

Traumatic Event Exposure

TE exposure can occur directly or indirectly via repeated confrontation with an adverse event, being a witness to a traumatic event, or knowledge of a loved one's trauma experience (Benjet et al., 2016; Lopizzo et al., 2017). In past research, TEs have been strongly correlated with the same adverse outcomes as ACEs, such as the development of unhealthy coping behaviors (CDC, 2014b; Machtinger et al., 2019; U.S. Department of Veterans Affairs, 2014). In addition, the experience of TEs in adulthood has been shown to influence the formation of psychopathology, such as major depressive disorder, and the development of psychosocial pathogenesis, such as carotid artery disease (Atwoli et al., 2016; Benjet et al., 2016; Husarewycz et al., 2014; Masters-Pedersen et al., 2015; Miller-Archie et al., 2014; North et al., 2015, Sumner et al., 2015; Vaccarino et al., 2013).

Neurobiology of Trauma

Many negative health outcomes have been shown to partially derive from toxic stress and the development of chronic neuro-dysregulation (Benjet et al., 2016, Groer et al., 2016; Hughes et al., 2017). Earlier research that investigated the relationship between traumatic experiences and health behaviors revealed that the cumulative nature of ACEs/TEs often placed trauma-exposed individuals into a state of chronic neuro-dysregulation, which led to hyperarousal, hyper-vigilance, and fear (Forster et al., 2018; Kalmakis & Chandler, 2015). As such, trauma researchers described that a state of chronic neuroendocrine dysregulation can induce uncontrollable neurobiological reactions that have the potential to overwhelm an individual's supportive coping abilities (Campbell et al. 2016; Nurius et al., 2015; Wadsworth, 2015). Specifically, studies that

addressed the physiological response to traumatic stress found that persistent toxic stress and an unbuffered involuntary fight or flight response initiates a cascading release of endocrine signaling hormones (e.g., cortisol) that are released into the circulatory system from the hypothalamic-pituitary-adrenal axis (Bendezú et al., 2016; Cowan et al., 2016; Danese & Baldwin, 2017; DeSocio, 2016; Garad et al., 2017; Hostinar & Gunnar, 2013; Kempke et al., 2015; Kuhlman et al., 2017; Quinones et al., 2020; Schwaiger et al., 2016). In addition, results from other past research that investigated the lasting impact of early-life adversity revealed that the hyper-secretion of cortisol in response to trauma often persisted long after the traumatic event ended (Cowan et al., 2016; Kempke et al., 2015; Lopizzo et al., 2017; Westfall & Nemeroff, 2015). Furthermore, researchers described how chronic elevated levels of cortisol can cause physiological damage and lead to several types of health problems, such as chronic fatigue syndrome, hypertension, and diabetes (Endres et al., 2015; Hales et al., 2017; Lowe et al., 2015; Magruder et al., 2017; Van der Kolk, 2005). Moreover, researchers who examined the neurobiological and systemic effects of chronic stress described how caring relationships may act as a buffer against involuntary toxic stress reactions in the architecture of the brain (McEwen & McEwen, 2017b; McEwen et al., 2016; Ortiz & Sibinga, 2017).

Evolution of TIC

In addition to the historical ACE study, the landmark Women, Co-Occurring Disorders and Violence Study (WCDVS) was launched by SAMHSA in 1998 to expand knowledge about effective methods to help women with histories of trauma, substance abuse, and mental health disorders (Clark & Power, 2005; Giard et al., 2005; McHugo et

al, 2005; Morrissey et al., 2005; SAMHSA, 2014b). The results of the WCDVS revealed that most of the study participants with substance abuse disorders and mental health issues had elevated rates of histories of childhood abuse and adult interpersonal abuse compared to the study's control groups (Morrissey et al., 2005; Salasin, 2005). The findings of the WCDVS influenced the development of the principles of TIC to reduce patient retraumatization and support the delivery of trauma-specific services to help individuals affected by trauma, such as prevention, intervention, and therapy services (Ardino, 2014; Berliner & Kolko, 2016; Donisch et al., 2016; Finkelhor et al., 2015a; Harris & Fallot, 2001; Levenson et al., 2016; Marcellus, 2014; SAMHSA, 2014a; Saunders & Adams, 2014).

TIC in Nursing

TIC has been described as a relevant element of nursing practice because nurses are the largest group of licensed personnel in healthcare and have more exposure to patients than any other health professional group (Tobiano et al., 2015; U.S. Department of Labor, 2017). Specifically, The World Health Statistics Report estimated that in the United States, there are 3.9 million nurses, including registered nurses and licensed practical nurses (as cited in Haddad & Toney-Butler, 2019). Moreover, nursing theory researchers have illustrated that a central aspect of nursing care is the recognition and modification of patients' environment to optimize health (DeSocio, 2016; Masters, 2014). In this regard, trauma researchers have specified that trauma-informed methods in nursing practice are aimed to mitigate inadvertent patient retraumatization and ameliorate the pervasive effects of ACEs/TEs by providing patient care in a supportive and nurturing

environment (Isobel & Edwards, 2017; Kassam-Adams et al., 2015; Stokes et al., 2017; Williamson & Kautz, 2018). As such, Isobel and Edwards (2017) defined that TIC in nursing practice is a universal approach that may be used in all settings and not limited to the care of patients with known histories of trauma. In other words, TIC is viewed as method of care for all patients with known or unknown histories to trauma. Thus, with the substantial number of practicing nurses in the United States, the use of trauma-informed methods in nursing practice has the potential to positively affect the health outcomes of patients who have been exposed to ACEs/TEs.

Problem Statement

Results from several earlier studies revealed that nurses in the United States were not responding adequately to the psychosocial needs of patients with histories of ACEs/TEs (Bradbury-Jones et al., 2014; De Crespigny et al., 2015; Kassam-Adams et al., 2015; Marcellus, 2014; Marsac et al., 2016; Muskett, 2014; Reeves & Humphrey, 2018; Strait & Bolman, 2017). Moreover, these researchers described how nurses felt unprepared to communicate with patients about trauma and its potential impact on health outcomes. Similarly, other past research that examined TIC and barriers to care revealed that healthcare providers often lacked proficient knowledge, skills, and evidence-based resources to properly support patients with past trauma exposure (Green et al., 2015; Kassam-Adams et al., 2015; Raja et al., 2015; Reeves & Humphrey, 2018). For example, Kassam-Adams et al. (2015) found that less than 1 in 5 nurses believed they had the necessary skills to question survivors about their trauma history without causing further distress, and 33% felt competent to provide brief interventions to aid patients with

posttraumatic stress reactions. Moreover, several trauma related studies reported that barriers to care formed when patients viewed their nursing care as stigmatizing, stereotyping, and retraumatizing (Alexander et al., 2016; Bradbury-Jones et al., 2014; Choi, 2016; De Crespigny et al., 2015; Green et al., 2015; Kassam-Adams et al., 2015; Marcellus, 2014; Marsac et al., 2016; Muskett, 2014; Raja et al., 2015; Reeves, 2015; Reeves & Humphreys, 2018; Worley & Delaney, 2017). These prior research findings were supported by the results of other studies that investigated health professionals' attitudes toward patients who used maladaptive coping skills to management stress, which found that patients who experienced stigmatization when receiving healthcare services felt retraumatized and reported diminished access to proper medical treatment (de Jacq et al., 2016; van Boekel et al., 2015).

The connection between poor health outcomes, maladaptive behaviors, and ACEs is well established in the literature (CDC, 2014a; Felitti & Anda, 2014; Mersky et al., 2013; Nakazawa, 2015; Scott et al., 2013; Sumner et al., 2015; Vaccarino, 2013; Widom et al., 2012). Notably, the National Survey of Children's Exposure to Violence showed that at the time of the study, 69.7% of children between the ages 14 to 17 had been assaulted, and 71.5% witnessed violence during their lifetimes (as cited in Finkelhor et al, 2015b). As such, earlier studies in the long-term effects of trauma described that ACEs can contribute to multiple adverse outcomes, such as cognitive deficiencies, dementia, depression, substance abuse, suicidality, cardiovascular disease, Type 2 diabetes, autoimmune disease, chronic bronchitis (i.e., emphysema), liver disease, skeletal fractures, shortened life, and poor self-rated health (Felitti & Anda, 2014; Mersky et al., 2013;

Nakazawa, 2015; Scott et al., 2013; Sumner et al., 2015; Vaccarino, 2013; Widom et al., 2012). In addition, other prior research that addressed the effects of trauma found that survivors who developed posttraumatic stress syndrome had a 25 to 50% increased rate of heart disease and peripheral vascular disease (Wolf & Schnurr, 2016). Furthermore, several trauma research findings revealed that patients who suffered a single traumatic event were at an elevated risk of subsequent traumas and often formed maladaptive harmful behaviors such as smoking, obesity, substance abuse, and risky sexual behavior (Baker et al., 2016; Beristianos et al., 2016; Felitti & Anda, 2014; Murray et al., 2013; Schüssler-Fiorenza Rose et al., 2016; Sumner et al., 2015; Williamson & Qureshi, 2015). In response, Schüssler-Fiorenza Rose et al. (2014) described the need for more research “to determine the best way to address [the effects of trauma and] improve coping and functional recovery from stresses related to patients’ emerging or existing disabilities” (p. 9).

Response to Gap in the Research Literature

Despite the knowledge that ACEs/TEs can lead to poor health outcomes, barriers and facilitators that affect the implementation of TIC into nursing practice are not well understood (Baker et al., 2016; Kusmaul et al., 2015; Marsac et al., 2016; Saint Arnault & O’Halloran, 2016; Williamson & Qureshi, 2015). In this regard, several earlier studies investigated healthcare professionals’ understanding of TIC and the influence of training programs and organizational tools to address the complex needs of trauma-exposed patients (Bruce et al., 2018; Choi & Seng, 2015; Kassam-Adams et al., 2015; Marcellus, 2014; Marsac et al., 2016; Muskett, 2014; Reeves & Humphrey, 2018; Strait & Bolman,

2017). As a result, a gap in the literature was revealed, showing that additional research was needed to better understand nurses' perceptions about implementing TIC into nursing practice to care for patients with disabilities who have been affected by trauma (Alvarez et al., 2017). In this regard, this gap in the literature was filled by the results of the current study, which elicited and interpreted the meanings of nurses' perceptions of implementing trauma-informed into nursing practice in the care of adult patients with physical disabilities.

Purpose of the Study

The purpose of this study was to examine nurses' lived experience of implementing TIC into nursing practice for the care of patients with physical disabilities, known or unknown histories ACEs or TEs, and secondary maladaptive coping behaviors at a SNF in a midsized city in the state of Michigan. A SNF was best suited for this study because it supplied a concentration of nurses with prior training in the use of trauma-informed nursing methods to care for patients with physical disabilities.

Research Questions

RQ1: What is it like for nurses to implement TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ2: What is the role of behavioral beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ3: What is the role of normative beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ4: What is the role of control beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

Theoretical Framework

In this study, I explored nurses' perceptions about implementing TIC into nursing practice through the lens of Ajzen's theory of planned behavior (TPB) belief-based framework (Ajzen, 1985).

Theory of Planned Behavior

The theoretical framework of this study was Ajzen's (1985, 1991) TPB, which I used to identify and examine nurse participants' perceptions of implementing TIC into nursing practice. According to Ajzen, behavior can be predicted by direct evaluation and measurement of the TPB's primary constructs, which include attitude toward the behavior, subjective norms, and perceived behavioral control (Ajzen, 1985, 1991, 2005). Ajzen (2012) described that performance of a behavior is likely when there is a high correspondence between an individual's positive evaluation of the given behavior (attitude toward the behavior), positive social support to perform the behavior (subjective norm), positive perception of ability to perform the behavior (perceived behavioral control), and behavioral intention to perform the behavior (see Table 1). Furthermore,

Ajzen purported that the theory's primary constructs directly influence an individual's intention to perform a behavior (Ajzen, 1985, 1991, 2005). As such, according to the TPB, behavioral intention is a primary determinant of behavior change (Montaño & Kasprzyk, 2015).

Belief-Based Framework

Specifically, I designed this study with the indirect constructs of the TPB's belief-based framework, which include behavioral beliefs, normative beliefs, and controls beliefs (Fishbein & Ajzen, 2010). Fishbein and Ajzen (2010) described that the indirect approach of the theory's belief-based framework can be used to identify antecedent factors that influence behavioral intentions by eliciting salient beliefs that impact the strength of each primary construct. Based on earlier research findings, which are discussed at length in Chapter 2, I sought to understand how nurses' beliefs affected their perceptions about implementing TIC into nursing practice. Therefore, I designed this study to identify, analyze, and interpret nurses' salient beliefs via the TPB belief-based framework. Moreover, the belief constructs of the TPB supplied critical theoretical concepts that I used to develop relevant interview questions to elicit nurses' salient beliefs. In addition, I created the study's RQs to align with the theoretical belief-based framework of the TPB and the purpose of the study. Table 1 illustrates the relationship between the TPB belief and primary theoretical constructs, key concepts of the TPB belief-based framework, and the study's RQs. A more detailed explanation about the TPB's origin, major theoretical propositions, and how I used the conceptual elements of TPB belief-based constructs to develop the research questions and interview questions is

presented in Chapter 2. Furthermore, Chapter 5 describes how I used the theoretical elements of TPB belief-based framework to analyze the study's findings.

Table 1

Belief-Primary Constructs, Key Concepts, and Research Questions

Belief constructs	Primary constructs	Key concepts	Research questions
Behavioral beliefs	Attitude toward Behavior	Beliefs about the positive or negative outcomes of the behavior	RQs 1 and 2
Normative beliefs	Subjective norms	Beliefs about whether important referents approve or disapprove of the behavior and whether referents perform the behavior	RQs 1 and 3
Control beliefs	Perceived behavioral control	Beliefs about personal ability to perform the behavior and intrinsic and extrinsic factors believed to help or hinder the behavior	RQs 1 and 4

Note. RQs = research questions

Nature of the Study

Study Design and Tradition Rationale

In this study, I used a qualitative data collection method, in which I was the main data collection instrument, to capture rich meaningful data that reflected nurses' perceptions of implementing TIC through open-ended interactive interviews, field journal notes, and reflexivity journaling (see Bloomberg & Volpe, 2016). Matua and Van Der Wal (2015) described that the aim of the hermeneutic phenomenological approach is to investigate the meaning of a given phenomenon to provide a deeper understanding of the related lived experience. In this regard, Gadamerian phenomenology, based on the philosophy of Gadamer (1960/2013), was the chosen philosophical stance for me to

explore the meaning in nurses' lived experience of their shared phenomenon of implementing TIC into nursing practice.

Brief Summary of Study's Methodology

The study's primary data collection tool was a validated 14-item interview guide, which I used to elicit nurse participants' salient beliefs about the implementation of TIC into practice. In addition, I employed multiple data collection tools to collect data, including semistructured interviews, field journal notes, and reflexive journaling. Moreover, several techniques were used to analyze the study's textual data, which included Saldaña's (2015) two-cycle coding process, Braun and Clarke's (2006) six steps of thematic analysis (TA), Gadamer's (1960/2013) hermeneutic circle, and Gadamer's interpretive practices, as described by Stenner et al. (2017).

The study was conducted at a long-term SNF where 15 nurse participants who met the following inclusion requirements were recruited to take part in the research: a current license to practice nursing in the state of Michigan, minimum of 1-year professional nursing experience, prior training in being trauma-informed, access to the internet, basic computer literacy skills, and fluency in speaking, reading, and writing English. In addition, during the development of the study, the Centers for Medicare & Medicaid Services (CMS) released new federal guidelines that mandated the implementation of TIC in all long-term skilled nursing facilities prior to November 2019 (CMS, 2016). The new CMS requirements provided a logical rationale for me to conduct this study at a skilled-nursing facility because it allowed me to recruit nurse participants with verifiable training and use of TIC methods in the care of patients with disabilities.

During data collection, I gave all participants ample time to review and sign the study's consent form agreeing to their participation in the study. Confidentiality was maintained to enhance participant truthfulness. Moreover, I informed the participants that they could withdraw from the study at any time. In addition, I explained to each participant that, as a registered nurse (RN) I am a mandated reporter under Michigan law, and I am unable to keep information about known or suspected incidents of abuse or neglect of a child, dependent adult or elder, including, but not limited to, physical, sexual, emotional, and financial abuse or neglect confidential. In the course of the study, I did not observe, suspect, or given such information of abuse or neglect, and, therefore, I had no need to report any such information to legal authorities.

Definitions

Attitude object: What an individual makes a judgment about, such as object, person, institution, or event (Fishbein & Ajzen, 1975).

Attitude valence: Refers to an individual's perception of whether an outcome is positive or negative (Fishbein & Ajzen, 2010).

Belief: Beliefs represents the subjective probability that the attitude object has a specific attribute (Fishbein & Ajzen, 1975).

Coping: Cognitive, emotional, and behavioral efforts a person uses to handle stressors (Lazarus & Folkman, 1984).

Evidence-based practice: Integration of the best available empirical research integrated with clinical expertise, patient preferences, and clinical guidelines (Farokhzadian et al., 2015).

Maladaptive coping: Negative dysfunctional or avoidance-focused behaviors used to alleviate stress consistent with adverse outcomes (Wadsworth, 2015).

Normative belief: The social influences driving the behavior (Ajzen, 2012).

Posttraumatic stress disorder: Posttraumatic stress disorder (PTSD) is defined in the American Psychiatric Association's (APA, 2013) *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*) as chronic psychiatric distress resulting from the experience of actual or threatened death or injury.

Psychological trauma: An overwhelming, stressful experience that exceeds an individual's ability to cope, which can lead to physical and emotional stress reactions, and depleted emotional resources (Min et al., 2013).

Psychosomatic: Also known as psychogenic; a physical illness caused or aggravated by an emotional factor such as stress (McLaughlin et al., 2016).

Reflexivity: A process of self-reflection and introspection of the self as the researcher to clarify personal bias or prejudice (Fleming et al., 2003; Gadamer, 1960/2013; Lincoln & Guba, 1985).

Trauma exposure: The DSM-5 defines a traumatic event as exposure to incidents of threatened death, severe injury, or sexual violence (APA, 2013).

Vicarious trauma: Trauma symptoms emerging in a nurse that are like those experienced by trauma-exposed patients they are caring for due to empathic and cumulative engagement with the patient's traumatic experiences (Hernandez-Wolfe et al., 2015).

Assumptions

This section provides readers with a detailed description of the study's research assumptions to aid with the transfer of the results of the study to other settings and to replicate the study's design and findings in future research (see Bloomberg & Volpe, 2016; Merriam & Tisdell, 2016). Research assumptions include philosophical worldview assumptions or paradigms, theoretical assumptions, and elements necessary to the study that cannot be controlled by the researcher (Bloomberg & Volpe, 2016; Patton, 2015). Hence, the first assumption was that the existence of constructed multiple realities or truths can be altered by the researcher as knower (i.e., subjective truth; Denzin & Lincoln, 2017). In other words, interpretation is ongoing, even after research is complete; therefore, multiple truths about the findings of the study can occur, and a precise interpretation is not possible (see Annells, 1996). Additionally, the study was based on the research paradigm of social constructivism; therefore, I assumed that individuals make subjective sense of their reality based on their historical and social perceptions (see Bloomberg & Volpe, 2016). In this regard, the study's assumption of subjective truth supported its use of Gadamer's (1960/2013) philosophy, which purported that interpretation is always an evolving process. Therefore, I assumed that the nurses in this study have developed meaningful and subjective perspectives about the implementation of TIC via their individual experiences. Moreover, I used a qualitative data collection method, and, therefore, I assumed that the best way to capture rich meaningful data that reflected nurses' perceptions of implementing TIC was through open-ended interactive dialogue during the interview process (see Bloomberg & Volpe, 2016). Furthermore, I

assumed that the nurse participants supplied truthful responses to the interview questions, which were independent of the nursing unit milieu or the facility administrators' perceptions. This assumption was necessary to trust that the participants accurately expressed their perceptions thereby enhancing the credibility of the study (see Noble & Smith, 2015). Lastly, I assumed that the nurse participants were personally and professionally invested in safe nursing practice methods to improve patient care and health outcomes. This assumption was paramount to the study's outcome to have trust that the participants' perceptions were based on thoughtful consideration of their experience implementing TIC versus a laissez-faire attitude toward the endeavor.

Scope and Delimitations

This study was conducted to address the research problem, which was identified via the results of several past studies that pointed to nurses' inadequate response toward patients with histories of trauma and maladaptive behaviors as contributing to patient retraumatization, barriers to care, and adverse health outcomes (Alexander et al., 2016; Bradbury-Jones et al., 2014; Choi, 2016; De Crespigny et al., 2015; de Jacq et al., 2016; Ellis & Barrett, 2016; Green et al., 2015; Kassam-Adams et al., 2015; Marcellus, 2014; Marsac et al., 2016; Muskett, 2014; Raja et al., 2015; Reeves, 2015; Reeves & Humphreys, 2018; van Boekel et al., 2015; Vijayaraghavan et al., 2012; Worley & Delaney, 2017).

Scope of Study

In this regard, I designed the current study to examine select elements of the research problem to better understand nurses' lived experience and a priori beliefs that

influenced their perceptions about implementing TIC into nursing practice. As such, the current study concentrated on the “preexisting conditions [a priori beliefs], or anything external [perceived barriers] to the intervention [implementation of TIC], which may affect the outcome [improved nursing care and mitigation of patient retraumatization]” (Thirsk & Clark, 2017, p. 2). Thus, the focus of this study was to elicit, identify, assess, and interpret nurse participants’ antecedent (i.e., a priori) salient beliefs and to understand how these beliefs influenced the participants’ perceptions about implementing TIC into nursing practice. Moreover, I aimed to understand nurses’ perceptions through the lens of the TPB’s belief-based constructs (i.e., behavioral, normative, and control beliefs). Specifically, I used the TPB belief-based constructs to construct interview items to elicit salient beliefs that shaped participants’ perceptions of implementing TIC methods into practice. In addition, I utilized Gadamer’s (1960/2013) hermeneutic circle to interpret themes that I developed from the participants’ perceptions of their shared lived experience of implementing TIC into practice. Thus, the elicitation, identification, assessment, and interpretation of nurses’ antecedent salient beliefs allowed me to achieve a deeper understanding of the nurse participants’ perspectives of implementing TIC into practice to respond to the research problem and answer the research questions.

Study Topic Motivation

The current study’s problem statement was influenced by my initial interest in issues that affected the nursing care and health outcomes of female adolescent patients with teen and preteen pregnancies. In this regard, the chosen topic of this study was TIC. Specifically, I chose to focus this study on the phenomenon of “implementing TIC into

nursing practice” due to unsettling incidents that I experienced early in my nursing career when I worked as a pediatric RN at a large urban metropolitan hospital. During the 4 years that I worked as an RN on the pediatric unit at the metropolitan hospital, I noticed an increased incidence of intentional pregnancies occurring among adolescent female patients, as young as 12 years old, who were receiving inpatient and outpatient medical care. Through my nursing role, I learned that a substantial number of the adolescent female patients had histories of childhood trauma, alcohol and drug abuse disorders, multiple sexual partners, recurrent sexually transmitted diseases, previous pregnancies, criminal convictions, and impoverished living conditions, among others. Moreover, I noted a high prevalence of comorbid mental health issues in this population, such as depression and anxiety, and cooccurring health problems, such as obesity and asthma. Also, I observed that teen-aged female patients who presented with pregnancies and secondary maladaptive behaviors were often mistreated with stigmatizing attitudes by the nursing staff, which readily provoked a hostile and defiant response from these patients and led to barriers in care. This experience was troublesome for me, and I began to investigate the phenomenon of early adolescent pregnancy and the impact of nurses’ stigmatizing response on the health outcomes of this population. Through a review of the literature, I discovered Felitti et al.’s (1998) ACE study, which revealed a link between ACEs and the development of poor health outcomes in adulthood. Moreover, I found earlier studies that described how nurses’ lack of an effective therapeutic response and stigmatizing attitudes toward patients with maladaptive behaviors potentially compounded trauma’s negative affect on health outcomes (de Jacq et al., 2016;

Marcellus, 2014; Marsac, et al., 2016; van Boekel et al., 2015; Worley & Delaney, 2017). After I learned about the findings of the ACE study and the potential negative impact of stigmatization on the health of patients with ACEs/TEs, I searched for research that described ways to ameliorate patient retraumatization and to improve nurses' care of patients with maladaptive behaviors. In this regard, I discovered the model of TIC and past research that described the models' approach as a potential nurse-practice method to mitigate patient retraumatization. As such, I decided to develop this study to investigate the phenomenon of the implementation of TIC into nursing practice to potentially mitigate the type of inadvertent patient retraumatization I witnessed as a young nurse.

Delimitations

Delimitations are study design elements chosen by the researcher that define the boundaries of the study and limits its scope (Bloomberg & Volpe, 2016). The exclusionary and inclusionary decisions made for this study are provided in this section to assist the reader to understand the study criteria and enhance transferability of its findings to other settings (see Bloomberg & Volpe, 2016). First, this study was delimited to one skilled-nursing facility, in a midsized city in the state of Michigan. The expansion of the study to other facilities would have required added time and expense that was not necessary to obtain the data that I sought. In addition, the study was delimited to RNs and licensed practical nurses (LPNs) who worked at the partner facility that had implemented TIC methods prior to the commencement of the study. This restriction was necessary to focus only on licensed professional nurses. Moreover, nurses who did not receive prior training in TIC were intentionally excluded from taking part in the study. This exclusion

was done to focus on nurses who had knowledge about TIC methods and were able to supply more in-depth answers to the interview questions than those who did not receive training on TIC. Also, only nurses who were able to read, write, and speak English were eligible to take part in the study. This delimitation was necessary because I was the sole researcher, and I am only fluent in English, so the interviews and correspondence had to be conducted in English. Additionally, only nurses with at least 1 year of experience were invited to take part in the study. This delimitation was based on past studies that showed that although novice nurses recognized the value of research-based practices (i.e., TIC), they felt overwhelmed and lacked confidence in their clinical ability to engage in these types of models of care (see Hosking et al., 2016). Additionally, only participants who had ready access to the internet and self-reported competence with the use of email and basic computer skills were able to take part in the study. These delimitations were necessary to complete member checking and for any unforeseen communication needs.

There were no exclusions based on race, ethnicity, or age of participants. The study site was in a culturally diverse county, and the inclusion of participants from various ethnic backgrounds and ages increased the opportunity for a more representative sample. Furthermore, no exclusions were made about the gender of the participants. However, during the data collection phase, only female nurses were employed at the partner site; hence, the study sample did not include male participants. Lastly, no delimitations were made to prevent nurses from participating in the study if they had an encumbered nursing license. This was due to the sensitive nature of personnel disciplinary actions, and access to this information would not have been made available

to me. Moreover, this study was delimited to nurses' perceptions about implementing of TIC into nursing practice in the care of patients with physical disabilities, with known or unknown histories of ACEs/TEs, and secondary maladaptive coping behaviors at a skilled-nursing facility in a midsized city in the state of Michigan. However, because the focus of the study was on nurses' perceptions, it was not necessary to determine whether the patients being cared for at the partner facility met the DSM-5 diagnostic criteria for psychological trauma exposure or PTSD (see APA, 2013). Instead, during the interview process, I asked the participants to focus on their lived experience of implementing TIC into practice and their a priori salient beliefs (e.g., behavioral, normative beliefs, and control beliefs) related to the implementation of TIC in nursing practice with patients who had disabilities and maladaptive behaviors.

Social Cognitive Theory

This study was delimited to the theoretical lens of the TPB. Preliminarily, I considered social cognitive theory (SCT) as a potential theoretical framework for this study; however, it was not chosen due to several factors. The SCT framework purports that individuals self-regulate their behavior via the structures of perceived self-efficacy expectations, outcome expectations, and personal goal setting (Bandura, 1986). Although the structures of the SCT were relevant to the current study's overall aim, I had to decide if the phenomenon of the study would be better studied from a sociocognitive or a psychological point of view. Bandura (1997) described that "Social Cognitive Theory rejects a dualistic view of the relationship between self and society, and between social structure and personal agency" (p. viii). In other words, according to Bandura, social

structure is independent of personal agency. As a psychologist, Bandura emphasized an individual's power of personal agency, or a sense of control occurs without the direct influence of society. In this regard, the SCT depicts passive observational learning as a mechanism by which people adapt their behaviors by observing what occurs in their environment not necessarily because they are coached to do so by others in their social setting (Bandura, 1997).

In contrast, the sociocognitive view of Ajzen's TPB (1991) approaches human behavior more from a social position and incorporates the construct of subjective norm or perception of social pressure to change behaviors. In nursing practice, there is a social dimension present when nurses collaborate and integrate into multidisciplinary teams to provide patient care (McInnes et al., 2015). In this respect, research has shown that the TPB can explain health care professionals' behaviors related to social influences (Glisson & Williams, 2015). Therefore, I chose the TPB for this study because it had the advantage of including a social construct over the SCT.

Transferability

Transferability denotes the ability of a study's findings to be applied to other situations or settings (Anney, 2014; Berger, 2015; Bloomberg & Volpe, 2016). Specifically, Bloomberg and Volpe (2016) illustrated that studies that include the rationale for research decisions that formed the design and conduct of the study helps the reader to better understand the study's process and improves potential transferability of its findings. In this regard, the study is presented herein with multiple descriptive approaches to enhance the potential transferability of its results, including thick rich descriptions about

the rationale for executed research decisions; highly detailed accounts about the research environment, methods of sampling and participant selection criteria, data collection and analysis techniques, and results; and dense background information about how the data were coded, themed, and interpreted (see Anney, 2014; Creswell & Poth, 2018).

Moreover, I maintained a historical record of the research decisions that were executed during all phases of data collection and data analysis via an electronic audit trail tool that I updated frequently (see Anney, 2014; Bloomberg & Volpe, 2016; Whitehead, 2004).

Thereby, when requested, I will provide the electronic audit trail database to others who wish to determine if the findings of the study are relevant and appropriate to transfer to another context (see Lincoln & Guba, 1985).

Limitations

In this section, I present a description about factors that may affect the inferences that can be drawn from this study (see Creswell & Creswell, 2017). Bloomberg and Volpe (2016) described how limitations are uncontrollable external elements that can restrict the study's scope and may affect research outcomes. The first potential limitation of this study was related to nurse participants' perceived knowledge about TIC. An individual's self-reported perceived knowledge about a topic is not always equivalent to tested factual knowledge (Ladwig et al., 2012; Su et al., 2014). As such, it was beyond the scope of this study to quantitatively test participants' knowledge of TIC; therefore, only participants with prior documented training in TIC were able to take part in the study.

Second, as with all qualitative hermeneutical research, the study's findings may be interpreted differently by other researchers because each is influenced by their preconceptions when interpreting data (see Koch, 2006; Lub, 2015). Consequently, the reader may not agree with the interpretations of the data, potentially limiting transferability if they determine that the results cannot be transferred. To assist with the transfer the study's findings to different settings, I have provided thick rich descriptions about the context and methods of the study (see Anney, 2014; Bloomberg & Volpe, 2016; Creswell & Poth, 2018). Other limitations to the study included time constraints, labor intensity of the data analysis, and decreased access to the study site, participants, and partner-facility documents due to the COVID-19 pandemic that ensued during data collection, which I describe in-depth in Chapter 4 (see Anney, 2014; Bloomberg & Volpe, 2016; Creswell & Poth, 2018).

Bias Mitigation

This section describes the measures that I employed to mitigate various forms of bias including researcher bias, confirmation bias, selection bias, self-reporting bias, and social desirability bias.

Researcher Bias

Some positivist researchers have claimed that it is not possible to be neutral when the researcher is acting as the instrument (Rudestam & Newton, 2015). Moreover, the researcher's presence in phenomenological qualitative research and data analysis has been challenged by researchers due to the potential for researcher bias (Merriam & Tisdell, 2016; Rudestam & Newton, 2015). Bloomberg and Volpe (2016) described that

researcher bias occurs when the inquirer seeks only information that supports their own opinions. Hence, a possible limiting factor of the study was the subjective nature of the collected qualitative data that were obtained via the phenomenological approach. As such, I used reflexivity to identify and mitigate researcher bias via reflexive journaling and peer debriefing sessions with professional colleagues. In this regard, I achieved reflexivity with engagement in the hermeneutic circle during all phases of data collection and data analysis in which I gathered an understanding of the data as a whole by studying the individual parts of the textual data and contemplating my understanding of each distinct piece in reference back to the whole. Engagement in the phenomenological reflexivity processes provided an opportunity for me to examine my preunderstandings about the research phenomenon and its potential influence on the interpretation of the data (see Fleming et al., 2003; Gadamer, 1960/2013; Lincoln & Guba, 1985).

Specifically, I used reflexive journaling and peer debriefing sessions to explore how my historical nursing experiences may have influenced my impression of the data, and I reflected on how my preunderstandings of the study's topic might have shaped the research inquiry (see Fleming et al., 2003; Gadamer, 1960/2013; Lincoln & Guba, 1985). Thus, I adapted a Gadamerian stance and became aware of my preunderstandings, which allowed "the text [transcribed interviews] to present itself in all its otherness and thus assert its own truth against one's own fore meanings" (Gadamer, 1960/2013, p. 282).

Similarly, Gadamer (1960/2013) referred to the researcher contemplation of influence as prejudice, which he described as the researcher's preunderstandings being brought into the data analysis process. Hence, the hermeneutic phenomenology approach

is not a value-free method, and the researcher's prejudice is not seen as a limitation per se; rather, Gadamer saw it as a helpful influence in the search for meaning. Therefore, to avoid researcher bias and analyze all data sets equally, I used a comprehensive reflexive approach within the hermeneutic circle to bring forth and examine my personal presuppositions about the study phenomenon. Details about the use of the hermeneutic circle and how my preunderstandings were used to interpret the data is further discussed in Chapter 4.

Confirmation Bias

Likewise, Malone et al. (2014) described that confirmation bias occurs when participant responses (i.e., data points) are selectively chosen by the researcher to confirm the premise of the study while dismissing alternative data. Confirmation bias was mitigated through an extensive examination of the data from different angles to find and interpret emerging themes in the coded texts by performing a cross comparison analysis of the data from the study's four data collection tools (i.e., data triangulation), including the interview guide, demographic screening survey, field notebook, and digital reflexivity journal (see Anney, 2014; Bloomberg & Volpe, 2016; Cope, 2014; Guzys et al., 2015).

Selection Bias

Researchers have described that response bias can occur due to personality differences between individuals, which influences who is more likely to volunteer to take part in a study and those who do not (see Porta, 2014). In this regard, response bias can affect the balance of the participant pool if it is dominated by individuals with similar characteristics and temperaments. As such, the study results could be affected and

represent narrow findings due to only sampling volunteer participants with personality traits and worldviews similar to others who tend to be more amiable towards volunteering. Therefore, the transferability of this study's findings may be limited due to the purposeful sampling approach that was used to recruit and select volunteers who met the study's inclusion requirements. In this respect, I decided that although selection bias was a potential risk of purposeful sampling, this limitation was an acceptable study constraint to gain knowledge that can be applied to future research.

Self-Reporting Bias

Self-reporting bias was a potential inherent study limitation (see Althubaiti, 2016). Fadnes (2009) described that self-reporting bias is a result of distinct aspects of participant recall, such as memory lapses and misinterpretations. To minimize the risk of self-reporting bias, I designed and conducted the participant interviews with open-ended questions to avoid leading responses and to make room for clarification. Also, because a short recall period has been shown to decrease recall bias (Althubaiti, 2016), I devised the interview questions to ask the participants about their experiences with the phenomenon during the weeks prior to the interview.

Social Desirability Bias

Researchers describe social desirability bias as interview answers that are influenced by participants' desire to receive approval or to supply socially acceptable responses (see Althubaiti, 2016; Fisher, 1993). In this regard, social desirability bias was a potential factor due to the design of the study's purposeful sampling method that resulted in participants being selected from a single research site. As such, participants

may have felt the need to supply responses that positively reflected on the partner-site facility and may have been uncomfortable to supply less than favorable answers. Specifically, Dodou and de Winter (2014) described that “social desirability is inversely related to the degree of privacy and anonymity that a person experiences” (p. 488). Moreover, because I used a researcher-developed instrument to collect data (i.e., interview questionnaire), it had to be validated and pilot tested prior to the commencement of data collection. In so doing, the validation and pilot testing process also helped to mitigate the effects of social desirability bias. In this manner, I convened an expert panel to validate the interview questionnaire for relevance, clarity, and essentiality. Following the validation process, I pilot tested the interview questions with a set of nursing professionals to assess the questionnaire’s usability, feasibility, practicality as a data collection instrument, and its ability to elicit nurses’ views of implementing TIC in practice (see Doody & Doody, 2015). In so doing, I refined the interview questionnaire to ensure that the interview questions were phrased in such a way they were phrased indirectly. Asking the participants how a third party perceives a situation allows the participants to project their perceptions onto others without risking their anonymity (see Fisher, 1993). Also, as described in Chapter 4, I used various methods to create rapport with the participants during the recruiting and interview process, which helped the participants to express their views in a more open manner (see Kornbluh, 2015).

Significance

In this study, I examined nurses’ perceptions about implementing TIC into practice to care for patients with physical disabilities who had known or unknown

histories of ACEs/TEs and secondary maladaptive coping behaviors. The study was partially inspired by Kelly et al.'s (2014) research article that described how a lack of trauma-informed practices can lead to barriers to care and the retraumatization of patients with histories of ACEs/TEs. In this respect, the results of the current study revealed that nurses' perceptions about implementing TIC into practice were influenced by a set of modal beliefs, which I discuss in-depth in Chapter 5. In this regard, the revealed set of modal beliefs could be targeted in future quantitative studies to develop and validate TIC training programs and implementation strategies to improve the use of trauma-informed nursing methods, which could lead to better care for survivors of ACEs/TEs and decrease patient retraumatization. Furthermore, the findings of this study may be used by policy makers to improve government regulatory policies that require the use TIC methods in long-term care facilities. Additionally, the results of this study could function as a positive catalyst for social change by using the findings to improve the health outcomes for patients with physical disabilities who have known or unknown histories of ACEs/TEs and secondary maladaptive behaviors.

Summary

In this chapter, I presented an overview of the foundations of the study, including the historical roots of psychological trauma, impact of ACEs/TEs on the development of poor health outcomes, neurobiology of trauma, evolution of the TIC paradigm, TIC in nursing practice, and the study's response to gaps in the literature. Moreover, the study's problem statement, purpose, and RQs were described, followed by a discussion about why I chose the TPB belief-based framework as the theoretical model for the study. In

addition, elements of the study's qualitative hermeneutic design and its use of the Gadamerian phenomenological approach to interpret the data were illustrated. Furthermore, the scope, delimitations, and limitations of the study were detailed, and the methods that I used to address study limitations were discussed. Lastly, the significance of the study was presented, which described potential ways the study's findings could be used in future research.

The following chapters offer a detailed description of the elements of the study:

(a) Chapter 2 presents the literature review of key elements of the study, in-depth details about the study's theoretical approach, and nature, scope, and limitations of the study; (b) Chapter 3 describes the study's research methods and design; (c) Chapter 4 presents the results of the study's data collection and analysis; lastly, (d) Chapter 5 offers a discussion about the study's findings and recommendations for future research.

Chapter 2: Literature Review

Introduction

Past research results revealed that nurses in the United States were not responding adequately to the psychosocial needs of patients with histories of ACEs/TEs due to nursing practices that were potentially stigmatizing, stereotyping, providing inappropriate care, retraumatizing, and creating barriers to care (Alexander et al., 2016; Bradbury-Jones et al., 2014; Choi, 2016; De Crespigny et al., 2015; Kassam-Adams et al., 2015; Muskett, 2014; Reeves, 2015; Reeves & Humphreys, 2018). As such, trauma researchers developed TIC to prevent or reduce patient retraumatization, which required that nurses be aware of the effects of psychological trauma and how patients with histories of ACEs/TEs can be negatively affected in the healthcare system (Isobel & Edwards, 2017; Reeves & Humphreys, 2018). Specifically, trauma researchers described that the purpose of implementing of TIC into nursing practice is to mitigate retraumatization, decrease patient aggressive and violent behavior, decrease patient self-harm, decrease the use of restraints, improve patient access and participation in care, and increase patients' self-regulation, self-esteem, self-mastery, and self-control (Alvarez et al., 2017; Choi, 2016; Horowitz et al., 2015). However, despite the growing body of research on the use of TIC in healthcare settings, there existed a gap in the literature about nurses' perceptions of using TIC in nursing practice to care for patients with disabilities, histories of ACEs/TEs, and secondary maladaptive behaviors (Baker et al., 2016; Choi, 2016; Raja et al., 2015; Reeves, 2015; Stokes et al., 2017; Williamson & Kautz, 2018). Thus, I developed the current study to examine nurses' lived experience of implementing TIC into nursing

practice for the care of patients with physical disabilities, known or unknown histories ACEs/TEs, and secondary maladaptive coping behaviors at a skilled-nursing facility. As such, I identified the study's key research concepts as nurse's implementation of TIC, patients with cooccurring physical disability and history of ACEs/TEs, maladaptive behavioral responses to trauma, and skilled-nursing facilities. Furthermore, I selected the study's key research concepts for examination due to their affiliation with public health outcomes and the dearth of literature on the topic of nurses use of TIC to care for patients with disabilities in the skilled-nursing setting.

I begin this chapter with a description of the literature search strategy that I employed to find relevant literature related to the study's research problem, purpose statement, and key research elements. Next, an in-depth discussion is provided about the theoretical approach of the study—the TPB— along with its major theoretical propositions and constructs and how they were used in the study's design. Additionally, a thorough review of the literature is presented that illustrates what is currently known about the study's key concepts and phenomena, theoretical foundation, and gaps in the literature.

Literature Search Strategy

I conducted an exhaustive review of the literature via Internet Explorer and Google Chrome search engines to identify various electronic sources of relevant information written in English. Moreover, I used the online Walden library and Google Scholar research databases extensively to find peer-reviewed, full-text articles published between the years 2016 and 2021 and earlier published historically relevant articles. The

searched databases included EBSCO Open Access Journals, Health and Medical Collection, Ovid Nursing Journals, ProQuest, ProQuest Digital Dissertations, PsycARTICLES, PsycINFO, PubMed Central Open Access, Science Direct, and Taylor & Francis. In addition to peer-reviewed journal articles, I explored electronic books, video recorded presentations, published and unpublished dissertations, and government websites such as U.S. Department of Labor, CDC, SAMHSA, and U.S. Department of Veterans Affairs.

Moreover, I used various keywords and combinations of terms to locate relevant materials including but not limited to *adverse childhood experiences, coping, conversion disorder, disability related to psychological trauma, dissociation, maladaptive coping, nursing stigmatization, neurobiological effects of trauma, nursing stigmatization, public health trauma-informed care, post-acute rehabilitation, posttraumatic stress disorder, psychological trauma, rehabilitation, subacute rehabilitation, skilled-nursing rehabilitation, theory of planned behavior, theory of reasoned action, trauma, traumatic events, trauma-informed care, and trauma-informed nursing*. In addition, I combined key words via Boolean operators *AND, OR, and NOT* with other key words to expand the search with combinations such as *trauma and disability, trauma-informed care and nursing and rehabilitation, psychological trauma not physical trauma, neurobiology or neuroendocrinology and psychological trauma, trauma-informed health care workers or nurses and rehabilitation, and trauma-informed healthcare and subacute rehabilitation or skilled-nursing rehabilitation*. Furthermore, I reviewed the reference list of retrieved journal articles and books to find additional relevant literature. During the literature

review process, I used an electronic Excel literature citation matrix spreadsheet to organize and document pertinent information about each article (e.g., date published, complete citation, key topics, methods, subtopics, and abstract).

I evaluated the reviewed literature for inclusion in the study based on the reliability of the source and appropriateness of the information. In this regard, I used the following literature inclusion criteria: peer-reviewed or evidence-based studies conducted by qualified authors, U.S. government data, studies that used established research objectivity and rigor, studies that used validated instruments of measurement, and studies published within the last 5 years or historically relevant. Moreover, I verified secondary citations in some research articles against their original cited source to ensure that the primary source's information had been correctly interpreted in the proper context in the secondary article. For example, many researchers discussed and cited the original ACE study; therefore, I verified the accuracy of these citations by referring back to Felitti et al.'s (1998) seminal article. In addition, relevant studies performed in and outside the United States that used various methods (e.g., qualitative, quantitative, mixed methods, meta-analysis, and evaluation studies) were included in the literature review. However, I excluded research that did not meet the literature inclusion criteria or lacked scholarship and credibility.

In the first search for key terms, I found 960 articles that met the study's inclusion criteria. Next, I narrowed the list of qualified articles to those that were specifically relevant to the following topics: public health, TIC, health care, nursing, disability, maladaptive behavior, and ACEs/TEs. The narrowed search decreased the number of

relevant articles to 724, which I examined for recurrent themes such as the current state of knowledge about TIC and nurses' experience of implementing TIC into practice (see Colorafi & Evans, 2016).

Theoretical Foundation

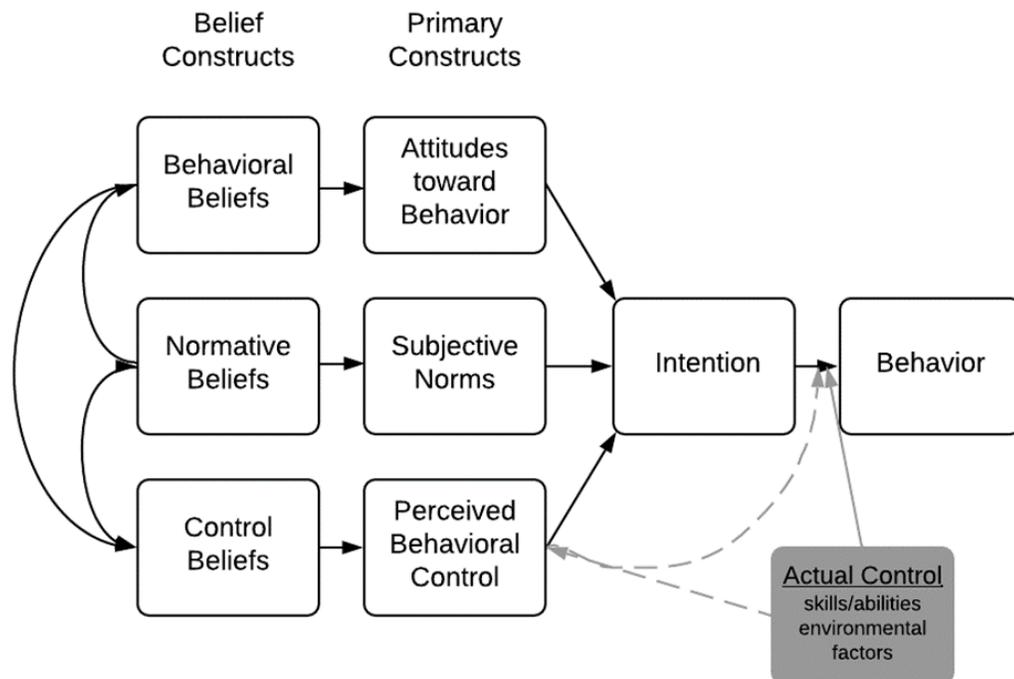
Merriam and Tisdell (2016) explained that a theoretical framework is used in qualitative research to frame the underlying structure of the study and to analyze and interpret the data to explain the phenomenon of the inquiry via the theory's concepts. In recent years, social psychology research and theories have focused on factors that have motivated and determined healthy behaviors via social cognition models, such as the TPB (see Hagger et al., 2016). In this manner, according to social cognition models, there are a limited number of proximal determinants of behavior, which include cognitive (beliefs) and affective (attitude) factors (Sutton et al., 2003). Moreover, social cognition models purport constructs such as beliefs and attitudes are strong predictors of various behaviors (Connor, 2015; Montaña & Kasprzyk, 2015). Furthermore, earlier researchers who investigated prevention and public health approaches to trauma reported that the efficacy of intervention programs can be improved via formative research to identify factors that motivate targeted behaviors and develop strategies that target the most influential proximal determinants of the target population's behavior (Endres et al., 2015; Magruder et al., 2016). Thus, in this study, I used a formative research design based on the social cognition model of the TPB.

TPB Belief-Based Framework

Because the current study was a qualitative formative investigation, it was necessary to choose a theoretical framework that would be useful to elicit participants' salient beliefs and conceptually analyze the data to develop themes related to nurses' perceptions of implementing TIC into practice to answer the research questions.

Therefore, I used the belief-based framework of the TPB to examine the underpinnings of nurses' lived experience of adapting the TIC model (see Figure 1). Specifically, Ajzen (1991) described that the TPB belief-based framework is based on the idea that an individual's intention to perform a behavior is preliminarily formed by a set of antecedent salient beliefs that respectively influence the theory's three primary constructs (i.e., attitudes toward the behavior, subjective norms, and perceived behavioral control). As shown in Figure 1, the salient belief constructs of the TPB belief-based framework include behavioral beliefs, normative beliefs, and control beliefs. Ajzen provided the following description of the TPB's belief constructs:

- Behavioral beliefs are salient beliefs about the potential pros and cons of performing a behavior, which form attitudes toward the behavior.
- Normative beliefs are salient beliefs about whether significant people (referents) approve of the behavior and themselves perform the behavior, which forms subjective norms.
- Control beliefs are salient beliefs about the ability to perform a behavior and perception of barriers and facilitators that may help or hinder performing the behavior, which forms perceived behavioral control.

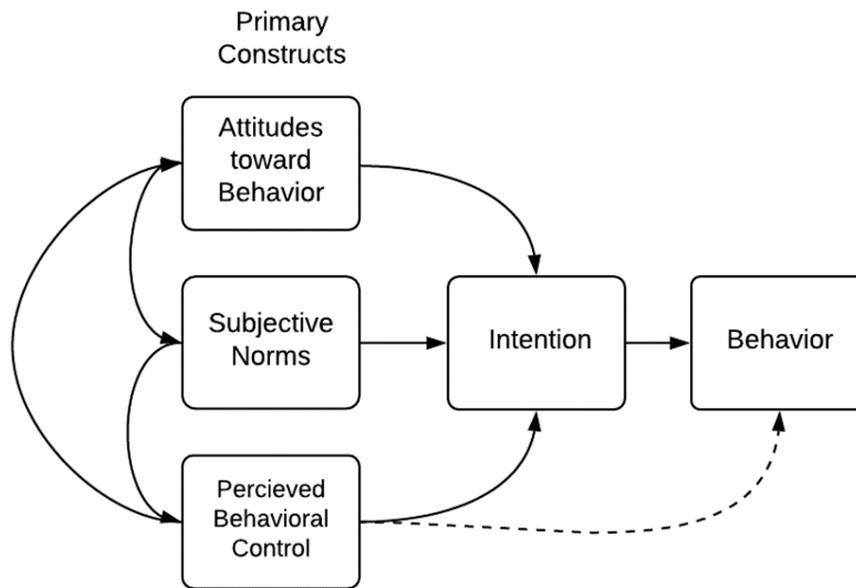
Figure 1*Theory of Planned Behavior Belief-Based Framework*

Note. This figure illustrates the structure of the TPB belief-based framework, which includes belief constructs → primary constructs → intention → behavior. The primary constructs of attitudes, subjective norms, and perceived behavioral control are influenced by the belief constructs of behavioral, normative, and control beliefs. Gray dotted lines indicate that perceived behavioral control and factors of actual behavioral control (shown in gray box) can affect the targeted behavior. From “Theory of Planned Behavior Diagram,” by I. Ajzen, 2019 (<http://people.umass.edu/ajzen/tpb.diag.html>). Copyright 2019 by Icek Ajzen. Reprinted by permission of author (see Appendix G).

The following section provides a historical overview of the development of Fishbein and Ajzen's current model of the TPB and the rationale for the theory's concepts.

Theory of Planned Behavior

The TPB was originally designed by Ajzen (1985) as a theoretical model to predict human behavior via three primary constructs that included (a) attitude toward the behavior, defined as an individual's positive or negative assessment of the targeted behavior; (b) subjective norm, defined as an individual's perception of social pressure to adapt or amend the targeted behavior; and (c) perceived behavioral control (i.e., self-efficacy), defined as an individual's belief in their ability to perform the targeted behavior correctly (see Figure 2). Specifically, the TPB purports that an individual's behavioral intention to perform a behavior is the immediate antecedent of behavior change (Ajzen, 2002a). In addition, Ajzen (1991) described that behavioral intention is determined by one or a combination of the theory's primary constructs, dependent upon the targeted behavior and situation. Moreover, Ajzen stated that "the stronger the intention to engage in a behavior, the more likely should be its performance" (p. 181). Furthermore, Ajzen theorized that behavior is determined by behavioral intention or perceived behavioral control (see Figure 2).

Figure 2*Theory of Planned Behavior*

Note. This figure illustrates the primary structure of the theory of planned behavior, which includes primary constructs → intention → behavior. The black dotted line demonstrates that behavior can also be directly determined by perceived behavioral control. Adapted from *Theory of Planned Behavior Diagram*, by I. Ajzen, 2019 (<http://people.umass.edu/ajzen/tpb.diag.html>). Copyright 2019 by Icek Ajzen. Reprinted by permission of author (see Appendix G).

Origin of the Theoretical Framework

The TPB's framework and its constructs were grounded in several earlier theories, such as learning theories, theories of attitude, consistency theories, and social cognitive models (Ajzen, 2012; Fishbein, 1967; Fishbein & Ajzen, 2010). Historically, social theorists assumed that the construct of attitude was unidimensional and solely comprised of an affect component (Ajzen & Fishbein, 1980; Allport, 1935; Rosenberg & Hovland, 1960; Smith, 1947). Later, an attitude was viewed as a complex multidimensional construct that included affective, cognitive, and conative aspects (Ajzen & Fishbein, 1980). Ajzen and Fishbein (2000) described how earlier theories viewed attitude as a function of the information an individual was given about the attitude object, such as Hovland et al.'s (1953) hypothesis that purported that attitude could be changed with persuasion techniques and added information. In contrast, Peak's (1955) model of attitude and motivation theorized that attitude "is related to the ends which it serves, that is, to its consequences" (p. 153). Specifically, Peak hypothesized that attitude was a function of the sum of an individual's perceptions that certain consequences would result from performing a given behavior multiplied by the respective appraisal of each perceived consequence. Similar to Peak's model of attitude and motivation, Fishbein (1963) proposed the concept that an individual's attitude toward an attitude object is the function of their beliefs about likely outcomes of performing the given behavior, which became known as the concept outcome expectancies (as cited in Fishbein & Ajzen, 1975). Likewise, Tolman's (1932) sign-Gestalt theory of learning purported that an individual learns to perform a behavior that they expect will lead to positive outcomes via

a learned conditioned response. In this regard, Tolman posited that an individual is conditioned to perform a given behavior via experience and training to follow signs (stimuli) to reach a goal that produces a favorable outcome. Moreover, Doob (1947) expounded upon Tolman's theory and hypothesized that attitudes are learned responses. Comparable to Tolman's theory and Doob's hypothesis, Fishbein (1967) developed a stimulus-response conditioning model, which he termed the multi-attribute model of attitudes (as cited in Fishbein & Ajzen, 1975). The multi-attribute model of attitudes posited that a person learns to have favorable attitudes toward objects that they believe to have positive attributes, and vice versa (Ajzen & Fishbein, 1980).

Later, Dulany (1968) applied concepts from Tolman's and Doob's earlier theories and developed the conceptual model of the theory of propositional *control* that consisted of two hypotheses. According to Dulany's first hypothesis, the distribution of reinforcement, individuals intentionally select behaviors in response to their subjected weighted value. Specifically, the hypothesis theorized that an individual is apt to perform a behavior in proportion to the strength of their belief that the behavior will have a valued outcome. In other words, according to Dulany's first hypothesis, if a person strongly believes that a behavior will have a positive outcome, they will be more inclined to perform the given behavior.

Attitude-Behavior Measurement Gap

Although past theories in attitude toward an object supplied insight into general attitudes and patterns of behavior, the theorists of the time were unable to define adequate methods to measure attitude and predict behavior (Ajzen & Fishbein, 2000). For

example, Thurstone's (1928) research hypothesized that attitude was based on a set of beliefs and unidimensional—with a single valence—in which, an individual decides whether an attitude object is favorable or unfavorable. Based on these assumptions, Thurstone developed a means scaling method to assess a population's attitude toward the attitude object. However, the means scaling method was found to be cumbersome and Likert (1932) proposed an alternative summation scaling method in which ratings of agreement—on a five-point scale from agree strongly, agree, undecided, disagree, to strongly agree—were summed to generate a composite score of attitude toward the attitude object (as cited in Ajzen & Fishbein, 1980). In addition to the means and summation scaling methods, Osgood et al., (1957) developed a semantic differential rating scale that measured the connotative or semantic meaning of adjectives that an individual used, which revealed their attitude towards an attitude object (as cited in Ajzen & Fishbein, 1980). While each scaling method demonstrated validity to determine a groups' attitude toward an attitude object, they were found to be poor predictors of behavior (as cited in Ajzen & Fishbein, 1980).

Fishbein's Seminal Theories

In response to the lack of predictive attitude-behavior measures in the field of social psychology at the time, Fishbein (1963) posited that the construct, *attitude*, was a function of the cognitive summation of all beliefs and individual held toward an attitude object (as cited in Anderson & Fishbein, 1965; Fishbein & Hunter, 1964). Specifically, Fishbein adapted tenants from the scaling methods proposed by Thurstone (1928), Likert (1932), and Osgood et al., (1957), and developed the summation theory of attitude.

Fishbein's summation theory of attitude posited how individuals hold many beliefs about the attributes of an attitude object and that each belief has a corresponding implicit favorable or unfavorable evaluative view (attitude) that could be summed. However, Fishbein was unable to consistently demonstrate empirical validation of the summation theory of attitude (Ajzen & Fishbein, 1980). To improve the validity of his theory, Fishbein (1967) developed the theory of attitude-behavior by modifying Dulany's (1968) distribution of reinforcement hypothesis, which purported that behavior is determined by its subjective weighted value. Similarly, Fishbein's theory of attitude-behavior proposed that a given behavior could be predicted by measuring an individual's attitude toward performing the behavior rather than assessing their attitude toward the attitude object of the behavior (Ajzen & Fishbein, 1977, 1980). Ajzen (2012) described that Fishbein's theory of attitude-behavior made a critical distinction between attitude toward an object and attitude toward performing a behavior related to that object. In other words, Fishbein's theory illustrated the predictive advantage of measuring attitude toward the performance of the given behavior (e.g., attitude toward implementing TIC into practice) over measuring attitude toward an attitude object that the behavior is being directed (e.g., the TIC model; Fishbein & Ajzen, 1975). To illustrate, per Fishbein's theory of attitude-behavior, a study to predict whether nurses will implement the TIC model into nursing practice would measure nurse's attitude toward implementing TIC into practice rather than assessing nurse's attitude about the TIC model itself.

Ajzen (2012) explained that up until Fishbein's theory of attitude-behavior, previous unidimensional measurements that focused solely on the affect component of

attitude had extremely poor correlations between attitude and behavior. For example, Wicker (1969) argued that the attempt to measure attitude toward the attitude object to predict human action was not efficacious and that research on the attitude construct to predict behavior should be abandoned. In this regard, Ajzen described that Fishbein's theory was a significant theoretical advancement in the study of behavior and that the theory of attitude-behavior demonstrated improved correlations over earlier models to predict behavior. In summary, Ajzen (1989) described that *attitude* is "an individual's disposition to respond favorably or unfavorably toward an object, person, institution, or event" (p. 241).

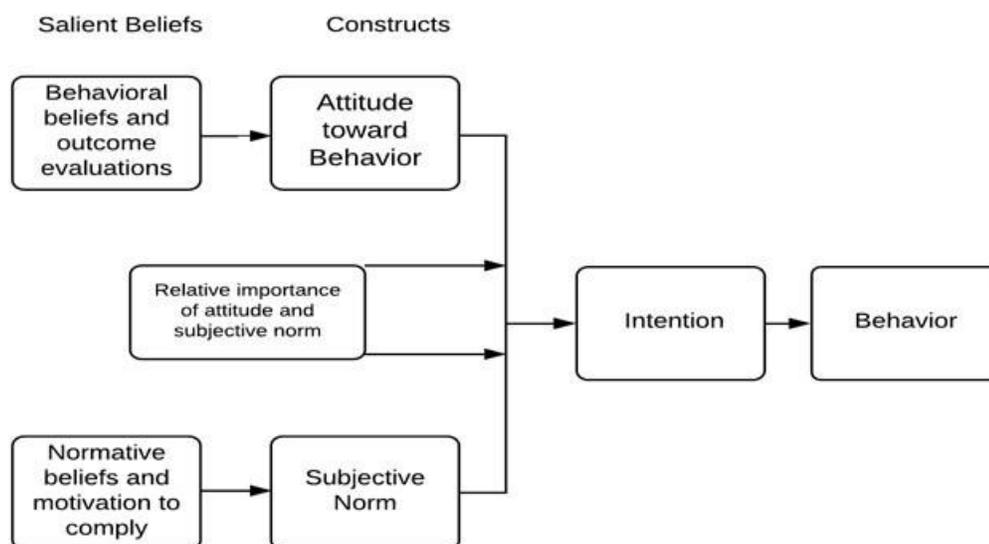
Expounded Theory of Reasoned Action

Fishbein and Ajzen (1975) and Ajzen and Fishbein (1980) expounded upon the tenants of Fishbein's theory of attitude-behavior and developed the theory of reasoned action (TRA). The TRA clarified Fishbein's earlier concepts and introduced the expectancy-value model of attitude, which purported that "each belief associates the object with a certain attribute, and a person's overall attitude toward an object is determined by the subjective values of the object's attributes in interaction with the strength of the associations" (Ajzen, 2001, p. 30). In other words, the TRA posited that an individual's overall attitude toward an attitude object is in direct proportion to the strength of the individual's perceived subjective probability that the object has a certain attributable outcome.

The TRA, and later the TPB, defined behavior as those behaviors that are within a person's volitional control; meaning a certain degree of control over the performance of a

given behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Moreover, the TPB assumes that prior to making a volitional decision to perform a behavior an individual rationally processes information that is presented to them (Ajzen, 1991). As such, Ajzen (2012a) stated that the TRA was developed as a “conceptual framework for predicting, explaining, and changing human social behavior” (p. 11). The aim of the TRA, and subsequently the TPB, was to predict and understand or explain the determinants of behavior and posited that behavioral intention is the best predictor of behavior (Ajzen, 1985, 1991, 2005; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Moreover, as shown in Figure 3, the TRA posited that salient or underlying beliefs are the determinants of the theory’s two constructs, attitude toward the given behavior and subjective norm, which influence behavioral intentions and subsequent behavior (Ajzen & Fishbein, 1980). The TRA’s concept of salient beliefs and the corresponding belief constructs—behavioral beliefs and normative beliefs—are discussed in its respective section.

Figure 1*Theory of Reasoned Action*

Note. In the TRA, behavior intention is a function of attitude toward behavior and subjective norm. Attitude is a function of behavioral beliefs and evaluation of behavioral outcomes. Subjective norm is a function of normative beliefs and motivation to comply. Intention is a relative weight of the importance of attitude and subjective norm leading to behavior. From “Relations among belief, attitude, subjective norm, intention, and behavior,” by I. Ajzen and M. Fishbein, 1980, *Understanding attitudes and predicting social behavior*, 1st, p. 100. Copyright 1980 by Prentice-Hall Inc. Reprinted with permission (see Appendix H).

Extended Theory of Planned Behavior

Ajzen (1985) proposed the TBP as an extension of the TRA. As such, the previously discussed tenants of the TRA and its historical theoretical building blocks (e.g., learning theories, theories of attitude, consistency theories, and social cognitive

models) are the same for the TBP. Also, similar to the TRA, the TPB was designed as a theoretical model to understand and predict human behavior (Ajzen, 1991; Ajzen & Fishbein, 1980). In comparison with the TRA's two primary constructs, the TPB consists of three primary constructs that include attitude toward the behavior, subjective norm, and perceived behavioral control (i.e., self-efficacy) (Ajzen, 1991; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010). Moreover, as shown in Figure 2, the TPB contains three salient belief constructs that include behavioral beliefs, normative beliefs, and control beliefs (Ajzen, 1991; Fishbein & Ajzen, 2010). As such, Ajzen (1991) purported that the salient belief constructs influence the primary constructs that are the determinants of an individual's intention to perform a behavior. Each of the TPB's primary constructs and salient belief constructs are described in more detail in later sections.

Salient Beliefs. In the TPB's belief-based framework, an individual's salient beliefs are purported to be the a priori determinants of the performance of a given behavior (Montaño & Kasprzyk, 2015). In this respect, Ajzen and Fishbein (1980) and Fishbein and Ajzen (1975) described that the belief-based framework of the TPB was influenced by the tenants of consistency theories that were presented in earlier studies in the determinants of attitude such as Festinger (1957), Fishbein (1963), and Peak (1955). Consistency theories argued that attitude change is a function of attitudes being cognitively balanced to be consistent with existing belief schemas. For example, Festinger's (1957) theory of cognitive dissonance purported that an individual forms an attitude toward an object to match an intrinsically held belief.

Moreover, the TPB assumes that an individual's behavior is formed by the beliefs they hold, and that behavior is planned reasonably, although the beliefs may not always be rational (Fishbein & Ajzen, 2010). In this regard, the TPB does not explain where salient beliefs cognitively originate; however, Fishbein and Ajzen (2010) acknowledged that background factors, such as "intelligence, personality traits, self-esteem, and global attitudes toward objects, issues, and events," (p. 389) may affect a person's beliefs about a given behavior. Ajzen (2012) clarified that per the theory's expectancy-value model, prevailing attitudes are determined by a limited number of salient beliefs that can be easily retrieved in memory (i.e., readily accessible beliefs). Specifically, Fishbein (1963) argued that only the first five to nine salient beliefs are assessable at a given time (Fishbein & Ajzen, 1975, 1980). The theory's purported number of readily assessable beliefs was based on findings from cognitive research conducted by Mandler (1967), Miller (1956), and Woodworth and Schlosberg (1954); which found that a person can address approximately five to nine cognitions at a time (Fishbein & Ajzen, 2010). In addition, Fishbein (1963) amended his theory of attitude-behavior and proposed that an individual's beliefs about the attitude object are in ranked order and only those beliefs at the top of the order are accessible at any given time. Fishbein's hypothesis was supported by other social theorists who described how salient beliefs represent an individual's most prominently held (i.e., strongest) beliefs about the behavior in question (Ajzen, 1991; Francis, et al., 2004).

Modal Beliefs. Fishbein and Ajzen (2010) described how beliefs can differ from respondent to respondent and vary between populations. Therefore, Fishbein and Ajzen

suggested that formative studies identify their target population's modal set of shared salient beliefs about performing the targeted behavior. Specifically, prior to the commencement of primary translational research or the development of behavioral intervention programs, Fishbein and Ajzen recommended that formative research be conducted with a representative sample of the target population to identify the most frequently shared salient beliefs about performing the targeted behavior. Moreover, Ajzen (2006) and Fishbein and Ajzen (2010) described that the results of the formative investigations may be used to design more effectual translational research and program interventions by targeting the modal salient beliefs that were found to be the most relevant and prevalent in the target population related to the targeted behavior (Ajzen, 2006; Fishbein & Ajzen, 1980, 2010). Moreover, Fishbein and Ajzen stated that translational research and intervention programs that are based on findings from formative research have been shown to have better outcomes.

TPB's Primary Constructs

As previously discussed, the elicitation and assessment of salient beliefs was determined to be an indirect measure of the TPB's primary constructs (i.e., attitude toward the behavior, subjective norms, and perceived behavioral control) (Ajzen, 1991; Francis, et al., 2004). In addition, per the TPB, salient beliefs can provide a detailed glimpse into the roots of behavioral intention to perform a given behavior (Fishbein & Ajzen, 2010). In this respect, Fishbein and Ajzen (1975, 1980, 2010) recommended that formative studies use of a free response interview design to provoke the spontaneous

elicitation of participant's salient beliefs. The following sections describe each of the TPB's constructs with their respective corresponding belief-based determinants.

Attitude Toward the Behavior. Fishbein and Ajzen (2010) and Sutton et al. (2003) described that the attitude construct is comprised of experiential (i.e., affective, feelings) and instrumental (i.e., knowledge, function) elements. Specifically, an individual's experiential attitude is their affective or emotional feeling toward the behavior (e.g., implementing TIC is satisfying). Whereas instrumental attitude denotes an individual's knowledge-based evaluation of the potential outcomes of the behavior (e.g., TIC is time consuming). According to Fishbein and Ajzen, an individual's attitude toward a behavior is strengthened when they have a strong subjective belief—positive or negative—about the potential outcome of performing a given behavior. Moreover, the TPB purports that an individual's attitude toward the behavior is directly proportionate to the perceived probability that performing the behavior will produce the expected outcome (Ajzen, 1985, 1991, 2005; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975; Fishbein & Ajzen, 2010). In this respect, Fishbein (1963) described that formed attitude is the “*belief* as the subjective probability that the object has a certain attribute” (Ajzen & Fishbein, 2000, p. 4).

According to the TPB, individuals are assumed to hold many salient behavioral beliefs toward a given behavior, and each behavioral belief is associated with a different outcome that is subjectively evaluated as favorable or unfavorable (Ajzen & Fishbein, 1980). As such, behavioral beliefs together with perceived positive or negative evaluations of potential outcomes form an individual's attitude toward the behavior

(Ajzen & Fishbein, 1980). Moreover, the TPB assumes that when new behavioral beliefs are formed, corresponding attitudes are automatically formed (Fishbein & Ajzen, 2010). Hence, behavioral beliefs are the primary determinants of attitude toward the behavior. Fishbein & Ajzen's formula to calculate an estimate of attitude toward the behavior is expressed as:

$$A \propto \sum b_i e_i$$

In this equation, A = attitude toward the behavior, b_i = the strength of each behavioral belief that the behavior has attribute i , and e_i = the subjective evaluation of the attribute i (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010). To calculate an estimate of attitude toward the behavior, each belief strength b_i is multiplied by each outcome evaluation e_i , and the total number of resulting products are summed (Fishbein & Ajzen, 2010). As such, "In this fashion, people come to hold favorable attitudes toward objects they associate with positively valued attributes and unfavorable attitudes toward objects they associate with negatively valued attributes" (Fishbein & Ajzen, 2010, p. 91). Hence, the weighted behavioral beliefs become the determinant of attitude toward the behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010).

Subjective Norms. The second hypothesis of Dulany's (1968) theory of propositional control was the significance of the reinforcer, which posited how individuals decide to behave in a manner that is expected of them to the extent that they are motivated to comply with important referent's expectation. Fishbein (1967) adapted Dulany's referent's expectation hypothesis and transformed it into the normative beliefs construct of his earlier theory of attitude-behavior, which later became the TRA. Fishbein

originally defined normative beliefs as a function of the strength of an individual's subjective probability that a specific referent expected them to perform a given behavior multiplied by the individual's motivation to comply with the referent's expectation (Fishbein, 1967). In this context, motivation to comply is determined by whether the person desires to do what the referent expects (Fishbein & Ajzen, 2010).

Ajzen and Fishbein (2014) described that the subjective norms construct was later expanded in an update to the original TPB to include two distinct normative sub-constructs, injunctive norms, and descriptive norms. In this regard, Ajzen and Fishbein explained that the expansion of the normative construct was based on the results of Deutsch and Gerard's (1955) experimental study in social influence, which revealed that individual judgement was influenced by distinctive normative and informational factors. In this respect, the TRA and the original TPB model only included injunctive norms in the subjective norms construct. Whereas the subjective norms construct within extended belief-based framework of the TPB includes the conceptual substrates of injunctive norms and descriptive norms. Specifically, in the extended TPB subjective norms construct, injunctive norms are described as socially motivating factors to perform a behavior based on the individual's normative belief that important an referent expects the behavior to be performed, is in a position to reward the performance of the behavior or punish refusal to perform the behavior, has the authority to request the behavior be performed, is viewed as an expert in the field, or because the individual seeks to be liked by the referent (Ajzen & Fishbein, 2014). In addition, descriptive norms are described as socially motivating factors that influence an individual's intention to perform a behavior

based on their normative belief that an important referent is performing or not performing the behavior (Fishbein & Ajzen, 2010). Moreover, the TPB assumes that individuals can hold normative beliefs about more than one referent (Fishbein, 1967). Fishbein & Ajzen's (2010) formula to calculate an estimate of subjective norms (injunctive and descriptive) is expressed as:

$$SN \propto \sum n_i m_i$$

In this equation, SN = subjective norms, n_i = the strength of each of the normative beliefs about referent i , and m_i = the motivation to comply with each referent i (Ajzen, 1991; Fishbein, 1967). To calculate an estimate of subjective norms, each normative belief n_i is multiplied by each motivation to comply m_i , and the total number of resulting products for all referents are summed (Fishbein & Ajzen, 2010). Depending on the strength of individual's normative beliefs and subjective motivation to comply with a referent's expectation to perform a behavior, the individual will either comply or resist performing the behavior (Fishbein & Ajzen, 2010). Thus, the combination of weighted injunctive norms and weighted descriptive norms determine form an individual's subjective norms. In this regard, weighted normative beliefs become the determinant of subjective norms (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010).

Perceived Behavioral Control. Ajzen and Fishbein (1980) described that the TRA was designed to focus on behaviors that were under an individual's volitional control. However, the TRA's narrowed sole focus on volitional behaviors was found to be a limitation of the theory since there are many behaviors over which individuals may not have complete volitional control (Ajzen, 1985). In response to this limitation, Ajzen

(1985, 1991, 2005) extended the TRA and developed the TPB to include the primary construct perceived behavioral control (PBC) and the belief construct control beliefs.

Origin of PBC Construct. Ajzen (2012) credited Bandura's (1986) social cognitive theory with supplying the concept for the TPB's perceived behavioral control construct. Moreover, Ajzen (2012) compared Bandura's (1977, 1986, 1997) SCT construct of self-efficacy to the TPB's construct of PBC. Specifically, Ajzen described that the TPB's construct of perceived behavioral control was influenced by Bandura's (2001) theoretical concept of personal agency in which Bandura purported that behavior is influenced by an individual's belief in their personal agency or ability to exert control over their "own functioning and environmental events" (p. 165). In this regard, Ajzen (1991) described that measuring an individual's perceived behavioral control to perform a given behavior can predict behavior more accurately than measuring an individual's general belief about the behavior itself. Moreover, the likelihood that an individual will perform the given behavior is dependent on their belief that they have the necessary resources and ability to perform the behavior successfully (Ajzen, 1991). For instance, Yzer (2012) described that there are multiple factors that influence an individual's actual ability to perform a behavior such as available resources, opportunities, and other control factors. As such, per the TPB, regardless of behavioral intention, an individual's actual control to perform a given behavior is dependent upon their access to necessary resources (e.g., skills, support from colleagues, essential tools, etc.) (Ajzen, 1985). In this regard, Fishbein & Ajzen (2010) explained that "intention is the best single predictor of

behavior; however, it is also important to take skills and abilities as well as environmental factors (i.e., actual control) into account” (p. 17).

TPB Reasoned Action Approach

A later extension of the TPB, the reasoned action approach, adopted two conceptual elements of Bandura’s (2006) personal agency concept that included self-efficacy (or perceived capacity), and perceived control (or perceived autonomy; Fishbein & Ajzen, 2010; Montaña & Kasprzyk, 2015; Yzer, 2012). Specifically, Bandura (1977, 1986, 1997) described that self-efficacy refers to an individual's belief in their intrinsic ability to carry out a task or successfully perform a behavior regardless of obstacles or difficulties. Likewise, Yzer (2012) stated that “Perceived capacity is the degree to which one believes that one is able to perform a behavior” (p. 102). Whereas Ajzen (2002a) illustrated that perceived autonomy is an individual’s perception of external and internal control factors that may affect their ability to perform a given behavior.

As such, Ajzen (1985, 1991, 2005) described that perceived behavioral control is determined by the strength of an individual’s control beliefs about personal capacity and perceived control (i.e., external and internal control factors that could enable or hinder the performance of a given behavior). Specifically, Fishbein and Ajzen (2010) illustrated the following formula to calculate an estimate of perceived behavioral as:

$$PBC \propto \sum c_i p_i$$

In this equation, PBC = perceived behavioral control, c_i = the strength of each control belief that factor i will be present, and p_i = the subjective perceived power of factor i to enable or hinder performance of the behavior (Ajzen, 1991; Fishbein, 1967).

To calculate an estimate of perceived behavioral control, each control belief c_i —beliefs about personal capacity and perceived control—is multiplied by each control factor p_i , and the total number of resulting products are summed (Fishbein & Ajzen, 2010). “The more of the required resources and opportunities individuals think they possess, and the fewer obstacles or impediments they anticipate, the greater should be their perceived control over their performance of the behavior” (Fishbein & Ajzen, 2010, p. 164). In this regard, weighted control beliefs become the determinant of perceived behavioral control (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010).

Major Theoretical Propositions and Assumptions

As previously discussed, one of the propositions of the TPB was derived from Fishbein’s theory of attitude-behavior, which proposed that behavior is best understood by measuring an individual’s attitude toward performing a given behavior rather than assessing attitude toward the object of the behavior itself (Ajzen & Fishbein, 1977, 1980). Ajzen and Fishbein’s (2010) theoretical distinction between measuring perceptions of performing a behavior rather than measuring perceptions of the object of the behavior was an important aspect of the current study’s design. During the pre-research phase of the study, I considered the possibility that although nurse participants may have positive attitudes toward the TIC model itself, they may not have positive perceptions about implementing TIC into practice, and vice versa. Since this was a formative study to investigate nurses’ perceptions of implementing TIC into nursing practice, if the data collection methods (i.e., interview items, reflexivity journal, etc.) focused on nurse participants’ general attitude about the TIC model itself, the results of the study would

not have provided the relevant data that was needed to answer the research questions (Ajzen & Fishbein, 2015). As such, this study was designed per the precepts of the belief-based framework of the TPB and Ajzen and Fishbein's (2010) proposition that formative studies develop interview items that are compatible with the study's research questions and elicit the target populations salient beliefs about the targeted behavior.

Behavioral Intention Proposition

In addition to the TPB theoretical propositions and assumptions described in earlier sections, the TPB posits that an individual's intention to perform a behavior is the primary determinant of behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010). Specifically, the following formula to calculate an estimate of behavioral intention may be expressed as:

$$B \sim BI \sim w_1AB + w_2SN + w_3PBC$$

In this equation, B = behavior, BI = behavioral intention, AB = attitude toward the behavior, SN = subjective norms, PBC = perceived behavioral control, w_1 = behavioral beliefs weighted by outcome evaluations, w_2 = normative beliefs weighted by motivation to comply, and w_3 = control beliefs weighted by the power of control factors (equation adapted from Ajzen, 1991; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010; Montaña & Kasprzyk, 2015). Specifically, as previously discussed, w_1AB = the product of the calculation to estimate attitude toward the behavior (i.e., $A \propto \sum b_i e_i$), w_2SN = the product of the calculation to estimate subjective norms (i.e., $SN \propto \sum n_i m_i$), w_3PBC = the product of the calculation to estimate perceived behavioral control (i.e., $PBC \propto \sum c_i p_i$) (adapted from Ajzen, 1991; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010; Montaña & Kasprzyk,

2015). Hence, to calculate an estimate of behavioral intention and subsequent behavior, the resulting overall product of each weighted construct is summed (Fishbein & Ajzen, 2010).

To illustrate, the TPB assumes that behavioral intention (BI) is the best predictor of behavior (B); which is determined by the attitude toward the behavior (AB), subjective norm (SN), and PBC (Montaño & Kasprzyk, 2015). As described in the previous Attitude Toward the Behavior section, the weights for the three constructs (i.e., w_1 , w_2 , and w_3) are quantified by the salient belief constructs of the expectancy-value model of the TPB's belief-based framework; also called the reasoned action framework (see Figure 4) (Ajzen, 2010; Fishbein & Ajzen, 2010; Montaño & Kasprzyk, 2015). In particular, according to Fishbein and Ajzen (2010), the theory's primary constructs (i.e., AB, SN, and PBC) are direct determinants of behavioral intention and behavior, and the relative weights of each primary construct are influenced by the salient belief constructs (i.e., behavioral beliefs, normative beliefs, and control beliefs), which makes the belief constructs indirect determinants behavioral intention and behavior. Hence, Fishbein and Ajzen (2010) described that the indirect approach of the theory's belief-based framework can be used in formative studies to identify antecedent factors that influence behavioral intentions by eliciting salient beliefs that impact the strength of each primary construct. Therefore, this study was designed to identify, analyze, and interpret nurses' salient beliefs via the TPB belief-based framework to understand how nurses' beliefs affected their perceptions about implementing TIC into nursing practice.

Principle of Compatibility

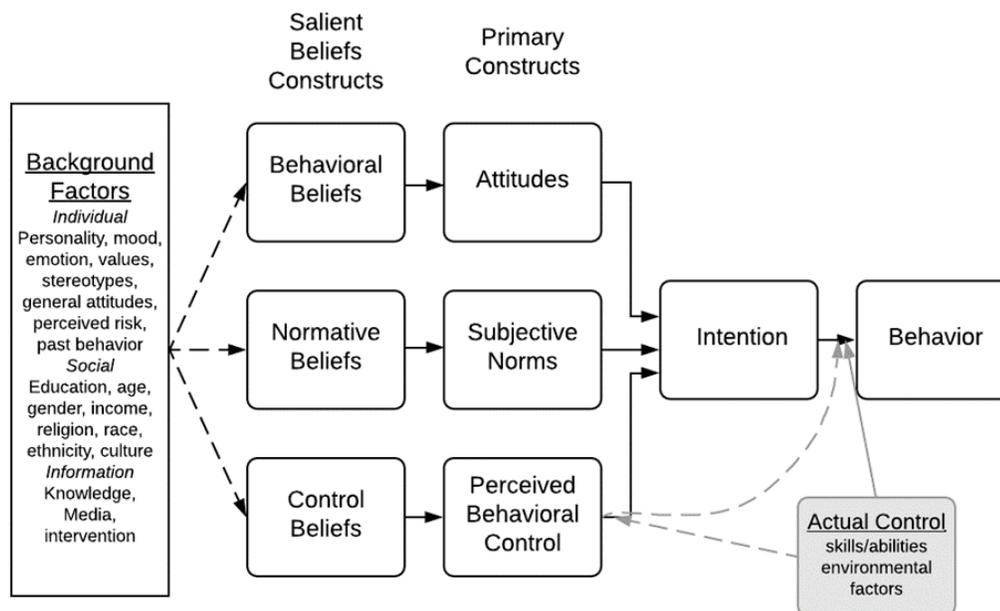
Moreover, a central proposition of the TPB is that one or more of the theory's primary constructs (i.e., AB, SN, and PBC) can be determinants of behavioral intention, depending on the targeted behavior and population (Fishbein & Ajzen, 2010). For example, findings from a study that used the TPB to predict leisure-time physical activity among individuals with a spinal cord injury found that a combination of the theory's primary constructs were equal predictors of behavioral intentions, which significantly predicted participant behavior (Latimer & Martin-Ginis, 2005). In contrast, the results of a study that used the TPB to predict cell phone usage for calling and texting while driving found that the attitude construct was the strongest predictor of behavioral intentions and the subjective norm and perceived behavioral control constructs had minimal correlations (Sullman et al., 2018). In this regard, according to the theory's precepts, behavioral intentions are influenced by the weighted strength of the primary constructs, and each weight depends on the relative importance of beliefs about the behavior to the individual (Fishbein & Ajzen, 2010). Moreover, the TRA and TPB assumes that the significance of each of the primary constructs on intention to perform a given behavior can vary by population and the behavior being studied (Ajzen & Fishbein, 2014; Fishbein & Ajzen, 2010). For example, one population may not perform a given behavior due to perceived control issues (i.e., PBC), while another population may refrain from the behavior due to perceived social pressure against the behavior (i.e., SN).

To overcome research findings that demonstrate differing weighted outcomes for each construct, the TPB proposed the principle of compatibility, which states that to

better understand and predict behavior the specificity of a measured attitude needs to match the specificity of the targeted behavior (Ajzen & Fishbein, 2014). As such, per the principle of compatibility, the concepts being studied need to be congruent in terms of action, target, context, and time; specifically, “an action directed at a target, performed in a given context, at a certain point in time” (Ajzen & Fishbein, 2014, p. 182). To aid researchers to construct compatible TPB measures, Ajzen (2012) created the acronym TACT, which stands for target, action, context, and time. To illustrate, the current study aimed to understand nurses’ perception of implementing (i.e., action) TIC (i.e., target) in a skilled nursing facility (i.e., context) in the next 12 months (i.e., time).

Sufficiency Assumption

Lastly, the TPB’s sufficiency assumption purports that the effect of all other background influences (e.g., organizational culture, intelligence, personality traits, self-esteem, and global attitudes toward objects, issues, and events) are mediated within the TPB’s constructs (Ajzen, 1985). Specifically, Ajzen stated that factors that are external to the TPB influence behavior only to the extent that they affect a person’s beliefs and respective constructs (see Figure 4).

Figure 2*Reasoned Action Framework*

Note. Diagram presentation of the TPB reasoned action model. “The [black] dotted arrows indicate that, although a given background factor may in fact influence behavioral, normative, or control beliefs, there is no necessary connection between background factors and beliefs” (p. 20). Gray dotted arrows show that PBC with or without factors of actual behavioral control (shown in gray box) may affect targeted behavior. From “Schematic presentation of the reasoned action model,” by M. Fishbein and I. Ajzen, 2010, *Predicting and changing behavior: The reasoned action approach, 1st*, p. 18. Copyright 2010 by Taylor and Francis Group, LLC. Reprinted with permission (see Appendix I).

Application of TPB in Earlier Research

The TPB was used in earlier studies to understand why and how individuals formed intentions to implement research-based practices (Gagnon et al., 2015; Liang et al., 2017; White et al., 2015). In addition, according to Ajzen (2011), the TPB has become “one of the most frequently cited and influential models for prediction of human social behavior” (p.1113). In this regard, several earlier studies have demonstrated that the TPB is a valid theoretical model for use in formative intervention research and intervention program development. For example, the results of a prior meta-analysis that examined studies that used the TPB to predict health-related behaviors showed that the TPB explained appreciable levels of variance in adult’s intentions toward dietary behaviors (49.6%), physical activity (43.7%) and student’s abstinence from smoking and binge drinking (43.6%) (McEachan et al., 2011). In addition, the meta-analysis revealed that the strongest predictor of behavioral intentions was the TPB’s attitude construct, and that the theory’s social norms construct was the best predictor of intentions to use safer sex methods (McEachan et al., 2011). Moreover, the TPB has been successfully used in many studies to predict behaviors and intentions such as, predicting patients’ substance abuse treatment completion (Zemore & Ajzen, 2014), predicting pharmacists’ intention to utilize prescription drug monitoring programs (Fleming, et al., 2014), predicting healthcare providers’ intention to measure blood pressure accurately (Nelson et al., 2014), and predicting nurses’ intention and behavior to utilize health literacy strategies in patient education (Sharifirad, et al., 2015),

Moreover, my decision to use the TPB belief-based framework to guide the current study was supported by the results of past studies that used the TPB to examine the behavior of healthcare professionals, which reported that the theory's constructs were strong predictors of behavior change (see Gagnon et al., 2015; Gavaza et al., 2014). For instance, an earlier study that investigated nurse's intentions and behaviors to implement patient safety measures found that the injunctive norms sub-construct (i.e., normative beliefs) was a strong predictor of nurses' intention to perform patient safety measures. Other research findings have supported the use of the TPB in intervention translational research but challenged the usefulness of the TPB to predict behavior. For example, a meta-analysis by Sutton (1998) demonstrated that the TPB had strong predictive validity related to behavior and intentions, however, Sutton suggested that the TPB model may be more valuable as a theory to explain behavior and develop proper interventions. Indeed, several studies have successfully used the TPB belief-based framework to understand and explain the determinants of behavioral intentions and behavior such as, explaining condom use behavior among men who have sex with men (Andrew, et al., 2016), explaining teachers' beliefs related to intentions to utilize digital literacy in their classrooms (Sadaf & Johnson, 2017), and explaining physicians' and nurses' psychological antecedents of intentions to use a surgical checklist (Mascherek et al., 2015). Furthermore, the TPB outlines research methods to predict and explain behavior, which begins with formative qualitative research to identify salient beliefs that contribute to determinants of behavior (Fishbein & Ajzen, 2010; Francis et al., 2004).

There is a lack of qualitative theoretically based formative research to explain the belief determinants of nurses' implementation of TIC in nursing practice (Hatcher et al., 2018; Wilson et al., 2017). Still, the TPB belief-based model was used in earlier formative studies to examine the belief determinants of various behaviors such as beliefs about mobilizing ventilated patients (Holdsworth, et al., 2015), culturally specific beliefs about the consumption of sugar-sweetened beverages (Zoellner et. al, 2012), beliefs that influence teenager's pro-environmental behavior (De Leeuw et al., 2015), and beliefs underlying pre-driver's intentions to take risks (Rowe et al., 2016). In this regard, the formative studies reported that open-ended questionnaires or interviews were used to elicit and assess participant's salient beliefs to determine the level of influence the salient beliefs had on the TPB primary constructs, behavior intention, and performance of the targeted behavior. In addition, the findings of the formative studies revealed the targeted behaviors most frequent belief determinants, which laid the groundwork for future implementation or additional intervention research.

Rationale for Using the TPB

The outcomes of public health interventions are dependent on an understanding of individuals' behaviors and the context in which they are derived (Davis et al., 2015; Endres et al., 2015; Magruder et al., 2016). Moreover, an intervention has an increased likelihood of being effective when there is a theoretical understanding of the given behavior and desired behavior change (Davis et al., 2015). As such, a theoretical model has two roles, it can help explain a given behavior and guide a study to identify determinants of a behavior via an explanatory theory; or suggest ways to influence and

change behavior as a guide to the development of interventions via a change theory (U.S. Department of Health and Human Services, 2005). The TPB is considered an explanatory theory in that it explains how underlying salient beliefs (i.e., behavioral beliefs, normative beliefs, and control beliefs) influence the cognitive and affective foundations of the theory's primary constructs including attitude toward behavior, subjective norm, and perceived behavioral control; which, in turn, influence behavioral intentions and subsequent behavior (Ajzen, 2002a; Montaña & Kasprzyk, 2015). For example, an individual's behavioral beliefs (e.g., beliefs about the likely consequences of performing the behavior) influences their attitude towards a behavior (de Leeuw et al., 2015). In this regard, de Leeuw et al. explained that when a person holds beliefs that positive outcomes will result due to performing a behavior, their attitude towards this behavior will be favorable. Moreover, beliefs are based on the information an individual has about a behavior; therefore, according to the TPB, targeted beliefs can be changed with added information via behavioral interventions (Fishbein & Ajzen, 2010). As such, Fishbein and Ajzen (2010) stated that beliefs are central to understanding and explaining a given behavior as illustrated in the following quote:

At this level we learn about the substantive considerations that guide people's decisions to perform or not to perform the behavior of interest. This level of analysis offers insight into the ways people think about the behavior: about its likely consequences, the demands placed on them by others, as well as the required resources, possible barriers, and other issues of control. (p. 18)

Specifically, Ajzen (2012) theorized that to produce successful behavioral interventions formative research is necessary to identify salient beliefs that influence a targeted behavior. In other words, the effectiveness of an intervention depends on preliminary rigorous formative research. Therefore, a future intervention strategy to implement TIC in nursing practice may be improved by targeting nurses' beliefs about the use of TIC in nursing practice (see Ajzen, 2012). However, as previously discussed, there is an absence of theoretically based formative studies to understand the determinants of nurses' use of TIC in nursing practice (Hatcher et al., 2018; Wilson et al., 2017). Therefore, in the current formative qualitative study I used the belief-based model of the TPB to elicit and describe nurses' salient beliefs about implementing TIC into practice. Furthermore, the results of the current study that explained nurse participants' perceptions about implementing TIC into practice may be used in later quantitative research to develop intervention programs that target the most frequent modal beliefs that were identified in this study.

Literature Review Related to Key Concepts

This section presents an in-depth discussion about the findings of an exhaustive review of the literature that I conducted to explore each of the current study's key concepts. Specifically, the literature review focused on the following key concepts that were determined to be relevant to the focus of the study and the research questions: psychological trauma, history of trauma, post-traumatic stress syndrome, ACEs effect on health outcomes, TEs effect on health outcomes, neurobiological stress response to trauma, maladaptive behavioral response to trauma, disability and trauma, resilience and

trauma, nursing response to trauma, skilled nursing, TIC, history of TIC, limitations of TIC, nursing perspectives of TIC, nurses' personal and vicarious trauma, and controversies of TIC. In this respect, the following sections—psychological trauma and nursing response to trauma—present a detailed description of the rationale for the selection of each of the study's key concepts, what is known about them, what is controversial, and what remains to be studied. Moreover, in the following sections, a review of relevant studies related to the key elements of the research questions—nurses' implementation of TIC into nursing practice; patients with disabilities and known or unknown histories of ACEs or TEs; and secondary maladaptive behaviors in the SNF setting—is presented, which describes why the research approach and focus of the current study is meaningful.

Psychological Trauma

Several studies and researchers have recognized psychological trauma, also called trauma, as a major public health challenge due to its downstream effects on physical and mental health outcomes (Endres et al., 2015; Hales et al., 2017; Handley et al., 2015; Lowe et al., 2015; Magruder et al., 2017; Van der Kolk, 2005). The term complex trauma has also been used to describe chronic and repeated TEs that can lead to pervasive disruptions in physical and psychological well-being and a depletion of internal and external resources to effectively cope with toxic stress (Choi, 2016; Cook et al., 2017; Spinazzola et al., 2017; Van der Kolk, 2017). For example, Miller and O'Callaghan (2002) described that, “of the 10 leading causes of death, [toxic] stress has been directly implicated in 4 (heart disease, stroke, musculoskeletal disorders or injuries, and

suicide/homicide) and indirectly in 3 (cancer, chronic liver disease, and lung disorders like chronic bronchitis and emphysema)” (p. 5). As previously discussed, the term trauma in the current study is used to refer to psychological trauma and the effects of trauma including complex trauma.

History of Trauma

Cannon (1916, 1932) was first to describe the acute stress response as a function of the sympathetic nervous system’s fight-or-flight physiological reaction to a perceived threat. Later, the acute stress response was described as a physiological response that prepares an individual to fight, flee, or freeze when a threat to survival is perceived (Modell et al., 2015; Van der Kolk, 2014; Wethington et al., 2015). Moreover, past toxic stress research was influenced by the tenants of Hans Selye’s (1936) general adaptation syndrome, which proposed that the body reacts to a perceived threat via a three phased stress response including alarm (i.e., fight-or-flight), resistance (i.e., adaptation), and exhaustion (i.e., failure to cope with stress). A great deal of what is known about psychological trauma resulted from decades of research that examined the emotional impact of combat experience on soldiers’ psyche (Herman, 2015). Earlier descriptions of military traumatic stress suggested that symptoms of PTSD (e.g., uncontrollable crying, inability to speak, and emotional numbing) were merely flaws in the affected soldier’s character and labeled these issues as soldier’s heart and shell shock (DiMauro et al., 2014; Fueshko, 2016). Soldiers who returned from war with unexplained psychological disorders were described as malingerers who had lost their nerve to fight (Fueshko, 2016). The mainstream medical establishment of the late 19th century dismissed the idea

that traumatic stress could be the cause of war veteran's psychological symptoms, however, in 1905 the Russian army was first to acknowledge that soldiers' emotional collapse was a direct result of the stress of war (Ficocelli & Mardon, 2013; Fueshko, 2016; Moss, 2014). In addition, in the 19th century, French physician Jean-Martin Charcot conducted one of the early civilian investigations into the realm of psychological trauma (Dmytriw, 2015; Herman, 2015; Koerber, 2018; North, 2015; Novais et al., 2015; Teive et al., 2014). In this regard, Charcot investigated the determinants of female hysteria that presented as psychosomatic symptoms in traumatized women who were admitted to the La Salpêtrière psychiatric institution in France (Dmytriw, 2015; Herman, 2015; Koerber, 2018; North, 2015; Novais et al., 2015; Teive et al., 2014). The symptoms of hysteria were described as sudden paralysis, amnesia, deafness, sensory loss, and epileptic-like seizures (North, 2015; Novais et al., 2015). At the time, female hysteria was viewed as a psychic malady that affected only women and was believed to originate from the uterus, due to the lack of conception (Dmytriw, 2015; Herman, 2015; Koerber, 2018; North, 2015; Novais et al., 2015; Teive et al., 2014). Of note, the ancient Greek physician, Hippocrates, was credited with introducing the term hysteria, which is the Greek translation of uterus, to describe a frustrated uterus that was believed to detach and wander throughout the body due to the lack of intercourse (Dmytriw, 2015; Herman, 2015; Koerber, 2018; North, 2015; Novais et al., 2015; Teive et al., 2014). Charcot argued that hysteria also affected men and, contrary to the wandering uterus theory, was due to an inherited neurological disorder that remained dormant until a hysterical attack was triggered (Broussolle et al., 2014; Ford & Gómez, 2015; Novais et al., 2015). Two of

Charcot's most notable students, Pierre Janet, and Sigmund Freud, pursued parallel, yet divergent, research into the origins of hysteria, which contributed to the advancement of the science psychological traumatology (Broussolle et al., 2014; Camargo et al., 2018; Ford & Gómez, 2015; Herman, 2015; Novais et al., 2015). Janet and Freud's findings were similar, and they agreed that unconscious dimensions of an individual's traumatic experience created an altered state of consciousness that influenced the development of somatic symptoms such as weakness and paralysis (Herbert, 2015; Nicholson et al., 2016; Novais et al., 2015). Like Charcot, Janet believed that hysteria was due to a neurodegenerative condition and theorized that dissociation (i.e., disconnection from consciousness) occurred in response to an overwhelming traumatic experience, which contributed to symptoms of memory lapses and loss of motor control (Broussolle et al., 2014; Ford & Gómez, 2015; Novais et al., 2015). In comparison, Freud opposed the prevailing theory of his time, which purported that failed conception caused hysteria, and developed the sexual unconscious theory of hysteria; which postulated that traumatic childhood sexual abuse was the impetus of hysteria (Broussolle et al., 2014; Ford & Gómez, 2015; Kanaan, 2016; Novais et al., 2015).

Specifically, Freud contended that patients who exhibited signs of hysteria had repressed painful and traumatic memories into their unconscious that manifested as outward physical symptoms of hysteria, which he termed hysterical conversion. (Nicholson et al., 2016; North, 2015). For a detailed history and description of the earlier diagnostic criteria of hysterical conversion disorder see Mace's (1992) article, *Hysterical Conversion: II: a Critique*. Similarly, Freud and Breuer (1895/2004) proposed that

suppressed unconscious traumatic memories manifested as physical symptoms such as paralysis (Blakemore et al., 2016). This phenomenon is now recognized in the field of psychiatry as a conversion disorder, which has been shown to stem from psychoneurobiological mechanisms that trigger non-organic physical symptoms (i.e. not due to a medical or physical disease) such as psychogenic forms of paralysis, loss of sensation, and blindness (Blakemore et al., 2016; Boudoukha, 2017; Boyd et al., 2018; Ford & Gómez, 2015; Kanaan et al., 2017; Nicholson et al., 2016; Bègue et al., 2018).

Posttraumatic Stress Syndrome

In the centuries following Charcot, Janet, and Freud's experiments at La Salpêtrière research into psychological trauma expanded (Abdallah et al., 2017). Most of the advancements in trauma research occurred after World War II when the field of psychiatry advanced its understanding of the association between exposure to trauma, psychological factors, and the manifestation of psychogenic physical illnesses (DiMauro et al., 2014). Later research that investigated the impact of trauma exposure discovered that trauma often resulted in psychological sequelae, such as intrusive thoughts, negative feelings, and reactive behavior (Boudoukha et al., 2017; Friedman, 2015; Horwitz, 2018). In 1980, the APA added PTSD to its third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.; *DSM-3*), which filled a critical gap in the psychiatric treatment of trauma-exposed individuals (Friedman, 2013; Friedman, 2015; Horwitz, 2018). The *DSM-3* was revised over the years to incorporate updates and changes to the diagnostic criteria for PTSD (Friedman, 2013; Friedman, 2015; Horwitz, 2018). For instance, the current *DSM-5* diagnostic criterion for PTSD includes at least

one exposure to death, threatened death, actual or threatened severe injury, or actual or threatened sexual violence (APA, 2013). In addition, the DSM-5 stipulates that for a diagnosis of PTSD trauma exposure must have occurred in at least one of the following ways: direct exposure to a traumatic event, indirect exposure to a traumatic event, direct vicarious exposure (e.g., directly learning that a traumatic event has happened to a relative and/or close friend), and indirect vicarious chronic exposure (e.g., first responders at a car accident; APA, 2013). Furthermore, the DSM-5 specifies that the individual's symptoms must have persisted for at least one month and include intrusive thoughts or memories (e.g., nightmares, flashbacks), avoidant symptoms (e.g., emotional numbing; avoiding situations, people, thoughts, or feelings), negative alterations in mood or cognitions (e.g., self-blame, fear, isolation, shame, sadness, anhedonia), and increased symptoms of arousal (e.g., difficulty concentrating, emotional lability, irritability, sleep difficulty, hypervigilance, or heightened startle reflex; APA, 2013).

In the past thirty years, a significant amount of trauma research has come from military studies that investigated the psychological effects and treatment of combat-related trauma (Armenta et al., 2018; Boyd et al., 2018; Xue et al., 2015). Indeed, the results of studies that examined factors related to persistent symptoms of PTSD among US military members and veterans, prompted the Department of Veteran's Affairs to recognize PTSD as one of the most disabling health conditions among U.S. veterans (Armenta et al., 2018; Waszak & Holmes, 2017). However, recent research acknowledged that despite advances in diagnosis and treatment many veterans continue to suffer from persistent PTSD and poor coping skills (Armenta et al., 2018; Boyd et al.,

2018; Oster et al., 2017). For example, findings from studies that examined the outcomes of veteran's PTSD found that 30% of older U.S. veterans had PTSD and the rate of suicides among soldiers in the U.S. Army increased to 24 suicides per 100,000 soldiers at the time of the research (Arneson et al., 2018; Hall et al., 2018).

While the current study did not specifically focus on nurses' use of TIC in the care of patients with a PTSD diagnosis, a review of the literature on PTSD was essential to understand the historical origins of the field of psychological trauma, which led to the recognition and understanding of PTSD. Moreover, several studies were identified in the literature review that revealed how exposure to trauma acts as a determinant of PTSD and can lead to pervasive physical, psychological, and neurobiological changes, which can impact an affected individual's physical and emotional well-being throughout their lifespan (Afari et al., 2014; Benjet et al., 2016; CDC, 2016; Felitti & Anda, 2014; Groer et al., 2016; Handley et al., 2015; Hughes et al., 2017). For example, a strong association was found between PTSD and poor general health and poorer health-related quality of life in a meta-analysis that examined the physical health consequences of PTSD (Pacella et al., 2013). In addition, the results of an additional study that examined the health outcomes of 180 individuals who had experienced a serious motor vehicle accident (MVA) with premorbid histories of TEs, found that PTSD symptoms acted as a mediator between the participants' pre-existing trauma history and post-injury health outcomes (Irish et al., 2013). Similarly, a later study that investigated the formation of PTSD symptoms in 188 participants who had experienced sudden cardiac arrest subsequent to an MVA, found that 36% reported post-injury symptoms of PTSD and revealed that a

history of premorbid trauma was a strong predictor of the development of PTSD symptoms following a MVA (Rosman et al., 2016). Moreover, Rosman et al. described how other predictors of post-injury PTSD symptoms included being female, worse general health, and younger age. Conversely, a study of 369 female veterans by Smith et al. (2015) did not find a relationship between PTSD symptom severity, trauma exposure, and increased use of medical health care services among older veterans. In particular, Smith et al.'s findings revealed that over the course of the participants' lifetime older veterans exhibited less cumulative trauma exposure, lower severity of PTSD symptoms, and better mental health functioning compared to younger female veterans. The authors posited that the study's findings could be due to the development of adaptive coping strategies that older veterans formed over time which may have enhanced resilience and decreased the risk of secondary trauma.

ACEs Effect on Health Outcomes

As discussed in Chapter 1, the seminal ACE study was instrumental in relating poor adult health outcomes to ACEs (e.g., abuse, neglect, and dysfunctional family life) that occurred earlier in life (Austin, 2018, Felitti et al., 1998). Specifically, in the seminal ACE study—conducted from 1995 to 1997—adult participants were asked about seven categories of childhood adversities: “psychological, physical, or sexual abuse; violence against mother; or living with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned” (Felitti et al., 1998, p. 245). Incidentally, recent studies included expanded ACE categories such as parental separation, emotional and

physical neglect, and experiences of social disadvantage (e.g., economic hardship, homelessness, community violence, discrimination, historical trauma).

The original ACE study revealed that participants had a 4- to 12-fold increased risk for alcoholism, drug abuse, depression, and suicide attempts in adulthood if they had experienced four or more ACEs out of a maximum of seven categories of ACEs (Felitti et al., 1998). The findings of Felitti et al. (1998) were mirrored in a triad of landmark studies by Finkelhor et al. (2007a, 2007b, 2007c) which found that adult chronic disease and mental health disorders had their origins in exposure to poly-victimization (i.e., multiple traumas) during childhood. Felitti's (2009) commentary, *Adverse Childhood Experiences and Adult Health*, further defined the dual pathways that transform ACEs into a disease. In the first pathway, Felitti described that an individual with a positive ACE score is likely to develop secondary maladaptive coping mechanisms such as overeating, which, can lead to obesity, type 2 diabetes, and heart disease. Felitti explained that the second pathway is found in neuro-biochemical changes that can occur in an affected child's body due to cumulative chronic stress resulting from years of childhood adversity. This adversity is mediated by the persistent excretion of cortisol and proinflammatory cytokines, which can lead to physical health problems such as a "chronic headache or back pain, primary pulmonary fibrosis, osteoporosis, [and] coronary artery disease" (Felitti, 2009, p. 131). In addition, Felitti and Anda's (2014) findings showed that an ACE score of 6 leads to a "4,600% increase in the likelihood of later becoming an injection drug user, compared to the likelihood at ACE score 0" (p. 207) leading to social and public health problems. Felitti's (2009) observation was

supported by other researchers who agreed that poor health in adulthood often begins with incidents of trauma in childhood when the developing brain and body are most vulnerable to the harmful effects of chronic neuro-dysregulation (Gilbert et al., 2015; Horner, 2015; Huffhines et al., 2016; Kalmakis & Chandler, 2015). Furthermore, additional research that investigated childhood trauma outcomes, revealed that individuals affected by trauma may use maladaptive coping behaviors (e.g., smoking, overeating, illicit opiate use, etc.) to self-regulate negative symptoms (e.g., depression, anxiety, anger, etc.) from damaged neural pathways as a result of childhood trauma (Horner, 2015; Huffhines et al., 2016; Kalmakis & Chandler, 2015).

Further evidence of the effects of ACEs on public health outcomes was found when the ACE questionnaire was included in an expanded version of the Behavioral Risk Factor Surveillance Survey (BRFSS) for the District of Columbia and ten states (Gilbert et al., 2015). The state based BRFSS is the “largest continuously conducted survey in the world” (CDC, 2014b) and collects data annually from U.S. adults regarding health conditions and risk factors. Since 2009, 50 states plus the District of Columbia have included ACE questions for at least one year on their survey (CDC, 2015). The expanded BRFSS study found that pervasive childhood adversity led to the proclivity for chronic disabling disease including “myocardial infarction, asthma, fair/poor health, frequent mental distress, disability, coronary heart disease, stroke, and diabetes” (Gilbert et al., 2015, p. 347). Furthermore, participants had an increased likelihood of stroke and coronary heart disease in adulthood compared to those with no ACE exposure. Additional ACE studies showed comparable results while expanding the categories to include a

broader range of adversities such as bullying, unemployment, income disparities, and exposure to community violence; which found elevated rates of health disparities in groups exposed to the added ACE categories (Cronholm et al., 2015; Finkelhor et al., 2013a; Mouton et al., 2016; Topitzes et al., 2016; Wade et al., 2014). Other empirical studies demonstrated a strong correlation between ACE scores and health outcomes even after adjusting for behavioral and socioeconomic factors (Solis et al., 2015; Thomaes et al., 2016). In these studies, there was an association with mortality and morbidity regardless of behavioral and socioeconomic factors, which suggested that a neurobiological phenomenon was occurring.

TEs Effect on Health Outcomes

The DSM-5 describes that TEs occur when an individual is exposed to “actual or threatened death, severe injury or sexual violence through direct experience or witnessing [the event]” (O'Donnell et al., 2017, p. 209). Boudoukha et al. (2017) stated that the four categories of TEs include “disasters (natural disasters and those caused by humans), interpersonal violence (war situations, barbaric acts, physical and/or sexual assaults, fights with weapons, etc.), serious accidents, and the sudden death of a relative and/or close friend” (p. 561). In addition, the most reported TEs were found to be the death of a loved one, witnessing death, life-threatening automobile accidents, and life-threatening illness or injury (Benjet et al., 2016).

Prior studies reported that patients with histories of TEs in adulthood were found to have increased healthcare costs, poor health outcomes, and disability (Green et al., 2015; Lopez-Martinez et al., 2018). Specifically, earlier research that investigated the

effects of TEs on health demonstrated that, similar to findings from research in ACEs, exposure to multiple TEs had a dose-response relationship with the development of negative health outcomes (Atwoli et al, 2016; Husarewycz et al., 2014; Karatzias et al., 2015; Lian et al., 2014; Ogle et al., 2014; Smith et al., 2015). For instance, a previous study that examined PTSD-related cardiovascular disease and accelerated cellular aging showed that cumulative toxic stress that resulted in PTSD increased survivors' risk of cardiovascular and peripheral vascular disease by 25-50% (Wolf & Schnurr, 2016). In comparison, Beristianos et al. (2016) examined the relationship between PTSD and cardiovascular disease in aging veterans and found an 82% increased risk of myocardial infarction (i.e., heart attack) in patients with chronic PTSD symptoms. Moreover, Beristianos suggested that, due to the high correlation of myocardial infarction and PTSD, health care professionals should diligently monitor patients with histories of TEs for potential signs and symptoms of cardiovascular disease.

Similar to the results of ACE studies, earlier meta-analysis research that examined the health implications of TEs, demonstrated that some survivors of TEs exhibited secondary maladaptive emotional stress responses and subsequent negative health outcomes such as cardiac arrhythmias and autoimmune disease (Lopez-Martinez et al., 2018; Porcelli et al., 2016). Moreover, results from comparable research described that the etiopathogenesis (i.e., cause and development) of TE-related maladies was associated with a pathophysiological response (Lian et al., 2014; Määttänen et al., 2015; Maletic & DeMuri, 2017). These findings supported the results of an earlier cross sectional study that examined the associations between lifetime TEs and subsequent chronic physical

conditions found that although some study participants did not meet the criteria for a PTSD diagnosis their trauma histories were associated with disabling adverse health outcomes that included arthritis, chronic back or neck pain, frequent or severe headaches, heart disease, hypertension, asthma, diabetes, peptic ulcer, cancer, chronic lung disease, and stroke (Scott et al., 2013). In addition, other studies discovered that trauma survivors with a predisposition to psychological and physical health challenges had an increased risk of forming unhealthy behaviors as a means to cope with overwhelming toxic stress (Campbell et al., 2016; De Bellis & Zisk, 2014; Garad et al., 2017; McEwen, 2017a; Porcelli et al., 2016; Wadsworth, 2015).

Dysregulated Neurobiological Stress Response

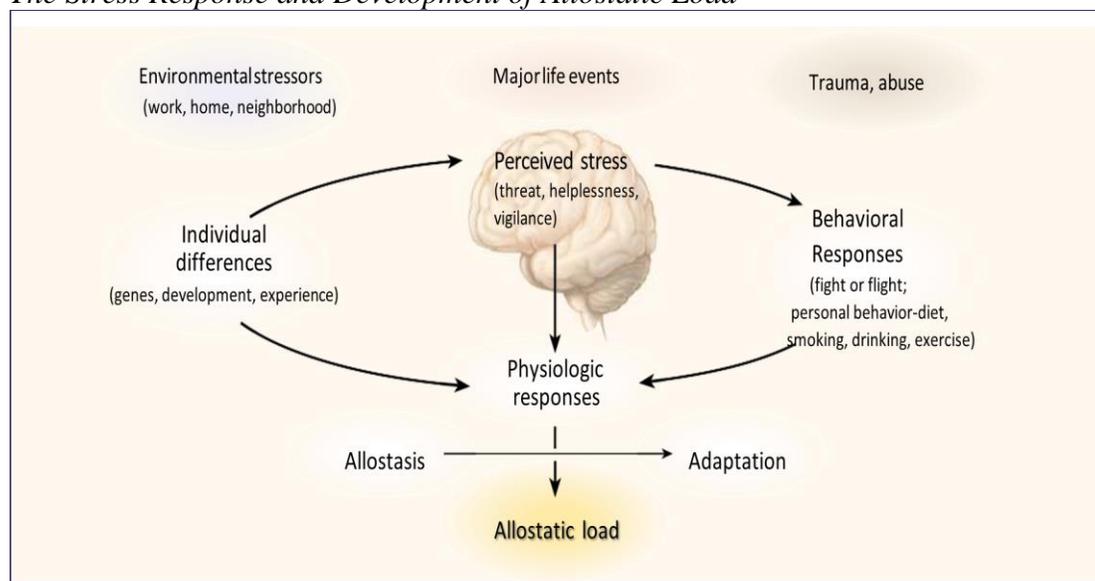
Several studies described that the human stress response is triggered by real or perceived threats of harm, trauma, fear, and other unfavorable conditions (McEwen, 2017b; McEwen et al., 2016; Solís et al., 2015; Wadsworth, 2015). In the *APA handbook of trauma psychology*, Najavits et al. (2017) described how maladaptive mechanisms that form in childhood, in response to trauma, can function as a mediator between toxic stress and psychopathology (i.e., anxiety, depression, aggression, hyperactivity, etc.) in a dysregulated neurobiological manner (i.e., pathophysiological) over the lifespan.

Allostatic Load. As shown in Figure 5, it has been found that survivors of prolonged traumatic stress may develop a heightened physiological response (e.g., increased pulse, elevated blood pressure, etc.) to all levels of stress—known as a heightened allostatic load (Engert et al., 2014; Danese & Baldwin, 2017; Garad et al., 2017; Groer et al., 2016; McEwen, 2017b; Solís et al., 2015; Wadsworth, 2015). McEwen

and Stellar's (1993) seminal study examined toxic stress and the mechanisms that lead to disease and defined an allostatic load as, "the strain on the body produced by repeated ups and downs of physiologic response, as well as by the elevated activity of physiologic systems under challenge, and changes in metabolism...that predispose the organism to disease" (p. 2094).

Figure 3

The Stress Response and Development of Allostatic Load



Note. This figure shows how a heightened allostatic load develops as a result of allostatic and adaptive physiological factors in response to perceived threat. The level of physiological response is influenced by individual differences and behavioral responses in response to overwhelming toxic stress from environmental stressors, major life events, and trauma. From "The stress response and development of allostatic load," by B. McEwen, 1998, *Protective and damaging effects of stress mediators*, p. 172. Copyright 1998 by Massachusetts Medical Society. Reproduced with permission (see Appendix P).

Evidence from decades of animal and human research revealed that a persistent heightened allostatic load can damage metabolic, cardiovascular, immune, endocrine, and nervous systems over the lifespan (De Bellis & Zisk, 2014; Garad et al., 2017; Kempke et al., 2015; McEwen, 2017a; Wadsworth, 2015). For example, a longitudinal study that investigated the cardiovascular effects of TEs on nurses with and without diagnoses of PTSD, found an association between a state of heightened allostatic load and body system damage (Sumner et al., 2015). Specifically, Sumner et al., (2015) revealed that, regardless of the existence of PTSD diagnosis, the study's nurse participants who had histories of trauma had an elevated risk of cardiovascular disabilities.

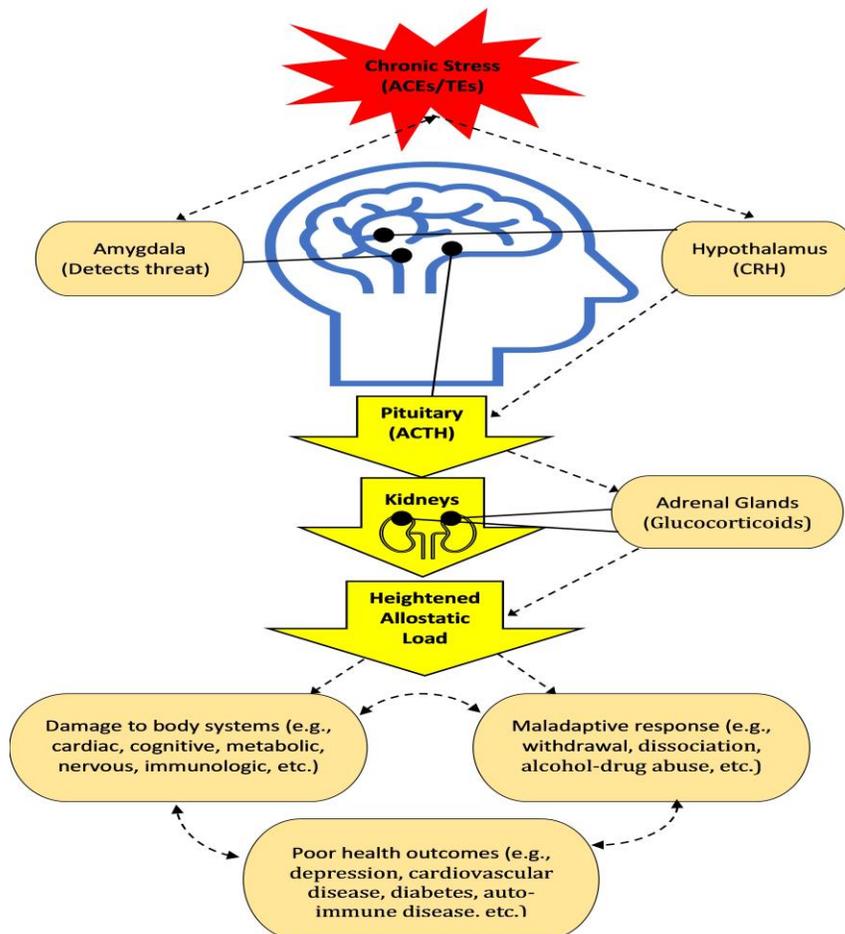
Neuroendocrine Stress Response. Rotenberg and McGrath (2016) described that when an individual is confronted with uncontrollable overwhelming psychological or physical stressors internal body systems initiate a neuroendocrine stress response—to maintain equilibrium or allostasis—via the sympathetic and parasympathetic branches of the autonomic nervous system. Research has shown that the neuroendocrine stress response is activated by hormones that are released from the sympathetic-adrenomedullary (SAM) system and the hypothalamic-pituitary-adrenal (HPA) axis (McEwen, 2017b; Rotenberg & McGrath, 2016). To achieve allostasis, the parasympathetic system produces hormones to calm the stress response (McEwen, 2017b; McEwen et al., 2016; Rotenberg & McGrath, 2016). The current study's literature review focused on the toxic stress response of the HPA axis and the production of glucocorticoids, which was determined to be relevant for the purpose of the study due to

the long-term health implications of the toxic stress response. For a review of the SAM systems see Deussing and Chen's (2018) recent review.

As shown in Figure 6, the amygdala is the part of the brain that is responsible for detecting threats and activating the neuroendocrine stress response, which is mediated by the HPA system (McEwen et al., 2016). Specifically, the HPA system is the central mediator for the neuroendocrine stress response to chronic prolonged physical or mental stress (Deussing & Chen; 2018; McEwen, 2017b; Rotenberg & McGrath, 2016). The main components of the HPA axis are the hypothalamus of the brain, the anterior pituitary gland at the base of the brain, and the adrenal glands, which are located above the kidneys (McEwen, 2017b; McEwen et al., 2016; Rotenberg & McGrath, 2016). When the stress response is initiated, corticotrophin-releasing hormone (CRH) is secreted from the hypothalamus into the portal circulatory vessels. The CRH stimulates the secretion of the adrenocorticotropin hormone (ACTH) from the anterior pituitary gland, which is then circulated in the bloodstream to the adrenal glands where glucocorticoids are released (McEwen, 2017b; McEwen et al., 2016; Rotenberg & McGrath, 2016) (see Figure 6).

Figure 4

The HPA Axis Reaction to Chronic Stress



Note. This figure illustrates the HPA axis system’s chronic stress response (i.e., neuroendocrine stress response). Adapted From “Schematic representation of the regulation of the HPA axis under chronic stress,” by Brian W. MacLaughlin et al., 2011, *Stress biomarkers in medical students participating in a mind body medicine skills program*. p. 3. Copyright 2011 by Brian W. MacLaughlin et al. under Creative Commons license CC BY 4.0.

As previously discussed, in a state of chronic stress, elements of the HPA axis become hyper-responsive and continuously release stress hormones or glucocorticoids, which leads to a heightened allostatic load (Engert et al., 2014; Danese & Baldwin, 2017; Garad et al., 2017; Groer et al., 2016; McEwen, 2017b; Solís et al., 2015; Wadsworth, 2015). Over the lifespan, a heightened allostatic load can become detrimental and pathological to several systems in the body such as the cardiac, cognitive, metabolic, nervous, endocrine, and immunologic systems (De Bellis & Zisk, 2014; Garad et al., 2017; Kempke et al., 2015; McEwen, 2017a; Wadsworth, 2015).

Maladaptive Behavioral Response to Trauma

Felitti (2009) presented the following observation about the need for increased awareness within the public health community concerning preexisting factors that lead to a maladaptive behavioral response to trauma:

Many of our most intractable public health problems are the result of compensatory behaviors like smoking, overeating, and alcohol and drug use, which provide immediate partial relief from the emotional problems caused by traumatic childhood experiences. Those experiences are generally unrecognized and become lost in time, where they are protected by shame, by secrecy, and by social taboos against exploring certain areas of human experience. A public health paradox becomes apparent wherein the public health problem is also often an unconsciously attempted solution. Not surprisingly, it is hard to give up something that almost works, particularly at the behest of someone who issues cautionary advice without any idea of what is really going on. For instance, in the

public health onslaught against smoking, we have lost sight of the psychoactive benefits of nicotine, which is well documented as having antianxiety, antidepressant, anger suppressant, and appetite suppressant properties. Before scientific documentation, the American Indians recognized its psychoactive benefits through their use of the peace pipe. In this same vein, we seem to have forgotten that the antidepressant medication methamphetamine, introduced for prescription sale in 1940, is now in its impure and dose-unregulated form the demonized street drug "crystal meth." Do these uncomfortable observations mean anything? Need we ask ourselves why a kid seeks the psychoactive benefits of nicotine, given its risks, or why one would buy on the street an antidepressant that is both impure and of unregulated dose? If we are to accomplish more than do our current approaches against smoking, overeating, and street drugs, perhaps we need to understand both sides of the equation. (p. 131)

In this regard, researchers have found that persistent arousal of the neuroendocrine stress response systems can lead to the development of maladaptive behaviors that form in response to a heightened allostatic load (Bowes & Jaffee, 2013; Moffit, 2013; Moustafa et al., 2018; Williamson & Kautz, 2018). For instance, results from other past studies that investigated associations between cumulative lifetime exposure to TEs and subsequent chronic diseases demonstrated a link between dysregulated physiological mechanisms and the formation of maladaptive coping responses (Austin, 2018; Caslini et al., 2016; Fazzino et al., 2018; Keyser-Marcus et al., 2015; Kibler et al., 2018; Luyten et al., 2017;

Mason et al., 2017; Mitchell et al., 2018; Scott et al., 2013; Sumner et al., 2015; Ullman, 2016; Wadsworth, 2015; Winning et al., 2017).

Lazarus and Folkman (1984) defined coping as a stress response in which an individual is “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 141). Other researchers have viewed coping as a continually evolving conscious and unconscious effort to manage psychological stressors (Compas et al., 2017). In particular, Lazarus and Folkman’s transactional theory of stress and coping revealed two types of coping strategies, which included emotion-focused and problem-focused. Emotion-focused detach-and-avoid coping strategies have been described as maladaptive approaches (e.g., social withdrawal, distraction, emotional venting, wishful thinking, minimization, distancing, dissociation, alcohol abuse, etc.) that form as a means to regulate mental and emotional reactions to stress (Biggs, Brough, & Drummond, 2017; Compas et al., 2017; Zimmer-Gembeck & Skinner, 2016). In contrast, problem-focused strategies have been described as adaptive approaches (e.g., active problem-solving, seeking solutions, creating social support networks, etc.) that form to manage situations that lead to stress (Biggs, Brough, & Drummond, 2017; Compas et al., 2017; Zimmer-Gembeck & Skinner, 2016).

Several studies that investigated the formation of emotion-focused maladaptive coping behaviors revealed that the experience of trauma overwhelmed survivors cognitive decision-making ability and resulted in impaired self-regulation and the formation of maladaptive coping mechanisms to manage irrepressible trauma-related

psychological stressors (Choi, 2016; Campbell et al., 2016; Nurius et al., 2015; Wadsworth, 2015). Neuroendocrinology researchers have explained that neuroendocrinological processes between the brain and the body (i.e., HPA axis and SAM system) mediate higher-level cognitive skills (e.g., executive functioning) and are used to make thoughtful decisions (McEwen et al., 2015; Rodriguez et al., 2018). As previously discussed, the neuroendocrine stress response system activates hormones that influence behavioral and physiological adaptations to engender homeostasis in the brain and body (McEwen, 2017b; McEwen et al., 2015). However, excessive activation of the SAM and HPA systems can cause persistent hyperarousal and pathophysiological changes within the body and may result in adverse physical and cognitive consequences such as impairment of cognition, memory, executive functioning (i.e., executive decision making), attention, processing speed, and affect (i.e., anxiety and mood; Bowes & Jaffee, 2013; Kinlein & Karatsoreos, 2020; McEwen, 2017b; McEwen et al., 2015; Moffit, 2013; Moustafa et al., 2018; Williamson & Kautz, 2018). As a result of altered cognitive functioning ability an affected individual may form maladaptive avoidance coping mechanisms (e.g., alcohol use, smoking, drug abuse, etc.) in an attempt to manage symptoms related a heightened allostatic load (Horner, 2015). Hence, due to the autonomic nature of the neuroendocrine stress response system, which can impair cognition, the early formation of maladaptive behaviors is not entirely under an affected person's volitional control.

Moreover, Wadsworth's (2015) study that investigated the development of maladaptive coping mechanisms in abused children, described how extreme cases of

maladaptive denial behaviors, such as dissociation, can form as a protective measure to allow the abused child to psychologically detach from their immediate surroundings in an attempt to consciously avoid the stress of maltreatment. For example, a child who is physically powerless to escape abuse may develop the ability to psychologically escape by mentally detaching from reality as described in Janet's 1889 dissociation theory (Broussolle et al., 2014; Ford & Gómez, 2015; Novais et al., 2015). In this regard, the unconscious dissociation is viewed as a psychological defense mechanism that triggers a state of unconscious awareness that is exhibited along a continuum from daydreaming to altered states of consciousness (Cross et al., 2017; Goodman, 2017). Furthermore, results from previous research that examined the relationship of psychological trauma and dissociative and posttraumatic stress disorders revealed that survivors who experienced dissociation during past TEs may not recall conscious memories of earlier traumas (Broussolle et al., 2014; Ford & Gómez, 2015; Novais et al., 2015).

Initially, psychological defenses, such as distraction (i.e., avoidance) and dissociation (i.e., psychic denial), can be an adaptive coping mechanism that allows an affected person to mentally escape an abusive situation (Herman, 2015). However, the formed protective avoidance and denial mechanisms can become maladaptive and harmful in later life (Herman, 2015). For instance, the avoidance strategy of coping-motivated high caloric consumption of nutrient-poor foods has been shown to increase the risk of obesity and other comorbid problems (e.g., hypertension; Golden et al., 2016; Neumark-Sztainer et al., 2018). The correlation between maladaptive coping mechanisms, ACEs/TEs, and health problems has been documented in several studies

(Cadet, 2016; Hammond et al., 2014; Smith et al., 2017). For example, earlier studies that examined problematic overeating behaviors discovered that adults with trauma histories reported short-term psychological benefits (e.g., improved mood) from coping-motivated eating (e.g., ingestion of high-fat and high-sugar foods) that was found to trigger a dopaminergic reward response that provided distraction and relief from negative feelings (Fazzino et al., 2018; Mason et al., 2017). In another study, the use of emotional numbing coping strategies among trauma-exposed participants was revealed in the U.S. National Comorbidity Survey–Replication (NCS-R) study that examined the relationship between psychological trauma and eating disorders (Luyten et al., 2017). The NCS-R found that 90.3% of female participants and 98% of male participants who were previously diagnosed with a binge-eating disorder had histories of one or more ACEs/TEs. Similarly, the results of a study to identify the mechanisms associated with PTSD and the incidence of cardiovascular disease (CVD) in younger women with past TEs, found that a higher body mass index and advanced PTSD symptoms had the largest impact on the development of CVD (Kibler et al., 2018). Specifically, Kibler et al. noted that female participants with PTSD reported binge eating to control stress, decreased activity, and a desire to be overweight. The phenomenon of the sexual barrier weight coping strategy among survivors of trauma was described in other past research that revealed how some survivors become overweight as a psychological protective mechanism against potential perpetrators (Caslini et al., 2016; Mitchell et al., 2018; Winning et al., 2017). Similarly, prior research that investigated sexual revictimization, PTSD, and problem drinking in sexual assault survivors found a correlation between women survivors of adult sexual

assault and greater symptoms of PTSD and problem drinking (Ullman, 2016). In addition, research that examined the association between trauma, gender, and mental health symptoms in individuals with substance use disorders illustrated that 60% to 70% of women who entered substance abuse treatment had a history of psychological trauma (Keyser-Marcus et al., 2015).

Moreover, results from a study that investigated the relationship between lifetime TEs and subsequent chronic physical maladies described that, regardless of PTSD symptoms, participants who used emotional inhibiting and suppressive coping mechanisms had an elevated incidence of poor health outcomes, which included arthritis, chronic back or neck pain, frequent or severe headaches, heart disease, hypertension, asthma, diabetes, peptic ulcer, cancer, chronic lung disease, and stroke (Scott et al., 2013). Likewise, earlier research that investigated whether trauma exposure and PTSD symptoms predicted the onset of CVD in women found that trauma-exposed participants with four or more symptoms of PTSD engaged in emotionally suppressive coping strategies such as smoking, poor diet, and excessive alcohol intake, which led to CVD outcomes (Sumner et al., 2015). Alternatively, the results of a study by Samuelson et al. (2017) that examined the role of psychological states on the association between PTSD symptoms and perception of cognitive problems revealed that survivors' level of coping self-efficacy was moderated by their level of negative posttraumatic beliefs about themselves, the traumatic experience, and personal coping ability (i.e., self-efficacy). In this regard, the findings indicated a strong relationship between survivors' posttraumatic self-efficacy beliefs (i.e., feelings of incompetence or helplessness) and their perception

of cognitive problems (i.e., beliefs about deficiencies in memory, attention, and thinking). Moreover, the results revealed that survivors who appraised themselves as having heightened cognitive problems, regardless of evidence to the contrary, had a poorer perceived quality of life and health outcomes. Samuelson et al. suggested that “a primary target for intervention when clients with trauma or PTSD report cognitive complaints may be to address negative cognitions and self-efficacy rather than cognitive rehabilitation” (p. 542). Samuelson et al.’s statement supported Wadsworth’s (2015) reflection that “coping interventions may also represent our best hope for repairing and recalibrating physiologic stress systems” (p. 3).

Resiliency

Although a strong association between ACEs/TEs and maladaptive coping mechanisms has been demonstrated in the empirical research, not all trauma-exposed individuals develop maladaptive behaviors regardless of trauma severity and living conditions (Cadet, 2016). In this respect, evidence has accumulated pointing to mediating protective elements in the social environment (e.g., social support, social buffering, etc.) that influence the formation and use of adaptive coping skills and resiliency (Cross, 2017; De Bellis & Zisk, 2014; McEwen, 2017a). Cadet (2016) suggested that a more therapeutic approach to reduce the formation of maladaptive behaviors may be to target and promote behaviors that are associated with resilience.

Disability and Trauma

Research in the prevalence of disabilities and access to health care described that in the United States, 25.7% of non-institutionalized adults have experienced some form

of disability (Okoro et al., 2018). Results of studies that examined the determinants of disability and the impact of trauma identified a relationship between ACEs/TEs and disability in adulthood (Austin et al., 2016; Byers et al., 2014; Felitti & Anda, 2014; Schüssler-Fiorenza Rose et al., 2014). For example, research that analyzed data from BRFSS surveys found that compared with those who reported zero ACEs, the odds of disability were highest among those with multiple ACEs (Schüssler-Fiorenza Rose et al., 2014). In a follow-up retrospective cohort study, Schüssler-Fiorenza Rose et al. (2016) examined the impact of ACEs on the inability of adults with disabilities to work and found that 72.4% of participants had experienced one or more ACEs, which was strongly associated with an inability to work and diminished physical and mental health. Similar findings were found in a retrospective study by Byers et al. (2014) of older veterans with chronic PTSD. In this study, the researchers found that 79.7% of participants with persistent PTSD became physically disabled compared to 36.9% without PTSD. The authors speculated that their findings suggested that chronic PTSD may be a potential predictor of disability in later adulthood. Other studies have described that in addition to physical injuries, catastrophic TEs such as motor vehicle accidents often result in long-term psychological disabilities (Craig et al., 2016; Guest et al., 2016). As such, the American Academy of Physical Medicine and Rehabilitation has recognized the correlation between trauma and disability and supported the concept of a “graded relationship between childhood trauma, adult health, and disability” (Williamson & Qureshi, 2015, p. 11).

Nursing Response to Trauma

This section describes ways earlier researchers have approached the problem of patient retraumatization and the strengths and weakness inherent in their approaches. Results from earlier research that investigated patient engagement in healthcare revealed that nurses' actions and behaviors were influential factors in patients' participation in care, which was found to be a critical component of improved health outcomes (Barello et al., 2017; Hibbard & Greene, 2013; Hibbard et al., 2015). In addition, other studies that examined nurses' perceptions of patients with mental health issues and victims of violence found incidents in which nurses stigmatized, lacked empathy, held prejudices, discriminated, labeled, and stereotyped patients who exhibited challenging behaviors (Alexander et al., 2016; Clement et al., 2015; Russell et al., 2017; Wallin-Lundell et al., 2018). Moreover, other past research that explored attitudes among health professionals towards patients with substance use disorders discovered that healthcare professionals' stigmatization of patients with histories of trauma and maladaptive coping mechanisms resulted in treatment barriers such as, avoidance of care, evading the disclosure of ACEs/TEs histories, anticipated stigma (i.e., anticipation of being perceived or treated unfairly), and reduced engagement in treatment (Clement et al., 2015; Kennedy & Prock, 2016; Nutt et al., 2017; Tierney, 2016; van Boekel et al., 2015). In addition, in a study by Knaak et al. (2017) that studied mental health-related stigma in healthcare, patients reported that their care was negatively affected by oppressive power dynamics in the healthcare setting related to experiences, such as

feeling excluded from decisions, receiving subtle or overt threats of coercive treatment, being made to wait excessively long when seeking help, being given insufficient information about one's condition or treatment options, being treated in a paternalistic or demeaning manner, being told they would never get well, and being spoken to or about using stigmatizing language. (p.111)

Other research that investigated posttraumatic shame in individuals with histories of childhood abuse found that healthcare stigmatization caused patients to internalize feelings of shame and self-blame and decreased their sense of empowerment, which led to poor health outcomes (Holl et al., 2017). In addition, several earlier studies in psychosocial care for patients effected by trauma suggested that the occurrence of patient stigmatization may be due to nurses' unconscious bias and lack of awareness and training about best practices for communicating and caring for patients who have been exposed to ACEs/TEs (Alisic et al., 2014; Dube & Rishi, 2017; Knaak et al., 2017; Stokes et al., 2017; Zerach & Shalev, 2015). Moreover, other studies that investigated barriers to care described that health care systems can be re-traumatizing for trauma-affected patients due to coercive policies, procedures, and systemic stigmatization (de Jacq et al., 2016; Hall et al., 2016; Knaak et al., 2017; Raja et al., 2015; Sweeney et al., 2016). For example, the results of a review of the literature by Raja et al. (2015) described that some trauma survivors reported anxiety and a resurgent of trauma memories during invasive medical procedures such as female pelvic exams. In addition, Raja et al. found that the trauma-exposed population often avoided preventative medical care, frequently used emergency care, and were reluctant to disclose trauma histories due to fears of being stigmatized.

Similarly, Muskett's (2014) review of the literature examined trauma survivors' perspectives of the nurse-patient relationship and found that some patients reported experiences with nursing actions that they viewed as coercive and retraumatizing, such as nurse's preoccupation with enforcing rules and physical and medication restraints. For example, patients described, "staff appearing disinterested or disrespectful, preoccupied by non-interactive tasks, and not empowering clients to be masters of their own destinies." (p. 57). Musket purported that to shift organizational culture and successfully implement TIC staff must be knowledgeable about the prevalence and impact of trauma and have a well-defined "understanding of their responsibilities in mitigating retraumatization" (p. 57). In this regard, Muskett suggested that nurses use "universal trauma precautions" and approach all patients as if they have a history of trauma since it is not always known which individuals are trauma survivors. Likewise, other studies have recommended the use of the principles of TIC in nursing practice to mitigate episodes of patient retraumatization (Currier et al., 2017; Krause et al., 2017; True et al., 2017; Wolf et al. 2016).

Skilled Nursing

Following a hospital stay for a major medical condition (e.g., fractured hip) many patients are discharged to a facility for post-acute care rehabilitation, which can be at a long-term care hospital, SNF (SNF), or an inpatient rehabilitation facility (Sacks et al., 2015). Cimarolli et al. (2018) reported that 40% of Medicare recipients are admitted to a SNF for post-acute physical rehabilitation following a hospitalization. Rehabilitation services have been described as a multidisciplinary approach the includes skilled nursing,

physical therapy, occupational therapy, and speech therapy to aid patients in the restoration of functional ability and reintegration into the community (Kumar et al., 2018; Vaughn et al., 2016). Williamson and Kautz (2018) described that rehabilitation nurses often encounter patients with histories of trauma. In this respect, Williamson and Kautz recommended the use of trauma-informed practices in rehabilitation settings to help affected patients rebuild a sense of empowerment and control and to reinforce the use of adaptive coping mechanisms (Williamson & Qureshi, 2015). Research on rehabilitation nurses use of TIC has not been established; however, several studies have been conducted on the influence nurses have on patient outcomes in SNFs. For example, the results of a grounded theory study that examined nurses' impact in the rehabilitation process revealed that nurses were instrumental in assisting patients to effectively cope and be motivated to take part in their care (Tyrrell & Pryor, 2016). In addition, an evaluation study of a pilot program for a recovery program that addressed geriatric substance abuse problems for patients in a SNF purported that a therapeutic nurse-patient relationship may aid patients to overcome barriers to psychological treatment (Coyle, 2018).

Trauma-Informed Care

TIC has been described as a strengths-based organizational approach that was designed to increase employee's knowledge about the effects of psychological trauma, improve therapeutic communication and interactions with patients, and reduce patient retraumatization; which requires an awareness of ways the delivery of care can cause iatrogenic harm (Kusmaul et al., 2015; SAMHSA, 2014b). Moreover, multiple trauma researchers have described that TIC is a universal approach to care that is applied in

practice with all patients regardless of reported or documented past trauma experiences (i.e., universal trauma precautions; Isobel & Edwards, 2017; Muskett, 2014). The following methods and models are related to the TIC approach in their aim to change organizational culture to provide better care for patients with histories of trauma: DEF protocol (Marsac et al., 2016); primary prevention of ACEs (Oral et al., 2015); patient-centered care (Vu et al., 2017); SEEK, a Safe Environment for Every Kid (Dubowitz et al., 2012); strength-based nursing (Gottlieb, 2014); resilience-oriented approach (Howell et al., 2017; Leitch, 2017); Sanctuary Model (Bloom, 2013; Bloom & Farragher, 2013); Risking Connections (Brown, Baker, & Wilcox, 2012); “Eden Alternative, the Green House model, the Wellspring Model, and the Pioneer Network” (Kusmaul & Waldrop, 2015). Several of the listed trauma approaches share similar elements with each other and the TIC model such as integrated principles of personalized care and individual choice (Kassam-Adams et al., 2015; Kusmaul & Waldrop, 2015). In contrast, Wilson et al. (2015) stated that the TIC model has unique principles to care for individuals with trauma histories that aren’t found in other trauma approaches, such as “prioritization of physical and emotional safety..., and the training of all staff in the nature and effects of current and lifetime trauma—that were not identified by these other related movements.” (Wilson et al., 2015, p. 587). Moreover, Wilson described that the other related trauma approaches did not provide global, inclusive methods (i.e., universal trauma precautions), which are provided in the TIC model.

History of TIC

The concepts of TIC originated from Harris and FalLOT's (2001) model of trauma-informed system of care that was based on trauma theory and formed to enhance patients emotional, physical, and psychological wellbeing in a safe environment. In this regard, Harris and FalLOT described that the principles of trauma-informed systems of care—henceforth referred to as TIC in the current study—are not meant to provide treatment for individuals with trauma histories. Rather, the TIC paradigm was designed as an approach to renew affected patient's sense of empowerment and shelter patients with trauma histories from retraumatization via the use of trauma-informed principles and methods of care (Kassam-Adams et al., 2015; Williamson & Qureshi, 2015). In this regard, the Harris and FalLOT TIC model is constructed of five core elements of individual and group practice that include safety, trustworthiness, collaboration, choice, and empowerment. In addition, the model contains six domains to guide the organizational implementation of TIC and influence positive cultural change within the organization that include (a) trauma-sensitive service settings and environments; (b) formal trauma-informed policies and procedures; (c) trauma screening, assessment, and planning of trauma-specific services; (d) system-wide support for trauma-informed services; (e) provider education and training; and (f) human resources practices. Incidentally, Harris and FalLOT's TIC model was validated by a study that examined the model's factor structure and construct dimensionality via confirmatory factor analysis and structural equation modeling (Hales et al., 2017). Hales et al.'s (2017) results revealed that the five core elements of Harris and FalLOT's TIC model (i.e., safety, trustworthiness, collaboration, choice, and

empowerment) were unique, equally important, interrelated, and shared a single underlying dimension; moreover, it was found that the TIC model had sufficient validity. The authors described that since the five core elements of the model were “interconnected then intervention in anyone [element] will lead to changes in the others” (Hales et al., 2017, p. 318).

Based on Harris and Fallot’s (2001) TIC model, SAMHSA (2014b) created a TIC framework for use in behavioral health settings, which has also been used in other human service organizations. The SAMHSA framework includes the following six key principles: (a) safety; (b) trustworthiness and transparency; (c) peer support collaboration and mutuality; (d) empowerment, voice, and choice; and (e) cultural, historical, and gender issues. In addition, the TIC framework was grounded in the following four key assumptions—the four Rs—in a trauma-informed approach: (a) realizing how widespread the impact trauma has on patient’s lives, (b) recognition of the signs and symptoms of trauma, (c) responding by implementing TIC practices, and (d) resisting retraumatization. To illustrate, per SAMHSA, a trauma-informed organization is defined as “A program, organization, or system that is trauma-informed *realizes* the widespread impact of trauma and understands potential paths for recovery; *recognizes* the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and *responds* by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively *resist* retraumatization” (p. 9).

Furthermore, SAMHSA (2014b) provided the following ten implementation domains to aid organizations in the development and implementation of TIC: (a)

governance and leadership; (b) policy; (c) physical environment; (d) engagement and involvement; (e) cross sector collaboration; (f) screening, assessment, treatment services; (g) training and workforce development; (h) progress monitoring and quality assurance; (i) financing; and (j) evaluation. As such, numerous organizations have used Harris and Fallot's (2001) TIC model and SAMHSA's TIC framework to assist with the organizational implementation of trauma-informed methods to provide better care to patients affected by trauma (Cleary & Hungerford, 2015; Berliner & Kolko, 2016; Kusmaul et al., 2015; Machtinger et al., 2019; Marsac et al., 2016; Muskett, 2014; Schüssler-Fiorenza Rose et al., 2014; Wilson et al., 2015).

Limitations of TIC

Studies in trauma-informed principles and methods have reported that the TIC approach does not have a universal operational definition or a common lexicon (Donisch et al., 2016; Purtle, 2020). In addition, a study to develop an instrument to measure organizational TIC described how universal strategies to implement TIC were lacking and that universal measures to evaluate the outcomes of TIC did not exist (Bassuk et al., 2017). Similarly, other trauma researchers reported that it was difficult to conduct empirical investigations to assess the impact of TIC because of various approaches and definitions of TIC that were being used in practice and the lack of empirical TIC implementation strategies (Branson et al., 2017; Hales et al., 2017; Hanson & Lang, 2016; Leitch, 2017). As such, the principles of Harris and Fallot's (2001) TIC model and the tenets of SAMHSA's (2014b) TIC framework, have frequently been used to define TIC in research design and to develop and implement organizational TIC programs

(Cleary & Hungerford, 2015; Berliner & Kolko, 2016; Kusmaul et al., 2015; Machtinger et al., 2019; Marsac et al., 2016; Muskett, 2014; Schüssler-Fiorenza Rose et al., 2014; Wilson et al., 2015).

Another potential limitation of the TIC model was discussed in a study by Leitch (2017) that examined the use of TIC to improve patient resilience. Leitch suggested that the trauma-focused approach of TIC may be detrimental to some patient's recovery process due to the paradigm's focus on past traumatic experiences rather than patient's resilience factors. For example, Leitch described that the ACEs studies and the BRFSS survey did not ask strengths-based questions and focused on past problems instead. Moreover, it was speculated that professionals who use trauma-oriented methods, such as TIC, may fail to recognize resilience factors within individuals that could be useful to support and care for the needs of those affected by trauma (Kristjansdottir et al., 2018; Leitch, 2017).

Although TIC has been implemented in numerous organizations across many specialty fields, I was unable to find evaluation studies that have assessed the efficacy of TIC in nursing practice to mitigate patient retraumatization and improve health outcomes. Likewise, researchers that investigated the use of TIC among agencies and systems also discussed the lack of outcome-based empirical studies to investigate the effects of TIC on targeted populations (Hales et al., 2017; Hanson & Lang, 2016). Nevertheless, results from earlier research that examined the use of trauma-informed practices to reduce the use of seclusions and restraints at a child and adolescent psychiatric hospital described that the implementation of the principles of TIC decreased the number of episodes that

seclusions and restraints were used (Azeem et al., 2017). Other research in the systemic implementation and training of trauma-informed principles in various social agencies and healthcare organizations reported that the training and use of trauma-informed practices by staff resulted in improved patient care and patient perceptions of care such as the reduction of physical coercion in routine psychiatric care and higher patient ratings for providers who had received training in TIC (Fraser et al., 2014; Green et al., 2016). Similarly, earlier research that investigated the use of TIC in healthcare and community settings found that organizations that adapted a trauma-informed approach in the care of survivors of ACEs/TEs had decreased episodes of vicarious trauma among the staff (Bloom, 2013; Bloom & Farragher, 2013; Reeves & Humphreys, 2017; Wolf et al., 2014).

Nursing Perspectives of TIC

Multiple studies have found that despite the wide acceptance of trauma-informed systems of care in education, medicine, and social work; the nursing field has yet to fully embrace and implement the TIC paradigm (Goldstein et al., 2017; Isobel & Edwards, 2017; Kassam-Adams et al., 2015; Levenson, 2017; Marsac et al., 2016; Strait & Bolman, 2017; Williamson & Kautz, 2018). Still, trauma researchers have proposed that nurses are strategically posed to use TIC methods to mitigate retraumatization and support patients who are at risk of adapting maladaptive behaviors in response to trauma (Beckett et al., 2017; Stokes et al., 2017; Williamson & Kautz, 2018).

Much of the earlier TIC translational research was conducted in professional fields other than nursing; however, the findings from past studies have helped nurses to

better understand trauma-informed principles and methods (Hall et al., 2016; Bartlett et al., 2016). Yet, past research that investigated the use of TIC in diverse types of systems suggested that it may be difficult to generalize the findings from studies conducted in other professional fields to the practice of nursing due to differing philosophies and divergent professional and organizational practices (Bartlett et al., 2016; Hall et al., 2016). As such, multiple studies have examined strategies to implement TIC into nursing practice to understand and improve nurses use of trauma-informed methods in various specialty nursing areas such as long-term care (Kusmaul & Anderson, 2018), “mental health (Muskett, 2014), emergency department (Hall et al., 2016), perinatal care (Choi & Seng, 2015), neonatal and pediatric acute care (Kassam-Adams et al., 2015; Marcellus, 2014), and correctional settings (Harner & Burgess, 2011)” (as cited in Stokes et al., 2017, p. 2). In addition, past formative studies evaluated healthcare providers’ and patients’ perspectives of the TIC model itself rather than their perceptions of the implementation of TIC into practice (Choi & Seng, 2014, 2015; Green et al., 2015; Hall et al., 2016; Hoysted et al., 2017; Kassam-Adams et al., 2015; Stokes et al., 2017). For example, an earlier study by Kassam-Adams et al. (2015) that examined trauma nurses’ knowledge, practice, and perspectives of TIC as a method of practice to care for acutely injured children. In this study researchers surveyed licensed nurses ($N = 232$) who worked at five different pediatric trauma centers and found that most of the participating nurses reported an elevated level of self-rated competence with many of the elements of TIC. Other findings revealed that most nurses had favorable opinions of TIC and felt competent in their ability to respond calmly to episodes of strong emotional distress in

patient's family members. In addition, nurses with six or more years' experience were found to be more likely to teach patients and their family ways to cope with distressing experiences. However, the findings showed that approximately 20% of nurses felt less competent "in eliciting details of a traumatic event without re-traumatizing a child or parent, educating patients and families about common PTS reactions, and responding to questions about whether a child may die" (p. 480). In addition, 55% to 66% of participants perceived that some trauma-informed methods posed potential barriers to patient care such as "time constraints, worry about further upsetting or re-traumatizing children and families, lack of training, and confusing information/evidence on trauma-informed practices" (p.480). Most of the study's participants were female, with 42% under age 30, and had a median of six years' experience working as a nurse. Although the authors sought to recruit nurses from multiple specialties those that volunteered were all mental health nurses. One of the study's weaknesses was the lack of nurse participants from other specialty areas. A strength of the study was the varied skill level and experience of the sample, which included 215 RNs, 5 LPNs, and six nurses with unreported nursing credentials.

A follow-up study that used a slightly adapted version of Kassam-Adams et al.'s (2015) survey tool was performed by Bruce et al. (2018) in an urban trauma center with a sample of interdisciplinary professionals ($N = 147$) that included 95 nurses, 27 therapists, and 25 physicians. The study's 38-item survey instrument assessed five categories of participants perspectives about TIC, which included knowledge regarding injury-related posttraumatic stress and TIC, opinions regarding TIC, self-rated competence in TIC,

recent use of TIC practice, and perceived barriers to implement TIC. The result of the study reported that the majority of participants had favorable opinions of TIC and an awareness that most patients who experience a severe injury or illness will have a traumatic stress reaction. In addition, most participants reported elevated levels of self-rated competence in TIC. Similar to findings from Kassam-Adams et al., a quarter of the participants in Bruce et al.'s study reported not feeling competent to elicit details of a traumatic event without re-traumatizing the patient. In addition, half of the participants in Bruce et al. rated themselves as not competent to educate patients about stress reactions. Furthermore, comparable to Kassam-Adams et al.'s findings, the majority of respondents in Bruce et al. reported perceived barriers to using TIC in practice such as time constraints, need for additional training, confusing information about TIC, and concern about retraumatizing patients. The authors purported that although nurses and other healthcare professionals have been found to value the principles of TIC, there may be gaps in training and organizational support that can adversely affect the use of TIC in practice. In addition, neither Bruce et al. nor Kassam-Adams et al. reported if their study's research design was based on a theoretical model.

The findings of Kassam-Adams et al., (2015) and Bruce et al., (2018) echo the results of an earlier qualitative study by Choi and Seng (2014) that investigated the use of TIC by 20 perinatal (i.e., maternity-care) professionals in the care of obstetric patients with histories of childhood trauma and posttraumatic stress. The results of Choi and Seng revealed that the participants perceived a need for more training in trauma-informed methods to better care for women with histories of trauma. A common theme was found

that revealed the participants' concern about past experiences caring for patients with trauma histories who had dissociated during childbirth and physical exams. The participants reported that they had not received specific training during their professional studies about dissociative disorders and that they wanted to learn better therapeutic communication strategies with patients at risk of dissociation. The need for effective communication strategies with trauma-exposed patients has been illustrated in other studies that described when healthcare professionals asked about and listened to patients' trauma histories the patients reported feeling accepted and motivated to take part in their care (CDC, 2016; Felitti & Anda, 2014; Goldstein et al., 2017; Green et al., 2016; Tobiano et al., 2015).

Choi and Seng (2015) conducted a follow-up pilot study in response to the results from Choi and Seng's (2014) earlier qualitative study. The follow-up pilot study aimed to develop, implement, and evaluate a one-hour TIC training program for perinatal health professionals. In addition, the study used a pretest-posttest format that included quantitative measures and one open-ended qualitative item to elicit participants' learning needs about TIC. To this end, the study used a "knowledge, skills, and attitudes (KSAs) framework" (p. 516) to pilot and assess the feasibility of the researcher-developed one-hour training program and to quantitatively evaluate participants' knowledge, skills, and attitudes about TIC after they received the training. The study recruited a convenience sample of participants ($N = 47$) that included social workers, nurses, administrators, and doulas (i.e., birth assistants). The qualitative results revealed that the social worker respondents perceived the TIC training program as too basic, and they wanted more in-

depth training. Whereas the healthcare professionals reported that they felt the training was highly informative and that it raised their awareness of trauma. A plausible explanation for the differing qualitative findings between social workers and healthcare professionals was found in the study's quantitative pre-test results, which showed that the social workers had a greater baseline knowledge of TIC compared to the nurse participants. In this respect, the social workers and nurses had differing levels of baseline knowledge about trauma prior to the training program and thus had different learning needs. The weakness of Choi and Seng's (2015) follow-up study was its use of a convenience sample, which may have affected the impartiality of the study's findings. Hence, the study results may not have been representative of the target population and thus not generalizable to other settings (Porta, 2014). Equally, the strength of this study was found in its use of a survey instrument that demonstrated good internal consistency and reliability (e.g., Cronbach's $\alpha = .78$ pretest and $.85$ posttest). Moreover, Choi and Seng's (2015) study showed the potential difficulty of implementing TIC with interdisciplinary teams that have varying levels of baseline knowledge.

In comparison, the results of a prior qualitative study that examined the lived experience of seven nurses who had adopted TIC in the care of patients admitted to a mental health setting found that despite a lack of formal knowledge about TIC the nurses had an inherent understanding of the principles of TIC (e.g., avoiding patient retraumatization) due to "the parallels between nursing and TIC" (Stokes et al., 2017, p. 7). However, the authors cautioned that the study's findings may not be transferable to other nursing specialties since the study was limited to mental health nurses and had a

small sample size ($N = 7$). Hence, the study's small sample size with limited participant attributes is a potential weakness of the study. One of the strengths of the study was its recommendation for future research to examine the similarities between the TIC model and existing nursing practices. In addition, one of the study's themes illustrated a subset of participants who perceived that the use of TIC in nursing practice could adversely affect their ability to provide proper care to patients with trauma histories. For example, the study revealed that some respondents felt that without training in TIC they may be at risk of developing vicarious trauma while caring for patients with histories of ACEs/TEs. Namely, some of the participants described that they believed the effects of secondary trauma already adversely affected their work. Moreover, the authors discussed that the nurse participant's perception of potential vicarious trauma supported the need for an organizational paradigm shift to TIC to mitigate the risk of secondary trauma that could affect nurses who cared for trauma survivors. The findings from Stokes et al. supported the results from other earlier research that explored nurses' knowledge and experiences related to TIC, which revealed that some participants felt that a nurse's personal history of trauma and the risk of vicarious trauma were potential barriers to using TIC in practice (Reeves, 2015).

Nurses' Personal and Vicarious Trauma

The impact and prevalence of nurses' personal and secondary exposure to trauma was a decidedly relevant literature review topic because the current study is based on Gadamer's (1960/2013) philosophical stance. Specifically, Gadamer described how individuals have a historically effected consciousness that is shaped by the person's

particular history and culture. Therefore, I reviewed the literature for research that examined the impact and prevalence of nurses' exposure to personal and vicarious trauma. For example, the results of a synthesis of the literature on TIC by Reeves (2015) revealed a high incidence of childhood sexual assault among health care professionals versus the general population. Likewise, Lavoie et al. (2016) reported that "25% of nurses have been victims of physical violence more than 20 times in 3 years" (p. 175). In another study of 1,981 nurses, 25% of participants reported histories of physical or sexual interpersonal violence (McLindon et al., 2018). Comparable results were found in a cross-sectional study of 1,071 public health professionals that included physicians, nurses, and nursing assistants, which showed that 26.6% of participants had experienced some form of inter-personal violence (Carmona-Torres et al., 2018). Moreover, Sansbury et al. (2015) described that "as many as 24 million or 8% of US residents will experience a traumatic stress response during their lives; but this rate is an estimated 15% to 50%, potentially nearly six times higher among mental health workers" (p. 114). A similar study that investigated rates of trauma among behavioral health practitioners, including psychiatric nurse practitioners, found that 66.4% of participants reported histories of ACEs/TEs, "with 43.3% indicating sexual molestation, 21.9% parental alcoholism, 13.8% physical abuse, 11.4% death of a parent or sibling, and 8.1% hospitalization of a parent for mental illness" (Butler et al., 2018, p 26). In addition to studies on nurses' and health professionals' personal trauma histories, several other studies investigated the effects of nurses' exposure to patients' traumatic experiences (Fukumori et al., 2018; Morrison & Joy, 2016; Sheen et al., 2016). For example, Fukumori et al. (2018) found

that 30% of oncology nurses had an elevated risk of compassion fatigue (i.e., feeling numb and disconnected from patients) as a result of exposure to patient's traumatic experiences. Another study discussed that the rates of vicarious trauma among nurses in differing specialties were found to be between 25% to 38%, with the highest rate of secondary trauma belonging to nurses who worked in hospice and oncology areas of practice (Zerach & Shalev, 2015). Missouridou (2017) speculated that the high incidence of vicarious trauma in the nursing profession may be related the risk of "overidentification" with the experiences of trauma-exposed patients by nurses who have their "own personal traumatic experiences" (p. 113). Similarly, other earlier studies described that nurses' who work with unresolved personal trauma histories and vicarious trauma may develop secondary difficulties such as PTSD (Creedy & Gamble, 2016; Lavoie et al., 2016; Zerach & Shalev, 2015); stigmatization of patients (Zerach & Shalev, 2015); and diminished capacity to deliver quality nursing care (Morrison & Joy, 2016).

Controversies of TIC

Earlier research in effective strategies for implementing TIC described that the implementation of TIC into nursing practice is debatable due to the difficulty of translating TIC philosophy into practice (Bryson et al., 2017; Isobel, 2015; Musket, 2014). The controversy of the difficulty of knowledge translation into nursing practice was illustrated by the findings of Isobel and Edwards' (2017) qualitative study that examined the impact of change upon the nurses who implemented TIC as a nursing model of care in an acute inpatient mental health unit. The Isobel and Edwards' study recruited a small purposive convenience sample of five mental health nurses ($N = 5$) who

were interviewed 18-months after the study site implemented TIC as a guiding philosophy of care. The thematic findings of the study revealed that nurses believed that the shift to TIC was “both good and bad” (p. 89) and that factions of resistance among the staff toward the implementation of TIC into practice arose within the nursing unit during the study. For example, participants described adverse feelings about the TIC model such as resistance to change and misunderstandings about trauma-informed methods. The findings also described nurses desire for “clarity and consistency and clear role expectations within TIC” (p. 90). For instance, the participants identified the need for transparent communication and educational support about TIC; specifically, nurses reported a need for patient psychological safety within the collaborative nurse-patient relationship. The strength of Isobel and Edwards’ study was its implication for practice to understand why nurses may resist implementing TIC and the breadth of nursing experience among the participants that ranged from 1 year to over 25 years. The weakness of the study is its small sample size and that the participants were purposively chosen. In addition, the study did not mention if a theoretical model was used for the development of the TIC implementation strategy. The findings of Isobel and Edwards’ study are echoed in Currier, Stefurak, Carroll, and Shatto’s (2017) description that an organization that is adapting TIC needs to have an understanding that trauma can affect the lives of patients and staff and be knowledgeable that the process of change impacts patients’ and staffs’ experiences within the facility.

An additional controversy of implementing TIC in healthcare settings is described in Hall et al.’s (2016) exploratory mixed method inquiry that was performed to evaluate

the effectiveness of a one-day TIC educational program for emergency department (ED) nurses. A pre-education and post-education questionnaire were used in the study with 34 ED nurses from two different hospitals to quantitatively find knowledge derived from training about TIC based on adult learning theory. The quantitative data from the pre- and post- education questionnaire found that nurses' knowledge of TIC increased related to their ability to talk to patients about peripheral trauma and understand the trauma-informed nursing practice. However, Hall et al. reported that nurses did not increase their understanding of their role as an ED nurse in TIC and the retraumatizing effects that the ED can have on these individuals. Focus groups consisting of 14 participants chosen from the original 34 ED nurses were conducted three months after the TIC educational program to gather qualitative data about "...staff perceptions of experiences and benefits of TIC in the ED" (Hall et al., 2016, p. 4). The authors described that the focus groups' qualitative data produced the following two themes: (a) effectiveness of the TIC education, which showed an improved understanding of TIC and the beginnings of an attitudinal change, and (b) changes in nursing practice, which showed improvements in the person-centered approach and the limitations of TIC (e.g., time constraints and risk of harm to staff). The findings of this study showed that the one-day educational program provided some increased knowledge of TIC principles among participating nurses. However, the authors described that overall, the nurses remained unsure of the practical elements of implementing trauma-informed nursing in the ED due to organizational issues such as lack of time and staff safety. The strength of this study was that it was theoretically based and demonstrated nurses desire to use a TIC framework despite the

implementation barriers in the ED. The weakness of this study was the lack of organizational support to integrate and sustain TIC methods in the ED.

The findings from Hall et al. (2016) were similar to literature synthesized by Reeves (2015), which found that "...nurses reported that barriers to inquiring about sexual violence or abuse included not having enough time with patients, feeling uncomfortable asking questions about sexual experiences, and not knowing how to respond" (p. 700). Reeves' findings echo Felitti and Anda's (2014) description of healthcare personnel's resistance toward implementing TIC that include barriers to using TIC such as time factors and a lack of sufficient training. Felitti and Anda speculated that resistance might also be related to healthcare providers' trauma exposures as well as discomfort about delving into patient's private family matters, which have traditionally been taboo subjects. Similarly, other researchers have suggested various approaches to improve healthcare professional's resistance and difficulty in addressing the psychosocial needs of patients with histories of ACEs/TEs and maladaptive coping behaviors (Knaak et al., 2017; Worley & Delaney, 2017). For example, Worley and Delaney (2017) recommended for nurses to identify personal biases and to expand their knowledge base to better understand how patient's maladaptive coping mechanisms are influenced physiologically via a neurobiological response to trauma. The authors suggested that nurses improved understanding of trauma could combat the assumption that adverse patient behavior is manipulative and that patients lack the willpower to change. Worley and Delaney's suggestion is similar to the results of studies that described how healthcare professionals who care for patients with histories or trauma are better equipped to provide

knowledgeable and compassionate care when they understand that patients' maladaptive coping behaviors and related illnesses are due to physiological adaptations to ACEs/TEs (Cleary & Hungerford, 2015; Strait & Bolman, 2017; Worley & Delaney, 2017). In addition, in a past review of the literature the authors found that TIC education for health professionals in conjunction with a supportive work environment had a positive influence on their attitudes toward patients with maladaptive behaviors (van Boekel et al., 2015).

Summary and Conclusions

This chapter presented the findings from the exhaustive review of the literature that examined what is known as well as what is not known in public health related to the implementation of TIC in nursing practice. Specifically, the literature review explored what is currently known about psychological trauma and the TIC model and how it is being studied and implemented into nursing practice. The results of the literature review revealed research that described the potential negative impact of ACEs/TEs on health outcomes, the use of TIC to mitigate episodes of inadvertent patient retraumatization, and the relationship between a dysregulated neurobiological response to trauma and the adaptation of maladaptive coping mechanisms. In addition, an abbreviated form of domain analysis was used to identify and narrow down broad themes found in the literature review that represented key elements of the study (Colorafi & Evans, 2016). In this regard, the broad themes were divided into key topics, or primary themes, which included universal trauma precautions, educating patients and families about ways to cope with ACEs/TEs, preventing patient retraumatization, nurses' personal history of ACEs/TEs, and nurse's vicarious trauma. In addition, sub-topics, or sub-themes, related

to the study topic were identified in the literature, which included barriers to implementing TIC, need for more training, fear of retraumatizing patients, vicarious trauma, confusion about the nurses' role in TIC, and the lack of a uniform TIC implementation strategy and universal definition of TIC.

Most of the studies that I identified in the literature review were conducted in settings such as mental health, pediatrics, and obstetrics. In this respect, the literature review revealed that there was a paucity of research in the use of TIC by nurses who work in rehabilitation or long-term care settings. Specifically, I was unable to find any studies that had examined nurse's implementation of TIC in rehabilitation or skilled-nursing facilities. In addition, there was a dearth of formative studies based on the TPB in the implementation of TIC into nursing practice and much of the reviewed research lacked a theoretical basis. Moreover, my extensive review of literature revealed that because organizational environments vary it is imperative to understand how each systems' staff and leadership perceive and experience TIC to select the most effective implementation strategy for that system (see Hales et al., 2017; Kusmaul et al., 2015; Weiss et al., 2017). In addition, I found that few qualitative formative studies had been conducted to identify factors that need to be addressed prior to implementing TIC into an organization. Hence, to fill the gap in the literature, I conducted the current formative study to elicit and understand a priori factors (i.e., beliefs) that influenced the nurse participants' perceptions about implementing TIC into practice. As such, the results of the current study provide an in-depth understanding of nurse's a priori beliefs and perceptions about implementing TIC into practice in a skilled-nursing setting. The

findings from this study may be informative to future translational studies that seek to improve nurse's use of TIC in the skilled-nursing setting to mitigate the inadvertent retraumatization of patients. The following chapter, Chapter 3, describes the current study's research design and tradition, philosophical stance, and data collection methods.

Chapter 3: Research Method

Introduction

In this study, I examined nurse participants' lived experience of implementing TIC into nursing practice for the care of patients with physical disabilities, known or unknown histories of ACEs/TEs, and secondary maladaptive coping behaviors at a skilled-nursing facility in a midsized city in the state of Michigan. In this chapter, the methods that I used to carry out data collection and data analysis for this hermeneutic phenomenological study and the rationale for the approach and techniques that I employed are described. Major sections of this chapter include the role of the researcher, participant selection, procedures for recruitment, participation, data collection and analysis, and issues of trustworthiness. Also, a detailed description of the formation and validation of the study's researcher-developed data collection instrument is presented. Lastly, ethical procedures that I used to uphold the principles of ethical conduct in research is described.

Research Design and Rationale

This study was a qualitative hermeneutic study based on the philosophical tenants of Gadamerian phenomenology. As discussed in Chapter 2, the theoretical model that I chose for this study was the TPB. A central assumption of the TPB is that behavior is formed by beliefs about performing a given behavior and that salient belief elicitation in formative research can provide a better understanding of the determinants of behavioral intention (Fishbein & Ajzen, 2010). In this respect, I developed the study's research questions to correspond with the elicitation phase of the TPB belief-based framework and

its salient beliefs constructs (i.e., behavioral beliefs, normative beliefs, and control beliefs). Specifically, I sought to better understand the study's central phenomenon, nurses' lived experience of implementing TIC into nursing practice, by eliciting and interpreting the antecedent beliefs that were most influential on nurses' perceptions about implementing TIC into practice to answer the following research questions:

RQ1: What is it like for nurses to implement TIC into nursing practice to care for patients who have disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ2: What is the role of behavioral beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ3: What is the role of normative beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ4: What is the role of control beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

Rational for Chosen Tradition

The literature review revealed several empirical studies that described how nurses' miscalculation of the impact that past traumatic experiences can have on patient

behavior can lead to nursing care that is potentially stigmatizing and retraumatizing for patients with histories of ACEs/TEs (Alexander et al., 2016; Reeves, 2015; Reeves & Humphreys, 2018; Vijayaraghavan et al., 2012). For instance, other past researchers, who examined strategies to prevent veteran's secondary trauma in mental health settings, discussed that a lack of trauma-informed practices can lead to retraumatization and barriers to care for patients with histories of ACEs/TEs (Kelly et al., 2014). Therefore, the central phenomenon that I chose for this study was nurses shared lived experience of implementing TIC into nursing practice to mitigate patient retraumatization.

Qualitative Approach

Creswell and Poth (2018) described that a qualitative study is appropriate when “a problem or issue needs to be explored...and a complex, detailed understanding of the issue” within its context is required (p. 45). In this regard, few theoretically based formative qualitative studies have been conducted to explain the belief determinants of nurses' implementation of TIC into nursing practice (see Hatcher et al., 2018; Wilson et al., 2017). Hence, a qualitative formative study was needed to explore nurses' perceptions of implementing the practice paradigm of TIC into nursing practice.

Phenomenology

Mantua (2015) described that “phenomenology is further recommended if a study requires its rigorous, critical, systematic nature of investigation to verbalise [*sic*] the perceptions of various experiences, especially poorly understood phenomena that are of importance to nursing” (p. 31). Therefore, I chose a phenomenological approach for this study to investigate and supply insight into the poorly understood existential meaning

structures of nurses' perceptions of the study phenomenon (see Baker et al., 2016; Hodgdon et al., 2013). In this manner, I designed the study to reveal pre-reflexive dimensions of nurses' lived experience in implementing a new practice paradigm that required a paradigmatic shift from a purely medical model that asked patients "What is wrong with you?" toward a TIC sociomedical model that asks patients "What happened to you?" (see Ardino, 2014).

Philosophical Stance

Wojnar and Swanson (2007) described that phenomenology is a philosophical discipline and a research method; thus, it is essential for phenomenological studies to specify the philosophy that undergirds its research design. In this respect, in the pre-research phase, I considered descriptive and interpretive phenomenological approaches as possible philosophical guides for this study.

Descriptive Phenomenological Approach

Husserl is credited as the founder of phenomenology, which has been used in countless studies as philosophical and descriptive approach to describe everyday conscious experiences (Husserl, 1999; Matua & Van Der Wal, 2015; Vagle, 2018). Christensen et al. (2017) discussed that Husserlian descriptive phenomenology seeks to describe the essence of a phenomenon via intentionality, reduction, and the natural attitude. In a descriptive phenomenological approach, preconceived opinions are set aside or bracketed by the researcher to suspend "all judgments about what is real" (Matua, 2015, p. 31). Husserl described how personal biases and prior knowledge need to be bracketed via a transcendental process of epoché and phenomenological reduction before

conducting research (Husserl, 1999; van Manen, 2016a). In this regard, Matua (2015) stated that the suspension of judgements or preconceived notions about the given phenomenon opens the researcher up to the lifeworld (i.e., the world as experienced prior to analysis) as it presents itself “without mentioning any of the participants’ social, cultural, or political contexts” (p. 24). Moreover, Nagle (2018) clarified that “a phenomenon, to Husserl, was the thing itself—not a generalization, an approximation, a representation, or a deduced outcome. It is what shows itself, in its immediacy, in consciousness” (p. 8). In this regard, to understand a given phenomenon, Husserl’s descriptive approach focuses on the intentional systematic contemplation of the structures of consciousness themselves—the thinking of or about things—as they appear naturally, not contextually (Husserl, 1999; Nagel, 2018).

I did not choose a descriptive approach for this study because the theoretical model for this study, the TPB, purports that one of the dominant influential elements of behavior is the context (e.g., environment, relationship, tools) in which the given behavior is performed (Fishbein & Ajzen, 2010). Specifically, studies have shown that understanding targeted behaviors in the context in which they are derived is a fundamental necessity for successful public health interventions (Davis et al., 2015; Endres et al., 2015; Magruder et al., 2016). Moreover, Husserl’s concept of intentionality is not in alignment with the TPB’s proposition that behavior is best understood by measuring an individual’s attitude toward or in the state of performing the given behavior rather than assessing their attitude about the object of the behavior (Husserl, 1999; Fishbein & Ajzen, 2010). Therefore, to best understand the current study’s phenomenon

within the context of the environment in which the phenomenon was occurring, Husserl's descriptive approach would not have provided the best approach to complete a contextual examination in the nurse participants' lived experience and therefore would not have aligned with the purpose of the study or its theoretical framework.

Interpretive Hermeneutic Approach

Interpretative hermeneutic phenomenology is derived from the philosophical work of Heidegger, which was later expounded upon by other philosophers such as Gadamer (Gadamer, 1960/2013; Heidegger, 1927/2010; Horrigan-Kelly et al., 2016; Vagle, 2018). Hermeneutic phenomenology combines the study of interpretation (hermeneutics) and the study of structures of consciousness (phenomenology) to search for an understanding of the phenomenon in question (i.e., *verstehen*) within the given phenomenon and its social-cultural context (Matua & Van Der Wal, 2015; Vagle, 2018; van Manen, 2016a).

In contrast to Husserl's (1999) philosophical reduction of existence to consciousness and intentionality (a consciousness of objects), Heidegger (1927/2010) described that hermeneutic phenomenology is grounded in Dasein or Being. Specifically, per Heidegger, in hermeneutical thought, existence is the state of being—a state of nonintentional openness to a world—which Heidegger termed being-in-the-world—or being itself is time, as Gadamer called it (Gadamer, 1960/2013; Heidegger, 1927/2010; Reiners, 2012; Warnke, 2013). Moreover, Heidegger explained that, in hermeneutical philosophy, consciousness or unconcealment is external to one's being-in-the-world, which cannot be reduced to one's consciousness of existence (Heidegger, 1927/2010;

Horrigan-Kelly et al., 2016; Vagle, 2018; Warnke, 2013). In this regard, Heidegger asserted that it is impossible to disavow a priori experiential knowledge and personal biases (Heidegger, 1927/2010; Reiners, 2012; Vagle, 2018). Instead, Heidegger believed that presuppositions are essential to phenomenological research and declared that researchers' preunderstandings are a valuable guide, and the recognition of fore knowledge can facilitate a deeper understanding of the phenomenon being studied (Heidegger, 1927/2010; Matua & Van Der Wal, 2015). Therefore, in contrast with Husserl's descriptive phenomenology, in the hermeneutic approach, the researcher's presuppositions are acknowledged and explored, but not bracketed (Matua & Van Der Wal, 2015; Vagle, 2018). Alternatively, hermeneutic phenomenology allows a given phenomenon to be examined in its social-cultural context to bring forth meanings and understandings via the participants' and the researcher's cogenerated understanding in the phenomenon (Matua & Van Der Wal, 2015; Wojnar & Swanson, 2007). For instance, Matua and Van Der Wal (2015) described that "interpretive [hermeneutic] phenomenological research results in a detailed interpretation of the meanings and structures of a particular phenomenon as it is experienced first-hand" (p. 24).

Gadamerian Philosophical Hermeneutics

Gadamer was a German philosopher who defined the phenomenological tradition of philosophical Hermeneutics and developed a grounding for hermeneutical ontology, or understanding being (Gadamer, 1960/2013; Dostal, 2002; Warnke, 2013). Gadamer (1960/2013) studied under Heidegger and was influenced by Heidegger's interest in the question of Being (Dostal, 2002; Warnke, 2013). Per interpretive Hermeneutics, to

understand something (i.e., a text), we must be grounded in a state of being, or Dasein, along with that which is to be understood (Heidegger, 1927/2010; Vagle, 2018; Warnke, 2013). In this regard, Heidegger (1927/2010) clarified, Being-in, in the following commentary in his magnum opus, *Being and Time*:

What is meant by “Being-in”? Our proximal reaction is to round out this expression to “Being-in” ‘in the world’”, and we are inclined to understand this Being-in as ‘Being in something’ ...as the water is ‘in’ the glass, or the garment is ‘in’ the cupboard. By this ‘in’ we mean the relationship of Being which two entities extended ‘in’ space have to each other with regard to their location in that space. (p. 79)

Therefore, the current study was grounded in the study phenomenon (i.e., nurses shared lived experience of implementing TIC into nursing practice to mitigate patient retraumatization).

In addition, Gadamer’s philosophical Hermeneutics was built upon the tenants of Heidegger's concepts of Dasein's historicity or heritage and Dasein's historizing of the human situation, which became central elements of Gadamer’s concept of the hermeneutic experience of understanding (Dostal, 2002; Warnke, 2013). Gadamer’s (1960/2013) magnum opus, *Truth and Method*, proposes that understanding is always a matter of interpretation and language via the careful reading and interpretation of texts within the reader’s historical context (i.e., preunderstandings; Dostal, 2002; Warnke, 2013). For instance, Gadamer wrote,

To think historically always involves mediating between those ideas and one's own thinking. To try to escape from one's own concepts in interpretation is not only impossible but manifestly absurd. To interpret means precisely to bring one's own preconceptions into play so that the text's meaning can be made to speak for us. (p. 398)

As such, because the current study was based on the research assumption of subjective truth and the paradigm of social constructivism, which assumes that individuals make subjective sense of their reality based on their historical and social perceptions (see Bloomberg & Volpe, 2016; Gadamer, 1960/2013), I chose a Gadamerian philosophical stance for this study. Specifically, in alignment with social constructivism, Gadamer (1960/2013) purported that individuals have a historically effected consciousness, which is shaped by the person's particular history and culture. For example, Koch (2006) described that Gadamerian phenomenology posits how individuals participate "in this a priori world in cultural, historical, and social contexts" (p. 831). Moreover, per Gadamer's philosophy, interpretation of a given phenomenon is always an evolving process, which is only possible because of the researcher's presuppositions (e.g., fore-having, fore-seeing, and fore-conceptions) in the targeted phenomenon that is understood within the context of language and tradition (Gadamer, 1960/2013; Warnke, 2013).

Gadamer (1960/2013, as cited in Holroyd, 2007) described that the hermeneutic approach is a learning experience and a reversal of consciousness, which "transforms our earlier views, and after this transformation, we can never return to our previously held views" (p. 9). Warnke, 2013 reframed Gadamer's argument as, "it is precisely in

confronting other beliefs and other presuppositions that we can both see the inadequacies of our own and transcend them” (p. 172). In this regard, Gadamer referred to presuppositions or preunderstandings (i.e., preformed ideas and attitudes) as *prejudice*. The importance of clarifying prejudice in phenomenological research is reflected in Gadamer's description that "it is the tyranny of hidden prejudices that makes us deaf to what speaks to us in tradition" (p. 282). Indeed, in the review of the literature I found empirical studies that described how nurses may inadvertently stigmatize, lack empathy, have prejudices, discriminate, label, and stereotype patients who have challenging behaviors (Alexander et al., 2016; Clement et al., 2015; Russell et al., 2017; Wallin-Lundell et al., 2018). Hence, I believe that Gadamer’s philosophical view of prejudice made Gadamerian phenomenology an appropriate choice for this study.

Horizons. As previously discussed, Gadamer (1960/2013) described that the understanding of a phenomenon is always a matter of language and interpretation of the text. Moreover, Gadamer discussed that interpretation is influenced by the reader’s *horizon*, or personal history and tradition, which form their preunderstandings of the phenomenon (e.g., prejudice). Specifically, Gadamer portrayed an individual’s horizon as “the totality of all that can be realized or thought about by a person at a given time in history and in a particular culture” (Clark, 2008, p. 58).

Fusion of Horizons. Gadamer (1960/2013) stated that hermeneutic inquiry and the revelation of personal horizons is meant to "clarify this miracle of understanding, which is not a mysterious communion of souls, but sharing in a common meaning" (p. 292). As such, Gadamer used the term, fusion of horizons, to describe individual’s

merging of horizons and transformation of perceptions about a given phenomenon, which leads to a sharing in common meaning and produces a different shared understanding of the phenomenon. Gadamer explained that to understand another person's perspective "the essence of the question is to open up possibilities and keep them open" (p. 298). In this regard, Gadamer clarified that, despite preunderstandings, a hermeneutic understanding of a given phenomenon can be achieved by a fusion of horizons and figuratively putting oneself "in someone else's shoes" (p. 315).

Hermeneutic Circle. Gadamer (1960/2013) further developed the hermeneutic circle, which was first presented by Heidegger (1927/2010), whereby "parts of the text are understood by reference to the whole, and the whole is understood in terms of its parts" (Gadamer, 1960/2013, p. 49). In this regard, Gadamer described that "to understand a text means to apply it to ourselves and to know that, even if it must always be understood in different ways, it is still the same text presenting itself to us in these different ways" (p. 399). In other words, the hermeneutic circle allows for a cyclic interpretation of the text until a mutual understanding the meaning of the phenomenon is achieved between the researcher and the textual data (Bloomberg & Volpe, 2018). Therefore, I used Gadamer's hermeneutic circle in the current study to interpret the textual data and achieve an understanding of the meaning in nurse participants' perceptions about their shared phenomenon of implementing TIC into practice.

Role of the Researcher

In a qualitative study, the researcher is the primary instrument of data collection and analysis (Merriam & Tisdell, 2016; Patton, 2015; Seidman, 2013). As the sole

researcher for the current study, I immersed myself in all phases of the research process, which included research design, participant recruitment and interviewing, data collection, coding, and data analysis. In this regard, there are potential risks of the researcher being viewed by the participants as having a dominant and more powerful position (see Merriam & Tisdell, 2016; Seidman, 2013). To mitigate the risk of a perceived power differential, I only recruited nurse participants who were not previously known by me, and I was not in a position of authority over their work. To alleviate any concern by the participants that their interview responses might negatively affect their employment, I took specific measures to protect their privacy, which included conducting interviews away from their workstation and masking all names in the final manuscript (see Merriam & Tisdell, 2016). A more in-depth discussion about how the study addressed participant privacy is presented later in the Ethical Procedures section.

Researcher Bias

Braun and Clarke (2013) described that qualitative research is a subjective process and that the researcher brings personal “histories, values, assumptions, perspectives, politics and mannerisms into the research” (p. 36). Therefore, to mitigate potential bias, I created a transparent research design that used methods of reflexivity to reveal personal biases and presuppositions that may have impacted the outcome of the study (see Creswell & Poth, 2018). During data collection and analysis, I was open to what is presented as “otherness” by rigorous introspection of personal biases and presuppositions via methods of reflexivity.

Historical Horizons

Gadamer (1960/2013) explained that in the Hermeneutical approach, “the important thing is to be aware of one’s own bias, so that the text can present itself in all its otherness and thus assert its own truth against one’s own fore-meanings” (p. 282). Since the current study was underpinned by Gadamerian philosophy it was necessary to extend my horizons (understandings shaped by experiences) to identify personal preunderstandings of the study phenomenon that may have otherwise impacted interpretation of the data and reflected my presuppositions (see Fleming et al., 2003; Gadamer, 1960/2013; Lincoln & Guba, 1985).

Reflexivity

Reflexivity is defined as, “awareness of the influence the researcher has on what is being studied and, simultaneously, of how the research process affects the researcher. It is both a state of mind and a set of actions” (Probst & Berenson, 2014, p. 814). Similarly, a researcher’s positionality within a study is their socially or professionally situatedness in relationship to the participants (see Bloomberg & Volpe, 2016). For example, Clancy (2013) described that “Many factors may be important to consider when thinking about positionality, such as ethnicity, age, previous life experiences, social identity, role and personality” (p. 13). In this respect, I examined my positionality and situatedness in the study by assessing, understanding, and integrating my preunderstandings during the course of the reflexive process. Specifically, throughout the data collection phase, I used multiple methods of reflexivity to critically evaluate my preunderstandings and positionality including a peer debriefing format, van Manen’s (2016b) reflexive

questions, and Rae and Green's (2016) matrix tools for reflexivity. As such, I mitigated researcher bias via the study's methods of reflexivity and reflexivity tools, which included recording observations in a field notebook, reflexive journaling, and peer debriefing. Through the use of the study's reflexivity tools, I conducted a self-appraisal of my preunderstandings and positionality in the study. In particular, by way of reflexive practices, I became aware of potential factors that could have influenced how I conducted data collection and data analysis such as my previous experiences, professional roles, personal values, beliefs, knowledge, and biases (see Berger, 2015; Clancy, 2013). As I engaged in the reflexive process, I recognized how my preunderstandings of trauma and TIC were influenced by elements of my historical horizons including my 30-year nursing career as an RN in which I worked in various settings such as pediatrics, ambulatory care, long-term care, case management, emergency department, public health, home health care, oncology, and nurse management. In addition, during my career, I lived and worked as a nurse in Italy and throughout the United States and where I cared for many patients with acute and chronic psychological trauma. Moreover, as a nurse, I have personally experienced trauma and vicarious trauma. Hence, via reflexivity, I recognized and examined my historical horizons and preunderstandings of the study phenomenon. As such, I embedded and discussed my revealed preunderstandings within the study's findings, which was an essential part of the interpretive process (see Merriam & Tisdell, 2016).

Conflict of Interest

I did not experience any ethical issues, conflict of interests, or significant power differentials related to the study site environment nor with the research participants. In addition, monetary incentives were not used to recruit or compensate participants.

Methodology

Van Manen (2014) described that the elements of hermeneutic phenomenological research cannot be reduced to standard "procedural schemes" (p. 30) as demonstrated by Gadamer's (1960/2013) quote, "There is no method to human truths" (p. 30). Therefore, the methods used to guide the process of data collection and data analysis were based on a compilation of various approaches. This section discusses the following elements of the study's methodology: (a) participant selection logic; (b) instrumentation; (c) researcher-developed instrument; (d) procedure for pilot study; (d) procedures for recruitment, participation, and data collection; and (e) data analysis plan.

Participant Selection Logic

The study's participant pool included RNs and LPNs who were employed at the partner site at the time of the study and who met the study's inclusion requirements. Van Manen (2016a) described that "a good phenomenological description is collected by lived experience and recollects lived experience-is validated by lived experience, and it validates lived experience" (p. 27). In this respect, Palinkas et al. (2015) illustrated that purposeful sampling allows the researcher to identify individuals who have experience or knowledge about the phenomenon under investigation and are willing to share their experience and knowledge.

Purposeful Sampling

To obtain rich information about the study phenomenon, I used three categories of purposeful sampling to recruit participants, which included homogeneous, criterion-based, and snowball sampling. First, I used a homogeneous purposeful sampling method to recruit and select study candidates who shared in the study phenomenon (Bloomberg & Volpe, 2016). Second, I applied criterion-based purposeful sampling method to select participants who met the study's inclusion criteria (see Bloomberg & Volpe, 2016). Lastly, I used a snowball sampling technique and asked enrolled participants to refer other potential qualified candidates to take part in the study (see Bloomberg & Volpe, 2016; Merriam & Tisdell, 2016; Patton, 2015).

Participant Inclusion Criteria

Merriam and Tisdell (2016) described that "the criteria you establish for purposeful sampling directly reflect the purpose of the study and guide in the identification of information-rich cases" (p. 96). Therefore, to recruit candidates who could provide rich relevant information related to the purpose of the study, I selected the following participant inclusion criteria: (a) licensed to practice nursing (RN or LPN); (b) currently working in a skilled-nursing facility that had previously implemented TIC; (c) prior training in TIC; (d) ability to read, write, and speak English; (e) at least one year of full-time nursing experience; (f) Internet and email access, competence in using email, and basic computer skills; (g) experience caring for patients with histories of ACEs/TEs and secondary maladaptive coping mechanisms; and (h) willing to participate in an in-depth interview concerning their perspectives about implementing TIC. In this regard, I

selected participants to take part in the study who met the study criteria and could supply rich information about the study phenomenon (Patton, 2015).

Sample Size

Varpio et al. (2017) suggested that a “sample be of sufficient size to allow transferability to other contexts...able to answer [the] research questions and aligned with...[the] research questions and methodological orientation” (p. 46). The suggested number of participants (i.e., sample size) for qualitative research varies. For example, for qualitative studies based on the TPB, Francis et al. (2004) recommended a minimum sample size of 13 to reach data saturation. Alternatively, Malterud et al. (2016) recommended a higher number of study participants when the aim of the study is broad and if the researcher is a novice. Although, the aim of the current study was narrowed to the nurses’ perceptions of implementing TIC; the topic of the study, TIC, is broad. In addition, I am a novice researcher, and this is the first study I have performed. Therefore, this study lent itself to a larger sample. Lastly, some journals have established qualitative sample size requirements, such as a minimum of 25–30 participants to publish studies that use in-depth interviews (Dworkin, 2012). Dworkin (2012) described that the rationale for required minimum sample sizes is to thoroughly address the research questions, collect enough data to clarify relationships and variations between theoretical constructs, and explore negative cases. Therefore, the study had a tentative sample of 25 participants. However, Varpio et al. explained that the sample may increase or decrease, depending on how many interviews are necessary to obtain reoccurring themes or a point where the information being supplied is redundant and no new substantive knowledge is

reached. Similarly, Merriam and Tisdell (2016) described that after data saturation is achieved, a fewer number of interviews may be needed than originally proposed.

Therefore, in the current study, I collected and analyzed data simultaneously until data saturation was achieved and no new themes or information emerged that would have augmented or changed the findings of a study (see Varpio et al., 2017).

Identifying Participants

To conduct research in a healthcare facility, Weierbach et al. (2010) recommended that the researcher contact the facility's nursing administrator to obtain permission to access the potential study site and to facilitate the recruitment of study candidates. To gain access to potential participants and a study site I developed and followed a detailed sampling strategy protocol (see Appendix B). Moreover, I strictly abided by all Walden University research policies during each phase of the research process. To identify a study site to recruit participants, I contacted the Healthcare Association of Michigan (HCAM) and requested a list of skilled nursing facilities that had implemented TIC and the contact information for each facility's Chief Nursing Officer (CNO) or the proper designated facility authority. Next, following the study's sampling protocol, I emailed the CNOs at the facilities that I was referred to by HCAM and requested a meeting to discuss the possibility of performing the study at their facility. As a result, an interested CNO responded, and I gained their support to conduct the study at the partner site and obtained a signed Letter of Cooperation.

Participant Recruitment

After receiving Walden University Institutional Review Board (IRB) approval, IRB# 09-25-19-0083644, I commenced the recruitment of study participants. To recruit study participants, I attended several scheduled staff meetings where I introduced the study and distributed study informational flyers that contained my contact information. In addition, I asked the potential participants to take their time and contact me if they wished to take part in the study. I had originally planned to send a solicitation email (see Attachment K) to prospective nurse participants who worked at the partner site to invite them to take part in the study, however, this was not necessary, due to receiving a substantial response from interested candidates who contacted me after my presentation at the staff meetings. When interested participants contacted me and expressed interest in volunteering for the study, I verified that they met the study's inclusion criteria via the demographic screening survey (see Appendix A), and I scheduled qualified candidates for face-to-face interviews. Next, I sent the qualified candidates an email that included their scheduled interview data and time, and study information.

Instrumentation

I used several data collection instruments to collect data to explain the phenomenon under investigation and answer the study's research questions (see Creswell & Creswell, 2017; Patton, 2015). In the study's original data collection strategy, I planned to collect data via multiple data collection instruments that included an interview guide, demographic screening survey, reflexivity journal, field notes, and facility documentation (i.e., nursing notes, policy on TIC, state survey documentation). However,

as explained in Chapter 4, unusual circumstances occurred during the data collection process that prevented me from accessing facility documentation at the partner site. As such, minus facility documentation, I used the remaining data collection instruments to collect data in several ways, which added to the credibility and dependability of the study's findings (see Creswell & Creswell, 2017; Patton, 2015).

Interview Guide

To obtain rich and meaningful data about the study phenomenon I developed, validated, and pilot tested a semi-structured interview guide prior to data collection (see Patton, 2015). Following the recommendations of several qualitative research authors, the interview guide included the following sections: introduction to the study, participant demographic information (see Merriam & Tisdell, 2016), open-ended interview questions with "ample space between the questions to write responses to the interviewee's comments" (Creswell & Poth, 2018, p. 165), probes, or prompts, to encourage more in-depth responses (see Braun & Clarke, 2013; King, 2013), holistic debriefing questions for participant self-reflection (see Moldjord & Hybertsen, 2015), and a closing statement (see Appendix C).

Open-Ended Interview Questions. Patton (2015) described that the rationale for conducting interviews with open-ended questions is "to get the person being interviewed to talk—to talk about experiences, feelings, opinions, and knowledge" (p. 447) and "to elicit relevant answers that are meaningful and useful in understanding the interviewee's perspective" (p. 471). Furthermore, semi-structured open-ended interview questions have been described as a way to elicit participant's salient beliefs, which are readily accessible

in memory, to gain an understanding of what guides an individual's intentions and behavior (Ajzen, 2002b; Fishbein & Ajzen, 2010). Therefore, I designed the interview items as semi-structured open-ended questions. An in-depth description of how the interview questions were developed and validated is presented in the Researcher Developed Instrument section of this chapter.

Probes. The use of semi-structured interviews with open-ended questions allowed the participants to provide rich, detailed information and provided the opportunity to ask follow-up probing questions to further explore the topic (see Bloomberg & Volpe, 2016; Merriam & Tisdell, 2016). Therefore, I used the following probes, as needed, during each interview:

- “What did that do for you?” (Munhall, 2007, p. 185)
- “(After a sentence) Go on...Could you elaborate more on that?” (Munhall, 2007, p. 185)
- “(After a period of silence, ask) Can you tell me what you are thinking about?” (Munhall, 2007, p. 185).
- “Would you elaborate on that?” (Patton, 2015, p. 465).
- “What was that like for you?” (Seidman, 2013, p. 88).

Holistic Debriefing. Following each interview, I asked holistic debriefing questions to glean a greater understanding of the participants' interview experience (see Moldjord & Hybertsen, 2015). In addition, the holistic debriefing questions permitted the participants the opportunity to share thoughts and feelings and "to recover and reset

emotions" (p. 288) that emerged during the interview (see Moldjord & Hybertsen, 2015).

In this regard, I included the following debriefing questions in the interview guide:

- How did this interview experience affect you emotionally?
- How did this interview experience affect you physically?
- What did you learn from the interview experience?
- What do you need after completing the interview?

Demographic Screening Survey

Bloomberg and Volpe (2016) described that relevant participant demographic information should be gathered "to help explain what may be underlying an individual's perceptions, as well as the similarities and differences in perceptions among participants" (p. 150). Moreover, Thomas and Magilvy (2011) described that, the inclusion of participant demographics enhances a qualitative study's rigor. Per Thomas and Magilvy, to increase the transferability of the findings from qualitative research the study should "provide a dense description of the population studied by providing descriptions of demographics and geographic boundaries of the study" (p. 153). Hence, in addition to screening potential participants for inclusion in the study, I used the demographic screening survey tool to obtain preliminary background information about the participants (see Appendix A). In addition, using the interview section of the interview guide, I collected the following demographic information at the beginning of each interview: (a) name, (b) address, (c) phone number, (d) email, (e) gender, (f) age, (g) ethnicity, and (h) length of time practicing as a licensed nurse (see Appendix C).

Field Notes

I recorded observational field notes in a loose-leaf spiral notebook that included my raw observations and impressions during and following visits to the partner site and participant interviews. Specifically, during my visits to the partner site, I documented my initial observations and impressions of factors in the social environment such as staff and patient interactions, frequency and tone of interactions, and styles of communication (see Giorgi, 2009; van Manen, 2016a). In addition, immediately following each interview I recorded my observations and impressions of the participant's affect, body language, demeanor, nuances in speech, specific words and phrases, and other elements of the interview that stood out (see Giorgi, 2009; van Manen, 2016a).

Reflexivity Tools

To critically evaluate my preunderstandings throughout the data collection phase, I used multiple methods of reflexivity, which included peer debriefing, Rae and Green's (2016) matrix tools for reflexivity, and van Manen's (2016b) reflexive questions.

Peer Debriefing Format. To identify my preunderstandings, potential oversights (i.e., underemphasized descriptions), and errors in interpretation I participated in peer debriefing sessions with professional colleagues during the data analysis process as an external check to explore my perspectives and assumptions toward the data (see Bloomberg & Volpe, 2016; Berger, 2015). As thoroughly described in Chapter 4, I applied a facet of Lincoln and Guba's (1985) definition of the peer debriefing and Creswell & Creswell's (2017) peer debriefing recommendations to explore how my historical nursing experiences may have influenced my impression of the data and I

reflected on how my preunderstandings of the study's topic might have shaped the research inquiry

Matrix Tools for Reflexivity. After receiving written permission from the authors, I adapted Rae and Green's (2016) Reflexivity Matrix (see Appendix D) and created a reflexivity journal matrix, which I converted into a Microsoft Office Word document format (see Table 2). The modified reflexivity journal matrix consisted of several questions divided into eight separate cells, which were categorized under the stages of research including pre-research, data collection, and data analysis. As such, I used the reflexivity journal tool continuously during each phase of the study to carefully document my presuppositions. Moreover, the reflexivity journal became the study's audit trail to show how my research decisions and strategies were developed throughout the research process (see Whitehead, 2004). In this regard, the reflexivity journal matrix became the study's primary instrument for gathering and documenting reflexive data.

Table 2*Reflexivity Journal Matrix*

Research process stage	In the overall social space	Within the nursing field	Within everything that is linked to membership of the scholastic universe
Pre-research	<p>Cell 1</p> <p>How do my broader motivations affect the reason to conduct research in the first place, the choice of topic and research question, and the choice of methodology? What is my conceptualization of “Trauma and TIC?”</p>	<p>Cell 2</p> <p>What is the relationship between me and the nursing/health care field? How is the choice of topic relevant to public health/nursing?</p>	<p>Cell 3</p> <p>Where do my interests (and conflicts of interest) lie within the relevant literature and its interpretations?</p>
Data collection	<p>Cell 4</p> <p>What are the shared and divergent understandings between me and participants with regard to research generally and to the study phenomenon? Are there any differences of a social nature, for example, gender, education, or experience? To what extent are meanings negotiated between me and participants, and how is this influenced by life experiences? Am I prepared to undergo change as a result of my interaction with the research? What of the potential for change in the participant?</p>	<p>Cell 5</p> <p>Do the participants and myself share the same “language” (e.g., nomenclature), especially if we come from different nursing paradigms? Are there any power differentials between me and the participants, based on positions I’ve held (present or past), nursing discipline, or education?</p>	<p>Cell 6</p> <p>Are questions (or prompts) inadvertently shaped by popular (perhaps fleeting) scholarly opinion?</p>
Data analysis	<p>Cell 6</p> <p>[Intentionally blank]</p>	<p>Cell 7</p> <p>How does my experience with the field shape analysis? Are some data dismissed as being commonplace, whereas they might warrant deeper interrogation? To what extent do I consider the balance of analytical authority to rest with the participant or with me as the researcher?</p>	<p>Cell 8</p> <p>How do I moderate any drive for outcomes that might inadvertently lead to data omissions or fabrications?</p>

Note. Adapted from “Portraying Reflexivity in Health Services Research,” by J. Rae and B. Green, 2016, *Qualitative Health Research*, 26(11), p. 1545. Copyright 2016 by SAGE Publishing. Adapted with permission from authors (see Appendix J).

Van Manen's Reflexive Questions. In the pre-research and data-collection stage, I created a description in the reflexivity journal matrix of my lived-experience of adapting similar TIC techniques into nursing practice, which was my first entrance into the hermeneutic circle (see van Manen, 2016b). In this regard I adapted van Manen's (2016b) suggestion that "before we ask others to furnish us with a lived-experience description about a phenomenon that we wish to examine, we might do well to try such descriptions ourselves first, so that we have a more precise sense of what we are attempting to obtain" (p. 64). Specifically, in addition to the questions in the reflexivity journal matrix, I pondered and answered the following reflexive questions, suggested by van Manen, to better understand my preunderstandings:

- Describe the experience (i.e., adapting similar TIC techniques into nursing practice) as it was lived through, avoiding causal explanations, generalizations, or abstract interpretations.
- Describe the state of mind that was present during the experience (i.e., adapting similar TIC techniques into nursing practice), such as feelings, mood, emotions, etc.
- Describe a particular example of an experience (i.e., adapting similar TIC techniques into nursing practice) that stands out for its vividness.
- Describe sensations such as smells or sounds present during the experience (i.e., adapting similar TIC techniques into nursing practice).
- Avoid using "fancy phrases or flowery terminology" (p. 64) to describe the experience (i.e., adapting similar TIC techniques into nursing practice).

Researcher-Developed Instrument

At the time of the study, I could not find a validated questionnaire to assess nurse's beliefs about implementation of TIC into practice. Therefore, I developed and validated the interview as shown in the Interview Guide (see Appendix C). Patton (2015) described that interview questions should be chosen in relation to the aim of the study. As previously discussed, the aim of the current study was to understand the phenomenon of nurses' implementing TIC into nursing practice. Therefore, I extracted items from the literature that were related to the key concepts of the study phenomenon and structured an item bank of preliminary interview questions that aligned with the belief-based framework of the TPB. Subsequently, I validated, and pilot tested the preliminary interview questions as described in the Validation of Interview Questions section of this chapter.

Interview Question Development

Kallio et al., (2016) described that the conceptual basis for the development of interview questions is a comprehensive understanding of the topic via a "critical appraisal of previous knowledge...by carrying out an extensive literature review...focused on the purpose of the study" (p. 11). As such, I formed the initial interview questions by identifying and understanding relevant domains and key concepts in the literature that were related to the study phenomenon. Next, I theoretically constructed the preliminary interview questions to align with the current study's TPB belief-based framework.

Domains and Key Concepts

I used Lynn's (1986) suggestion and included "domain identification, item generation, and instrument formation" (p. 383) in the preliminary phase of interview question development. As such, the first step in developing interview items for the current study included identifying domains and understanding key concepts that were relevant to the problem and purpose of the study. In this regard, as presented in Chapter 2, I conducted a thorough review of the literature to understand what was known about the key concepts of the study's phenomenon (see McKenzie et al., 1999). As shown in Table 3, I extracted the preliminary interview items from the key concepts that were found via an exhaustive review of the literature. Specifically, I developed the preliminary interview items that represented the domains, or relevant key concepts, which emerged from the literature related to the study's phenomenon.

Table 3

Interview Items Extracted from the Literature

Research questions	TPB constructs	Domain items	Preliminary items	Citation
RQ1 & RQ2	Behavioral beliefs	Trauma-informed care	Describe the positive feelings or emotions (i.e., likes or gratification) you have about using TIC in nursing practice over the next 12 months?	Ajzen & Fishbein, 2014; French et al., 2005; Sutton et al., 2003
RQ1 & RQ2	Behavioral beliefs	Trauma-informed care	Describe the negative feelings or emotions (i.e., dislike or loathing) you have about using TIC in nursing practice over the next 12 months?	Ajzen & Fishbein, 2014; French et al., 2005; Sutton et al., 2003
RQ1 & RQ2	Behavioral beliefs	Universal Trauma Precautions	In your opinion, what do you see are the positive effects (i.e., benefits or advantages) of using TIC in nursing practice over the next 12 months?	Bruce et al., 2018; Currier et al., 2017; Krause et al., 2017; Muskett, 2014; True et al., 2017; Wolf et al., 2016

Research questions	TPB constructs	Domain items	Preliminary items	Citation
RQ1 & RQ2	Behavioral beliefs	Universal Trauma Precautions	In your opinion, what do you see are the adverse effects (i.e., inconveniences or disadvantages) of using TIC in nursing practice over the next 12 months?	Bruce et al., 2018; Currier, Stefurak, Carroll, & Shatto, 2017; Krause et al., 2017; Muskett, 2014; True et al., 2017; Wolf et al., 2016
RQ1 & RQ2	Behavioral beliefs	Universal Trauma Precautions	What else influences your feelings about using TIC in nursing practice over the next 12 months?	Bruce et al., 2018; Currier, Stefurak, Carroll, & Shatto, 2017; Krause et al., 2017; Muskett, 2014; True et al., 2017; Wolf et al., 2016
RQ1 & RQ3	Normative beliefs	Educating patients and families about ways to cope with ACEs/TEs	Which individuals or groups do you think are most likely use TIC in nursing practice over the next 12 months?	Bruce et al., 2018; Cleary & Hungerford, 2015; Hall et al., 2016; Isobel & Edwards, 2017; Kassam-Adams et al., 2015; Knaak et al., 2017; Stokes et al., 2017; Worley & Delaney, 2017
RQ1 & RQ3	Normative beliefs	Educating patients and families about ways to cope with ACEs/TEs	Which individuals or groups do you think are least likely to use TIC in nursing practice over the next 12 months?	Bruce et al., 2018; Cleary & Hungerford, 2015; Hall et al., 2016; Isobel & Edwards, 2017; Kassam-Adams et al., 2015; Knaak et al., 2017; Stokes et al., 2017; Worley & Delaney, 2017
RQ1 & RQ3	Normative beliefs	Educating patients and families about ways to cope with ACEs/TEs	Who in your life (i.e., individuals or groups) do you think would support or approve of you using TIC in nursing practice over the next 12 months?	Bruce et al., 2018; Cleary & Hungerford, 2015; Hall et al., 2016; Isobel & Edwards, 2017; Kassam-Adams et al., 2015; Knaak et al., 2017; Stokes et al., 2017; Worley & Delaney, 2017
RQ1 & RQ3	Normative beliefs	Educating patients and families about ways to cope with ACEs/TEs	Who in your life (i.e., individuals or groups) do you think would object or disapprove of you using TIC in nursing practice over the next 12 months?	Bruce et al., 2018; Hall et al., 2016; Isobel & Edwards, 2017; Kassam-Adams et al., 2015; Stokes et al., 2017
RQ1 & RQ4	Control beliefs	Preventing retraumatization	What are some of the things you believe would make it easier for you to use TIC in nursing practice over the next 12 months?	Bruce et al., 2018; CDC, 2016; Choi, 2016; Felitti & Anda, 2014; Goldstein et al., 2017; Green et al., 2016; Kassam-Adams et al., 2015; Tobiano et al., 2015; Williamson & Qureshi, 2015

Research questions	TPB constructs	Domain items	Preliminary items	Citation
RQ1 & RQ4	Control beliefs	Preventing retraumatization	What are some of the things you believe would make it harder for you to use TIC in nursing practice over the next 12 months?	Bruce et al., 2018; CDC, 2016; Choi, 2016; Felitti & Anda, 2014; Goldstein et al., 2017; Green et al., 2016; Hall et al., 2016; Kassam-Adams et al., 2015; Tobiano et al., 2015; Williamson & Qureshi, 2015
RQ1 & RQ4	Control beliefs	Preventing retraumatization	If you have the desire to use TIC in nursing practice, how certain do you feel that you can use TIC over the next 12 months?	Bruce et al., 2018; CDC, 2016; Choi, 2016; Felitti & Anda, 2014; Goldstein et al., 2017; Green et al., 2016; Hall et al., 2016; Kassam-Adams et al., 2015; Tobiano et al., 2015; Williamson & Qureshi, 2015
RQ1 & RQ4	Control beliefs	Personal history of ACEs/TEs	Please describe what personally comes up for you (i.e., personal traumatic experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?	Butler et al., 2018; Carmona-Torres et al., 2018; Lavoie et al., 2016; McLindon et al., 2018; Sansbury et al., 2015
RQ1 & RQ4	Control beliefs	Vicarious trauma	Please describe what professionally comes up for you (i.e., traumatic work experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?	Creedy & Gamble, 2016; Fukumori et al., 2018; Lavoie et al., 2016; Morrison & Joy, 2016; Missouriidou, 2017; Sheen et al., 2016; Zerach & Shalev, 2015

Note. RQ = research question

Theoretical Item Structure

In addition, the TPB supplied a guide to formulate open-ended interview questions to elicit participants' salient beliefs related to each of the theory's belief-based constructs; behavioral beliefs, normative beliefs, and control beliefs (see Ajzen, 2002b; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 2010; Francis et al., 2004). To provoke salient beliefs, Fishbein and Ajzen (2010) recommended asking the participants to describe the advantages and the disadvantages of performing the behavior under investigation. Therefore, the interview questions were explicitly phrased to elicit salient beliefs about the (dis)advantages of implementing TIC into nursing practice and whether performing the identified behavior (i.e., implementing TIC) is liked or disliked by the participant (behavioral beliefs), who would (dis)approve of performing the behavior (normative beliefs), and factors that help or impede the performance of the behavior (control beliefs). For example, to elicit behavioral beliefs I constructed the interview questions with the verbs dislike, advantage, and disadvantage; to elicit normative beliefs I used the verbs approve and disapprove; and to elicit control beliefs I used the verbs difficult and easy (see Fishbein & Ajzen, 2010; Francis et al., 2004).

Specifically, Ajzen and Fishbein (2014) proposed that behavioral beliefs are best measured via interview questions that address an individual's attitudes including their experiential, or affective, attitude "i.e., pleasant –unpleasant, interesting–boring" (p. 199) and instrumental, or cognitive, attitude which denotes an individual's knowledge-based evaluation of the potential outcomes of the behavior "i.e., desirable–undesirable, valuable –worthless" (p. 199). In this regard, to elicit participant's experiential attitudes, French et

al. (2005) recommended examining anticipatory affect (i.e., how participants feel about performing the behavior) in addition to the instrumental aspects of the attitude constructs (i.e., how participants feel about the likely consequences of that behavior) including the following:

1. Beliefs concerning the pleasant or unpleasant [(dis)like] features and feelings about performing the behavior (behavioral beliefs- experiential attitude); and
2. Beliefs concerning costs and benefits [(dis)advantages] outcomes of performing the behavior (behavioral beliefs-instrumental attitude).

Similarly, Ajzen and Fishbein (2014) described how subjective norms are best measured via interview questions that address injunctive norms “i.e., perceptions of what others think one should do” (p. 199) and descriptive norms “i.e., perceptions of what others are doing” (p. 199). In this regard Montaña and Kasprzyk (2015) suggested the following format for interview questions to elicit subjective norms:

1. Individuals or groups who are in favor of or opposed to the participant’s performing the behavior (normative beliefs- injunctive norm); and
2. “Perceptions about what others in one’s social or personal networks are doing ([normative beliefs]-descriptive norm)” (p. 79).

Additionally, Montaña and Kasprzyk (2015) described how interview questions should elicit control beliefs concerning the presence or absence of facilitators and barriers to behavioral performance. In this regard, Yzer (2012) suggested that control beliefs may be assessed by via questions about the individual’s capacity and autonomy to perform the behavior including:

1. “Situational or environmental facilitators and barriers that make the behavior easy or difficult to perform (control beliefs-capacity)” (Montaño & Kasprzyk, 2015, p. 82); and
2. Perceptions about the amount of control the participant feels they must perform the behavior (Yzer, 2012).

Fishbein and Ajzen (2010) described that it is essential to ensure that the interview questions are compatible concerning the action, target, context, and time elements of the behavior under investigation. For example, this study sought to understand nurses’ perceptions of implementing (i.e., action) TIC into nursing practice (i.e., target) in a skilled nursing facility (i.e., context) in the next 12 months (i.e., time). Furthermore, Fishbein and Ajzen described that the interview questions need to reflect the participants' personal experience of performing the behavior under investigation "and not about performance of the behavior in general" (p. 95). Hence, I structured the interview questions to assess the participants perception of the targeted behavior (i.e., implementing TIC) rather than their perception of the target of the behavior itself (i.e., TIC). Lastly, I investigated background factors with interview questions that I developed to assess nurse participants’ perceptions of how prior exposure to trauma may have affected their beliefs about implementing TIC.

In summary, I formed the interview questions to query the participants about their personal experience with the phenomenon of implementing TIC into nursing practice. Specifically, Table 3 shows the alignment and relationship between the research

questions, TPB belief-based constructs, domain items, preliminary interview questions, and citations of the domain items.

Validation of Interview Questions

I validated the interview questions after conducting an exhaustive review of the literature, which enabled me to clearly define the study's phenomenon, key concepts, and the theoretical model—which I used to generate the interview items (see Almanasreh, et al., 2019, Polit & Beck, 2004; Zamanzadeh, et al., 2015).

Content Expert Panel

First, I assembled a content expert review panel to examine each interview question to ensure that the items adequately assessed the study phenomenon and aligned with the theoretical constructs (see Almanasreh, et al., 2019; McKenzie et al., 1999; Zamanzadeh, et al., 2015). Gilbert and Prion (2016) described that a content expert review panel should be composed of persons who are authorities about the subject of the study "at various professional levels" (p. 530). According to Gilbert and Prion, the preferred number of experts for a panel is between five to ten, while three experts is considered adequate if they are difficult to obtain. Therefore, my goal was to recruit 3-10 content experts for a panel to review and validate the interview guide. In this regard, I used a purposive sampling technique to recruit content experts. The inclusion criteria for the panel of experts required that they had published research about TIC in the past five years (see Gilbert & Prion, 2016).

Hence, I emailed 14 TIC experts who worked in various positions at different professional levels and met the inclusion criteria. In the email I described the study and

invited them to become a member of the expert panel. Eight experts ($N = 8$) responded favorably to the invitation and agreed to accept and complete the electronic validation tool. The expert panel consisted of two PhD candidates, one PhD researcher/evaluation coordinator, one university chair emeritus, and four PhD university professors/researchers.

Validation Tool

To facilitate a convenient way for the content experts to validate the interview guide, I developed an electronic fillable validation tool (see Appendix K). The validation tool was composed of the following three content validity scale surveys:

1. The content validity index (CVI) scale to determine the relevance of each interview item,
2. The clarity scale to determine the structural and conceptual clarity of each interview item, and
3. The content validity ratio (CVR; Lawshe, 1975; Zamanzadeh, et al., 2015).

In addition, I presented each of survey scales in the validation tool in a linear fashion per interview question. For example, I asked the expert raters to rate each interview item for relevance, clarity, example each interview item a text box was inserted below each item in the fillable validation tool to allow space for expert panel member's recommendations and comments (see Appendix K). I emailed the expert panel members a cover letter with details about the purpose of the study; the study's theoretical framework and constructs; the rationale and domain for each item; and instructions on

how to complete the validation tool and send it back. Each of the eight experts completed validation tool electronically and returned it to me via email without incident.

Content Validity

Researchers describe that the establishment of validity of any instrument is critical to safeguard high quality measurements (Almanasreh et al., 2019). Whereas “validity is the extent to which the instrument measures what it is intended to measure” (Lynn, 1986, p. 382); content validity measures “the degree to which an instrument has an appropriate sample of items for the construct being measured” (Polit & Beck, 2004, p. 423). Therefore, I established the content validity of the study’s interview questions via an assessment of the expert panel’s ratings to establish each items relevance, clarity, and essentiality by computing the item and scale-level content validity index, clarity scale scores, and content validity ratio.

Content Validity Index

First, I calculated the content validity index (CVI) to ensure confidence that the interview guide and individual items were relevant to defined characteristics of the underlying theoretical constructs (i.e., attitude toward the behavior, subjective norms, and perceived behavioral control; see Polit & Beck, 2004). Polit, Beck, and Owen (2007) illustrated two approaches to compute an instrument’s CVI value either by calculating the item-level CVI (I-CVI) for each item separately or computing the scale-level (S-CVI) of all joint items in the instrument. As such, I calculated the I-CVI and S-CVI after the expert panel members completed their validation tool and returned them to me via email.

Item-Level CVI. Using Lynn's (1986) technique to calculate the I-CVI, I asked the expert panel members to rate the relevance of each interview item using a 4-point ordinal scale in response to the question, "how relevant is this item?". Authors suggest the 4-point method because it avoids ambivalent middle ratings (Lynn, 1986; Polit & Beck, 2004). Furthermore, the I-CVI is reported to be the most widely used method to quantify content validity in health research (Almanasreh, et al., 2019; Zamanzadeh, et al., 2015). In this respect, I asked the experts to rate the relevance of each item as either 1 = *not relevant*; 2 = *somewhat relevant*; 3 = *quite relevant*; or 4 = *very relevant* (Lynn, 1986). Next, to find the proportion of agreement between the experts about each interview item, I considered items that received a rating of 1 or 2 as not relevant and discarded them from the I-CVI calculations (see Almanasreh, et al., 2019; Zamanzadeh, et al., 2015). In turn, I considered items that received a rating of 3 or 4 as relevant and included them in the I-CVI calculations (see Almanasreh, et al., 2019; Zamanzadeh, et al., 2015). Next, using Polit et al.'s (2007) recommendation, I individually calculated each item I-CVI by dividing the total number items that received of experts rating each specific item with a 3 or 4 (e_{ri}) by the total number of interview items ($I = 14$) using the following formula:

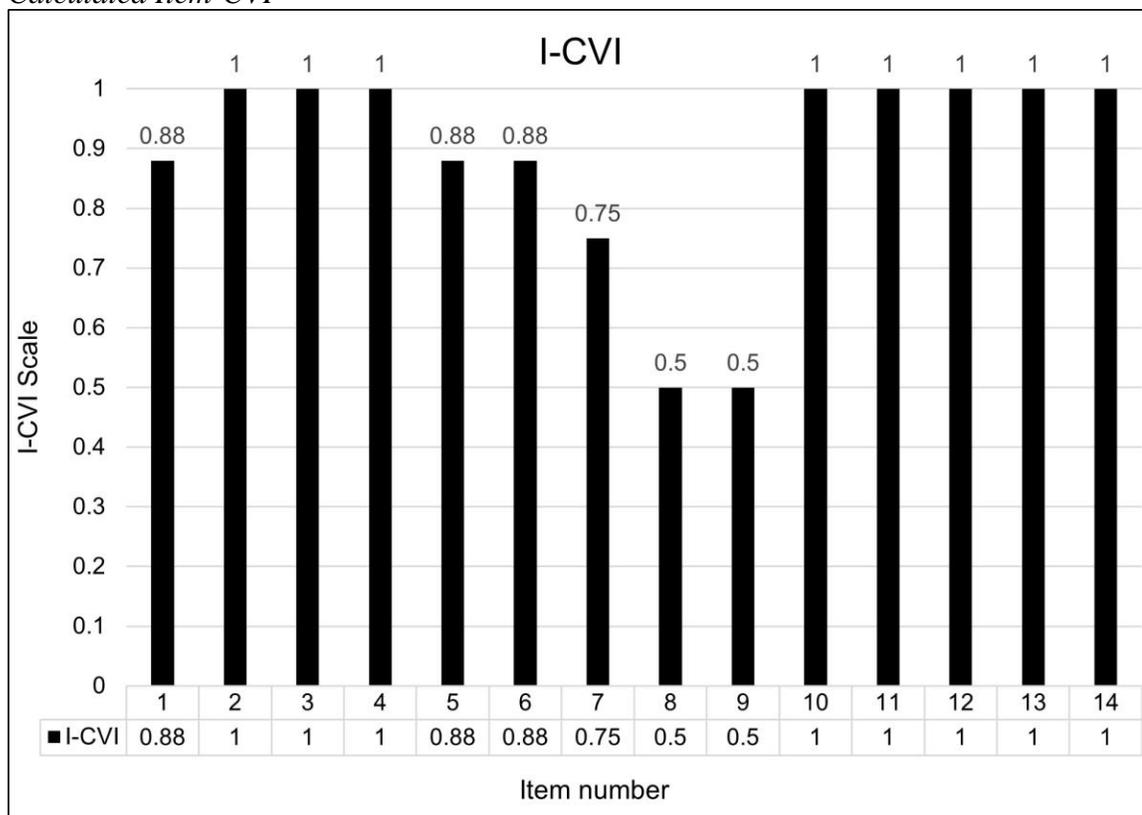
$$I-CVI = \sum e_{ri} / I$$

In this equation, $I-CVI$ = item-level CVI, e_{ri} = relevant items rated 3 or 4, and I = the number of items ($I = 14$).

Hence, I calculated the I-CVI for each item to find its relevance and validity and whether it required revision (see Almanasreh, et al., 2019; Zamanzadeh, et al., 2015).

According to Lynn (1986), a minimum acceptable I-CVI for a panel of eight experts is 0.83. Lynn explained that an I-CVI value of 1.0 denotes that there is universal agreement among all expert panel members that the item is relevant. Furthermore, Lynn advised that when universal agreement is not present, items with calculated values between 0.83 to 1.0 should also be considered relevant, while computed values below 0.83 do not represent valid items and therefore these items should be discarded or revised (Lynn, 1986; Polit & Beck, 2004). Therefore, after the completed expert panel validation tools were returned, I computed the I-CVI for each item on the validation tool.

The I-CVI values for the 14 items ranged from 0.5 to 1.0 and 11 items met the minimum accepted I-CVI value of 0.83. Specifically, eight items had I-CVI calculations of 1.0, showing universal agreement among the experts, thus indicating that the items were relevant and should remain on the instrument. In addition, three items had I-CVI values of 0.88, which was within the parameters for relevancy and inclusion on the instrument. However, three items fell short of Lynn's recommended I-CVI threshold of 0.83 and needed revision including item 7 with a score of 0.75, and items 8 and 9 with respective scores of 0.50 (see Figure 7).

Figure 5*Calculated Item-CVI*

Note. For a 14-item instrument via expert panel ratings, the I-CVI results showed that 11 of the items met the minimal acceptable I-CVI of 0.83 for a panel of eight experts.

Whereas three items (7, 8, and 9) did not meet the minimum threshold and were revised using feedback from panel members to improve the items' relevancy.

Scale-Level CVI. I calculated the S-CVI to find the reliability of all item's collective relevance to the study's constructs (see Almanasreh, et al., 2019; Zamanzadeh, et al., 2015). In other words, the S-CVI demonstrates the overall content validity of the tool opposed to the content validity of each individual item. To calculate the S-CVI, I used the conservative choice described by Rodrigues et al. (2017) and calculated the

average of all item-level CVIs (S-CVI/Ave). To calculate the S-CVI/Ave, I calculated the sum of all I-CVI's and divided the total by 14 (i.e., the total number of items) using the following formula:

$$S-CVI / AVE = \sum I-CVI / I$$

In this equation, $S-CVI / AVE$ = average of all item-level CVIs, $I-CVI$ = item-level CVI, and I = the number of items ($I = 14$).

As such, the S-CVI/Ave was found to be 0.89. A scale is considered to have robust content validity with an S-CVI/Ave of 0.9 or higher (Rodrigues, et al., 2017). In this regard, the S-CVI/Ave result of 0.89 fell slightly below the recommended validity level, which was another indication to improve items 7, 8, and 9 that fell below the recommended I-CVI.

Clarity Scale

Next, I assessed the clarity of each item via quantitative and qualitative measures to ensure confidence that the wording of individual questions was clear, concise, accurate, and direct (see Almanasreh, et al., 2019). In this regard, I asked the expert panel members to rate on a 3-point Likert scale whether each item was clear in response to the question, "Is this item clear?" (see Rodrigues, et al., 2017). In this respect, the experts were asked to rate the clarity of each item as 1 = *not clear*; 2 = *item needs some revision*; 3 = *very clear* (see Ayre & Scally, 2014). In addition, I asked the expert panel members to supply written comments regarding item clarity in a text box below each question of the validation tool.

Next, I quantifiably calculated the results of expert's clarity scale values to determine the total mean score for each scale item. As such, I calculated the mean for each item by summing the expert's rating for the item and dividing the product by the total number of panel experts. In this manner, I used the following mean formula:

$$\bar{x}_i = \sum e_i / N$$

In this equation, \bar{x}_i = mean of each item, e_i = expert rating per item, and N = the number of expert raters ($N = 8$).

Likert scales produce ordinal data, however, experts assert that parametric statistics, such as calculation of the mean, can be used to assess Likert scale ratings when the Likert survey measures a conceptual concept via a small sample size (e.g., 5–10 participants; see Harpe, 2015; Sullivan & Artino, 2013). Hence, I completed a parametric statistical analysis to evaluate the expert's scale ratings for each of the clarity scale items. The calculation and analysis of the mean (i.e., evaluation of the arithmetic mean) for each clarity scale rating was an appropriate approach to evaluate each of the interview items for clarity because the clarity scale survey of the validity tool was completed by a small sample of eight experts who were asked to assess each item for structural and conceptual clarity.

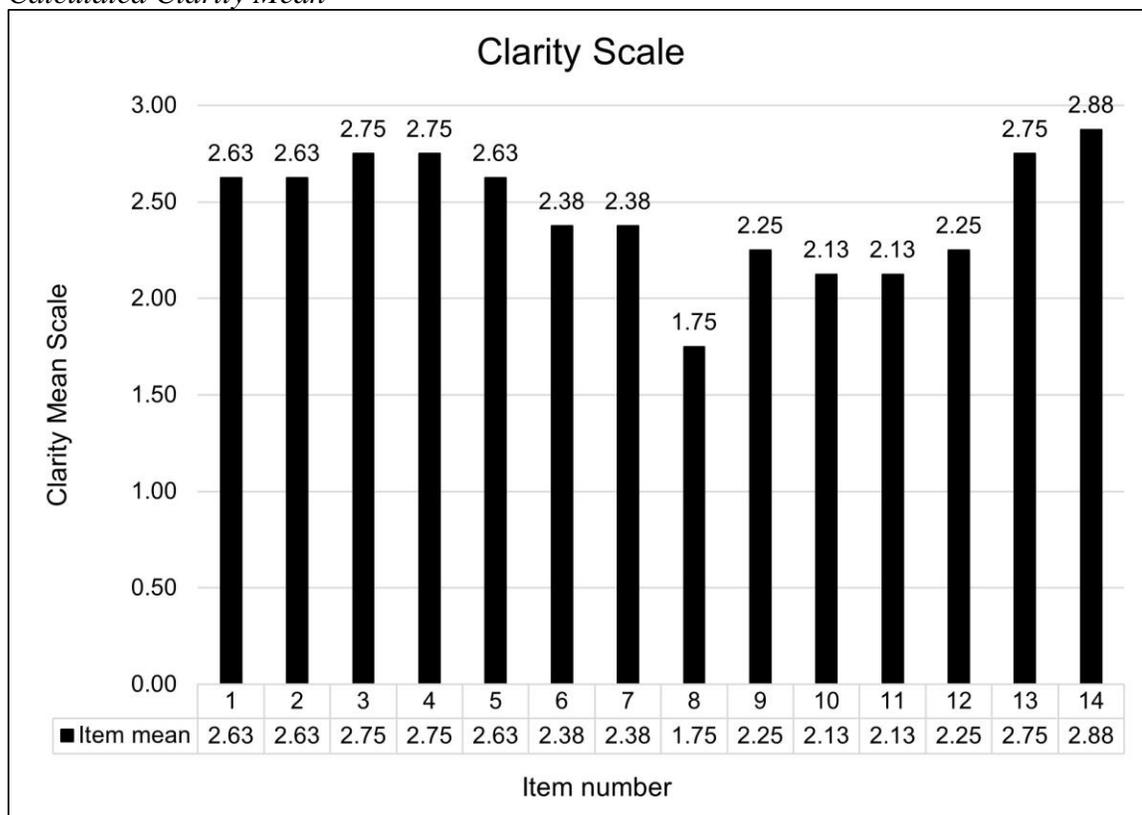
As shown in Figure 8, the calculated clarity means scores for individual items ranged from 1.75 to 2.88. Specifically, the mean score calculations showed that none of the 14 interview items received a rating of 3 = *very clear*, 93% (13 items) were rated with 2 = *item needs some revision*, and 7% (one item) was rated 1 = *not clear*.

Next, I calculated the overall clarity score of the validation tool using the following formula:

$$CS = \sum \bar{x}_i / I$$

In this equation, CS = overall clarity score, \bar{x}_i = mean scores of each item, and I = the number of interview items ($I = 14$).

In this regard, I found the overall clarity score to be 2.45, which I calculated by summing each of the item mean scores and dividing the product by the number of interview items ($I = 14$). The overall clarity score of 2.45 revealed that the interview guide did not meet the standard of 3 = *very clear* and therefore the interview items needed to be revised (see Figure 8). To improve the clarity of the interview guide, I made revisions to the interview questions, which is discussed in-depth in the Questionnaire Refinement Results in this chapter.

Figure 6*Calculated Clarity Mean*

Note. For a 14-item instrument via expert panel Likert Scale ratings. The clarity results showed that none of the items were considered very clear by a panel of eight experts and required revisions. The calculated clarity means scores for individual items ranged from 1.75 to 2.88 out of a possible 3.0. Specifically, 13 items (93%) were rated item needs some revision, and one item (7%) was rated not clear.

Content Validity Ratio

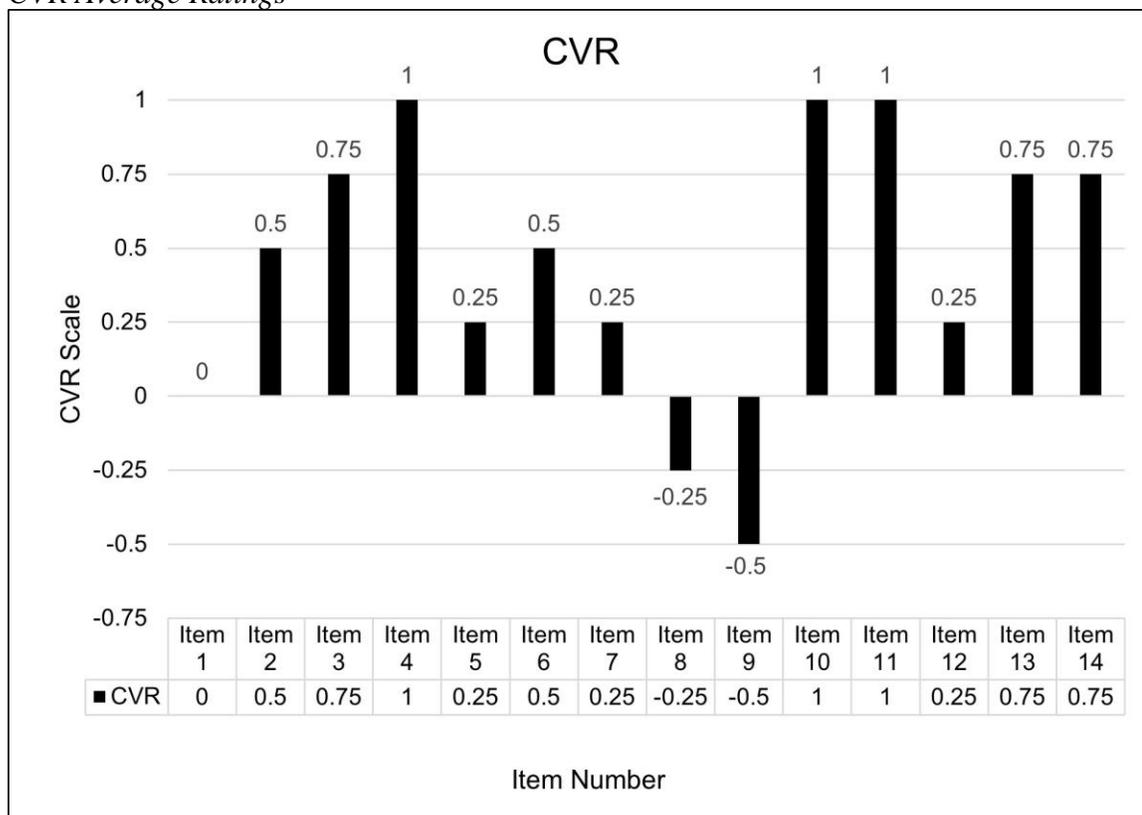
Lastly, I calculated the content validity ratio (CVR) to ensure confidence that only the most essential content to answer the study's research questions was included in the interview guide (see Almanasreh, et al., 2019; Zamanzadeh, et al., 2015). In this regard, I

determined the CVR via Lawshe's (1975) 3-point rating scale to identify which interview questions were essential (see Ayre & Scally, 2014). In this manner, I asked the expert panel members to rate whether each item was necessary related to the study's theoretical constructs in response to the question, "how essential is this item?" In this respect, the experts were asked to rate the essentiality of each item as either 1 = *not essential*; 2 = *useful but not essential*; or 3 = *essential* (see Ayre & Scally, 2014). I calculated the CVR via the following formula:

$$CVR = (Ne - N/2) \div (N/2)$$

In this equation, Ne = number of panelists indicating essential and N = total number of panelists (Gilbert & Prion, 2016).

The CVR results ranged between 1.0 and -0.5 with higher scores reflecting greater acceptance by the panel for inclusion of the question in the instrument (see Almanasreh, et al., 2019; Zamanzadeh, et al., 2015). Moreover, I used Lawshe's (1975) table of minimum values to determine the numeric value of the CVR. According to Lawshe's table, an acceptable CVR value for eight panelists is 0.75. As such, I generated the CVR for each item using an excel worksheet and I marked items with a $CVR < 0.75$ not essential and revised these items with feedback from four of the content experts. In addition, the average CVR was determined to be 0.45 (see Figure 9).

Figure 7*CVR Average Ratings*

Note. CVR average ratings. For a 14-item questionnaire by eight experts, the CVR results showed that only six of the items met the minimal acceptable CVR value of 0.75 for a panel of eight experts. Items with a CVR < 0.75 were marked not essential and revised using feedback from two of the content experts.

Questionnaire Refinement Results

After I completed the calculations for the I-CVI, S-CVI, clarity scale, and CVR, I analyzed the results. My analysis of the quantitative findings revealed that some interview items required modifications due to the lack of relevance, ambiguous wording, or deficient essentiality as detailed in the above respective sections. As such, I revised the

items that had unsatisfactory results via feedback from four panel members who had supplied specific qualitative written recommendations for item improvement on their submitted validation tools. Specifically, one of the reviewers who had extensive experience using the TPB in research, suggested that the interview guide questions were not in alignment with Ajzen's (2002) model for TPB questionnaires. In addition, I received written feedback from two experts who suggested grammatical corrections for some questions to improve clarity. Furthermore, one of the expert panel members, who specialized in TIC, supplied written feedback identifying items 8 and 9 as non-essential to answer the study's research questions and recommended discarding or revising the items.

Thus, I used the quantitative and qualitative data that was provided by the expert panel to modify the interview guide to improve the validity of the questionnaire. Following modifications, I emailed a copy of the updated interview guide to the four expert panel member who had supplied written feedback on the pilot validation tool. I asked each of the four experts to review the modified interview guide using the modified validation tool to decide if the changes improve the content validity of the instrument (see Appendix L). The four experts were in 100% agreement that the modified interview guide was improved, and they did not recommend any further changes. After receiving initial approval from Walden University's Internal Review Board, the modified interview questions were pilot tested.

Procedures for Pilot Studies

After I received IRB approval—number # 09-25-19-0083644—I conducted a pilot study. A pilot study is conducted in qualitative research to refine and strengthen the study's method by identifying problems before performing the main study and determining the usefulness of researcher developed data collection instruments (Bloomberg & Volpe, 2016; Creswell & Creswell, 2017). Merriam and Tisdell (2016) said that pilot interviews are essential in qualitative research to “learn which questions are confusing and need rewording, which questions yield useless data, and which questions, suggested by your respondents, you should have thought to include in the first place” (p.117). In addition, Seidman (2013) advised that the pilot study is the optimal time for the researcher to evaluate and modify their interview techniques to improve the quality of data collection. Furthermore, Williams-McBean described that a pilot study can serve the following useful purposes:

- “Developing and refining research instruments,”
- “Assessing the feasibility of recruitment protocols,”
- “Designing, assessing, and refining research protocols,”
- “Collecting preliminary data,”
- “pre-empting possible challenges in data collection and analysis,”
- “Increasing training and confidence in conducting qualitative research, and”
- “Securing funding” (Williams-McBean, 2019, p. 1056).

As such, I used the first six elements of Williams-McBean’s list of useful pilot study purposes to guide the current study’s pilot study to improve data collection

methods and assess the usability, feasibility, manageability, and usefulness of the interview guide in the field setting.

Pilot Study Scope and Delimitations

I purposely limited the pilot study setting, number of participants, and data collection strategy to focus solely on the limited scope of the pilot study (see Bloomberg & Volpe, 2016). Moreover, the pilot study was not intended to be a prototype of the main study and merely sought to ensure that the verbiage and format of the interview guide was perceived as a relatable and intelligible instrument with the study target population (see Seidman, 2013; Williams-McBean, 2019). Therefore, the pilot study participants did need to meet all the same qualifications set forth for the main study participants.

Therefore, the pilot study selection criteria only included the following: ability to speak English proficiently, an active Michigan nursing license, a minimum of 3 years nursing experience, and at least 2 years' experience working as a nurse in a nursing rehabilitation facility or related setting (see Hosking et al., 2016).

Pilot Sample Size

I used Connelly's (2008) recommendation that a pilot study sample should be 10% of the projected sample size for the main study. Based on the previously discussed sample size recommendations, I estimated that 25 participants would be necessary to achieve data saturation (see Dworkin, 2012; Francis et al., 2004, & Malterud et al., 2016). Therefore, I used Connelly's recommended method and computed the desired number of pilot study participants with the following equation:

$$n = N (p/100)$$

In this equation, n = desired pilot study sample size, N = estimated main study sample size, $p = 10$ (i.e., Connelly's recommended percentage)

In this regard I calculated the desired pilot study sample size by finding the product of 10% of the estimated main study sample population ($N = 25$); which was found to be $n = 2.5$, or between two to three participants.

Pilot Study Participant Recruitment and Data Collection

I used the same ethical and confidentiality measures in the pilot study that were set forth for the main study. In addition, I recruited the pilot study participants via a convenience sampling strategy, which allowed me to identify qualified participants based on ease and availability (see Merriam & Tisdell, 2016). In this manner, per the pilot study sample calculation, I recruited two licensed nurses who were familiar to me and who met the pilot study inclusion criteria. After signing the consent form, each pilot study participant took part in one individual face-to-face interview session at a private office setting. During the interviews, I read the interview guide aloud and the pilot study participants provided verbal feedback about their perceptions of the interview guide's usability, feasibility, and usefulness as a data collection instrument. As a result of the observations that I made during the pilot study and feedback from the participants, I made small adjustments in logistical aspects of the data-collection interview plan that I discuss in-depth in Chapter 4. Moreover, at the completion of the pilot study, I submitted the modified interview guide that had been revised after it was validated by the expert panel to Walden's IRB program for approval prior to conducting the main study.

Procedures for Main Study Data Collection

Study Site

As previously discussed, and illustrated, in the Sample Recruitment Protocol (see Appendix B), I located a main study partner site by contacting the HCAM and obtained a list of skilled nursing facilities that had implemented TIC and the contact information for the CNO at these sites. After I received the list of potential sites from HCAM, I emailed several CNOs and eventually met with the Director of Nursing (DON) of a unit at an interested partner site at a skilled-nursing facility in a midsized city in the State of Michigan. At the DON meeting, I presented the study, answered questions, and shared the following study documents:

- Study proposal
- Sample of informational study flyer
- Sample of interview guide (see Appendix C)
- Sample of the participant consent form
- Sample of a Letter of Cooperation
- Sample of participant e-mail solicitation letter (see Attachment D)

After the meeting, the CNO agreed to allow me to conduct the study and to recruit qualified nurse participants at the partner site. In addition, I obtained a signed Letter of Cooperation from the CNO, and I forwarded it to the Walden University IRB program for approval.

Participant Recruitment

After receiving final IRB approval, I began participant recruitment at the partner site. To recruit participants, I attended staff meetings, presented the proposed study, and handed out the informational study flyers with my contact information. When interested candidates contacted me, I completed the demographic screening tool to ensure that they met the study criteria. Then, I scheduled each qualified candidate for an interview and sent each participant an email that included information about the interview. I originally proposed that if I were unable to recruit enough participants at the partner facility, I would seek an additional study site. However, I did not need to partner with another facility because I was able to recruit enough qualified participants at the partner site to reach data saturation.

Data Collection

I was the sole researcher for the current study, and I collected all the research data independently via participant interviews, demographic screening surveys, reflexivity journal entries, and field notes. Qualitative researchers have recommended face-to-face interviews as a prime opportunity to observe the participant's use of non-verbal body language (i.e., mannerisms, gestures, facial expressions) to convey the intent of their dialogue (Creswell & Poth, 2018; Oltmann, 2016; Patton, 2015). Therefore, I conducted all interviews via face-to-face. At the beginning of each interview, I informed the participant that a transcript of their transcribed interview would be emailed to them to review for accuracy and return to ensure that the transcript accurately reflected their responses (see Bloomberg and Volpe, 2016; Patton, 2015). As previously discussed in the Holistic Debriefing section, after each interview, I asked the participants the holistic

debriefing questions on the interview guide. The holistic debriefing questions allowed the participants the opportunity to share their thoughts and feelings about the interview and "to recover and reset emotions" (p. 288) that may have emerged during the interview (see Moldjord & Hybertsen, 2015).

Although, in-person interviews are the preferred method in qualitative research, Lo Iacono et al. (2016) advised that virtual interviews via Voice over Internet Protocol (VoIP) technologies (i.e., Skype, FaceTime, Go to Meeting) may be used if the allotted times available to conduct interviews conflict with the participant's schedule. Specifically, Lo Iacono et al. described that VoIP technologies allow the researcher to interview participants face-to-face using voice and video via a real-time (i.e., synchronous) connection on an internet portal. Therefore, I designed the study's data collection plan to allow for face-to-face participant interviews to be conducted either in-person at the partner study site or virtually via VoIP technologies; on a date and time chosen by the participant.

Site Visits

Qualitative research authors have conveyed that prolonged engagement in the field increases credibility and allows a deeper understanding of the phenomenon being studied (Bloomberg & Volpe, 2016; Berger, 2015). Moreover, Leonard (1994) described, "to understand a person's behavior or expressions one has to study the person in context. For it is only in context that what a person values and finds significant shows up" (p. 51). Hence, I received permission from the partner site to be present at the facility up to eight hours per day, three days per week, for up to three months to gain an in-depth

understanding about the facility's implementation of TIC, observe the participants in their work environment, and to collect interview data. I initially proposed that all data collection and participant interviews would be completed at the partner site during pre-arranged visits. In addition, it was originally planned that each in-person interview at the partner facility would be scheduled for 90 minutes—with a 30 minute interval—and use the following time sequence: (a) 15 minutes to review the purpose of the study, answer questions, and have informed consent signed; (b) 60 minutes to conduct the interview; (c) 15 minutes to complete the closing statement and debriefing questions; and (d) 30-minute interval between interview sessions to document in the reflexivity journal and the field notebook. Of note, after the seventh in-person interview, unusual circumstances occurred, that prompted a modification in the data collection plan, which is explained in-depth in the Data Collection section of Chapter 4.

Recording Data

As previously discussed, during partner site visits I recorded my observations of the environment and staff interactions in the field notebook. In addition, at the time of each interview, I made very brief notes of interesting observations in the space provided in the interview guide. Also, immediately following each interview, I recorded my initial raw observations and impressions in the field notebook, and within 24 hours I documented any forms of bias or presuppositions that emerged during or after the interview in the electronic reflexivity journal.

Moreover, I digitally recorded all in-person interviews using a Sony ICD ux560 digital audio recording device; while virtual interviews—conducted with VoIP

technologies—were recorded using the recording feature of the online service. Weloty academic transcription service signed a confidentiality agreement at the beginning of the study process and contractually agreed to safely transcribe the study’s digitally recorded interviews for a nominal fee. Within 24 hours following each interview, I uploaded an MP3 file of the recorded interview into a password protected secure portal that Weloty provided. After Weloty received the MP3 file, they provided a verbatim electronic textual transcription of the recorded interview via the secure portal within 72 hours.

Confidentiality Limit

Since I am a licensed registered nurse in the State of Michigan, I am a mandated reporter under Michigan law. As such, I could not keep as confidential, information about known or suspected incidents of abuse or neglect of a child, dependent adult or elder, including, but not limited to, physical, sexual, emotional, and financial abuse or neglect. If I would have been given such information, I would have been required to report it to the authorities. Specifically, according to the Michigan Social Welfare Act, “A mandated reporter who suspects or has reasonable cause to believe an adult has been abused, neglected, or exploited must immediately, by telephone or otherwise, make an oral report to the MDHHS Centralized Intake unit” (State of Michigan, 2019, p. 2). In addition, the Michigan Child Protection Law requires mandatory reporters to “report their suspicions of child abuse or neglect to Centralized Intake (CI) at the Department of Health and Human Services (DHHS)” (Michigan Department of Health and Human Services, 2019). Therefore, if I had suspected abuse, neglect, or exploitation of a child, dependent adult, or elder during the course of the study I would have been required to call the appropriate

number to make a report. In addition, if any issues of neglect or abuse had occurred, I would have informed the chair of my committee and the IRB committee of the situation and completed the IRB Adverse Event Reporting Form within one week of the incident. During the course of the study, I did not observe, suspect, nor was I given such information of abuse or neglect, and therefore I had no need to report any such information to legal authorities.

Data Analysis Plan

I used several techniques to analyze the study's textual data that included Saldaña's (2015) two-cycle coding process, Braun and Clarke's (2006) six steps of TA, Gadamer's (1960/2013) hermeneutic circle, and Gadamer's interpretive practices as described by Stenner (2017). Interpretive phenomenological data analysis uses a two-step approach; the first step is the generation of themes, and the second step is the interpretation of the meaning of the themes (Creswell & Creswell, 2017; Stenner, 2017; Vagle, 2018). In this regard, I coded the transcribed interviews into units, then, to larger representations, which included categories and themes. Initially, I hand coded the data and then organized and compared during the theming process with the assistance of NVivo 11 Pro for Windows.

Type of and Procedure for Coding

To code the data and generate themes, I read the transcribed interviews multiple times to obtain an overview of the data. Next, I coded the transcripts for provisional a priori codes, which originated from key concepts of the study phenomenon and precepts of the TPB belief-based model. As I read and re-read the textual data in search of patterns

and clusters of similar concepts and subthemes, I modified and extended the a priori codes. In addition, during the coding process, I frequently reviewed and compared the reflexivity journal entries, field notes, and facility documents to the transcripts to identify shared conceptual patterns that I later identified as themes. Moreover, during the theming process, I searched and compared all forms of the study's textual data for words that manifested as expressions of meaning such as "desires, questions, wishes, hopes, and complaints" (Munhill, 2012, p. 179) and "thoughts, emotions, feelings, statements, motives, metaphors, examples, behaviors, appearances and concealments, voiced and nonvoiced language" (De Chesnay, 2014, p. 11). Furthermore, in the course of coding and theming the textual data, I used Gadamer's hermeneutic circle to interpret the emerging themes in a reiterative circular fashion (see Stenner, et al., 2017).

Discrepant Cases

My use of multiple types of data sources (i.e., semi-structured interviews, demographic screening surveys, reflexivity journal, and field notes) assisted in confirming that most of the collected data demonstrated consistent findings between the data sets (see Bloomberg & Volpe, 2016). However, as described in-depth in the Study Results section of Chapter 4, I explored, described, and integrated inconsistent or discrepant findings in the results of the study to provide a deeper level of understanding about the study phenomenon (see Bloomberg & Volpe, 2016; Patton, 2015).

Issues of Trustworthiness

Guba and Lincoln (1981) described that trustworthiness refers to "methods that can ensure one has carried out the [research] process correctly" (p. 245). In this respect, I

used Guba and Lincoln's constructivist qualitative paradigm to achieve trustworthiness of the study's findings.

Trustworthiness Paradigm

The trustworthiness paradigm measures include credibility, dependability, confirmability, and transferability (Guba & Lincoln, 1981). As such, to increase the trustworthiness of the research findings, I used several strategies that included prolonged participant engagement, data triangulation, audit trail documentation, member checking, peer debriefing, inter-rater reliability, reflexive processes, theme development, acknowledgement of disconfirming evidence, and detailed descriptions of the research process (see Anney, 2014; Bloomberg & Volpe, 2016; Creswell & Creswell, 2017; Guba & Lincoln, 1981; Lincoln & Guba, 1985).

Credibility

Credibility assesses how much faith can be placed in the accuracy of the research findings (Anney, 2014; Bloomberg & Volpe, 2016). To achieve credibility, I used the following strategies: triangulation, peer debriefing, and member checking. Triangulation is used to "overcome the intrinsic bias that comes from single-methods, single-observer and single-theory studies" (Denzin, 2017, p. 370) and to provide "diverse ways of looking at the same phenomenon" (Patton, 2015, p. 661). In this regard, I established data triangulation via multiple sources of data and forms of data collection (see Patton, 2015). For example, I recruited nurse participants with distinct levels of licensure (i.e., RNs and LPNs) and experience to participate in the study. In addition, I used four different data collection instruments to collect data that included an interview guide, demographic

screening survey tool, field notebook, and electronic reflexivity journal. Also, to identify preunderstandings, potential oversights (i.e., underemphasized descriptions), and errors in interpretation I took part in peer debriefing sessions with professional colleagues during the data analysis process as an external check to explore my perspectives and assumptions toward the data (see Bloomberg & Volpe, 2016; Berger, 2015; Creswell & Creswell, 2017; Lincoln & Guba, 1985). Moreover, I used member checking to enhance credibility and to ensure that the data was correctly transcribed and interpreted (see Bloomberg and Volpe, 2016; Patton, 2015).

Transferability

Transferability denotes the ability of the study's findings to be applied to other situations (Anney, 2014; Bloomberg & Volpe, 2016; Berger, 2015). In Hermeneutical research, the themes that emerge from the data will not be the same for the researcher and the reader because each is unavoidably influenced by their own preconceptions when interpreting the data (Koch, 2006; Lub, 2015). As such, because this was a Hermeneutical study, readers may not agree with the study's interpretation of the data, which could limit the transferability of its findings. Fusch et al. (2018) described that transferability of a study's findings can be enhanced with thick rich descriptive data such as "thick data is a lot of data; rich data is many-layered, intricate, detailed, nuanced, and so on" (p. 24). Therefore, in the study findings I included thick, rich descriptions of the data and the interpretative process to allow comparison by those who wish to transfer the findings to another situation or population (see Guba & Lincoln, 1981; Lub, 2015). In addition, I used an audit trail to detail the justifications for research decisions that were made

throughout the study (see Bloomberg and Volpe, 2016; Guba & Lincoln, 1981; Lub, 2015).

Dependability

Dependability in qualitative research denotes the ability of others to follow the process that was used for collecting, analyzing, and interpreting data (Anney, 2014; Bloomberg & Volpe, 2016). Moreover, the dependability of a study's results may be affected if there are gaps in the data due to restricted time at the site (Bloomberg & Volpe, 2016). To address potential time constraints, I pre-arranged and scheduled partner site visits and in-person interviews within allotted timeframes. In addition, to enhance the transferability of the research findings, I will retain all physical and electronic research documents that were created during the research process for future audits (see Anney, 2014).

Confirmability

Confirmability demonstrates that the study's findings were derived without the influence of researcher bias (Cope, 2014). In this study, I established confirmability via participant quotes, an audit trail, reflexivity journal, peer debriefing, and data triangulation (see Anney, 2014; Cope, 2014; Guzys et al., 2015; Lincoln & Guba, 1985). In addition, to decrease potential researcher bias and enhance confirmability, I established inter-rater reliability whereby a subset of the transcribed interviews was coded separately by me and two colleagues and compared for consistency in coding (see Bloomberg & Volpe, 2016).

Ethical Procedures

To comply with all ethical standards, I obtained approval to conduct the study from the IRB at Walden University's Office of Research Ethics and Compliance (OREC) before conducting participant recruitment or data collection; IRB approval number # 09-25-19-0083644. Participation in the study was voluntary and the ethical standards and protocols that were used to protect study participants' rights were developed through the Federal Policy for the Protection of Human Subjects or the Common Rule in conjunction with the Belmont Report (see Miracle, 2016; U.S. Department of Health and Human Services [HHS], 2019). Specifically, I adhered to the following three guiding principles that are laid out in the Belmont Report to ensure that ethical research is practiced: (a) autonomy and respect for persons; informed consent, (b) beneficence; do no harm with the least amount of risk as possible relative to the potential benefits of the research, and (c) justice; equal treatment and fairness regardless of participation (see Miracle, 2016; HHS, 2019). In addition, the Belmont Report lists the following three measures that must be addressed in human research: (a) informed consent, (b) risk/benefit assessment, and (c) individual and social justice in the selection of research participants (as cited in Miracle, 2016; HHS, 2019). Therefore, I obtained written informed consent from each participant who took part in the study. Moreover, the informed consent described the study and the potential risks and benefits of participation in the study. In addition, if any adverse events had occurred, I would have informed the chair of my committee and the IRB committee of the situation and completed the IRB Adverse Event Reporting Form within one week of the incident. It happened that no adverse events were observed during

the course of the study. In addition, I informed all participants that their participation in the study was strictly voluntary and that they were free to exit the study at any time. Furthermore, the identity of the participants and the study site are masked in this report and all digitally recorded interviews were deleted after they were transcribed and checked for accuracy with each participant. During the study, I kept all interview transcript data secure on a password protected computer. Finally, I will maintain all hard copies of data that are required by Walden University to be kept for 5 years after matriculation in a locked cabinet.

Summary

This chapter presented a thorough description about the methods that I used to conduct the study. In addition, a detailed explanation of how the researcher-developed interview items were validated, and pilot tested was provided. Moreover, this chapter outlined the procedures that I employed to recruit participants, conduct data collection and analysis, enhance trustworthiness, and perform ethical research. The next chapter, Chapter 4, presents the findings of the pilot study; the data collection and data analysis process; and the results of the main study.

Chapter 4: Results

Introduction

The purpose of this Gadamerian phenomenological study was to examine nurses' lived experience in implementing TIC into nursing practice for the care of patients with physical disabilities, known or unknown histories ACEs/TEs, and secondary maladaptive coping behaviors at a skilled-nursing facility in a midsized city in the state of Michigan.

I developed the interview guide for the study in alignment with the TPB belief-based framework to answer the following research questions:

RQ1: What is it like for nurses to implement TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ2: What is the role of behavioral beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ3: What is the role of normative beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

RQ4: What is the role of control beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?

In this chapter, I present the results of the study including the pilot study and its findings, participant demographics, data collection, data analysis, evidence of trustworthiness, and an interpretation of the results. First, a detailed description of the pilot study and its impact on the main study is presented. Next, the process and outcomes of the data analysis are discussed, which describes how I used TA to find emerging themes and subthemes in the textual data. In addition, the hermeneutic interpretive process is presented to illustrate how I applied a Gadamerian philosophical lens to interpret the overall meaning of the data. Furthermore, evidence of trustworthiness and measures that I used to establish qualitative rigor are discussed. Finally, the results of the study are presented, which detail the study's answers to each of the research questions.

Pilot Study

Conditional study approval was granted by Walden University's IRB on September 25, 2019, with the IRB approval number 09-25-19-0083644. The IRB conditional approval was given while I worked to secure a signed letter of cooperation with the partner facility. In the interim, beginning on October 10, 2019, I recruited a panel of researchers and professionals, with expertise in TIC, to determine the validity of the interview guide, which is thoroughly described in the Methods section of Chapter 3. During the interview tool validation process, I obtained a signed letter of cooperation from the partner site on November 11, 2019, which I submitted to IRB for approval. Subsequently, I received Notification of Approval to Conduct Research from the Walden IRB committee on November 25, 2019. The study's formal data collection process began with the commencement of the pilot study on December 1, 2019. I applied the same

ethical and confidentiality measures during the pilot study that were set forth for the main study and described in Chapter 3.

Pilot Study Scope

The goal of the pilot study was to improve the quality of data collection and to assess the following factors prior to conducting the primary study: (a) the interview guide's manageability, usability, feasibility, and practicality as a data collection instrument in the field setting; (b) the interview session time requirements; (c) the ease of digitally recording interviews; (d) the efficiency of the data transcription process; and (e) the pilot participants' perception of the interview guide (see Anney, 2014; Bloomberg & Volpe, 2016; Creswell & Creswell, 2017; Doody & Doody, 2015; Seidman, 2013). Via the pilot study, I was able to preemptively resolve issues in the study's data collection process prior to conducting the main study (see Anney, 2014; Bloomberg & Volpe, 2016; Creswell & Creswell, 2017).

Pilot Study Delimitations

Because the pilot study was not meant to duplicate the main study, the participant selection criteria only included the ability to speak English proficiently, possession of an active Michigan nursing license, a minimum of 3 years nursing experience, and at least 2 years' experience working as a nurse in a nursing rehabilitation facility or related setting (see Hosking et al., 2016). Furthermore, as previously discussed, I used Connelly's (2008) recommendation that a pilot study sample should be 10% of the projected sample size for the main study. Therefore, using Connelly's method, I calculated that the desired pilot study sample size was between two to three participants.

Pilot Study Data Collection and Analysis

I recruited two English speaking Michigan licensed nurses, who were familiar to me and who met the pilot study inclusion criteria, for the pilot study via an in-person convenience sampling strategy. The first participant, Pilot #1, was employed as a certified critical care nurse at the time of the interview and had 3 years' experience working as an RN in a skilled rehabilitation setting. The second nurse, Pilot #2, was employed as a director of nursing for a SNF at the time of the interview and had 7 years' experience working as an RN at an orthopedic trauma step-down unit where patients received in-patient physical rehabilitation following their discharge from intensive care.

Next, I conducted the pilot study interviews at separate times on December 1, 2019, in a private office conveniently located in a town near the participants' homes. At the start of each interview, I gave a brief overview of the purpose and context of the main study and described the aim of the pilot study. Next, prior to each interview, I provided time for the participants to ask questions about the study and obtained verbal permission from each participant to digitally record the interview. Moreover, each participant signed a consent form before their interview commenced. During the interviews, I read the interview items aloud and made brief written notes in the field notebook about the participants' use of nonverbal body language and other observable reactions. In addition, during dialogue with each participant I interjected the following probing questions that were recommended by Francis et al. (2004):

- Are any items ambiguous or difficult to answer?
- Does the questionnaire feel too repetitive?

- Does it feel too long?
- Does it feel too superficial?
- Are there any annoying features of the wording or formatting?
- Are there inconsistent responses that might show that changes in response endpoints are problematic for respondents who complete the questionnaire quickly? (p. 27)

Pilot Study Findings

The pilot study gave me an opportunity to gauge the effectiveness of my interviewing skills to elicit meaningful information and to identify any forms of bias and preunderstandings (see Doody & Doody, 2015; Seidman, 2013). Likewise, I used the opportunity to practice reflexivity and better understand my position in the interview process, which allowed me to improve my novice interviewing and reflexive techniques (see Seidman, 2013; Williams-McBean, 2019). Specifically, via the pilot study, I was able to improve the organization of the study's data collection process, achieve a better sense of my role as coresearcher, and enhance my interviewing skills.

The main study data collection plan relied on conducting the interviews at the partner site location. As such, it was important to know how long each interview would take for scheduling purposes. Accordingly, the respective duration of the two pilot study interview sessions was found to be 25 minutes and 35 minutes, respectively. Although the pilot study was not meant to replicate the main study, I was able to use the preliminary interview experience and my professional judgement to estimate the length of time the main study interviews would take (see Doody & Doody, 2015). In this regard, I applied

my professional experiential knowledge that I had obtained from previous experience conducting patient interviews and projected that it would require 60 to 90 minutes to complete each primary study interview. During follow up conversations with the pilot-study participants, in which informed consent continued, they agreed that the length of time I estimated for the main study interview sessions would be sufficient to allow for thoughtful and complete responses from participants.

Regarding the usability, feasibility, and usefulness of the interview guide, the pilot-study participants agreed that the interview guide would be manageable in the field and that the interview questions were relevant to the study's purpose. For example, Pilot #1 said,

I think that I believe you know...most nurses will be able to relate to the topic of working with patients who have experienced traumatic events and these interview questions because we see it all the time...even if, you know, we don't realize it. It [the interview guide] will probably help nurses remember specific examples of patient interactions they have had.

However, Pilot #2, suggested that interview Items 8 and 9 were vague and offered some revision recommendations,

I don't get what you're trying to get at in Questions 8 and 9...I guess it's a wording problem maybe. What does it mean "is the anything you associate with other people's views about personally educating..."? To me, those are a whole bunch of words that are confusing to me...if they confuse me, it could confuse them [the participants].

I noted that the expert panel findings also showed subpar validation outcomes for Items 8 and 9. Hence, the findings from the expert panel validation process, described in the Validity of Interview Questions section in Chapter 3, and the pilot study findings I used to improve the interview guide.

Impact of the Pilot Study on the Main Study

Following the expert panel review and the pilot study, I reconciled the qualitative and quantitative data from both evaluations and revised the interview guide to improve the quality, validity, usability, feasibility, usefulness, relevance, clarity, and essentiality of the data collection instrument (see Almanasreh, et al., 2019; Doody & Doody, 2015; Polit & Beck, 2004; Zamanzadeh et al., 2015). Furthermore, I updated corresponding changes on the consent form. Specifically, I revised the interview guide via the findings from the expert-panel validation of the interview questions, which is described in depth in the Validity of Interview Questions section in Chapter 3. In addition, I used the pilot-study findings for planning and logistical purposes (i.e., time requirements, materials needed) and to enhance the quality of my interview skills. For example, I performed a self-assessment of my interview skills and found that I needed to speak louder and use better diction when reading the interview questions aloud to the participants. In addition, I noted that I needed to use interview prompts more often and probe deeper into the participant's responses to elicit richer descriptions of their experiences. As a reminder to use prompts, I added the concise list of probing questions to the interview guide, which is discussed in the Instrumentation section of Chapter 3. In this regard, the list of probing

questions in the interview guide acted as a reminder to probe deeper during the main study interviews.

Lastly, on December 14, 2019, I submitted a request for a change in procedures to Walden University's IRB committee for the revisions that were made to the interview guide and the modifications on the consent form to ensure compliance with all ethical standards. Subsequently, I received final IRB approval on December 26, 2019, for the revised interview guide and the updated consent form and I began the main study on January 15, 2020.

Study Setting

I conducted the study's data collection in partnership with the IRB-approved partner site. The partner site was a 39-bed Medicare-certified skilled-nursing unit at a large healthcare facility that was located in a midsized municipality in the state of Michigan. There were no personal or organizational conditions that influenced participants or their experience at the time of study. In addition, there were no personal or organizational conditions that may have influenced the interpretation of the study results. Furthermore, I completed all participant recruitment and data collections strategies used at the partner site were completed in strict accordance with the policy and procedures of Walden University's IRB department and formal IRB approval.

Demographics

When candidates who were interested in taking part in the study contacted me, I screened them using the study's demographic screening survey (see Appendix A) to ensure that they meet the participant inclusion criteria. Specifically, the inclusion

requirements included a current Michigan nurse licensure, minimum of 1-year professional nursing experience, completion of TIC training, internet access, basic computer literacy, and fluency in speaking, reading, and writing English. As such, 18 candidates met the inclusion requirements, and 15 participants took part in the study ($N = 15$).

The study's participant demographics are presented in Table 4, which shows that 66% ($n = 10$) of the participants had an LPN level of nurse licensure. In addition, the highest level of education among the participants was a Master of Science degree in nursing ($n = 1$). Furthermore, the self-reported gender of all participants was female ($n = 15$), and the reported ages of the participants ranged from 28 to 55 years old. Specifically, 20% of participants were between the ages of 28 and 36, 40% were between the ages of 36 and 45, and 40% between the ages of 46 and 55. Likewise, the participants' years of nursing practice ranged from 1 to 23 years' experience with 1 year ($n = 1$) being the least number of years practicing nursing, and 33 years ($n = 1$) being the longest. Moreover, the participant's self-reported ethnicity included 73% White ($n = 11$), 20% Black or African American ($n = 3$), and 7% multiracial ($n = 1$; see Table 4).

Table 4*Participant Demographics*

Demographic characteristic	Participant totals	
	<i>N</i>	%
Licensure/education		
LPN	10	66
RN/BSN	4	27
MSN	1	7
Gender		
Female	15	100
Male	0	0
Age		
28-35	3	20
36-45	6	40
46-55	6	40
Years' experience		
1-5	4	27
5-10	2	13
10-20	7	47
>20	2	13
Ethnicity		
White	11	73
African American	3	20
Multiracial	1	7

Note. All participants ($N = 15$) were Michigan licensed nurses with at least 1 year of professional experience, had prior training in TIC, had access to the internet, were computer literate, and were fluent in speaking, reading, and writing.

Data Collection

To answer the research questions, I used multiple data-collection tools that included the study's interview guide, demographic screening survey, reflexivity journal, and field notebook (see Creswell & Creswell, 2017; Patton, 2015).

Hermeneutic Elements

Pre-research Reflexivity

Prior to the interview phase, to begin the reflexive process and gain insight into my preunderstandings about the study phenomenon, I used van Manen's (2016b) recommendation and completed a written description of my previous experience of implementing methods similar to TIC into nursing practice, which is described in the Methods section in Chapter 3. In addition, throughout the data collection phase, I critically evaluated my presuppositions and biases, which I contemplated in the context of my historical and concurrent experiences to discover how they influenced my understanding and interpretation of the data using van Manen's (2016b) technique and Rae and Green's (2016) matrix tools for reflexivity. Specifically, the study's reflexive practices allowed me to explore my personal horizons as a registered nurse who has cared for trauma-exposed individuals and as a nurse manager who has supervised nursing subordinates in the use of therapeutic communication strategies, similar to TIC, with patients with histories of trauma (see Gadamer, 1960/2013). Moreover, during the data collection process, I documented my reflexive insights in the electronic reflexivity journal three to four times a week.

Hermeneutic Interviewing

During each interview session, I aimed to develop a rapport with the participant and to be focused, attentive, reflective, open, and curious to hear and observe the participants fully (see Braun & Clarke, 2013). In this manner, I strove to create a relaxed professional interview space where the participant felt at ease to share their experiences freely (see Creswell & Poth, 2018). Specifically, I used the Gadamerian approach of *bildung*, or openness to meaning, and listened closely and observed intently to the participant's verbal and non-verbal responses to the interview questions. Therefore, if the participant made an interesting or insightful comment, I made a brief note of it in the space provided on the interview guide (see Braun & Clarke, 2013). Otherwise, I did not take extensive notes during the interview sessions so that I could focus my full attention on the participant's responses and any non-verbal communication being expressed via body language (see Braun & Clarke, 2013). Moreover, I strove to remain fully present in mind, body, and spirit during each interview to achieve a merging of understanding between my preunderstandings and the participant's expressed perceptions of implementing TIC into practice (see Stenner et al., 2017).

Furthermore, during each interview, I asked probing questions to encourage the participant to elaborate about their experience and to fully express the meaning and perceptions of their shared ideas (see Harris, 2017). In this regard, I adapted Gadamer's (1960/2013) ontological view of the world that language is being, and I viewed each participant as my coresearcher to discover a cogenerated understanding of their lived experiences (see Matua & Van Der Wal, 2015; Wojnar & Swanson, 2007). Specifically,

my interviewing approach was intended to engage the participant in Gadamer's process of sharing in a common meaning to achieve a fusion of horizons with a shared understanding of their experiences (see Stenner et al., 2017; Vandermause & Fleming, 2011).

In addition, I interviewed and observed the participants in their naturalistic work environment, or milieu, at the partner facility. I chose this naturalistic location to experience the participants' world view whereby they developed their perspectives about TIC via their interactions with each other and the facility's milieu (see Benner, 1994; Creswell & Poth, 2018; Creswell & Creswell, 2017; Gadamer, 1960/2013). In this manner, I used Denzin and Lincoln's (2017) interpretative concepts and throughout the interview process I asked myself the question, "what is it like for the participants to implement trauma-informed care in this environment?" (i.e., milieu). By staying open to the participants' telling of their otherness and being-in-the-world (i.e., temporal situatedness), regarding their lived experience, I was able to develop a deeper understanding of how the participants' work environment and relationships influenced the meaning they placed on implementing TIC into practice (see Benner, 1994; Gadamer, 1960/2013; Vandermause & Fleming, 2011).

Immediately following each interview, I documented my fresh raw observations in the field notebook to capture my initial assessment of the participant's demeanor, expressions, non-verbal body language, significant statements, and my overall impression of the interview (see Braun & Clarke, 2013). In addition, via van Manen's (2016b) reflexive questions and Rae and Green's (2016) tools for reflexivity, I practiced

reflexivity multiple times a week to evaluate my preunderstandings of the study phenomenon and interview findings. Moreover, I documented my reflexive preunderstandings in the electronic reflexivity journal matrix (see Table 2; Chapter 3). In particular, Mason (2018) defined reflexivity as “thinking critically about what you are doing and why, confronting your own assumptions, and recognizing the extent to which your thoughts, actions and decisions shape how you research and what you see” (p. 5). Hence, I used the digital reflexivity journal to document my personal assumptions, beliefs, and thoughts about the data and the study phenomenon. In addition, through the use of the study’s reflexive techniques I was able to recognize how my preunderstandings potentially shaped how I analyzed the data (see Creswell & Creswell, 2017).

Participant Recruitment

I completed participant recruitment via purposeful and snowball sampling strategies (see Bloomberg & Volpe, 2016; Merriam & Tisdell, 2016; Patton, 2015). In coordination with the partner facility’s DON, I began participant recruitment on January 15, 2020, and attended eight separate two-hour nursing staff meetings on three different days. During the staff meetings, I gave a 20-minute presentation about the study, answered questions, and passed out samples of the consent form and the study informational flyers with my contact information. During my partner site visits and staff meetings, I hung study informational flyers at the nursing stations and asked potential study candidates to inform nurse coworkers about the study and to ask prospective participants to contact me if they were interested in volunteering for the study. In addition, I met with the facility’s social worker and obtained a general overview of the

types of trauma histories that were found in the patient population and the interdisciplinary structure of the partner site. Likewise, the DON supplied general information about the partner site's required state survey documentation and the facility's TIC policy and training standards.

In response to my recruitment efforts, 21 prospective study participants contacted me via email, phone, and text and requested to be part of the study. When interested candidates contacted me, I completed the demographic screening survey (see Appendix A) to determine if they met the study criteria. As such, two ($n = 2$) of the 21 interested nurses had been practicing nursing for less than a year and one ($n = 1$) did not have access to the internet. Thus, these three prospective candidates ($n = 3$) did not meet the study's inclusion requirements and were not enrolled in the study. I scheduled the remaining interested nurses ($n = 18$) who met the study's inclusion criteria for in-person interviews. In addition, the DON was able to verify that the qualified candidates had previously completed a multi-session TIC training program and received a certificate of training. I sent each scheduled candidate a study participant information email to reinforce their commitment to take part in the study and to remind them to attend their scheduled interview.

In-Person Interviews

I scheduled each in-person interview for 90 minutes at the partner site. The interviews observed the following time sequence: 15 minutes to review the purpose of the study and obtain signed informed consent, 60 minutes to complete the interview, and 15 minutes for the closing statement and debriefing questions. In addition, on days that

multiple interviews were scheduled, a 30-minute interval was slated between sessions to allow time to document in the reflexivity journal and field notebook.

I conducted the in-person interviews on January 24, 2020, January 28, 2020, February 4, 2020, February 13, 2020, March 6, 2020, and March 7, 2020, with more than one interview scheduled on some of the dates. I conducted each in-person interview in a private office at the partner facility in alignment with the data collection plan (see Appendix F). During each interview I followed the interview guide (see Appendix C) that began with a brief overview of the purpose and context of the study and a review of the consent form. Next, prior to asking interview questions, I provided time for the participant to ask questions and obtained their signed consent. Additionally, I obtained verbal permission from each participant to allow me to digitally record the interview. Each in-person interview session lasted between 22 to 40 minutes. Throughout the interview process I followed the interview guide and asked the participants probing questions to help elicit deeper explanations about what they were trying to convey. The only variance during the in-person interviews occurred when participant #Nurse3 requested a restroom break at which time the digital recording was stopped and restarted when they returned to resume the interview.

Following each interview, I completed the holistic debriefing questions (see Moldjord & Hybertsen, 2015), which were part of the interview guide, and documented the participant's responses in the field notebook. Due to the possibility that some participants could have been emotionally triggered by the interview topic of trauma, a list of referral sources for mental health services was prepared and made available to all

participants during the study (see Appendix E). By the end of the data collection phase, none of the participants had requested or indicated a need for the list of mental health services.

Unusual Circumstances

During the data collection process, the COVID-19 pandemic arose and effectively halted my ability to continue conducting participant in-person recruitment and interviews. Specifically, on March 10, 2020, the governor of Michigan, Gretchen Whitmer, declared a state of emergency across the state, then, on March 14, 2020, the governor issued an order prohibiting outside visitors in health care facilities, and on March 23, 2020, an executive statewide stay-at-home order was issued for all non-essential workers, which was lifted on June 1, 2020 (State of Michigan, 2020a). As of the writing of this manuscript, the state of emergency has been extended through the Michigan Department of Health and Human Services (see State of Michigan, 2020b).

Prior to the ensuing COVID-19 pandemic, I conducted 11 in-person face-to-face interviews at the partner site. During the first 11 interviews there was no need to deviate from the established recruitment protocol or data collection plan. Prior to the pandemic, I made every attempt to be present at the study site at least three times a week at various times to conduct interviews, observe nursing interactions, and meet with the social worker and DON. The opportunity for prolonged engagement at the partner facility enhanced my ability to perceive the participants' lived experience of implementing TIC into practice in the context of their work environment (see Bloomberg & Volpe, 2016; Berger, 2015).

After analyzing the first 11 interviews, data saturation was not reached, which meant that more data needed to be collected. However, the ability to conduct additional interviews became problematic on March 14, 2020, when Governor Whitmer implemented state-wide stay-at-home executive orders that included restrictions that prohibited guests from visiting health care facilities due to the COVID-19 pandemic (see State of Michigan, 2020a). Although, in-person interviews were the preferred method of data collection (see Patton, 2015), the current study's research plan allotted for the use of virtual interviews (i.e., Skype) if participants were unable to meet in person (see Lo Iacono et al., 2016). Therefore, I contacted the remaining seven study volunteers and asked if they would be willing to complete their interview virtually and if they had access to the necessary electronic equipment and technology to take part virtually (e.g., computer, scanner, printer, webcam, and Skype application). Out of the remaining seven potential candidates, four candidates ($n = 4$) responded favorably that they were able and willing to complete a virtual interview and had the necessary equipment and technology to fully participate in a remote manner. After several attempts, I was unable to reach the remaining three potential candidates and they were removed from my list of potential study participants.

Variations in Data Collection

The ensuing COVID-19 pandemic interfered with the proposed debriefing strategy for the study that originally planned for peer debriefing to be carried out with monthly discussions with the chair of my dissertation committee, instead two of my professional nursing colleagues volunteered to fulfill this role. In addition, on March 12,

2020, the Walden University IRB department issued a general provision, which allowed for alternative forms of data collection due to the COVID-19 pandemic. Therefore, I contacted the four remaining candidates ($n = 4$) who had indicated willingness and ability to complete their interviews virtually and scheduled a date and time that was convenient for them to take part in the study using the software application Skype VoIP technology (see Lo Iacono et al., 2016).

Another variation in the data collection process occurred due to pandemic public health orders that restricted outside visitors to healthcare facilities, which prevented me from visiting the partner site to access documentation (i.e., nursing notes, policy on TIC, and state survey documentation). In addition, during the data collection phase, the CMS suspended revalidation surveys and non-statutory recertification surveys at long-term care facilities to allow inspectors and facilities to focus on COVID-19 mitigation strategies (see CMS, 2020). Therefore, updated state survey data related to the CMS (2016) federal requirement to implement TIC in long-term care facilities before November 2019 was not available at the time of the writing of this manuscript. Hence, I was unable to collect or analyze data from the CMS state survey database to view the partner facility's state survey results related to their implementation of TIC. Furthermore, prior to the ensuing pandemic, I had not received my facility credentials to access electronic nursing notes via the facilities electronic medical record. As a result of the Governor's orders that restricted visitors from medical facilities, I was unable to get the necessary credentials to access electronic nursing notes. Hence, data from nursing

documentation was unavailable and could not be assessed and included in the study's data collection and data analysis process.

Virtual Interviews

Each virtual participant stated that that they were familiar and experienced with the Skype program. In addition, each virtual participant confirmed that they had easy access to private electronic equipment to print, sign, scan, and email their signed consent forms to me during their scheduled interview session. Moreover, I asked the virtual participants to choose a private setting to complete their Skype interview session. In turn, I was located in a private office during all Skype calls. In this regard, I conducted the virtual interviews on March 20, 2020, and March 27, 2020, with two interviews scheduled each date. During the virtual interview phase, I conducted the data collection process in an identical fashion to the in-person interview phase, apart from how the consent agreement was obtained. To obtain the signed consent agreement during the virtual interviews, I emailed each virtual participant a digital copy of the consent form and asked them to print it out prior to their scheduled interview. In accordance with the approved IRB study procedures, at the beginning of each virtual interview, I reviewed the consent agreement and supplied time for the participant to ask questions. After which, if the participant agreed, they were asked to sign the consent agreement and immediately scan and email it to me. In this regard, I successfully received signed consent agreements from each of the four virtual participants via email, without incident.

Data Saturation

Out of the 18 qualified candidates who originally volunteered to take part in the study, three were lost to follow up, and did not participate in the study, which left a pool of 15 prospective participants ($n = 15$). After I conducted the initial 11 in-person interviews ($n = 11$) the COVID-19 pandemic ensued, and I continued data collection via virtual interviews with the remaining four participants ($n = 4$). During the data collection process, I listened to the digital recordings immediately after each interview and immersed myself in the textual data to identify new and recurring themes. In this respect, I performed the data analysis process in tandem with data collection until I reached data saturation when no added information emerged that would have augmented or changed the findings of a study (see Varpio et al., 2017). As such, I achieved data saturation after the 14th interview. Although, I performed one additional interview to ensure that a comprehensive data collection process was achieved. Hence, a total of 15 participants ($N = 15$) completed face-to-face interviews either through an in-person or virtual format in which a set of 15 transcribed textual data sets was generated.

Data Recording

Preceding each interview, I assigned the participant an alpha numeric code that corresponded with the order they were interviewed to ensure their privacy during data collection and analysis. Incidentally, the order in which the participant's interviews were scheduled was known only to me due to the varied shifts that the nurses worked. For example, the first participant interviewed was assigned the pseudonym #Nurse1, the second person interviewed was given the pseudonym #Nurse2, and so on. Furthermore, I

used the designated pseudonyms in all manners of data collection and analysis including observational field notes and reflexivity journaling throughout the length of the study.

I recorded the in-person interviews on a Sony ICD ux560 digital audio recording device; while interviews conducted via Skype VoIP technologies were recorded using the recording feature of the online service. Within twenty-four hours after each interview, I uploaded the digital recording to the Weloty academic transcription service. Prior to the commencement of the data collection phase, I entered into an agreement with Weloty to pay a nominal fee for transcription services and I obtained a signed confidentiality agreement from the Weloty representative. Within 24 hours after each interview, I uploaded an MP3 file of the interview recording a to Weloty via a secure electronic portal. Afterward, Weloty supplied a verbatim digital textual transcription of the interview within 72 hours.

After I received each transcribed interview digital text file from Weloty, I compared it to the MP3 audio recording of its respective interview for accuracy. Next, I emailed each participant a copy of their transcribed interview to confirm that what they shared with me had been transcribed correctly and to clarify or add information they felt was not clear or that they forgot to include. In accordance with the terms of the consent agreement, I asked each participant to reply within two weeks of receiving their emailed transcript to confirm if they agreed with how their responses were represented or if changes needed to be made. In total, eight participants responded via email within the two-week timeframe and stated that their transcript correctly stood for the responses they gave during their interview and no requests for changes were received. Seven participants

did not reply to my email within the two-week timeframe, and I assumed, per the consent agreement, that the non-responding participants agreed that their interview answers were complete and transcribed correctly. Furthermore, in compliance with the consent agreement, I removed all digital MP3 files that contained the participant's audio recorded interviews after I received confirmation from the participant that their interview transcript was accurate or assumed to be accurate after the two-week response period had lapsed.

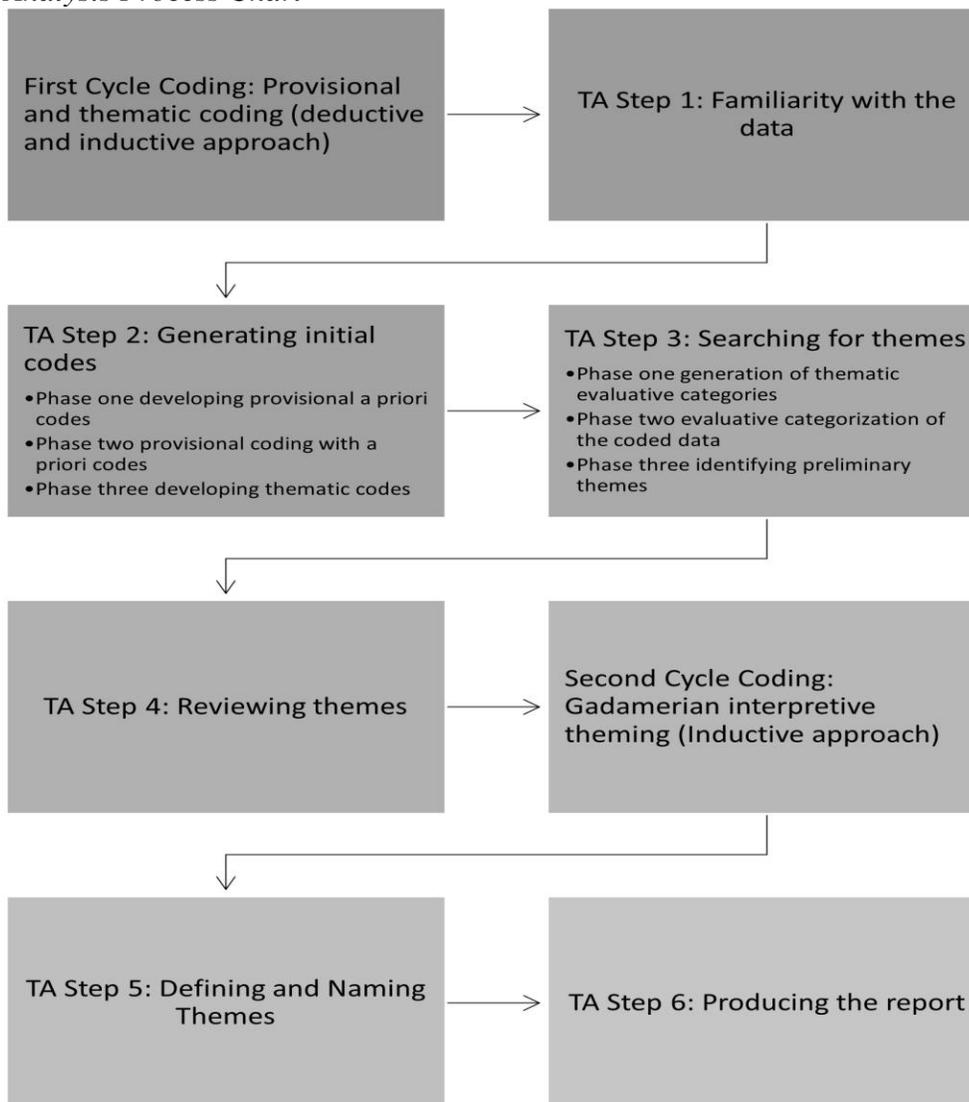
Data Analysis

I rigorously developed the data analysis process to align with the study's research design, theoretical framework, and philosophical stance to fully address the research questions (see Merriam & Tisdell, 2016). In this regard, I used a hybrid of methods to code, analyze, and interpret the data. Specifically, I used an adaptation of Braun and Clarke's (2006) six steps of TA to systematically organize the data analysis process, which included familiarity with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Furthermore, I did not use a reductionist coding approach to analyze the data. Rather, I adapted Saldaña's (2015) description of the intent of coding that said,

My definition of coding approaches the analytic act as one that assigns rich symbolic meanings through essence-capturing and/or evocative attributes to data. . . . Most of these methods are geared toward discovering a participant's voice, processes, emotions, motivations, values, attitudes, beliefs, judgments, conflicts, microcultures, identities, life course patterns, etc. These are not reductionist outcomes but multidimensional facets about the people we study. (p. 38)

Therefore, throughout the data analysis process, the number of codes and themes fluctuated until the data was assimilated into a finite number of themes and subthemes. In addition, I used a selection of Saldaña's (2015) coding methods to code the textual data via a two-cycle coding process. Furthermore, the data analysis process alternated between an inductive and deductive approach (see Bloomberg & Volpe, 2016). Bloomberg and Volpe's dual inductive-deductive approach complemented the qualitative design and theoretical framework of the study by allowing the precepts of the theory of planned behavior to be an integral part of "deductive thematic analysis while allowing for themes to emerge direct from the data using inductive coding" (p. 82). In this regard, Figure 10 displays the data analysis process that I used to analyze the textual data, which included Saldaña's (2015) two-cycle coding process and Braun and Clarke's (2006) six steps of TA. As shown, I began the first cycle coding process with a deductive approach to become familiar with the data, generate initial codes, provisionally code the textual data, and categorize the data via TA steps one, two, and partially with step three. Next, I transitioned from the first cycle coding process into an inductive approach to find and review preliminary themes partially through TA step three and primarily with TA step 4. In this respect, I used Gadamerian hermeneutic analysis in the second cycle coding process to interpret the coded sections of the preliminary themes to answer the research questions and produce a report via TA steps five and six (see Figure 10). In the sections that follow, a thematic framework of tables and process flow diagrams is presented to demonstrate how I used Saldaña's coding methods to "...categorized, recategorized, and

conceptualized [the codes] throughout the analytic journey...” (pg. 198) in relationship to the study’s theoretical framework.

Figure 8*Data Analysis Process Chart*

Note: TA = Thematic Analysis

NVivo Computer Assistance

I used computer-assisted qualitative data analysis (CAQDA), via NVivo 11 Pro for Windows, to help analyze the data in the following ways: organizing the coding and theming process, examining the large volume of textual data, and performing extensive cross-case analysis (see Bloomberg & Volpe, 2018; QSR International, 2018). For example, as I received each transcribed interview from the transcription service, I uploaded the digital text file of the transcript into NVivo as an individual *case* file. Similarly, I uploaded the digital reflexivity journal into an NVivo file and updated accordingly as reflexive data was collected. The inclusion and comparison of the reflexivity journal data in NVivo allowed me to conduct a more robust triangulation of the digital reflexivity journal entries and the digital transcripts (see QSR International, 2018). In addition, after I uploaded each transcript into NVivo, I manually transcribed relevant participant observations from the field journal into the text of digital interview transcript including episodes of the participant's use of hyperbolic verbal expressions and non-verbal body language (see Bloomberg & Volpe, 2018). The presence of the transcribed field notes in the digital transcript helped me to triangulate the data, refine codes, and interpret the meaning of themes during the first cycle coding process.

Notably, the use of CAQDA in phenomenology research was cautiously supported by researchers, such as Goble et al. (2012) and Sohn (2017), who provided a caveat for phenomenological researchers that if a computer-assisted data analysis tool, such as NVivo, was used to analyze hermeneutical data the researcher must remain the primary tool for data analysis. In this regard, I was the primary instrument for data

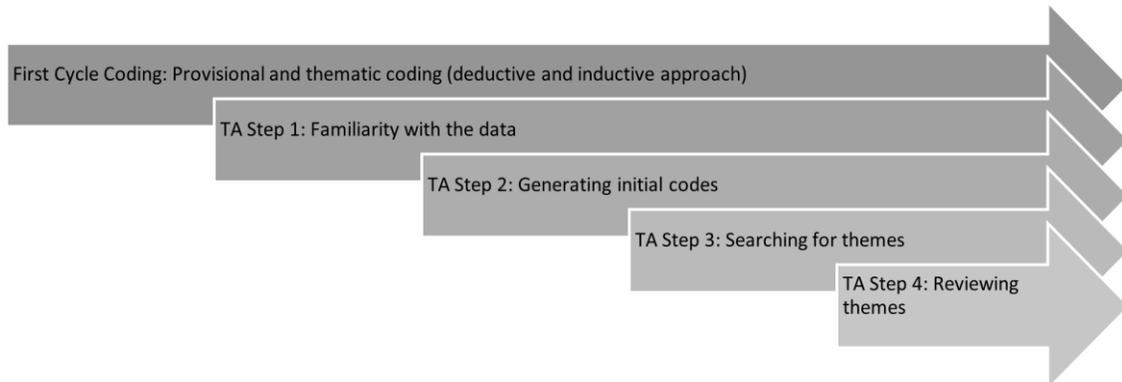
collection and data analysis and NVivo was used as a tool to organize and compare segments of the data to identify relationships, re-occurring patterns of ideas, and emerging themes that were interpreted via the study's Gadamerian phenomenological ontology (see Goble et al., 2012; Sohn, 2017). Hence, to fully analyze the study's hermeneutical data, I did not use all of the sophisticated CAQDA applications that are available in NVivo. My partial use of NVivo's data analysis tools allowed me to remain open to the otherness in the textual data to bring forth a new understanding in the meaning of text and identification of emerging themes (see Benner, 1994; Gadamer, 1960/2013; Vandermause & Fleming, 2011).

First Cycle Coding Process

I performed first cycle coding concurrently with the data collection process to ensure that data saturation was achieved and to complete a comprehensive theming of the textual data (see Creswell & Creswell, 2017; Saldaña, 2015). As shown in Figure 11, during the first cycle coding process, I succinctly followed the first four steps of TA, which included familiarity with the data, generating initial codes, searching for themes, and reviewing themes (see Braun & Clarke, 2013). In addition, I used Saldaña' (2015) provisional, narrative, and pattern coding methods during the first cycle coding process. Specifically, I used the steps of TA and a selection of Saldaña's coding methods to analyze the data in an organized and focused manner (see Figure 11).

Figure 9

First Cycle Data Analysis Process



Note. TA = Thematic Analysis

Moreover, I used the central propositions of the TPB to ground the coding and theming process within the theoretical framework of the study (see Fishbein & Ajzen, 2010). As previously discussed, Fishbein and Ajzen's (2010) formative proposition of the TPB posited that the intention to perform a behavior is "a function of attitudes toward performing the behavior (based on underlying beliefs and their evaluative aspects) and on perceptions of what specific referent others thought one should or should not do and motivation to comply with those referents" (p. 388). As such, I used Fishbein and Ajzen's theoretical proposition and appropriated four central theoretical elements including underlying beliefs, evaluative aspects, perceptions, and motivation. Specifically, I used the four theoretical elements as focal topics, or as a guide, throughout the first cycle coding process to help me to remain focused and grounded in the study's theoretical model during the data analysis process. Furthermore, throughout the first cycle coding process, I applied several data triangulation techniques and compared the text of each interview transcript to entries in the field notebook and the reflexivity journal in an

iterative fashion to generate codes, develop themes, contextualize the data, and interpret themes (see Guzys et al., 2015).

TA Step 1: Familiarity with the Data

I began TA Step 1, familiarity with the data, within 24 hours after each interview and listened to the recorded session. As I listened to each recorded interview I made detailed notes in the field notebook to record my impressions, participants hyperbolic expressions, and other elements of the interview that stood out (see Creswell & Creswell, 2017). Similarly, after I received the digitally transcribed interviews from the transcription service, I immediately printed each transcript and read it several times to get a sense of the text as whole and a baseline impression of the data (see Creswell & Creswell, 2017; Tesch, 1990). Furthermore, I compared each transcript to its digital recording to ensure that the interview was properly transcribed. Next, I hand-coded the first two transcripts via an inductive open-ended approach to find phrases that stood out, bolster my familiarity with the data, and strengthen my coding skills (see Creswell & Creswell, 2017; Saldaña, 2015). During the hand-coding process I reviewed each transcript line by line for emerging ideas and made notes and memos in the transcript's margins of interesting concepts (see Nowell et al., 2017; Tesch, 1990). In addition, I used colored highlighters to color code similar phrases and related concepts to form an introductory understanding of the data (see Creswell & Creswell, 2017; Saldaña, 2015). In this manner, I obtained a formational familiarization with the textual data and an overview of the participants' similarly expressed ideas that I was able to apply in the subsequent TA steps.

TA Step 2: Generating Initial Codes

I completed TA Step 2, generating initial codes, in three phases, which included the following: (a) developing provisional a priori codes, (b) provisional coding with a priori codes, and (c) developing thematic codes (see Braun & Clarke, 2006; Nowell et al., 2017).

Phase 1: Developing Provisional A Priori Codes. To remain grounded in the theoretical model during Phase 1 of TA Step 2, developing provisional a priori codes, I chose the focal topic, underlying beliefs. As previously discussed, I guided sections of the coding process with select chosen focal topics that I derived from Fishbein and Ajzen's (2010) fundamental propositional elements of the TPB. As such, the focal topic for this phase, underlying beliefs, represented the concept of beliefs as the theoretical foundation of the study's interview questions (see Fishbein & Ajzen, 2010). Specifically, to elicit participants' salient beliefs, I formed the interview questions via the TPB's belief-based constructs (i.e., behavioral beliefs, normative beliefs, and control beliefs) because my fundamental goal during data analysis was to analyze and interpret the participant's responses to the interview questions about their beliefs about implementing TIC into practice (see Brooks et al., 2015; Fishbein & Ajzen, 2010). Thus, to develop provisional a priori codes, the focal topic for the Phase 1 of TA Step 2 was underlying beliefs.

Provisional A Priori Code Development. I used a deductive top-down approach in Phase 1 of TA Step 2 to generate initial codes based on the review of the literature and the theoretical framework (see Nowell, 2017). In this regard, I found empirical studies that described conceptual methods to analyze qualitative data that was derived from

interview questions based on the theory's belief-based constructs. Specifically, Ajzen and Fishbein (2014) posited that behavioral beliefs are best measured via a set of belief precepts including experiential, or affective, attitude such as "i.e., pleasant –unpleasant, interesting–boring" (p. 199) and instrumental, or cognitive, attitude which denotes an individual's knowledge-based evaluation of the potential outcomes of the behavior such as "i.e., desirable–undesirable, valuable –worthless" (p. 199). Furthermore, French et al. (2005) recommended examining participant's anticipatory affect (i.e., how participants feel about performing the behavior) in addition to the instrumental aspects of the attitude constructs (i.e., how participants feel about the likely consequences of that behavior). Similarly, Ajzen and Fishbein (2014) described how subjective norms are best measured via interview questions that address injunctive norms "i.e., perceptions of what others think one should do" (p. 199) and descriptive norms "i.e., perceptions of what others are doing" (p. 199). Additionally, Montaña and Kasprzyk (2015) described that the interview questions should elicit control beliefs concerning the presence or absence of facilitators and barriers to behavioral performance. Moreover, Yzer (2012) suggested that control beliefs may be assessed via questions about the individual's capacity and autonomy to perform the behavior. Therefore, I used the previously described conceptual methods that were found in the literature review and generated nine a priori belief precepts that I used to provisionally code the interview transcripts. Specifically, as shown in Table 5, via the literature review and the TPB I generated the following provisional a priori codes: positive feelings, negative feelings, most likely to use TIC, least likely to use TIC, support for TIC, disapproval of TIC, opinion of TIC, easy to use, and hard to use.

Table 5*A Priori Codes; Belief Precepts of the TPB Belief-Based Constructs*

Behavioral beliefs (attitudes)	Normative beliefs (subjective norms)	Control beliefs (perceived behavioral control)
Positive feelings	Most likely to use TIC	Easy to use
Negative feelings	Least likely to use TIC	Hard to use
	Support for TIC	
	Disapproval of TIC	
	Opinion of TIC	

Note. TIC = trauma-informed care

Provisional Anchor Code Development. I created an NVivo file labeled Anchor Codes for each research question as a bin to simultaneously associate coded text with its respective research question during the first cycle coding process (see QSR International, 2018). Specifically, the anchor codes file included an individual anchor code (AC) for the main concept of each research question (RQ) and a link to its associated interview questions (IQ). The anchor code file contained four anchor codes that included one anchor code, what is behavior like, for the primary overarching research question, and the following three anchor codes for each of the TPB belief-based constructs related their respective research questions: belief behavior outcome is positive or negative; beliefs referents perform and approve/disapprove of behavior; and beliefs in ability and factors help/hinder behavior (see Table 6). During the coding process, I simultaneously coded segments of the transcripts according to the study's codebook definitions (see Table 8) and assigned an anchor code for the research question that it best represented.

For example, in NVivo, I dual coded the segment of #Nurse2's quote, "I think it'd be easy to do like I said once we, once you started and get a little background," with the a priori code, positive feelings; and anchor code four (AC4), beliefs factors help/hinder behavior, which represented the fourth research question (RQ4). Therefore, because this segment of #Nurse2's quoted text was dual coded, when I completed an NVivo query for all text coded with the anchor code AC4 associated with RQ4 would I was easily able to retrieve this segment of #Nurse2's text. As the coding scheme advanced, I updated the anchor codes and linked them to their corresponding research question. As described later in this chapter, the dual-coding method helped me to compare significant segments of coded text to answer the research questions.

Table 6*Anchor Codes in NVivo*

Research question	Belief-Base construct	Anchor code	Interview questions
RQ1: What is it like for nurses to implement TIC into nursing practice to care for patients who have disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Primary over-arching research question	AC1: What is behavior like? (multi-construct related)	IQs 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
RQ2: What is the role of behavioral beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Behavioral beliefs	AC2: Belief behavior outcome is positive or negative. (construct related)	IQs 1, 2, 3, 4, 5
RQ3: What is the role of normative beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Normative beliefs	AC3: Belief referents perform and approve/disapprove of behavior. (construct related)	IQs 6, 7, 8
RQ4: What is the role of control beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Control beliefs	AC4: Belief in ability and factors that help/hinder behavior. (construct related)	IQs 9, 10, 11, 12, 13, 14

Note. RQ = research question, IQs = interview questions, AC = anchor code

Phase 2: Provisional Coding With A Priori Codes. The aim of Phase 2, provisional coding with a priori codes, of TA Step 2, was to provisionally code transparent segments of text that clearly described relevant participant beliefs in relationship to the TPB belief-based constructs. In this respect, I used Saldaña's (2015) provisional coding method to start the coding process with the predefined provisional set of a priori codes (see Braun & Clarke, 2013, Saldaña, 2015). In addition, I created nine codes in NVivo to represent the nine a priori codes. Next, via NVivo's computer-assisted techniques, I manually coded transparent segments of the text with the relevant a priori codes in relationship to the respective interview question and the belief-based theoretical precept. To illustrate, I developed the first interview question to elicit participant's behavioral beliefs about implementing TIC into practice using the positive affective precept (i.e., emotional feeling toward the behavior) of the TPB behavioral belief construct (see Fishbein & Ajzen, 2010). Therefore, the first interview question was posed as "Describe the positive feelings or emotions (i.e., likes or gratification) you have about using TIC in nursing practice over the next 12 months?" Hence, I correlated the a priori code, positive feelings, with the behavior precepts of first interview question. For example, in response to the first interview question #Nurse1 stated, "I think it is very helpful because you have to know your residents and once you know them you know the little things about them." In this respect, I provisionally coded the segment of #Nurse1's statement with the a priori code positive feelings. Furthermore, as previously discussed, I simultaneously coded all segments of text with the relevant provisional code and its respective anchor code (see Table 6). Therefore, I also coded the above sample of

#Nurse1's text with the second anchor code (AC2) belief behavior outcome is positive or negative. To demonstrate, several exemplars of provisionally coded segments of texts and their provisional a priori codes and anchor codes are presented in Table 7.

Table 7*Exemplars of A Priori Coded Segments of Text*

A priori codes	Anchor codes	Exemplars
Behavioral beliefs		
Positive feelings	AC2: Belief behavior outcome is positive or negative	“I think it will assist us in relieving our undue or unnecessary our behaviors.” - #Nurse1
Negative feelings	AC2: Belief behavior outcome is positive or negative	“Yeah, because it’s a model... You’re having to do it on everybody, which tends to overwhelm assessors when you have to do something for everyone.” - #Nurse2
Normative beliefs		
Most likely to use TIC	AC3: beliefs referents perform and approve/disapprove of behavior	“Oh, I definitely think that the CNAs because they’re first on the scene. They’re the first ones to see the resident. They’re the first ones to interact with them. So, they’re the first ones to see if there’s any, if the resident is nervous, if they’re guarding, if they don’t want to take off their clothes if they don’t.” - #Nurse2
Least likely to use TIC	AC3: beliefs referents perform and approve/disapprove of behavior	“And I think the older nurses or older people who have been in nurse longer. I think it will take more to get him on board and start getting in that Trauma Informed Care.” - #Nurse3
Support for TIC	AC3: beliefs referents perform and approve/disapprove of behavior	“I think family members would definitely be on board. Because the more we know about their loved ones the better we can care for them.” - #Nurse4
Disapproval of TIC	AC3: beliefs referents perform and approve/disapprove of behavior	“My guess is the same people that are going to have to do it are the same people that are going to object or disapprove.” - #Nurse1
Opinion of TIC	AC3: beliefs referents perform and approve/disapprove of behavior	“I think it’s really important. I think everybody’s even if they don’t work in healthcare should be, go through this course because no matter what you’re doing, if you’re a cashier at Walmart, you’re going to have to be sensitive.” - #Nurse3
Control beliefs		
Easy to use	AC4: beliefs in ability and factors help/hinder behavior	“Clear cut instructions and examples in the SOI manual.” - #Nurse2
Hard to use	AC4: beliefs in ability and factors help/hinder behavior	“Just because things would be so individualized with the residents that I can get my take longer we might have to work harder or spend more closing time.” - #Nurse4

Note. AC = anchor code, TIC = trauma-informed care

Preliminary Codebook. Next, I created a preliminary codebook to operationalize and define each of the nine a priori codes with the following descriptive items: label, definition, description, qualifications or exclusions and raw data exemplars (see Roberts et al., 2019). Furthermore, I used the preliminary codebook as a guide to preliminary code the first three interview transcripts. Specifically, I coded each transcript, line by line, to match passages in the text to their respective a priori codes defined by the preliminary codebook (see Roberts et al., 2019).

Inter-Rater Reliability. After I preliminarily coded the first three transcripts, two of my nursing colleagues agreed to volunteer to independently code two of the same transcripts, chosen at random, to establish inter-rater reliability. Specifically, I gave each inter-rater volunteer a copy of the preliminary codebook and the same two randomly chosen transcripts (see Siedlecki & Albert, 2017). Incidentally, I randomly selected the transcripts that the inter-rater coders received from the three transcripts I had preliminarily coded, which allowed for a three-rater comparison of the coded texts. In addition, I ensured that the chosen transcripts did not have any identifying information for the partner site or the participant. Furthermore, the inter-rater coders were licensed healthcare providers with advanced nursing master's degrees, and they required minimal instruction on the coding process and use of NVivo. After the inter-rater volunteers coded the two transcripts, I compared their coding strategy to each other and to the coding scheme I performed on the same transcripts to calculate the degree of agreement among the three raters (see Siedlecki & Albert, 2017). In this respect, I performed an NVivo code comparison query to decide the percentage of agreement among the raters by

dividing the total units of measure within the data item by the number of units of agreement (see QSR International, 2018). Accordingly, I determined the calculated average rate of agreement for the three raters to be 0.94, which stood for the percentage of times the three raters agreed with the same code for a segment of text (see Bloomberg & Volpe, 2018; Siedlecki & Albert, 2017). Per, Siedlecki and Albert (2017), agreement scores greater than 0.80 are desired for the degree of agreement among inter-raters. Thus, the three raters' calculated agreement score of 94% was considered a desirable inter-rater score and used to validate the provisional codebook. Next, I discussed any coding discrepancies with the inter-rater volunteers and resolved differences in our coding strategies by making minor changes in the codebook (see Bloomberg & Volpe, 2018; Siedlecki & Albert, 2017). Hence, the definitive version of the provisional codebook was completed (see Table 8). In this regard, I reviewed the first three transcripts and updated the previously coded texts to align with the final provisional codebook definitions. Furthermore, I resumed the data collection and provisional coding process and used the validated codebook in the following Phase 3 of TA Step 2.

Table 8*Codebook of Provisional Codes*

Code label	Definition	Description	Qualifications or exclusions	Exemplars
Positive feelings	Expressions that the participant has formed a strong positive attitude or intention (or made a commitment) to uses TIC (Fishbein & Ajzen, 2010).	The participant's expressed positive valance (attitude) about TIC.	Can be expressed as positive feelings about the TIC model or about implementing TIC.	"I think it'd be easy to do like I said once we, once you started and get a little background." - #Nurse2
Negative feelings	Expressions that the participant has formed a strong negative attitude or intention (or made a commitment) not to uses TIC (Fishbein & Ajzen, 2010).	The participant's expressed negative valance (attitude) about TIC	Can be expressed as negative feelings about the TIC model or about implementing TIC.	"We have to be able to make decisions based on what the situation is, not what is current or popular in a field. We need to be straight across the board." – #Nurse3
Most likely to use TIC	Expressions of participant's beliefs about who is most likely to implement TIC into practice (Fishbein & Ajzen, 2010).	The participant's expressed speculation about others use of TIC in practice	Can be expressed as beliefs about coworkers, ancillary workers, or groups of health professionals who are most likely to use TIC.	"I think definitely the younger new nurse, well, new nurse don't have to be young. But like the newer graduates I guess will use it more." - #Nurse7
Least likely to use TIC	Expressions of participant's beliefs about who is most likely to implement TIC into practice (Fishbein & Ajzen, 2010).	The participant's expressed speculation about others disuse of TIC in practice	Can be expressed as believes about coworkers, ancillary workers, or groups of health professionals who are least likely to use TIC.	"I think LPNs in the nursing spectrum would be least likely to practice using Trauma-Informed Care." - #Nurse2
Support for TIC	Expressions of participant's beliefs of about who will support their use of TIC in practice (Fishbein & Ajzen, 2010).	The participant's expressed speculation about who will support their use of TIC in practice	Can be expressed as beliefs about who will support the participant's use of TIC.	"Most of my professional acquaintances are directors in other buildings and it's a regulation world...all of them." - #Nurse3
Disapproval of TIC	Expressions of participant's beliefs of about who will disapprove of their use of TIC in practice (Fishbein & Ajzen, 2010).	The participant's expressed speculation about who will disapprove of their use of TIC in practice	Can be expressed as beliefs about who will disapprove of the participant's use of TIC.	"My guess is the same people that are going to have to do it are the same people that are going to object or disapprove." - #Nurse3
Opinion of TIC	Expressions of feelings, opinions, and ideas about implementing TIC into practice.	Assumption that opinions or beliefs about an object can be viewed as verbal expressions of attitude toward the object	Can be direct or abstract person opinions about implementing TIC into practice rather than opinions about other people's use of	"I'm confident to a certain extent and the reason why I say that is because some things...we don't do a

Code label	Definition	Description	Qualifications or exclusions	Exemplars
		(Fishbein & Ajzen, 2010, p. 79).	TIC or about the TIC model in general.	lot of that here.” - #Nurse6
Easy to use	Expressions that the participant expects it will be “easy” to implement TIC into practice (Fishbein & Ajzen, 2010).	The participant’s expressed speculation that it will be “easy” to use TIC in practice	Can be expressed as beliefs about the ease of the participant’s use of TIC.	“I think it’d be easy to do like I said once we, once you started and get a little background.” - #Nurse2
Hard to use	Expressions that the participant expects it will be “hard” to implement TIC into practice (Fishbein & Ajzen, 2010).	The participant’s expressed speculation that it will be “hard” to use TIC in practice	Can be expressed as beliefs about the ease of the participant’s use of TIC.	“[No]...other than just sometimes with, you know, staffing and what, who we have available to care for who? I mean, sometimes that can be a little bit of a challenge.”- #Nurse5

Note. TIC = trauma-informed care

Phase 3: Developing Thematic Codes. In tandem with Phase 2, I used a dual deductive-inductive approach in Phase 3, developing thematic codes, of TA Step 2, to transition the provisional codes into more meaningful thematic codes that represented participant’s insights related to the interview questions. In this manner, data collection and analysis continued concurrently in phase three of this section beginning with Saldaña’s (2015) provisional coding method. Specifically, I used a deductive approach to provisionally code each newly generated transcript via the provisional codebook definitions (see Table 7). Furthermore, during this phase I simultaneously coded the transcripts with the anchor codes to associate the provisionally coded text with its respective interview question (see Table 6). In addition, I performed an inductive preliminary analysis with each provisionally coded transcript, one transcript at a time, to illuminate participants’ perceptions related to its respective interview question (see Creswell & Cresswell, 2017). In this regard, for this phase, I chose the focal topic,

perceptions, which was derived from Fishbein and Ajzen's (2010) TPB propositional elements as previously discussed. As such, the term, perceptions, was defined as views and insights expressed by a participant about their experience implementing TIC in the context of their professional milieu including their evaluation of important referents view of TIC (see Fishbein & Ajzen, 2010). Moreover, I used Saldaña's (2015) narrative coding method to explore passages in the provisionally coded transcripts that represented participant's perceptions. Specifically, after I provisionally coded the transcripts via the codebook and respective anchor codes, I analyzed passages of each provisionally code segment by reading and re-reading the text to intuitively find topics represented by words and phrases that expressed participant's views, insights, and perceptions within the context of the text. In this manner, I examined the paragraph and surrounding paragraphs that held the passage of coded text to better understand the context and topic of the passage. Furthermore, I used Saldaña's (2015) narrative coding method to refine the provisionally coded segments of text and re-code passages that represented participants' perceptions about implementing TIC into practice with descriptive labels that referred to the coded segment's perception concept.

For example, I developed the thematic code, model inflexibility/limitations, from the review of a segment of text in participant #Nurse11's transcript that I first provisionally coded with the a priori code, negative feelings, and the anchor code, belief behavior outcome is positive or negative. In this regard, #Nurse11 described that her perceptions of TIC were negatively influenced by an experience she had while trying to use TIC with an emotionally erratic psychiatric patient. Specifically, in response to the

interview question, “Describe the negative feelings or emotions (i.e., dislikes or loathing) you have about using TIC in nursing practice over the next 12 months?” #Nurse11 replied,

Well, I personally had a negative time with it the other day because, well, I’m not a new nurse, but this trauma-informed care stuff is new to me and even though *I did all the training to be a “trauma-informed nurse” [used air quotes] it didn’t seem to help with my elderly bi-polar patient.* I mean I guess a lot of the trauma-informed ideas aren’t any different from the, you know, OTHER [louder emphasis on word] therapeutic nursing communication techniques they teach us. But I think, or I know [sardonic tone] *trauma-informed care training should have more specific tools that nurses can use with psych patients.* Right? [gestured throwing hands in the air]. I mean, we’re still patient centered right? They aren’t all alike you know [sardonic tone]. *To me, the trauma-informed model is for non-psych patients* because they don’t have that extra layer of psych stuff going on. It just *makes it more difficult if, the powers-that-be tell me I am only supposed to “technically” [used air quotes] use one type of model of care* with my psych patients.

In #Nurse1’s preceding quote, the bracketed texts stand for illustrations of non-verbal and amplified expressions that were added into the transcribed record after the transcript was received from the transcription service during the data collection phase. In addition, for demonstration purposes, the italicized text shows the segment of text that I originally coded with the a priori code, negative feelings. To better describe the essence of

#Nurse11's negative perception about implementing TIC, I examined the a priori coded segment within the context of its surrounding text and its respective field notes and journal entries from the date of the interview. First, I explored the respective field notes that were documented at once following #Nurse11's interview to review my initial observational impressions of the session. Next, I reviewed the corresponding reflexivity journal entry that I made following #Nurse11's interview session that detailed my reflexive perceptions of the participant's interview responses and mannerisms. In this case, I found a relevant entry from the post-interview documentation in the reflexivity journal that described my observational impression of #Nurse11's interview in which I commented,

More passion expressed in this interview than the others. I sensed from #Nurse11 that she has a lot of experience and skill working in psych nursing and wants to be able to incorporate her current skill set to into TIC. She expressed frustration that the "powers" in the system did not account for the needs of the nurses providing direct patient care (my inference) and that the model of TIC she was taught didn't provide enough room for creative solutions to communicate effectively with traumatized psychiatric patients. Behavioral belief "restricted?"—Her evaluation of behavior – "TIC doesn't work with psych patients?" – Initial Pre-understanding – people resist change, giving up too soon, ask for help, everyone's different with a different learning curve, acceptance of change hard.

In the above example from my entry in the reflexivity journal, I described my overall perception of #Nurse11's interview session and documented my reflexive pre-

understanding and biases that emerged during the interview. Next, I compared this reflexivity journal entry to #Nurse11's coded response to the second interview question to gain a sense of its context and to transform the original a priori code into a thematic code that better represented the meaning of #Nurse11's perspective of using TIC. In this regard, the behavioral belief expressed in this segment of text was best described as a belief that TIC was not a flexible model of care. Hence, the a priori code, negative feelings, was transformed into the thematic code, model inflexibility/limitations, to better describe #Nurse11's perceptions about implementing TIC into practice via a reflective evaluation of the triangulated data (i.e., transcript and reflexivity entry). In addition, the codebook was updated with the revised thematic code, model inflexibility/limitations, and subsequent transcripts were evaluated for this thematic code. This preceding example illustrates the detailed deductive and inductive approach that I performed with each newly generated transcript using provisional and narrative coding methods to find thematizing meanings in the texts (see Braun & Clarke, 2006).

I continued the contextual coding process and data collection until the information being generated from the participant interviews was redundant and no new substantive knowledge was forthcoming at which point, data saturation was achieved (see Varpio et al., 2017). In this regard, I decided that data saturation was achieved after 15 interviews were completed when no new relevant codes emerged during the extensive cross-case thematic coding process that resulted in a preliminary set of 52 thematic codes. In this regard, I updated the codebook to include the 52 preliminary thematic codes with exemplars from the raw data (see Roberts et al., 2019).

Peer Debriefing. Next, I used a peer debriefing exercise to evaluate the appropriateness of the 52 preliminary thematic codes that I had reflectively developed from the provisional a priori codes. To assess the pertinence of the preliminary thematic codes, I applied a facet of Lincoln and Guba's (1985) definition of the peer debriefing model as a process "for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (p. 308). In this regard, the two earlier inter-rater volunteers agreed to be peer debriefers and participate in a peer-debriefing exercise with me to evaluate my perspectives and assumptions toward the data and ensure that the newly developed thematic codes clearly represented the updated codebook definitions (see Bloomberg & Volpe, 2016; Berger, 2015). I asked the peer debriefers to review my newly developed thematic codes for possible issues including: (a) a meaningful and necessary transition between the provisional and thematic codes; (b) accurate interpretation of texts coded and proper descriptive labels for the revised thematic codes of these texts; and (c) the appropriate relationship between the research questions and the newly coded data (see Creswell & Creswell, 2017). As such, I provided each peer debriefer with and a copy of the updated codebook and two randomly selected transcripts that held the thematic coding I performed via the contextual coding process. To protect confidentiality, the selected transcripts did not contain identifiable information for the partner site or the participants. After the peer debriefers completed their review of the thematically coded transcripts we met via Zoom and discussed any feedback they had related to the three issues they were asked to evaluate. In keeping with the study's audit trail documentation process, I took notes in the field notebook during the meeting and,

immediately following the session, I documented my initial impressions of the debriefing exercise in the digital reflexivity journal. The primary issue-items that the peer debriefers found in their review of the thematically coded transcripts included redundant thematic codes with similar descriptive meanings, unclear thematic codes labels, incorrectly coded text, and segments of text that could be interpreted differently with more than one code. Moreover, the peer debriefers agreed that there was a proper relationship between the research questions and the anchor coded data.

In addition, the peer-debriefing session offered me an opportunity to engage in the phenomenological process to extend my horizons (i.e., understandings shaped by my past and present experiences; see Berger, 2015; Fleming et al., 2003; Gadamer, 1960/2013). In this regard, the peer debriefers and I explored how my impressions of the data were potentially influenced by my experience as a nurse and identify and my preunderstandings of the study's topic during the session (see Gadamer, 1960/2013). For example, via peer debriefing and the reflexive process, I became aware of my propensity to instinctively assume the role of nurse manager during the interview sessions due to my long history working as a nurse manager. As such, throughout the data collection process, I learned to identify occasions when I approached the interview session with the lens of a nurse manager, and I was able to intentionally refocus my attitude back into the role of student researcher. This introspective aspect of peer debriefing allowed me to identify how my interpretation and transformation of a few of the provisionally coded texts reflected my personal understandings and potential researcher bias (see Gadamer, 1960/2013). Thus, I adapted a Gadamerian stance and became aware of my bias, which

allowed “the text to present itself in all its otherness and thus assert its own truth against one’s own fore-meanings” (Gadamer, 1960/2013, p. 282). As I discussed my preunderstandings in the peer-debriefing session, my historical experience merged (i.e., fusion of horizons) with what was presented in the text and a new understanding in the meaning of the text emerged that was not overshadowed by my historical consciousness (see Gadamer, 1960/2013). This reframing experience allowed me to use my historical preunderstandings of implementing a new model (i.e., TIC) into practice as a nurse manager to better understand the preliminary themes from the participant’s perspective.

As a result of the peer-debriefing exercise, I was able to reduce the preliminary set of 52 thematic codes to 34 thematic codes. Specifically, the 34 revised codes included four new codes with broader descriptive labels that enable coding similar text that was previously coded with two or more separate codes. Next, I updated the codebook and NVivo codes to represent the 34 thematic codes. In addition, the two peer-debriefers described above took part in *ad hoc* debriefing sessions throughout the remainder of the data analysis process as suggested by Bloomberg and Volpe (2016).

A detailed thematic code table is presented in Appendix M to illustrate the hierarchical coding elements that were adapted during the three phases of the second TA step, generating initial codes, including the TPB belief-based constructs, interview questions, a priori codes, thematic codes, and exemplars (see Saldaña, 2015). For convenience, Table 9 provides an abbreviated sample of the lengthier thematic code table that is presented in Appendix M. In addition, Figures 12, 13, and 14 present process flow diagrams that detail the complete set of narrative thematic codes that emerged from the a

priori codes related to the TPB believe-based constructs (i.e., behavioral beliefs, control beliefs, and normative beliefs).

Table 9*Sample of Thematic Code Table*

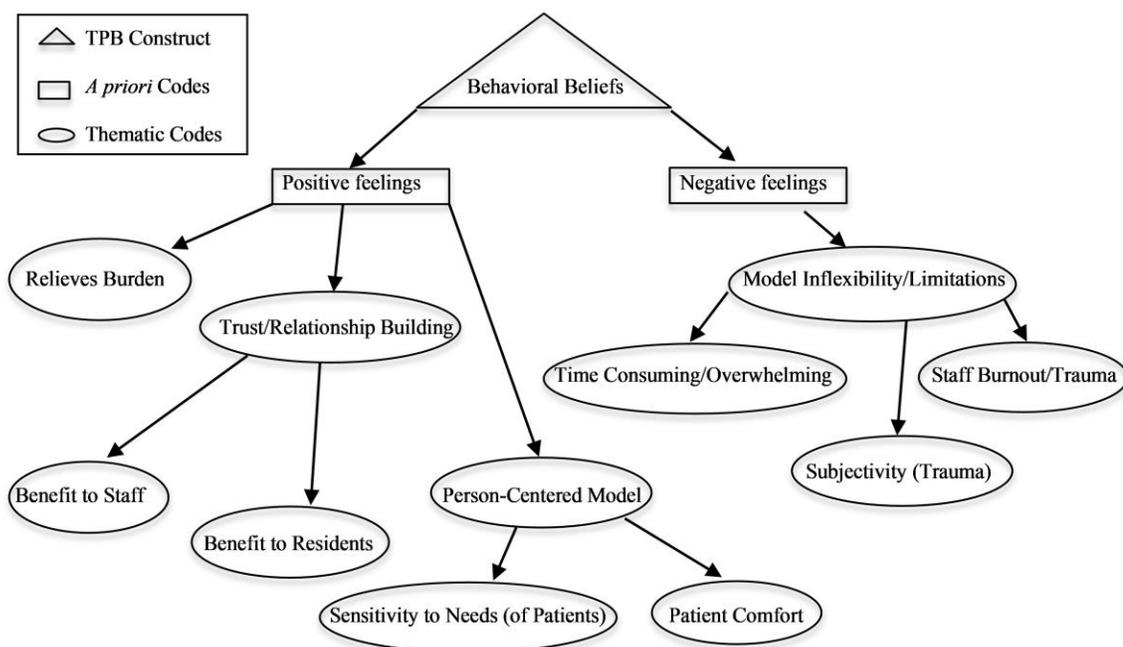
TPB belief-based constructs	Interview Questions	A priori codes	Thematic codes	Participant quote exemplars
Behavioral Beliefs	Describe the negative feelings or emotions (i.e., dislikes or loathing) you have about using TIC in nursing practice over the next 12 months?	Negative feelings	Model inflexibility or limitations	“I’m not a new nurse, but this trauma-informed care stuff is new to me and even though I did all the training to be trauma-informed it didn’t seem to help with my elderly bi-polar patient. I mean I guess a lot of the trauma-informed ideas aren’t any different from the other therapeutic nursing communication techniques I have learned. But it should have more specific tools that nurses can adapt for psych patients. Right? I mean, were still patient centered right? [sardonic tone] To me, the trauma-informed model is for non-psych patients because they don’t have that extra layer of psych stuff going on. It just makes it more difficult if, as a nurse, I am only supposed to “technically” [used air quotes] use one type of model with my psych patients.” – #Nurse11
Normative beliefs	Which individuals or groups do you think are most likely use TIC in nursing practice over the next 12 months?	Most likely to Use TIC	Social workers	“Social Work” – #Nurse2
Control Beliefs	What are some of the things you believe would make it easier for you to use TIC in nursing practice over the next 12 months?	Easy	Clarity	“Clear cut instructions and examples in the SOI manual.” – #Nurse4

Note. TPB = theory of planned behavior, TIC = trauma-informed care; see Appendix M

for the complete thematic code table.

Figure 10

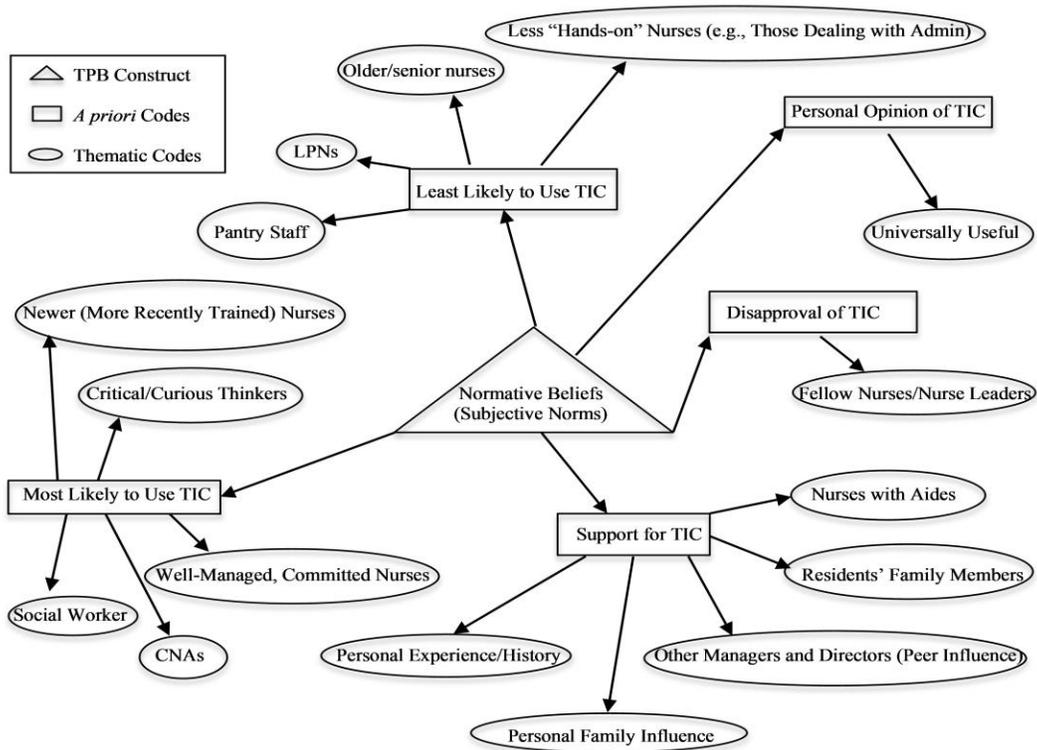
Thematic Codes from Behavioral Beliefs



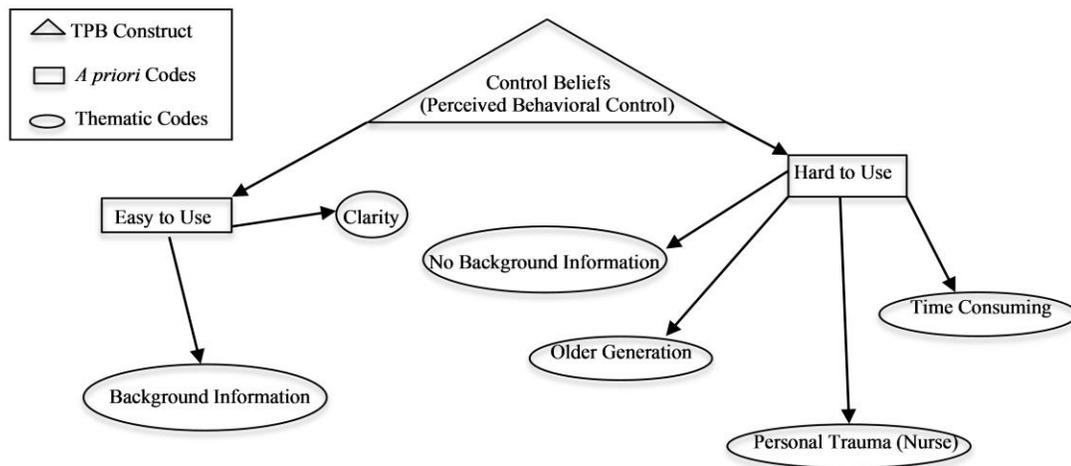
Note. Thematic codes that emerged from the a priori codes related to the TPB behavioral belief construct.

Figure 11

Thematic Codes from Normative Beliefs



Note. Thematic codes that emerged from the a priori codes related to the TPB normative belief construct.

Figure 12*Thematic Codes from Control Beliefs*

Note. Thematic codes that emerged from the a priori codes related to the TPB control belief construct.

TA Step 3: Searching for Themes

I completed TA Step 3, searching for themes, in three phases, which included the following: (a) generation of thematic evaluative categories, (b) evaluative categorization of coded data, and (c) finding over-arching preliminary themes. Specifically, in phases one and two, I used a deductive approach to generate and classify categories of key determinants of behavior (i.e., salient beliefs) that were derived from Fishbein and Ajzen's (2010) TPB belief-based framework. In phase two, I progressed to an inductive approach to refine the data further to develop rich and meaningful preliminary themes and sub-themes. As such, I applied the concept of thematic networks that Nowell et al. (2017) described, is a technique that "aims to take the researcher deeper into the meaning

of the texts, exploring the themes that emerged and identifying the patterns that underlie them” (p. 6). Hence, the three phases that I developed to complete the third TA step allowed me to engage and immerse myself in the data to search for cross-case themes in a robust manner.

Phase 1: Generation of Thematic Evaluative Categories. Phase 1, generation of thematic evaluative categories, was guided by the focal topic, evaluative aspects, which was related to Fishbein and Ajzen’s (2010) previously described fundamental propositional elements of the TPB. Specifically, the TPB suggests that the evaluative aspect of performing a behavior forms the strength of a person’s salient beliefs (Fishbein & Ajzen, 2010; Francis, et al., 2004; Sutton et al., 2003). According to Fishbein and Ajzen’s theory, if a person has a strong belief that the outcome of a behavior is going to be positive, they are more likely to develop a strong intention to perform the behavior. Therefore, I categorized the thematically coded segments of texts via the TPB belief-based constructs according to the participants’ evaluation of the perceived outcome of performing the targeted behavior, important referent’s performance and support of the behavior, and ability and tools to perform the behavior (see Fishbein & Ajzen, 2010; Francis, et al., 2004; Sutton et al., 2003). Moreover, I adapted Saldaña’s (2015) assertion that categories can be predetermined classifications of values if they are foundationally connected to the theoretical elements of study. Hence, I developed thematic evaluative categories as a guide to identify themes and subthemes that represented evaluative aspects of key elements of determinants of behavior (i.e., salient beliefs) via the study’s theoretical framework—the TPB. In this regard, nine thematic evaluative categories were

generated in a comparable manner to the nine a priori codes that were initially developed as described in the Phase One: Developing Provisional A Priori Codes section of this chapter.

Specifically, via a review of the literature, I compiled empirical sources that described the best measures to conceptualize and categorize the theoretical evaluative elements of the belief-based constructs (i.e., behavioral beliefs, normative beliefs, and control beliefs). In this regard, I identified empirical descriptions of relevant distinct theoretical evaluative measures of the TPB belief-based constructs that I used to generate nine thematic evaluative categories. To illustrate, as shown in Table 10, I used Fishbein and Ajzen's (2010) recommendation to solicit the evaluative aspects of behavioral beliefs and identified two theoretical evaluative elements—advantages and disadvantages—which I adapted as thematic evaluative categories. In particular, Fishbein and Ajzen purported that the best way to understand participant's behavioral beliefs is to ask for their evaluation of the advantages and disadvantages of performing the targeted behavior. Thus, I generated the theoretical elements—advantages and disadvantages—from the TPB's behavioral belief construct. In this manner, I was able to categorize portions of the coded data that characterized the evaluative aspects of participants' responses related to the advantages and disadvantages of implementing TIC into practice. Using the above method, I searched the literature and generated the following nine predefined thematic conceptual categories that represented the evaluative aspects of each of the TPB belief-based constructs: advantages of TIC, disadvantages of TIC, people most likely to use TIC, people least likely to use TIC, people who are supportive of TIC, people who

disapprove of TIC, factors that facilitate use of TIC, factors that impede use of TIC, and sense of efficacy (see Table 10; Fishbein & Ajzen, 2010; Francis, et al., 2004; French, et al., 2005; Montaña & Kasprzyk, 2015; Sutton et al., 2003; Yzer, 2012).

Table 10

Thematic Evaluative Categories

Behavioral beliefs	Normative beliefs	Control beliefs
Advantages of TIC	People most likely to use TIC	Factors that facilitate use of TIC
Disadvantages of TIC	People least likely to use TIC	Factors that impede use of TIC
	People who are supportive of TIC	Sense of self-efficacy
	People who disapprove of TIC	

Note. TIC = trauma-informed care

In this regard, I used the thematic evaluative categories as a classification guide to group similar thematically coded segments of text into nine pre-defined thematic conceptual categorical codes (see Roberts et al., 2019). Specifically, I re-interpreted and condensed segments of text that were previously coded with thematic codes via the thematic evaluative categories as a guide to identify and categorize participants expressed or implied evaluative attitudes and beliefs concerning their salient beliefs about implementing TIC into practice. In addition, I updated the codebook to include the nine thematic evaluative categories (see Appendix O). Hence, in the next phase of the third TA step, I classified the thematically coded data into the thematic evaluative categories.

Phase 2: Evaluative Categorization of the Coded Data. In Phase 2, evaluative categorization of the coded data, of TA Step 3, I began an in-depth review of the

thematically coded text to classify the data across the 15 data sets into the nine thematic evaluative categories. In this regard, I re-read and pondered the thematically coded texts using a logical deductive approach, based on the TPB literature, to sort and collate the data into the thematic evaluative categories (see Fishbein & Ajzen, 2010; Saldaña, 2015). Specifically, I reviewed and classified the thematically coded data for each of the 34 thematic codes according to the thematic evaluative categories' codebook definitions via an extensive cross case analysis (see Appendix N). For example, upon review of the thematic code, staff burnout/trauma, I reassessed the following two segments of text in #Nurse3's transcript to determine their appropriate evaluative categories:

You're creating and causing burnout by limiting individuals instead of focusing on other programs and options that could help get through and prevent retraumatization other than limiting people caring for other people [shaking head in an exacerbated expression].

And,

But I feel like when you push a certain model, you have to assess everyone for those indicators, not just people that are symptomatic or showing difficulties in certain areas. You have to do it with everybody. That's additional time, additional stress on assessors [concerned tone of voice].

Next, I used the concepts described in the TPB literature to conceptualize and categorize the theoretical evaluative elements of #Nurse3's two assertions. In this regard, I identified that both segments of text described #Nurse3's beliefs about anticipated negative outcomes of implementing TIC into practice that included burnout, additional time, and

additional stress. As such, the passages demonstrated #Nurse3's evaluation that the anticipated outcome of performing the targeted behavior (i.e., implementing TIC into practice) may produce a secondary negative result (see Fishbein and Ajzen, 2010). Therefore, to appropriately categorize these two segments of text, I referred to the codebook definitions of the evaluative categories. In this regard, #Nurse3's evaluative assertions matched the codebook's definition for the evaluative category titled disadvantages of TIC, which was defined in relation to implementing TIC into practice using Fishbein and Ajzen's (2010) definition of disadvantages as "expressions of anticipated... negative affect (e.g., regret, apprehension, anxiety, shame, guilt, anger, fear)" (p. 199). Hence, these two segments of #Nurse3's text were classified with the evaluative category disadvantages of TIC.

The preceding example illustrates the detailed deductive approach that I used to classify the thematically coded text appropriately into thematic evaluative categories via the codebook definitions across the 15 data sets (see Appendix N). In this manner, I used the process of condensing the thematic codes into thematic evaluative categories as a bridge into the theming phase to identify preliminary themes and sub-themes (see Saldaña, 2015).

Phase 3: Identifying Preliminary Themes. In Phase 3, identifying preliminary themes, of TA Step 3, I used Saldaña's (2015) inductive pattern coding method to find common patterns of meaning across the data sets, which I aggregated to create preliminary themes and sub-themes. Braun and Clarke (2013) described that "pattern-based analysis rests on the presumption that ideas which recur across a dataset capture

something psychologically or socially meaningful” (p. 223). As previously discussed, during the coding process, I frequently reviewed and compared all forms of data to identify shared conceptual patterns that manifested as expressions of meaning such as “desires, questions, wishes, hopes, and complaints” (Munhill, 2012, p. 179) and “thoughts, emotions, feelings, statements, motives, metaphors, examples, behaviors, appearances and concealments, voiced and nonvoiced language” (De Chesnay, 2014, p. 11). Specifically, the pattern coding approach that I used in this phase was influenced by the following quote cited in Cresswell and Cresswell (2017):

Pattern theory does not emphasize logical deductive reasoning. Like causal theory, it contains an interconnected set of concepts and relationships, but it does not require causal statements. Instead, pattern theory uses metaphor or analogies so that relationship “makes sense.” Pattern theories are systems of ideas that inform. The concepts and relations within them form a mutually reinforcing, closed system. They specify a sequence of phases or link parts to a whole.

(Neuman, 2000, p. 38)

Hence, my search for overarching themes across the data sets was an intensive and iterative process that started with the first TA step, data familiarization, and continued in an ongoing review of all data sources (i.e., field notebook, reflexivity journal, and transcripts). In this regard, throughout the first phase coding process, I recorded memos and annotations of interesting sequenced emerging concepts in NVivo. I considered the interesting concepts as potential themes. Specifically, the search for meaningful patterns across the 15 data sets began with a re-examination and comparison of thematically

coded sections of text across the evaluative categories to identify interconnected concepts and relationships with similar expression of meanings in relationship to the research questions (see Braun & Clark, 2006; Creswell & Creswell, 2017; Nowell et al., 2017). Nowell et al. (2017) described that although qualitative data can be organized and managed with the aid of computer programs, such as NVivo, they are not capable of intellectually interpreting and conceptualizing the data to make conclusions about the meaning of the data. In this regard, I primarily completed the theming process via an interpretive and inductive approach with nominal use of NVivo query tools to help categorize and identify related patterns in the texts (see Nowell et al., 2017; Saldaña, 2015). Thus, in the initial stages of the theming process, the following NVivo tools were used to organize and reflect on patterns in the data: (a) matrix coding query to identify the frequency of coding across the data sets (b) explore function to identify inter-relationships between the coded texts across the data sets, and (c) hierarchical aggregation process to aggregate similar theme codes (see QSR International, 2018).

To begin the theming process, I used Saldaña's (2015) recommendation and investigated coding frequencies in the data to get a sense of "emergent but as yet undetected" (p. 63) primary coding patterns that exemplified nurse participants' meaningful perceptions of implementing TIC into practice. In this regard, I generated several matrix coding query reports to determine the number of times each thematic code and anchor code had been used in each data set for the following attributes: (a) most frequently coded thematic evaluative categories per construct; (b) most frequently used

thematic codes per category construct; (c) anchor code ranking; and (d) belief-based constructs ranking (see Bloomberg and Volpe, 2016; QSR International, 2018).

The first code frequency report illustrated that the most often coded thematic evaluative categories per TPB belief-based construct were advantages of TIC, most likely to use TIC, and factors that facilitate use of TIC. The second report showed that the most frequently used thematic codes for each of the three highly coded thematic evaluative categories were sensitivity to needs of patients, model inflexibility/limitations, and background information. The third report query showed that the most frequently used anchor code was beliefs factors help/hinder behavior. Finally, I determined that the most coded construct was normative beliefs. Overall, as shown in Table 11, the coding frequency findings revealed that the three TPB belief-based constructs were ranked in the following order:

1. Normative beliefs were coded the most frequently.
2. Behavioral beliefs were coded the second most frequently.
3. Control beliefs coded the least frequently.

Table 11*Most Frequent Coding*

Most frequently used TPB belief-based constructs code ranking	Most frequently coded thematic evaluative categories per construct	Most frequently used thematic codes per thematic evaluative category	Overall construct related anchor code frequency
Normative beliefs – Most coded construct	People most likely to use TIC – Most frequently coded thematic evaluated category per <i>normative beliefs</i> construct	People who are supportive of TIC – Most frequently used thematic code per thematic evaluative category (associated with <i>normative beliefs</i> construct)	Belief that referents approve/disapprove of behavior – Most used anchor code overall (associated with <i>normative beliefs</i> construct)
Behavioral beliefs – Second most coded construct	Advantages of TIC – most – Frequently coded thematic evaluated category per <i>behavioral beliefs</i> construct	Sensitivity to needs of patients – Most frequently used thematic code per thematic evaluative category (associated with <i>behavioral beliefs</i> construct)	Belief behavior outcome is positive or negative – Second most used anchor code overall (associated with <i>behavioral beliefs</i> construct)
Control beliefs – Least coded construct	Factors that facilitate use of TIC – Most frequently coded thematic evaluated category per <i>control beliefs</i> construct	Background information – Most frequently used thematic code per thematic evaluative category (associated with <i>control beliefs</i> construct)	Beliefs factors help/hinder behavior – Least used anchor code overall (associated with <i>control beliefs</i> construct)

Note. TPB = theory of planned behavior, TIC = trauma-informed care

In this respect, I used the results of the coding frequency reports as an introductory glimpse into the primary coding commonalities within the data to begin the theming process (see Bloomberg and Volpe, 2016). For example, as shown in Table 11, the coding frequency report revealed that the most frequently used codes represented the anchor code AC3, belief referents perform and approve/disapprove of behavior, which was associated with the normative beliefs construct. Specifically, I used the data coded with the anchor code AC3 was to develop themes to answer the third research question, RQ3, which was linked to the normative belief construct (see Table 6). Moreover, the

heightened frequency of text coded with AC3, indicated that the participants' perceptions about implementing TIC into practice may have been more heavily influenced by factors of the normative belief construct. Although the normative believe construct appeared to be the most frequently coded anchor code, it also represented the most interconnected set of concepts and relationships that I identified during the lengthy iterative coding process. In this regard, during the phase of the first cycle coding process I used Braun and Clarke's (2013) recommendation that

Pattern-based analysis rests on the presumption that ideas which recur across a dataset capture something psychologically or socially meaningful. In working out which patterns are relevant and important in relation to your research question, it's not just a question of which are the most frequent. While frequency is an important factor, it's also about capturing the different elements that are most meaningful for answering your research question. So, it's about meanings, rather than numbers. (p. 223)

Therefore, I used the coding frequency findings as a helpful starting point to identify a set of preliminary meaningful themes across the body of collected data by assessing conceptual interconnected associations between the coded text, research questions, and precepts of the study's theoretical model (see Bloomberg and Volpe, 2016; Creswell & Creswell, 2017). In this respect, I used the NVivo explore function and generated several graphs and diagrams to compare the coded data, which aided to visualize and identify connections between coded sections of data and to analyze relationships between the coded texts across the data sets (see QSR International, 2018). As a novice user of

NVivo, I conducted conventional data comparisons across the data sets with the NVivo visualization tools wherein I manually created associational, relational, categorical, and hierarchical relationship model groups (see QSR International, 2018). These relationship models allowed me to compare segments of the data across the data sets that were thematically, categorically, and anchor coded. Moreover, I used the models to identify and connect threads of similar ideas, which eventually resulted in meaningful patterns and potential themes that were related to the research questions. As I identified interrelated concepts of similar ideas, I created new theme codes in NVivo with labels that described the potential themes. As I progressed through the preliminary theming process, I matched newly identified patterns of ideas and concepts of potential themes with the NVivo theme codes that had similar descriptions. If a newly identified potential theme did not match any of the existing theme code descriptions, I created a new theme code with its respective definition. In the search for meaningful and relevant potential themes, I created, modified, discarded, and recreated numerous theme codes with the help of the NVivo relationship models. This iterative theming process continued until I had evaluated all the data connections that I was able to evoke—via the relationship models—and assigned theme codes. As a result, I generated 112 potential themes that represented 112 over-arching patterns of ideas that were related to the research questions.

TA Step 4: Reviewing Themes

In Step 4 of TA, reviewing themes, I returned to the foundations of the study (i.e., theoretical framework and research questions) to ensure that the 112 potential themes were in alignment with the design and purpose of the study (see Braun & Clarke, 2013).

First, I engaged in member checking with two randomly chosen participants who agreed to review the potential themes at which time participant consent and confidentiality was still in effect (see Bloomberg and Volpe, 2016; Patton, 2015). In this regard, I emailed #Nurse 2 and #Nurse 12 an updated codebook with the 112 potential themes that did not include any identifiable participant information. In addition, I asked the two member-checking participants to review the potential themes against the codebook definitions and their lived-experience to determine if our interpretations of the data were similar (see Bloomberg and Volpe, 2016; Patton, 2015). Of note, I intentionally chose one participant that had completed an in-person interview and one participant that took part in a virtual interview to increase the reliability of the member-checking exercise (see Patton, 2015). In both cases, informed consent continued. After the two participants reviewed the potential themes, we discussed their observations in a three-way conference call. During the conference call, I took notes and the participants supplied important general feedback. Moreover, both participants described that they had experienced considerable time constraints and their review of the potential themes was limited due to the COVID-19 pandemic and increased nursing commitments at the partner site. As such, neither participant was able to supply detailed recommendations about the relevance of each specific potential themes. Instead, I explained how I developed the themes and my rationale for choosing the potential themes. After I described the theming process that I used, the participants provided more in-depth information about their lived experience of implementing TIC at the partner site specifically with patients experiencing fear and anxiety due to the pandemic. For example, #Nurse2 stated,

I am telling you, this lock down situation has definitely triggered a lot of anxiety with a few residents who never showed signs of being anxious or depressed before. I mean, just being told that their family can't come to visit really upset some of them, even though their family hardly visits anyway. But it still scared them, and I was glad that we learned in the training [TIC training] that patients with trauma history, even if they don't know, can have a fear of being trapped. Something like that. And it seems to be true, and I am glad I knew this is a normal symptom from trauma. So, I think the word [theme] "empowerment" you have listed on this list [codebook] is the best word to describe how it [using TIC in practice] is for me.

In response, #Nurse2 shared the following:

I agree, and empowerment is a good word [theme] to describe that both me, as a nurse, and the patient is more empowered with it [TIC] because, number one, me as the nurse, is able to recognize that for the patient their fear is legitimate and real. So, because, as a nurse, I am better prepared and know why they are overreacting, well you know what I mean, having more fear, I am better able to respond and comfort them and find other ways for them to talk to their family. Like, I called one son on my cellphone with Facetime and the patient was very happy to talk to her son and see his face and this calmed her down. And I think she felt sort of an empowerment too when she saw his face. I think, I don't know, maybe the training video [in TIC training] taught me to look at patient behavior like this differently.

After the conference call with the two participants, relevant elements from the member-checking exercise were used to condense the potential themes into a more manageable group of themes and sub-themes (see Saldaña, 2015).

To condense the 112 potential themes, I scrutinized the themes for similarity and redundancy by evaluating descriptions of their respective theme codes and associated references (i.e., connected memos). In this manner, I was able to aggregate similar theme codes via a hierarchical aggregation process into a hierarchical system of parent codes (i.e., preliminary themes) and child codes (i.e., sub-themes) in relationship to each of the research questions using NVivo tools. As a result of the aggregation process, I developed 40 preliminary themes and 11 preliminary sub-themes as conceptual branches of each of the thematic conceptual categories of determinants of behavior that stemmed from the theoretical framework. The relationship between the preliminary themes, sub themes, research questions, TPB belief-based constructs, thematic codes, thematic categories, and exemplars (i.e., participant quotes) are illustrated in Appendix N. For convenience, Table 12 displays an abbreviated sample of the lengthier preliminary theme table that is presented in Appendix N.

Table 12*Sample of Preliminary Theme Table*

Research question	Construct	Anchor Code	Thematic code	Thematic categories	Themes	Subthemes	Exemplars
RQ2: What is the role of behavioral beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Behavioral Beliefs (Attitudes)	Belief behavior outcome is positive or negative. (Construct related)	Negative Feelings	Disadvantages of TIC	Model is Inflexible	Overwhelming (Time and Stress)	Yeah, because it's a model... You're having to do it on everybody, which tends to overwhelm assessors when you have to do something for everyone." - #Nurse3
RQ3: What is the role of normative beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Normative Beliefs (Subjective Norms)	Beliefs that referents approve/disapprove of behavior. (Construct related)	Most Likely to Use TIC	People Most Likely to Use TIC	Critical and Curious Thinkers		"I prefer more than somebody that doesn't ask questions. Because then I think that that person is going through the critical thinking process and needs to understand why they're doing something." - #Nurse3

Note. RQ = research question, TIC = trauma-informed care; see Appendix N for the complete theme table.

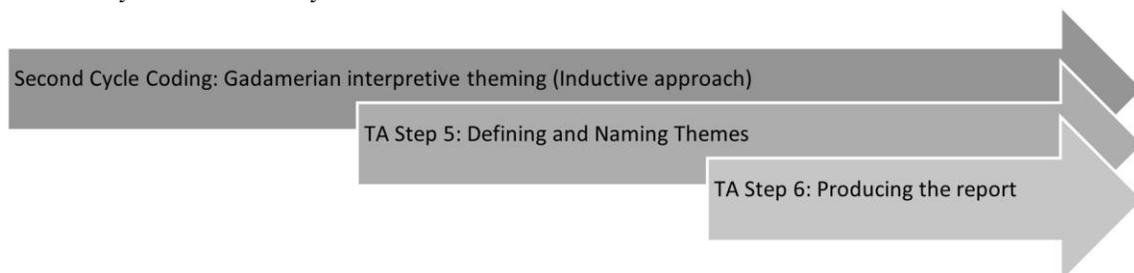
In summary, to remain grounded in the study's phenomenological method during the first cycle coding phase, I primarily used NVivo's computer aided manual-coding techniques to assist in the preliminary theming process. As such, I did not use NVivo's other advanced computer-assisted data analysis operations. The next section describes how I completed the final theming of the data via a Gadamerian interpretive approach in the second cycle coding process.

Second Cycle Coding

Following the identification of 40 preliminary themes and 11 sub-themes, the data analysis process transitioned into the second cycle coding phase that I used to complete the interpretive theming process (see Saldaña, 2015). Specifically, Saldaña (2015) described that the "second Cycle coding is reorganizing and condensing the vast array of initial analytic details into a 'main dish' [of concepts]" (p. 208). As shown in Figure 15, to produce a thick concentrated set of primary and secondary themes, I used the following methods in the second cycle coding process: (a) TA step five, defining and naming themes, (b) Gadamerian interpretive primary theming, and (c) TA step six, producing the report (see Braun & Clarke, 2013).

Figure 13

Second Cycle Data Analysis Process



Note: TA = thematic analysis

As previously discussed, this study examined nurses lived experience of implementing TIC into nursing practice in the care of patients with physical disabilities, known or unknown histories of ACEs/TEs, and secondary maladaptive coping behaviors. As such, I used a Gadamerian approach to develop a rich cogenerated understanding of the meaning nurses attach to the phenomenon of implementing TIC into practice in the context of the partner site's milieu (see Gadamer, 1960/2013). In this manner, throughout the data collection and data analysis process, I remained open to the otherness of the participants' experiences and developed a deeper understanding about their being-in-the-world and how their environment and relationships influenced the meaning they placed on the implementation of TIC in practice (see Benner, 1994; Gadamer, 1960/2013). Moreover, the Gadamerian stance allowed me to define and name primary and secondary themes in relationship to the research questions by interpreting the coded interview texts to find the meanings of nurses' actions (i.e., implementing TIC) in the context of relationships and environment (i.e., important referents, barriers, facilitators, partner facility; see Braun & Clarke, 2013; Creswell & Poth 2018; Saldaña, 2015; Stenner, et al., 2017).

TA Step 5: Defining and Naming Themes

In TA Step 5, defining and naming themes, I maintained a cyclical flow between defining and naming coded texts and interpreting the data throughout the data analysis process (see Stenner, et al., 2017). Particularly, I used Gadamer's hermeneutic circle to interpret the textual data whereby "parts of the text are understood by reference to the

whole, and the whole is understood in terms of its parts” (Bloomberg & Volpe, 2018, p. 49). In this regard, I remained in the hermeneutic circle in tandem with Braun and Clarke’s (2013) six steps of TA in which I moved between the thematically coded texts, anchor coded texts, and reflexivity journal entries in a circular fashion. As such, I weaved in and out of parts of the coded text and continuously referenced back to the textual data as a whole and then returned to parts of the texts—from whole to parts and back to whole—to gather, define, and name themes (see Stenner, et al., 2017). Moreover, throughout the data collection and analysis process, I used reflexivity within the hermeneutic circle to assess my presuppositions of the study phenomenon, which allowed me to transform my perceptions and merge my understandings with the participants’ perspectives in a cyclical manner until a shared Hermeneutic understanding of the meaning of the textual data was achieved (i.e., fusion of horizons; see Gadamer, 1960/2013; Stenner, et al., 2017).

Specifically, as discussed in the Data Collection section of this chapter, I engaged in reflexivity and entered the hermeneutic circle during the pre- and active-data collection phases and recorded how my analysis and interpretation of the data was potentially influenced by my preunderstandings of the study phenomenon (see Gadamer, 1960/2013; Stenner, et al., 2017). During the data collection process, I carefully reflected on the questions located in the study’s Reflexivity Journal Matrix (see Table 2; Chapter 3) and documented my responses to the questions and my impressions of the partner site’s milieu in the reflexivity journal after each interview. Hence, the reflexivity journal entries made during the data collection process were key sources of information that I used to

contextualize and interpret the data (see Gadamer, 1960/2013). In addition to reflexive journaling, I engaged in periodic *ad hoc* peer-debriefing sessions with the volunteer debriefers to explore and move beyond the discriminate preliminary themes (see Bloomberg and Volpe, 2016; Braun & Clarke, 2013; Patton, 2015). As a result of contemplating the preliminary themes via reflexive journaling and peer-debriefing I reduced the data to four primary themes and six sub-themes that were defined and named in relationship to the research questions (see Gadamer, 1960/2013; Stenner, et al., 2017). Specifically, as shown in Table 13, I developed the following primary and secondary themes:

- To answer RQ1, I developed the primary theme, nurses feeling empowered to avoid inadvertent patient retraumatization, and the secondary theme, TIC creates opportunities for compassion.
- To answer RQ2, I developed the primary theme, enhances nurse's empathetic response, and the secondary themes, patient compliance improved, and potentially burdensome.
- To answer RQ3, I developed the primary theme, uncertainty about referents use of TIC, and the secondary theme, positive referent support.
- To answer RQ4, I developed the primary theme, being equipped and prepared is essential, and the secondary themes, confident in personal ability to use TIC: self-efficacy, and personal trauma history.

Table 13*Primary and Secondary Themes*

Research questions/belief-based constructs	Anchor codes	Primary themes	Secondary themes
Overarching beliefs – RQ1	What is behavior like? (multi-construct related)	Nurses feeling empowered to avoid inadvertent patient retraumatization	TIC creates opportunities for compassion
Behavioral beliefs – RQ2	Belief behavior outcome is positive or negative. (Construct related)	Enhances nurse's empathetic response	Patient compliance improved. Potentially burdensome
Normative beliefs – RQ3	Beliefs that referents approve/disapprove of behavior. (Construct related)	Uncertainty about referents use of TIC	Positive referent support
Control beliefs – RQ4	Beliefs factors that help/hinder behavior (Construct related)	Being equipped and prepared is essential	Confident in personal ability to use TIC: self-efficacy. Personal trauma history

Note: RQ = research question, TIC = trauma-informed care

TA Step 6: Producing the Report

In TA Step 6, producing the report, I was able to produce a narrated report in response to each of the research questions. I based the report on the preceding five TA steps that allowed me to advance through an iterative coding and theming process and complete a hermeneutical interpretation of the aggregated data (see Braun & Clarke, 2013; Creswell & Poth 2018; Saldaña, 2015; Stenner, et al., 2017). In addition, any inconsistent discrepant findings that I found during the coding and theming process are described in the Study Results section of this chapter. In this regard, the participant's contrasting views supplied me with a deeper level of understanding about the participants' lived experience in relationship to the research questions (see Bloomberg & Volpe, 2016; Patton, 2015). As such, to answer the research questions in rich detail I

anchored the final report via an analysis of the nonconflicting and discrepant findings that I interpreted through the lens of Fishbein and Ajzen's (2010) TPB belief-based constructs and Gadamer's (1960/2013) philosophical stance as presented in the Study Results section of this chapter.

Evidence of Trustworthiness

Throughout the study I strove to establish trustworthiness and adhere to the study's proposed research strategies as described in Chapter 3. In this regard, I used Lincoln and Guba's (1985) trustworthiness paradigm to enhance the study's rigor including their criteria of credibility, dependability, confirmability, and transferability. In this endeavor, I used several strategies to increase the trustworthiness of the study's findings including, prolonged participant engagement, data triangulation, audit trail, member checking, peer debriefing, inter-rater reliability, researcher reflexivity, theme development, acknowledgement of discrepant finding, and rich descriptions of the data analysis and interpretive process (see Anney, 2014; Bloomberg & Volpe, 2016; Creswell & Creswell, 2017; Guba & Lincoln, 1981). Moreover, as previously discussed, I continued participant recruitment and data collection until data saturation was achieved.

Transferability

Transferability denotes the ability of the study's findings to be applied to other situations (Anney, 2014; Bloomberg & Volpe, 2016; Berger, 2015). In hermeneutical research, the themes that emerge from the data will not be the same for the researcher and the reader because each is unavoidably influenced by their own preconceptions when interpreting the data (Koch, 2006; Lub, 2015). Thus, the transferability of the study's

findings was enhanced with thick rich descriptions of the data that I demonstrated via a thematic framework of tables and process flow diagrams to allow comparison by those who wish to transfer the findings to another situation or population (see Fusch et al., 2018; Guba & Lincoln, 1981; Lub, 2015).

Credibility

Credibility assesses how much faith can be placed in the accuracy of the research findings (Anney, 2014; Bloomberg & Volpe, 2016). To achieve credibility of the research findings, I used the following strategies:

1. I performed triangulation of multiple data sources to enhance data interpretation of and to assess the data from different angles (see Denzin, 2012; Patton, 2015). Specifically, I used four data collection tools that included an interview guide, demographic screening survey, field notebook, and digital reflexivity journal. As described in the First and Second Coding sections in this chapter, I used an immersive reflexive process and iteratively coded the transcripts to find and interpret emerging themes in the coded texts via the triangulation of multiple data sources (i.e., interview transcript, field journal notes, and reflexivity journal entries; see Anney, 2014; Bloomberg & Volpe, 2016; Guzys et al., 2015). Furthermore, during the theming process, I often appraised and compared the coded data to entries in the field notebook and digital reflexivity journal to expand and contextualize the coded text and confirm or disconfirm my impression in the meaning of the participants responses (see Braun & Clark, 2006; Nowell et al., 2017).

2. As described in the First and Second Coding sections, I conducted several peer-debriefing and inter-rater sessions with two volunteer peers as an external check to confirm and explore my assumptions and perceptions of the data (see Berger, 2015; Bloomberg & Volpe, 2016; Patton, 2015). Specifically, I used the inter-rater process to validate the study's provisional codebook (see Roberts et al., 2019).
3. As described in the first and second coding sections, I used member checking to ensure that the transcribed interviews accurately reflected the participants responses and verify that the data was appropriately interpreted (see Bloomberg and Volpe, 2016; Patton, 2015). In this regard, I performed member checking to clarify any gaps or ambiguities during the theming process. As described in the First Cycle Coding section in this chapter, two participants took part in the member checking process and supplied additional feedback regarding the emerging themes. The supplementary participant feedback showed that I was identifying and interpreting relevant themes correctly during the theming process.

Dependability

Dependability in qualitative research denotes the ability of others to follow the process a study used for collecting and interpreting data (Anney, 2014; Bloomberg & Volpe, 2016). In this manner, I kept an audit trail to detail justifications for the chosen research processes including, how codes were generated, how the data was collected and analyzed, and how themes were developed (see Bloomberg and Volpe, 2016; Guba & Lincoln, 1981; Lub, 2015). Specifically, I conducted the theming process in a systematic

way and kept a log of my decisions in the reflexivity journal to describe the rationale for theme choice, theme modification, and/or elimination of themes (see Bloomberg and Volpe, 2016; Guba & Lincoln, 1981; Lub, 2015). In this regard, the reflexivity journal doubled as the study's decision trail archive and became a key element of the study's audit trail (see Whitehead, 2004). Thus, as the study's primary audit trail tool, I used the reflexivity journal as a historical record of my research decisions and the rationale behind the research choices that I made (see Anney, 2014; Bloomberg & Volpe, 2016; Whitehead, 2004). Furthermore, I frequently updated the reflexivity journal during all phases of data collection and data analysis. The dual-purpose digital reflexivity journal supplied a way for me to readily review my earlier impressions of the data and proved to be a useful resource to triangulate the data throughout the data analysis and theming process. Moreover, the digital reflexivity journal enhanced my ability to conduct a comprehensive examination of the data in an in-depth way. In addition, I will keep research documents for future audits including raw data, field notes, and all other materials created during the research process (see Anney, 2014).

Confirmability

Confirmability demonstrates that a study's findings are derived from interpreting participants' interviews without the influence of researcher bias (Cope, 2014).

Therefore, I established confirmability via an extensive cross case analysis of all the data sets, thick rich descriptions, and inclusion of participant quotes (i.e., exemplars) to illustrate the themes, an audit trail, digital reflexivity journal, and data triangulation (see Bloomberg & Volpe, 2016; Anney, 2014; Cope, 2014). In addition, I mitigated potential

researcher bias via peer-debriefing and inter-rater sessions as described in the First and Second Coding sections (see Bloomberg & Volpe, 2016).

Study Results

Through the TPB's belief-based model and a Gadamerian approach, I sought to identify perceptions and understand the lived experience of a group of nurses who shared the similar phenomenon of implementing TIC into nursing practice (see Fishbein & Ajzen, 2010; Gadamer, 1960/2013). As previously discussed, the chosen theoretical model for this study, the TPB, assumes that an individual's behavior is formed by the beliefs they hold (Fishbein & Ajzen, 2010). Accordingly, I generated the research questions and the interview questions from the TPB believe-based constructs (see Fishbein & Ajzen, 2010). Furthermore, as shown in Table 14, I completed a Gadamerian interpretation of the thematically categorized textual interview data and derived four primary themes and six secondary themes to answer each of the four research questions (see Gadamer, 1960/2013; Stenner, et al., 2017). Specifically, RQ1 was answered via the primary theme, nurses feeling empowered to avoid inadvertent patient retraumatization, and the secondary theme, TIC creates opportunities for compassion; RQ2 was answered via the primary theme, enhances nurse's empathetic response, and the secondary themes, patient compliance improved, and potentially burdensome; RQ3 was answered via the primary theme, uncertainty about referents use of TIC, and the secondary theme, positive referent support and; RQ4 was answered via the primary theme, being equipped and prepared is essential, and the secondary themes, confident in personal ability to use TIC: self-efficacy, and personal trauma history (see Table 14).

Table 14*Elements of Study Process to Answer Research Questions*

Research Question	Belief-based Construct	Primary themes	Secondary themes	Interview questions
RQ1: What is it like for nurses to implement TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Primary overarching research question (all TPB belief-based constructs)	Nurses feeling empowered to avoid inadvertent patient retraumatization	TIC creates opportunities for compassion	IQ - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, & 14
RQ2: What is the role of behavioral beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Behavioral beliefs	Enhances nurse's empathetic response.	Patient compliance improved. Potentially burdensome	IQ - 1, 2, 3, 4, & 5
RQ3: What is the role of normative beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Normative beliefs	Uncertainty about referents use of TIC.	Positive referent support	IQ - 6, 7, 8, & 9
RQ4: What is the role of control beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?	Control beliefs	Being equipped and prepared is essential	Confident in personal ability to use TIC: self-efficacy. Personal trauma history	IQ - 10, 11, 12, 13, & 14

Note: RQ = research question, IQ = interview question, TPB = theory of planned behavior, TIC = trauma-informed care.

Research Question 1

RQ1 asked, “What is it like for nurses to implement TIC into nursing practice to care for patients who have disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?” As shown in Table 15, RQ1 was answered using the textual data from all 14 interview items. In this regard, RQ1 was the primary research question, and assessed participants’ overarching beliefs across the three belief-based constructs.

Table 15

Research Question 1 Primary and Secondary Themes

Research questions/belief-based constructs	Primary themes	Secondary themes	Interview questions
Overarching beliefs – RQ1	Nurses feeling empowered to avoid inadvertent patient retraumatization.	TIC creates opportunities for compassion	IQ – 1 to 14

Note: RQ = research question, IQ = interview question

Nurses Feeling Empowered to Avoid Patient Retraumatization

I developed the primary overarching theme of the study, nurses feeling empowered to avoid inadvertent patient retraumatization, through a Gadamerian interpretive process following the theming process described in the Secondary Coding section. In this regard, I engaged with the textual data via Gadamer’s (1960/2013) hermeneutic circle and found that the participant’s primary belief about implementing TIC into practice was that the use of TIC in practice empowered the nurse to prevent the retraumatization of at-risk patients during nursing care. This was illustrated in #Nurse7’s

following response regarding how her TIC training enlightened her to the possibility that nurses could inadvertently re-traumatize patients during the nursing assessment process:

Yes, I guess, I learned like there might be times when nurses could re-traumatize a patient with specific questions and answers, just bringing up this whole [trauma] topic within itself can kind of bring them back to the initial event and that somewhat can be traumatic for a resident. Just kind of having to relive that, they're telling you the story about what happened or their particular incident. We [nurses] need to be aware of this and all of this was taught in that [TIC training]. It...stuff like that...was eye opening for me.

Furthermore, #Nurse7 explained that due to her new understanding about the potentially negative long-term effects of trauma she is less intimidated to assess her patients for signs of historical trauma. In addition, #Nurse 7 described in the following statement how she feels less awkward when a patient wants to engage in conversations about their traumatic experiences:

It's not such a taboo as it [history of trauma] used to be previously in the World War veteran's days. Where you had to bundle it up and hide it, it was kind of almost an embarrassment that they felt that way [traumatized]. Now it is okay to just let the person talk about it and then we [nurses] can simply listen to their story and acknowledge their feelings, which is what they need, they just have to be heard. It's like one of the [training] videos said, 'time doesn't heal all wounds, especially trauma wounds. When, we [nurses] are aware of that we can be

sensitive and have nursing plans that don't...like... cause more trauma to them [trauma exposed patients].

In addition, #Nurse7 explained that she was able to apply what she learned in TIC training to develop nursing plans of care that were sensitive to potential trauma history. Moreover, #Nurse7 described in the following statement how she felt encouraged that her nursing colleagues were supportive when she updated patients care plans with trauma-informed goals:

Being aware and then being presented with those different skills [TIC] makes you better able to help us [nurses] take care of them [patients]. So yes, I guess you would say trauma-informed plan of care, being able to write the plan of care basically for their [patients] particular needs related to the trauma because of what I learned from it [TIC training] ... I didn't know if they [nursing peers] would like the changes I made in them [patient plans of care] ...but, they said they were glad it was done so since I work nights, I update most of the care plans' goals like that... for trauma prevention

In addition, other participants, described TIC as a tool that empowered them to identify, anticipate, and diminish the possibility of inadvertently re-traumatizing patients with a past exposure to trauma. For example, #Nurse12, described how she implements TIC in practice to gain a better understanding of her patient's needs and stated, "I think it [TIC] is very helpful because you get to know your patients and once you know them you know the little things about them and what might trigger a [trauma] memory."

Similarly, #Nurse13 explained in the following statement how she used the TIC model to anticipate potentially re-traumatizing actions that could emotionally activate a participant's memory of a traumatic event:

So, if a patient was molested or raped as a child or as a young adult, they may have difficulty with a certain race, a certain sex [potential trauma triggers]. Being caregivers, we are seeing them intimately. So, it [TIC] is good for identifying those [potential trauma triggers] or using a risk tool and identifying interventions we can use for patients with these things [potential trauma triggers].

An example of the study's over-arching theme, nurses feeling empowered to avoid inadvertent patient retraumatization, is shown in #Nurse11's following statement: "I think it [TIC] is going to help because when they [nursing staff] know what happened in the past [patient's trauma history] they will try to avoid it [re-traumatizing the patient]."

In contrast, a discrepant case appeared in the following statement from #Nurse3 who voiced concern about the potential for nurses to misuse TIC to manipulate patients in an inappropriate manner:

I think, you know, if somebody [nursing professional] has a bad intent, then they can use this [TIC training] to force that patient to do what they want them to do.

You know, I think there's people out there that can have that mindset. - #Nurse3

TIC Creates Opportunities for Compassion

I found a prevailing sub-theme, TIC creates opportunities for compassion, in the textual data across all data sets ($N = 15$) in response to interview questions based on the three belief-based constructs (i.e., behavior beliefs, normative beliefs, and control

beliefs). In particular, my hermeneutic interpretation of the thematically coded texts revealed beliefs about the impact of TIC on the participant's compassion for patients with known and unknown histories of trauma. In this respect, 80% of participants ($n = 12$) alluded to episodes of increased compassion with their patients because of being educated about the effects of trauma. For example, #Nurse1 described that following her TIC training she became more aware of the need to supply verbal descriptions of what was going to be done during episodes of patient care to alleviate the patient's anxiety.

Specifically, #Nurse1 stated that

...just being sensitive to different needs of residents. Like if you have a patient that was a victim of physical abuse, when you're providing hands on care to keep in mind that you have to continue explaining to them what you're doing so they aren't afraid.

In addition, I observed the repeated theme that TIC induced a compassionate response toward patients throughout the data collection process. For example, #Nurse6 and #Nurse9 similarly described that TIC broadened their understanding about the potential reason some patients were averse to being cared for by male nursing assistants. These participants explained that prior to their TIC training they believed that when a female patient insisted on only receiving care from female nursing assistants it was because the patient felt embarrassed to have personal care provided by a male nursing assistant. Moreover, #Nurse6 and #Nurse9 described that due to their TIC training they developed a better understanding that a patient's opposition to being cared for by aides of a certain sex, male or female, may be related to a past traumatic event. For example, in the

following statement #Nurse6 described her beliefs about how TIC influenced the way she approached patient care and her perception about the support she received for her trauma-informed approach from important referents:

I like it [TIC] because it lets each resident know that we're being sensitive to their trauma issues whether we are aware they have them or not. Especially if somebody has a history of sexual abuse, like if they're a female, I will just automatically ask them, "Would you prefer a female caregiver?" So, it'll make them [patients] maybe more comfortable in their environment and the other staff seemed to be glad I asked about this before they sent a male caregiver in there and upset the resident.

#Nurse6's perception of TIC was echoed in #Nurse9's following response:

I think it's important because you have different types of patients that you come in contact with. Sometimes, you may never understand why they refuse to be dressed by a male CNA and you think maybe they are just overly modest. But, with all of this [TIC training] I can see that they [the patient] might have been raped or sexually abused in the past and it would be very upsetting for them to be undressed by a male CNA. And it's good to kind of be informed about how you can help them and how you can assist them in an understanding way.

In other instances, participants described their belief that TIC may enhance nurses' compassionate response toward patients who exhibit difficult behaviors due to a greater understanding of how trauma exposure can psychologically affect a person throughout their lifespan. For example, in the following statement #Nurse4 described her perception

that TIC may aid nurses to better know their patients when they have an understanding that a patient's difficult behavior may be due to earlier ACEs/TEs:

I think it [TIC] could be an advantage if they [nurse coworkers] really care and really want to know their patient. I think, you know, it can open their eyes about problem patient behavior and say 'oh, that's why they're acting that way.'

Finally, I identified a repeated theme across all data sets ($N = 15$) that showed participants' perception that TIC reinforced the need to provide a caring environment for all patients and reiterated the importance of validating patient's feelings, which is illustrated in #Nurse6's statement that

It [TIC training] reminded us that you can maybe make a patient's day just by doing simple things, giving them a hug, paying attention to them, and acknowledging their feelings. Then at the same time you feel rewarded because you got to make somebody's day.

Research Question 2

RQ2 asked, "What is the role of behavioral beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?" As shown in Table 16, RQ2 was answered with the data collected from interview items 1 to 5.

Table 16*Research Question 2 Primary and Secondary Themes*

Research questions/belief-based constructs	Primary themes	Secondary themes	Interview questions
Behavioral beliefs – RQ2	Enhances nurse’s empathetic response	Patient compliance improved Potentially burdensome	IQ – 1 to 5

Note: RQ = research question, IQ = interview question

Enhanced Empathy Towards Patients

The primary theme that emerged in the textual data in response to interview questions based on the belief-based construct, behavioral beliefs, was enhanced empathetic response. While this theme is like the previously discussed RQ1 over-arching secondary theme, TIC creates opportunities for compassion, it differs in the way it developed as a theme. In this regard, the data for the RQ1 over-arching secondary theme distinguished that the participants believed that their improved trauma-informed understanding of the effects of trauma and important referent support for their use of TIC in practice increased their ability to be compassionate toward patients and to act on those occasions in a compassionate manner (e.g., intentional acts of compassion) without opposition from nursing peers. Whereas the interpreted textual data representing the RQ2 primary theme revealed that the participants believed that an advantage of implementing TIC into practice was that it positively influenced their attitude toward patients with challenging behaviors. Specifically, 87% ($n = 13$) of responses to the third interview question (IQ3), “In your opinion, what do you see are the positive effects (i.e., benefits or

advantages) of using TIC in nursing practice over the next 12 months?” centered around the concept of apperception of the patients’ situational factors. In this manner, I found the emerging concept of apperception in the thematically coded textual data that reflected participants’ belief that their level of empathy was positively influenced via TIC by understanding challenging behavior from the patient’s perspective and how various situational factors in the patient’s trauma history potentially affected their current behaviors. This type of empathetic response was described by Gadamer (2013) as putting “ourselves in someone else’s shoes” (p. 315). For example, in the following statement #Nurse7 described her empathetic response during an encounter she experienced with a patient with a known trauma history:

So, a resident had something very traumatic that happened in her life and she talks about it sometimes. It was a very bad situation because her husband had committed suicide right in front of her and sometimes when I am with that person, I’m just kind of holding back my feelings to not overly express myself to them that I am feeling depressed for that person because I want to give them more empowerment. Like, instead I say something like, “Thank you for sharing with me what happened to you. You’re such a strong person,” and words of encouragement like that.

In a comparable manner, the following statement illustrates #Nurse6’s perception that TIC has heightened her sense of empathy while caring for a patient with a known trauma history:

What I like about it [TIC] is the fact that you just have to show compassion. Have that compassion and understand that the situation that they're [trauma exposed patient] in they cannot help or control. I try to pay attention to their facial gestures, body gestures. To understand what they want and what they need when they can't speak for themselves because their senses are overwhelmed from the trauma.

Patient Compliance Improved. The first secondary theme that I identified, patient compliance improved, represented participants beliefs about the positive effects (i.e., benefits or advantages) of using TIC in nursing practice to improve patient compliance. In this respect, 73% (n = 11) of participants described in some manner that their perceptions of TIC were positively influence due to a positive patient outcome following the implementation of TIC into practice. For example, #Nurse1, #Nurse13, and #Nurse15 described that they formed a positive evaluation of TIC after its implementation because of a perceived improvement in some patient's willingness to cooperate and take prescribed medications as described in #Nurse1's statement that

They [patient] will be more likely to maybe open up with you and they'll see you more as like a friend instead of just a nurse... it's really important that you build that rapport with them so that they trust you so they will take their medications and they will open up and it's like you're part of their family, so, they have to be able to trust you.

Participant #Nurse13 expressed a similar response in the following statement:

Compliance yeah. I mean, a lot of times they [patient] are afraid to take things they're afraid, but, you know, it [TIC] is something to better that [nurse-patient] relationship and when that [nurse-patient relationship] is better it can help the patient feel safe to comply, like to take their medications.

The advantage of using TIC to build and keep trust in the nurse-patient relationship to improved patient compliance was emphasized by #Nurse15 who stated that

So, it [TIC] seems to help because it's really important that you build that rapport with them [patient] so that they trust you so they will with their care, like take their medications, and they will open up and it's like your part of their family, so, they will be able to trust you.

Potentially Burdensome. In contrast to the positively evaluated primary theme and first-secondary theme that represented the behavioral beliefs construct, I found a discrepant negatively evaluated second-secondary theme in the textual data. The second-secondary theme, potentially burdensome, represented participants' dissenting response to the fourth interview question that asked, "In your opinion, what do you see are the adverse effects (i.e., inconveniences or disadvantages) of using TIC in nursing practice over the next 12 months?" In this regard, participant's expressed trepidation about TIC and perceived that its implementation could become burdensome during the nursing process. Specifically, via code frequency analysis, I found that 67% ($n = 10$) of participants speculated in some manner that the newly enacted 2019 CMS regulations requiring SNF's to implement TIC into practice could become arduous and present a

barrier to patient care. For example, #Nurse3 described her belief that the TIC model of care may over-extend the nursing staff due to the new CMS regulations and stated,

Yeah, because it's a model... You're having to do it on everybody, which tends to overwhelm nurses during nursing assessments when you have to do something for everyone. But I feel like when the government [CMS] pushes a certain model, you have to assess everyone for those indicators, not just people that are symptomatic or showing difficulties in certain areas. You have to do it with everybody. That's additional time, and additional stress on nurses.

In another instance, #Nurse10 described that TIC may create unrealistic expectations with the patients that the nursing staff cannot consistently fulfill, thus leading to mistrust, which is illustrated in her statement that

You have a resident who wants a female nursing assistant, well, what if we don't have any? So, what if all we have are male CNAs [nursing assistants]? If we've started this trend that the resident is only going to have female CNAs, then suddenly we can't and then that trust is broken.

Similarly, #Nurse 3 described her belief that TIC could be a disadvantage if the burden of care is unequally balanced amongst the nursing staff due to accommodations that must be made related to a patient's trauma history. Specifically, #Nurse3 stated that "You're creating and causing burnout by limiting individuals instead of focusing on other programs and options that could help get through and prevent retraumatization other than limiting people caring for other people."

Hence, the study's findings showed that the participants' primary perceived barriers to implement TIC included onerous regulatory expectations, over-extension of resources (e.g., time restrictions and staff's emotional capacity), and imbalance of staff workloads that I classified as the secondary-second theme potentially burdensome.

Research Question 3

RQ3 asked, "What is the role of normative beliefs on nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?" As shown in Table 17, RQ3 was answered with the data collected from interview items 6,7, 8, and 9. As previously discussed, the construct, normative beliefs, was the most heavily coded construct although it was represented by least number of interview questions (*IQs*=4).

Table 17

Research Question 3 Primary and Secondary Themes

Research questions/belief-based constructs	Primary themes	Secondary themes	Interview questions
Normative beliefs – RQ3	Uncertainty about referents use of TIC	Positive referent support	IQ - 6,7, 8, and 9

Note: RQ = research question, IQ = interview question

Uncertainty About Referents Use of TIC

The primary theme, uncertainty about referents use of TIC, was identified in the textual data in response to interview questions based on the belief-based construct normative beliefs. Specifically, I generated this theme via a Gadamerian interpretation of

the preponderance of participant responses to interview questions 6 and 8 (combined) that asked, “Which individuals or groups do you think are most ‘likely’ and ‘least’ likely use TIC in nursing practice over the next 12 months?” The prevailing participant responses to interview questions 6 and 8 reflected a tone of uncertainty and unknowingness about whether important referents (i.e., fellow healthcare professions) would use TIC in practice. A Gadamerian interpretation of the participant’s vague responses, via the hermeneutic circle, revealed that the participants may not have engaged in a dialogue with nursing counterparts about their commitment to implement TIC into practice. The possible lack of communication amongst nursing team members about individual commitments to implement of TIC into practice was shown by the indirect nature of 93% ($n = 14$) of participant’s responses to interview questions 6 and 8. For example, #Nurse6 did not directly answer interview question 6 about who would be least likely to use TIC in practice. Instead, as shown in the following quote, #Nurse6 speculated about whether other nurses would use TIC if it produced an emotional secondary-trauma effect:

Maybe sometimes they [fellow nurses] will use it [TIC] depending on connections they have with certain patients because if they really feel for that person, it affects your thinking and it's just hard to be around that patient because it's really affecting you or maybe some patient, maybe some nurses they might not have a good attitude towards it [TIC].

In a comparable manner, #Nurse11’s response questioned if nurses who have experienced vicarious trauma will use TIC. Specifically, #Nurse11 stated,

I think that sometimes when people have been doing nursing for a long time, I'm just speaking in general for some people they become desensitized. It's like they don't feel the compassion there because they're burnt out.

Likewise, #Nurse15, speculated that nurses who have not worked with trauma-exposed patients may struggle with TIC. Specifically, #Nurse15 stated,

Maybe if they haven't had experience with trauma, they don't really know little cues and stuff to look for and they would be afraid to use it [TIC], they would need additional training or something.

Similarly, #Nurse3, echoed the response of other participants perceptions in an ambivalent manner about whether nurses would use TIC as shown in the following statement:

If they [fellow nurses] don't think it's beneficial. They're not going to attempt it [TIC]. But I think that each group, whether it's the nurse down to the volunteer. If they're informed, they're educated and they're shown how effective it is to approach a resident with trauma-informed care. They're going to be more likely to use it.

In another example, #Nurse7, gave an indirect response and hypothesized that nurses would use TIC out of a sense of compassion and stated, "I would expect the person [nurse coworkers] to be compassionate and want to do whatever is necessary and proper for the patients to feel comfortable, to let them know that we have their best interests at heart."

In the following statement, a semi-direct response was offered by #Nurse4 who described her belief that the nurses most likely to use TIC in practice would be in recovery from a personal trauma:

Some of them [nursing colleagues] if they are aware of themselves, I think and have learnt how to cope, deal with their trauma or whatever has happened in their life, they sometimes can be more sympathetic to somebody else that has gone through a traumatic experience. They'll be more sympathetic, and they will be more apt to use it [TIC].

One discrepant case for the primary theme, uncertainty about referents use of TIC, was revealed by #Nurse2 who supplied the only direct response to interview question 6 that asked who would be most likely to use TIC in practice in which #Nurse2 replied, "I think everyone [nursing staff] will definitely use TIC because it makes their job easier. They know, you know, what happened in the past and how to avoid it."

Positive Referent Evaluation

I identified the subtheme, positive referent evaluation, in the textual data in response to Interview Questions 7 and 9 that asked, "Who in your life (i.e., individuals or groups) do you think would support or approve/disapprove or oppose of you using TIC in nursing practice over the next 12 months?" Specifically, I generated the sub-theme via a Gadamerian interpretation of the preponderance of participant responses in which 80% of participants ($n = 12$) said that they believed that most of their important referents (e.g., coworkers, managers, patients, family members, and the community) would support or approve their use of TIC in nursing practice over the next 12 months. For example,

#Nurse7 responded, “No, I think pretty much everybody would be on board with that [the participant’s use of TIC in practice].”

Similarly, #Nurse2’s response focused on the families of the patients as the important referents that many support the use of TIC in practice as she stated, “I think family members would definitely be on board. Because the more we know about their loved ones the better we can care for them.”

Research Question 4

RQ4 asked, “What is the role of control beliefs on nurses’ perceptions of implementing TIC into nursing practice to care for patients with disabilities, known or unknown histories of ACEs or TEs, and secondary maladaptive behaviors in the SNF setting?” As shown in Table 18, RQ4 was answered with the data collected from Interview Items 10 to 14.

Table 18

Research Question 4 Primary and Secondary Themes

Research questions/belief-based constructs	Primary themes	Secondary themes	Interview questions
Control beliefs – RQ4	Being equipped and prepared is essential	Confident in personal ability to use TIC: self-efficacy Personal trauma history	IQ - 10 to 14

Note: RQ = research question, IQ = interview question

Being Equipped and Prepared Is Essential

I identified the primary theme, being equipped and prepared is essential, in the textual data in response to the interview questions that were based on the belief-based

construct control beliefs. Specifically, I developed this theme via the participant's responses to interview question 10 and 11 (combined) that asked, "What are some of the things you believe would make it 'easier' or 'harder' for you to use TIC in nursing practice over the next 12 months?" Overall, the interpreted text of responses to interview question 10 revealed the participants' belief that the nursing staff could successfully implement TIC into nursing practice if certain needs were met. For example, #Nurse8 explained in the following statement that she felt that her success implementing TIC into practice was partially dependent on her fellow nurses' actions:

I think I will be able to use it [TIC] well, if we [nurses] work together and with the staff [CNAs] as a team, we help each other, we network, we come together and say, okay, like, for example, let's say this patient is very effected by this [trauma], he needs lots of support. Just coming together and saying, "Okay, what kind of plan are we going to set for the day at work so that we can make sure this patient's needs are met?" we can keep ourselves from getting stressed because we don't want the patient to see that we are stressed.

In addition, #Nurse6 described her believe that her ability to implement TIC was based on receiving high quality TIC training. Specifically, #Nurse6 stated,

I guess the only thing, I mean if I have the right training and certain things and I'm already confident as far as taking care of patients but if I have that extra training and we have staff that will work with you that's fine, but I know sometimes you might not.

Furthermore, 53% of participants ($n = 8$) responded alike that access to patients' trauma history would make it easier to implement TIC into practice. For example, #Nurse 7 explained, "Just being able to have that information prior to dealing with a particular patient. Just kind of knowing what you're dealing with, so you're not blindsided."

In contrast, #Nurse5 explained that it would be difficult to use TIC without sufficient nurse staffing levels and stated, "It could be hard sometimes to use it [TIC], you know, staffing and what, who we have available to care for patients? I mean, sometimes that [staffing] can be a little bit of a challenge."

Confident in Personal Ability to Use TIC: Self-Efficacy. I developed the secondary theme, confident in personal ability to use TIC: self-efficacy, from the 100% ($n = 15$) affirmative participant response rate to interview question 12 that asked, "If you have the desire to use TIC in nursing practice, how certain do you feel that you can use TIC over the next 12 months?" All of the study participants responded similarly to interview question 12, in which they described beliefs about their personal ability to implement TIC (i.e., self-efficacy). The following four participant quotes are representative of the total participant response to interview question 12:

- Ninety-five to one-hundred percent confident I can use it [TIC]. - #Nurse3
- I'm pretty confident in it [TIC] - #Nurse5
- Yes, I'm sure I can use it [TIC], I think the more we use it, the more we get a better understanding of exactly what it is...it's like a skill - #Nurse7
- I think I can definitely do it [use TIC] ...Like I said, once we started to use it and got a little background - #Nurse12

Personal Trauma History. A secondary theme, personal trauma history, was identified in the textual data that represented participants responses to interview questions 13 and 14 (combined) that asked, “Please describe what ‘personally’ and ‘professionally’ comes up for you (i.e., personal and work trauma experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?” In response to interview questions 13 and 14, 66% ($n = 10$) of the participants independently revealed that they had experienced a traumatic event, either personally or within their family. The cohort of self-identified trauma-exposed participants described similar beliefs that their personal personal trauma experience was an asset for their own implementation of TIC. For example, #Nurse1 described that she believed her trauma experienced enhanced her intuitive nursing assessment skills and stated that

I myself am a victim trauma. So, I feel like I'm always just aware that everybody's got something going on. I have a sixth sense about it [trauma exposure] which I think will help me to use the trauma informed care.

Likewise, #Nurse6, offered a detailed description about the secondary trauma her and her mother experienced due to a traumatic event her sister experienced. #Nurse6 explained that, over the course of 10 years, they learned healthy ways to deal with the secondary effects of the trauma by working with a behavioral health therapist. In this respect, #Nurse6 stated that she believes that she “became a stronger person” and that her experience will help her implementation of TIC into nursing practice as described in her following statement:

Oh, yeah, definitely. I do feel like it [sister's trauma background] will help me with this [implementation of TIC] because I have that background and I also help my mom with my sister's problem [trauma disorder]. In the beginning it was bad. It got better as time progressed, she's still not where she was. So, I've had that experience helping her and I have cared for her when my mom went on vacation for like a week. So, I have experienced with that and that's why I'm not afraid to use this [TIC].

Similarly, #Nurse7 explained that she believes her experience of caring for a family member with a significant psychiatric disorder who has experienced TEs will be beneficial in her use of TIC. Specifically, #Nurse7 stated,

Well, I have an aunt. She's diagnosed with bipolar and seasonal depression plays a big part when she remembers bad things from the past. So, as a family I think we use trauma-informed care without even knowing it.... So, just being a little bit more understanding and aware of those different triggers for some people because of seeing my aunt's experience will help with this [using TIC in practice].

Notably, none of the participants disclosed any professional trauma history (e.g., work violence) during the interviews. However, 6 of 10 nurses (60%) in the cohort of participants that self-disclosed histories of trauma offered countering speculative perceptions that nurses with histories of trauma may have difficulty implementing TIC when caring for patients with trauma exposure if the nurse does not know how to anticipate and plan for potential emotional triggers. For example, #Nurse2 described that she felt confident about her ability to implement TIC because through her years-long

personal trauma recovery work she created a support network of people to call if she experiences a triggering event. #Nurse2 stated,

I think if they [nurse] had the same traumatic event [as a patient] or something that could bring up similar memories or trigger something it could be traumatizing for them [the nurse]. If I have this thing happen [triggering event] at work, I have someone to talk to so that I don't get fully triggered. I tell people, like, you have to have something, I mean if you don't it can ruin your day.

Another participant, #Nurse4, described her view that if a nurse is affected by a triggering event, it may prevent them from implementing TIC with that patient and stated that

Some [nurses] it [TIC] might trigger their personal trauma in them [the nurse] and then they can't help the person [patient]. I know this for myself. Like, if you know ahead of time that certain things will affect you...like if you know that it will be too much to be the nurse for a patient who talks about being abused by her husband...it is better to ask if you can be reassigned if possible.

Summary

This chapter supplied a detailed overview of the methods used for data collection and data analysis to answer the study's four research questions. In this regard, the Gadamerian interpretation of the thematically coded text resulted in four primary themes and six secondary themes that I used to answer each of the four research questions.

RQ1 sought to discover what it is like for nurses to implement TIC into practice. Based on the hermeneutic analysis of the aggregate textual data, I found that the participants perceived their implementation of TIC into nursing practice as an

empowering experience. In this regard, RQ1 was answered via the primary theme, nurses feeling empowered to avoid inadvertent patient retraumatization, which showed the over-arching participant belief that the implementation of TIC into nursing practice produced an advantageous outcome. In this regard, the participants' described that through their TIC training and implementation of TIC into practice they felt empowered in their role as a nurse to avoid the inadvertent retraumatization of known or unknown trauma-exposed patients during the nursing process. In addition, the secondary RQ1 theme, TIC creates opportunities for compassion, established the secondary over-arching participant belief that their use of TIC in practice was supported by important referents and supplied increased opportunities for nurses to demonstrate compassion in the care of their patients. Specifically, this secondary RQ1 theme was formed through the analysis of texts that described participants' belief that they gained a sense of self-efficacy in their ability to implement TIC because of being educated about the effects of ACEs/TEs and feeling free to demonstrate increased compassion toward patients during the nursing process without objections from important referents (i.e., nursing peers).

RQ2 sought to discover the role of behavioral beliefs on nurses' perspectives of using TIC in practice via the participants' outcome evaluation of the advantages and disadvantages of using TIC. In this regard RQ2 was answered via the primary theme, enhances nurse's empathetic response, which showed participants' primary behavioral belief that, via TIC, nurse's empathetic response was enhanced by understanding problematic behaviors from the patient's perspective. In addition, RQ2 was further addressed via the first-secondary theme, patient compliance improved, which showed the

participants' secondary behavioral belief that, via TIC, patient compliance with nursing care improved resulting from the nurse's trauma-informed approach during the nursing process. Lastly, RQ2 was answered additionally via the second-secondary theme, potentially burdensome, which showed a contrasting secondary behavioral belief that the implementation of TIC was potentially burdensome in nursing practice. In this respect, the second-secondary theme demonstrated participants' speculative beliefs that potential barriers or challenges may develop that negatively influence the implementation of TIC into nursing practice including onerous CMS (2017) regulatory expectations, over-extension of resources (e.g., time restrictions and staff's emotional capacity), and imbalance of staff workloads. In this regard, the findings showed that this discrepant belief was the least weighted behavioral belief about the consequences of implementing TIC into practice.

RQ3 sought to discover the role of normative beliefs on nurses' perspectives of using TIC in practice via the participants evaluation of important referents who were most likely or least likely to use TIC and those referents who would approve or disapprove of the participant's use of TIC. In this regard RQ3 was answered through the primary theme, uncertainty about referents use of TIC, which showed participants' primary normative belief of uncertainty whether important referents would implement TIC into practice. In addition, RQ3 was further addressed with the secondary theme positive referent support, which showed the secondary normative belief that important referents approved of nurse's implementation of TIC in practice. Hence, the findings showed that the belief that important referents (e.g., coworkers, managers, patients,

family members, and the community) supported their use of TIC had the greatest impact on the participants' normative beliefs.

Finally, RQ4 sought to discover the role of control beliefs on nurses' perspectives of using TIC in practice via the participants' evaluation of the following: (a) what would make it easier or harder to use TIC in practice, (b) certainty in personal ability to use TIC in practice, and (c) impact of personal or professional TEs. In this regard, RQ4 was answered via the primary theme, *equipped and prepared: key to TIC success*, which showed the primary control belief that the nursing staff could successfully implement TIC into nursing practice if certain organizational needs were met (e.g., adequate staffing levels, proper TIC training, and access to patient trauma history). In addition, RQ4 was further addressed via the first-secondary theme, *confident in personal ability to use TIC: self-efficacy*, which revealed the first-secondary control belief of personal self-efficacy in the nurse's ability to use TIC in practice. In this respect, 100% (n = 15) of the participants expressed the belief that they were confident in their personal ability to use TIC (i.e., self-efficacy). Furthermore, RQ4 was answered through the second-secondary theme, *personal trauma history*, which exposed an added secondary control belief that personal trauma experience could be an asset or hindrance in nurse's implementation of TIC.

In the next chapter, Chapter 5, an analysis, and interpretation of the findings from this Gadamerian phenomenological study is presented in the context of the study's theoretical framework. In addition, Chapter 5 describes recommendations for further research and the implications of the study's potential impact for positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this chapter, I present a discussion about the significance of the results of the study, beginning with a reflection on the purpose, nature, and reason for the current study. Subsequently, the results are discussed in the context of the study's theoretical framework, followed by an interpretation of the findings in comparison to earlier research as described in the review of literature in Chapter 2. The remaining sections of Chapter 5 include the following sections: limitations of the study, recommendations for further research, implications of the study's potential impact for positive social change, and conclusion.

Purpose and Nature of the Study

The purpose of this study was to examine nurses' lived experience of implementing TIC into nursing practice for the care of patients with physical disabilities, known or unknown histories ACEs/TEs, and secondary maladaptive coping behaviors at a skilled-nursing facility in a midsized city in the state of Michigan. I chose a phenomenological research method for this study because it allowed me to form an in-depth understanding of the phenomenon of the implementation of TIC into nursing practice (see van Manen, 2016b). To this end, I created, validated, and pilot tested a 14-item interview guide to elicit nurse participants' salient beliefs about the implementation of TIC into practice. In addition, I used multiple tools to collect data including semistructured interviews, field journal notes, and reflex journal documentation. Moreover, I used several methods to analyze the collected textual data including several

coding methods, thematic data analysis, and Gadamerian interpretation techniques (see Braun & Clarke, 2013; Creswell & Poth, 2018; Gadamer, 1960/2013; Mantua, 2015). As such, via a Gadamerian hermeneutic approach, I was able to interpret the meaning of nurses' elicited beliefs within the context of their environment (i.e., the partner site milieu; see Matua & Van, 2015; Vagle, 2018). As a result of the interpretive data analysis process, four primary themes and six secondary themes were produced that I used to answer each of the four research questions as presented in the Study Results section of Chapter 4.

Reason for the Study

This study was inspired by the results of the review of the literature that are presented in Chapter 2, which revealed studies that advocated for additional research to identify and assess methods to improve therapeutic nursing care (i.e., TIC), decrease inadvertent patient retraumatization, rebuild trauma-exposed patients sense of empowerment and control, and improve patients use of adaptive coping skills (see Coyle, 2018; Williamson & Qureshi, 2015). In addition, in 2016, the CMS adopted research recommendations and enacted federal regulations that required all long-term skilled nursing facilities to implement TIC beginning November 2019. Moreover, this study was developed in response to the gap in the literature and the scant number of empirical studies about nurses' perceptions of implementing TIC into nursing practice to care for patients with disabilities and histories of ACEs/TEs in the skilled-nursing setting (see Baker et al., 2016; Choi, 2016; Raja et al., 2015; Reeves, 2015; Stokes et al., 2017; Williamson & Kautz, 2018). Specifically, Schüssler-Fiorenza Rose et al. (2014)

described that there was a need for added research “to determine the best way to address ACEs to improve coping and functional recovery from stresses related to patients’ emerging or existing disabilities” (p. 9).

Notably, the review of the literature revealed that few qualitative formative studies had been conducted to identify factors underlying nurses’ behavioral beliefs related to the implementation of TIC in nursing practice (see Hatcher et al., 2018; Kassam-Adams et al., 2015). Hence, this study used the belief-based model of the TPB to understand the determinants of TIC in nursing practice related to earlier research that described the absence of theoretically based formative studies in this realm (see Fishbein & Ajzen, 2010; Hatcher et al., 2018; Kassam-Adams et al., 2015). Specifically, this study sought to qualitatively elicit and hermeneutically explore nurses’ beliefs about the implementation of TIC into nursing practice from the perspective of nurses who worked in a skilled-nursing facility. Furthermore, due to the earlier discussed implementation of CMS regulations, I was able to conduct this formative study at a skilled-nursing facility that had previously implemented TIC and recruit nurse participants who had verifiable training in TIC and experience implementing TIC into nursing practice.

Summary of Key Findings

An iterative and evolving interpretive data analysis process produced four primary themes and six secondary themes that represent the modal sets of salient beliefs that the participants held about the study phenomenon (see Table 13). As described in Chapter 4, I identified the study’s key themes via a Gadamerian interpretation of the thematically coded interview texts. In this respect, the study’s thematic findings provide a dense

understanding of nurses' beliefs about implementing TIC into nursing practice in a skilled-nursing setting to care for patients with disabilities, known or unknown past trauma exposure, and secondary maladaptive behaviors. As such, I identified the following key primary and secondary themes:

1. Primary overarching belief that TIC influences nurses feeling empowered to avoid inadvertent patient retraumatization.
 - a. Secondary overarching belief that TIC creates opportunities for compassion.
2. Primary behavioral belief that TIC enhances nurse's empathetic response.
 - a. Secondary behavioral belief that TIC may improve patient compliance.
 - b. Secondary behavioral belief that TIC is potentially burdensome.
3. Primary normative believe of uncertainty about important referents implementation of TIC.
 - a. Secondary normative belief that important referents support others use of TIC.
4. Primary control belief that being equipped and prepared is essential in TIC.
 - a. Secondary control belief in personal ability to implement TIC.
 - b. Secondary control belief that a nurse's personal trauma history may be helpful or detrimental in the implementation of TIC.

Interpretation of the Findings

In this section, I describe how the current study's key findings confirm, dispute, or extend knowledge of the study phenomenon by comparing the present study's outcomes with earlier research findings as discussed in the Review of the Literature section in Chapter 2. In this regard, this section presents an interpretation of the current

study's findings in the context of the set of modal salient beliefs that I identified in the form of primary and secondary themes (see Table 13). In addition, other significant findings that did not present as themes are included in the discussion of the interpretation of results due to their relevant and unique qualities that add to the current body of knowledge.

Theoretical Context of the Findings

I chose the belief-based framework of the TPB as the theoretical model for this study to elicit participants beliefs about the implementation of TIC into nursing practice (see Fishbein & Ajzen, 2010). Specifically, this study used the TPB belief-based theoretical framework in keeping with Ajzen and Fishbein's (1980) assertion that formative research is critical to detect which beliefs need to be targeted in future interventions to influence targeted behaviors. As previously discussed, Fishbein and Ajzen (2010) described how beliefs that are readily accessible in memory are the antecedents of behavioral intentions to perform a behavior, which may supply a detailed glimpse into the roots of a targeted behavior. Accordingly, I formulated the study's research questions and interview questions to align with the definitions of the TPB belief-based constructs (see Fishbein & Ajzen, 2010).

Because beliefs can differ from respondent to respondent and vary between populations, Fishbein and Ajzen (2010) acknowledged the difficult challenges that arise when a researcher tries to summarize individually held beliefs within a targeted population (e.g., licensed nurses) about performing a specific targeted behavior (e.g., implementing TIC). In response, Fishbein and Ajzen stated that to describe or summarize

the beliefs of the study population and compare beliefs among populations, it is necessary to identify the modal set of salient beliefs held in the study population (i.e., prevailing set of beliefs within a group). In this regard, Fishbein and Ajzen proposed the belief-based constructs of the TPB (i.e., behavioral beliefs, normative beliefs, and control beliefs) as a theoretical means to elicit individual's salient beliefs that impact the intention to perform or not perform a targeted behavior. Thus, I used Fishbein and Ajzen's belief-based constructs of the TPB theoretical model in this study to elicit, examine, and interpret nurses' antecedent modal salient beliefs about the implementation of TIC into practice.

Specifically, I used Fishbein and Ajzen's (2010) central propositions to ground the coding and theming process within the study's theoretical framework. As previously discussed, Fishbein and Ajzen's formative central theoretical proposition of the TPB posits that the intention to perform a behavior is "a function of attitudes toward performing the behavior (based on underlying beliefs and their evaluative aspects) and on perceptions of what important referents thought one should or should not do and motivation to comply with those referents" (p. 388). Accordingly, I derived the following four focal topics from Fishbein and Ajzen's proposition: underlying beliefs, evaluative aspects, perceptions, and motivation. In this regard, I used the focal topics as a guide to remain focused and grounded in the study's theoretical framework during the coding and theming process.

Hence, via Fishbein and Ajzen's (2010) theoretical proposition, Saldaña's (2015) coding methods, and Braun and Clarke's (2006) six steps of TA, the interview texts were coded and themed in alignment with the TPB belief-based constructs, which produced a

set of thematic codes that signified the participants' modal set of behavioral, normative, and control beliefs as described in Chapter 4 (see Table 9, Figures 12, 13, and 14; and Appendix M). Subsequently, I developed nine evaluative categories that represented the evaluative aspect of the participant's modal set of thematically coded beliefs about implementing TIC into practice in relationship to each of the TPB belief-based constructs (see Table 10; Chapter 4). Specifically, I conceptually categorized the coded segments of text within the modal set of thematic codes into the evaluative categories according to the coded text's theoretical evaluative elements as defined by each of the TPB's belief-based constructs (see Table 1; Chapter 1). In other words, the thematically coded segments of texts were categorized via the TPB belief-based constructs according to the participants' evaluation of the perceived outcome, important referent's reaction, and perceived self-efficacy of implementing TIC into practice rather than their perception of the TIC model itself (see Fishbein & Ajzen, 2010; Francis et al., 2004; Sutton et al., 2003).

After the thematically coded texts were categorized into evaluative categories, I began the theming process and searched for meaningful patterns across the fifteen textual interview data sets. In this regard, I reexamined and compared the thematically coded sections of text across the evaluative categorized data to find interconnected concepts and relationships with similar expression of meanings. Next, I defined and aggregated observed interrelational patterns between the data sets into preliminary themes and subthemes in correspondence with the TPB theoretical model and belief-based research questions (see Braun & Clark, 2006; Creswell & Creswell, 2017; Nowell et al., 2017). As a result of the detailed theming aggregation process described in Chapter 4, 40

preliminary themes and 11 preliminary subthemes were produced as conceptual branches of each of the thematic evaluative categories that stemmed from the TPB theoretical framework (see Appendix N).

Following the identification and aggregation of preliminary themes and subthemes, I commenced a Gadamerian interpretive theming process via the reflexive hermeneutic circle as described in Chapter 4. As previously discussed, I remained open to the otherness of the nurse participants' lived experiences throughout the data collection and data analysis process. The experience of openness allowed me to develop a deeper understanding about how the nurse participants' environmental milieu and personal and professional relationships influenced the meaning they placed on the implementation of TIC in practice (see Benner, 1994; Gadamer, 1960/2013). I remained in the hermeneutic circle during the data collection and data analysis process and reflexively assessed and thematically coded the emerging textual data through the lens of the TPB belief-based model in an iterative circular fashion by weaving in and out of individual segments of textual data (see Gadamer, 1960/2013; Stenner, et al., 2017). Next, I reflected on the categorized segments of data in the preliminary themes and subthemes and completed a Gadamerian hermeneutic interpretation of the thematically coded textual interview data. I concluded the theming process with a contextual interpretation in the meaning of the themes. This reflective interpretative process produced four primary themes and six secondary themes, based on the precepts of the TPB belief-based model, which I used to answer each of the four research questions (see Table 13; Chapter 4).

The following sections present how I applied the precepts of TPB belief-based constructs as a theoretical framework to determine the participants' overarching beliefs, behavioral beliefs, normative beliefs, and control beliefs and their respective primary themes and secondary themes (see Table 13; Chapter 4; see Braun & Clarke, 2013; Fishbein & Ajzen, 2010; Gadamer, 1960/2013; Saldaña, 2015; Stenner, et al., 2017).

Overarching Beliefs

The following set of prominent group beliefs were identified in the textual data, which represented all the formational precepts of the TPB belief-based framework: (a) the implementation of TIC was viewed as a positive nursing practice intervention that could result in advantageous patient outcomes (i.e., behavioral beliefs), (b) beliefs that the nurses' use of TIC may enhance compassion and perceived its use to be supported by fellow nurses (i.e., normative beliefs), and (c) the implementation of TIC into nursing practice was perceived to increase nurses understanding about the effects of past trauma, which resulted in a perceived sense of empowerment and self-efficacy to avoid inadvertent patient retraumatization (i.e., control believes). Two prevailing overarching ideas (i.e., one primary theme and one secondary theme) were revealed. The overarching ideas were associated with the anchor code for RQ1, what is the behavior like (see Table 6; Chapter 4), which stood for the study group's prevailing beliefs about what it is like to implement TIC into nursing practice. Hence, the overarching key finding that represented the study group's set of modal beliefs (i.e., aggregated TPB belief-based constructs) was the perception that the implementation of TIC empowers nurses to mitigate the inadvertent retraumatization of patients. Moreover, the perception of empowerment was

related to the belief that the knowledge-based methods, found in the TIC model, equipped nurses to recognize and engage in opportunities of compassion for patients with known or unknown trauma histories.

Behavioral Beliefs

As previously discussed, modal behavioral beliefs refer to a set of group beliefs about the advantages and disadvantages of performing a behavior, thus deciding their attitude toward the behavior (Ajzen, 1991). In this regard, three prevailing ideas (i.e., one primary theme and two secondary themes) associated with the anchor code for RQ2, beliefs behavior outcome is positive or negative (see Table 6; Chapter 4) were revealed, which stood for the participants' prevailing behavioral beliefs about the likely consequences of implementing TIC into nursing practice. As such, RQ2 was answered via the primary theme, enhances nurse's empathetic response, and the secondary themes, patient compliance improved, and potentially burdensome. Hence, the key finding that represented the study group's set of modal behavioral beliefs was the perception that while the consequences of implementing TIC into practice may be burdensome, the knowledge gained in the process was advantageous and was perceived to potentially improve patient compliance. Moreover, the perception of improved patient compliance was related to belief that TIC may enhance the nurse's empathetic response toward patients with difficult behaviors subsequent to training and acquiring an understanding that maladaptive behaviors may be a result of the patient's known or unknown past trauma exposure. Thus, a belief was revealed in a subgroup of participants who

speculated that nurses enhanced empathetic response would result in improved patient compliance.

Normative Beliefs

As previously discussed, a set of modal normative beliefs refers to a target groups most prominently held beliefs about whether important referents perform a targeted behavior and if important referents approve or disapprove of others performing the behavior, thus, deciding subjective norms (Ajzen, 1991). In this regard, two prevailing ideas (i.e., one primary theme and one secondary theme) associated with the anchor code for RQ3, beliefs referents will implement and approve/disapprove of behavior, (see Table 6; Chapter 4), were revealed, which stood for the participants' prevailing normative beliefs about whether important referents would implement TIC and if they would approval of others implementing TIC into nursing practice. As such, RQ3 was answered via the primary theme, uncertainty about referents use of TIC, and the secondary theme, positive referent support. Therefore, the key finding that represented the study group's set of modal normative beliefs was the perception of uncertainty about whether important referents (i.e., fellow nurses) would implement TIC into practice. In contrast, I found that the perception of uncertainty was balanced by the belief that important referents would support others implementation of TIC into practice.

Control Beliefs

As previously discussed, modal control beliefs refer to a set of group beliefs about whether barriers and facilitators may thwart or support the performance of the behavior, thus, deciding perceived behavioral control (e.g., the use of TIC methods will take too

much time) (Ajzen, 1991). In this regard, three prevailing ideas (i.e., one primary theme and two secondary themes) associated with the anchor code for RQ4, beliefs factors help/hinder behavior, (see Table 6; Chapter 4), were revealed; which stood for the participants' prevailing control beliefs about their ability to implement TIC into nursing practice. As such, RQ4 was answered via the primary theme, being equipped and prepared is essential, and the secondary themes, confident in personal ability to use TIC: self-efficacy, and personal trauma history. Hence, the key finding that represented the study group's set of modal control beliefs was the perception of heightened self-efficacy in the ability to successfully implement TIC into nursing practice. Moreover, it was found that the perception of self-efficacy was related to the belief that successful implementation of TIC was dependent upon organizational support (i.e., interprofessional collaboration), professional preparedness (i.e., ongoing TIC training opportunities), and personal readiness (i.e., awareness of the effects of personal trauma history).

Literature Review Context of the Findings

The following section presents an analysis and interpretation of the study's findings in relationship to the literature review presented in Chapter 2.

Nurses Feeling Empowered to Avoid Inadvertent Patient Retraumatization

The current study revealed that the organizational strategy that the partner site used to implement TIC was based on requirements in the CMS (2017) TIC guidance to eliminate or alleviate triggers that may cause patient retraumatization. A portion of the guidance is described in the following CMS §483.25(m) directive:

The facility must ensure that residents who are trauma survivors receive culturally competent, trauma-informed care per professional standards of practice and accounting for residents' experiences and preferences to eliminate or mitigate triggers that may cause retraumatization of the resident...The interdisciplinary team (IDT) must be aware of potential underlying causes and/or triggers that may lead to expressions or indications of distress. Identifying the frequency, intensity, duration, and impact of a resident's expressions or indications of distress, as well as the location, surroundings, or situation in which they occur, may help the IDT identify individualized interventions or approaches to care to support the resident's needs. (CMS, 2017, p. 401)

As such, the current study's findings revealed the nurse participants' primary overarching belief that the implementation of TIC methods (i.e., universal trauma precautions), empowered nurses to avoid and mitigate episodes of inadvertent retraumatization of patients. This finding aligns with Muskett's (2014) observation that advocated for the use of universal trauma precautions with all patients regardless of documented trauma histories.

Moreover, the present study revealed the participants' perception that improved knowledge of the long-term effects of trauma and the methods of TIC to mitigate patient retraumatization lead to a greater sense of autonomy (i.e., empowerment) in their role as a nurse to use independent nursing judgement to implement TIC. As previously discussed, the current study defined autonomy as an individual's perception of being independent of external and internal control factors and having a perceived freedom of

choice (Ajzen, 2002a). Of note, the finding of nurse participants' perception of increased autonomy and heightened empowerment correlates with Bandura's (1986, 2001) self-efficacy research that described how an individual's perceived control (i.e., control beliefs) in their ability to perform a behavior was positively associated with their sense of autonomy. Other present findings about nurse participant's control beliefs are discussed in the TIC Self Efficacy section below.

In addition, results from the current study illustrated the nurse participants' view that their increased knowledge of the effects of trauma enabled them to show greater compassion toward patients during the nursing process without causing added traumatic stress. Specifically, the current study showed that 87% ($n = 13$) of nurse participants perceived that their level of empathy was positively influenced via a specific lesson in the TIC training they received that instructed nurses to evaluate challenging patient behaviors from the patient's perspective. For example, several nurse participants described that their attitude and response to patient outbursts had improved related to a better understanding that factors in the patient's known or unknown trauma history can affect current behaviors beyond their control (e.g., long-term neurobiological adaptations to trauma). In this respect, the current findings echo earlier research that explored the implementation of TIC in perinatal nursing practice that demonstrated how TIC education raised nurse's awareness of the possible effects and symptoms of trauma (Choi & Seng, 2015). Similarly, earlier studies in TIC translational research described how nurses were more receptive to the implementation of TIC into practice following education on the potential long-term effects of trauma on health outcomes and how

patients with histories of ACEs/TEs can be negatively impacted and retraumatized in the healthcare system (Isobel & Edwards, 2017; Kelly et al., 2014; Reeves & Humphreys, 2018).

Yet, the current results of nurse participants' perceived empowerment to avoid and mitigate inadvertent patient retraumatization via TIC is not congruent with portions of previous research that investigated nurses' views and current practice of TIC that reported, even with favorable opinions and self-rated competence in fundamentals of TIC, a segment of nurses believed they lacked the skills to talk with patients about various elements of trauma without causing additional retraumatization (Bruce et al., 2018; Kassam-Adams et al., 2015). It was not clear whether the participants in these earlier studies received preliminary training in TIC as was the case in the current study, which may be the reason for some of the diverging results.

Enhanced Empathetic Response

Moreover, the findings of the current study found that the nurse participants' beliefs regarding implementing TIC into practice were partially influenced by CMS's (2017) TIC guidelines to develop individualized comprehensive care plans to eliminate or alleviate triggers that may cause retraumatization of patients described in the following CMS §483.21(b)(3) directive:

The services provided or arranged by the facility, as outlined by the comprehensive care plan, must— (ii) Be provided by qualified persons in accordance with each resident's written plan of care. (iii) Be culturally-competent and trauma-informed (CMS, 2017, p. 231)... Person-centered approaches to care

should be implemented based upon the comprehensive assessment, in accordance with the resident's customary daily routine, life-long patterns, interests, preferences, and choices, including the interdisciplinary team (IDT), the resident, resident's family, and/or representative(s)...Individualized, person-centered approaches to care must be implemented to address expressions or indications of distress. (CMS, 2017, p. 401)

As such, the results from the current study identified nurse participants' behavioral belief (i.e., positive, and negative views) that the consequence of implementing TIC into practice was advantageous and provided a positive empathetic means to improve the care of patients with known or unknown trauma histories. In contrast, studies published prior to the release of the CMS (2017) TIC implementation facility guidelines, that investigated health professionals perception of trauma and the use TIC in healthcare, described that nurses in the United States were not responding adequately to the psychosocial needs of patients with histories of ACEs/TEs by stigmatizing, stereotyping, providing inappropriate care, re-traumatizing, and creating barriers to care (Alexander et al., 2016; Bradbury-Jones, et al., 2014; Choi, 2016; De Crespigny, et al., 2015; Kassam-Adams, et al., 2015; Muskett, 2014; Reeves, 2015). Additionally, other studies conducted shortly before the release of the CMS (2017) guidelines, examined the use of TIC in pediatric settings and found that nurses were uncommunicative with their patients about the potential adverse impact of childhood trauma and other TEs on health outcomes (Marcellus, 2014; Marsac et al., 2016). In this respect, the current study's findings supply an adjunct to the body of literature about the

status of nurse's knowledge and perception of the effects of trauma and their use of trauma-informed communication practices. In juxtaposition to earlier studies that described nurse's ineffective response to patients with histories of ACEs/TEs, the current study revealed an attitudinal paradigm shift in nurse participants' perception of patients who exhibited maladaptive behaviors. Specifically, a shift in attitude was identified via the finding that participants perceived that their newly acquired understanding about the neurobiological response to trauma and its potential negative impact on long-term patient outcomes allowed them to respond with greater empathy and to proactively develop more comprehensive plans of care for patients who demonstrated episodes of difficult behavior. For example, a nurse participant described that prior to the implementation of TIC, if an elderly patient exhibited a sudden change in cognitive functioning and combative behavior the first thought was to assess the patient for a possible urinary tract infection to account for the behavior change. The participant elaborated that prior to TIC they rarely considered the possibility that a patient's sudden change in cognition could be related to a triggered traumatic memory. This finding is similar to Worley and Delaney's (2017) observation that nurses need to be encouraged to identify personal biases and gather an improved understanding of the maladaptive neurobiological response to trauma to combat assumptions that adverse patient behavior is manipulative or that they lack the willpower to change. Moreover, the current results are consistent with previous research that investigated nurses' use of TIC with individuals who experienced various ACEs/TEs, which described that healthcare professionals who are caring for patients with trauma histories are better equipped to provide knowledgeable and compassionate care when

they understand that patients' maladaptive coping behaviors and related illnesses can be due to neurobiological adaptations to past traumatic experiences (Cleary & Hungerford, 2015; Strait & Bolman, 2017; Worley & Delaney, 2017).

In addition, present study findings revealed nurse participants' belief that their views about the impact of trauma on patient outcomes may have been positively influenced via specific TIC training recommendations that encouraged nurses to look for ways to avoid potential trauma-triggers during nursing care. In this regard, the results of the current study showed that nurse participants felt inspired to proactively assess for factors in the patient's history that may stimulate a maladaptive trauma response. For example, several of the nurse participants described that the TIC training and CMS (2017) implementation guidelines influenced the way they assigned nursing assistants to assist with certain patient's personal care who had resisted care from assistants of the other sex in the past. In this instance the participants described that although they were not aware of histories of trauma, they made changes care assignments because they realized that the patients may be resistant to care from the other sex if they had experienced sexual abuse earlier in life. This finding complements earlier research that examined the consequences of healthcare professional's stigmatization of patients, which found that education for health professionals in conjunction with a supportive work environment had a positive influence on nurses' attitude toward patients with maladaptive behaviors (see van Boekel et al., 2015).

Moreover, the results of the current study revealed nurse participants perception of increased confidence in their ability to empathetically listen to a trauma-affected

patient talk about their trauma experience. For example, participant #Nurse1 described that prior to the implementation of TIC she would “try to refocus patients if they ruminated on a traumatic event from their past.” In addition, #Nurse1 reported that she gained a new perspective and increased knowledge about the possible long-term effects of trauma from the TIC training that they received. For example, #Nurse1 described how she learned that the act of listening to a patient’s recollection of their traumatic experience and validating their feelings about the trauma “may be the only nursing intervention that they [patient with trauma exposure] needs.”

Similarly, the current findings are consistent with results from an earlier study that evaluated the effectiveness of TIC training for emergency department (ED) nurses (see Hall, et al., 2016). Hall et al. (2016) reported that the nursing staff’s TIC training resulted in qualitatively demonstrated changes including an improved understanding of TIC, attitudinal change, and person-centered approach among the study participants. Specifically, one of Hall et al.’s findings illustrated that nurses’ knowledge and use of TIC methods increased their level of confidence to talk with patients about their traumatic experiences. In this respect, the qualitative results from Hall et al. mirror the current study’s previously discussed findings, which showed that nurse participants reported a heightened level of confidence in their ability to empathetically respond to patients when they talked about their trauma. However, the current study’s findings did not fully align with Hall et al.’s quantitative results, which found that nurses were unsure of their role and duty of care to address a patient’s past trauma, unsure of the potential retraumatizing effect of hospital ED visits, and “unsure about how to respond to a

patient's disclosure about trauma" (p. 7). In contrast, the current study found that nurse participants perceived that the implementation of TIC at the partner site had a positive influence on their understanding of their role as a nurse when caring for patients with known or unknown histories of ACEs/TEs to avoid inadvertent retraumatization during the nursing process. Specifically, the results of the current study found that 73% ($n = 11$) of participants described in some manner that their perception of TIC was positively influenced due to their observation of an improved patient outcome (i.e., improved medication compliance) following the use of TIC methods that were introduced in the facility's TIC training series. This present finding confirms the results from earlier studies that investigated trauma-informed medical care, which described how patients felt accepted and motivated to participate in their care when healthcare professionals inquired and listened to their trauma histories (see Coyle, 2018; Goldstein et al., 2017; Green et al., 2016; Tobiano et al., 2015). Moreover, the nurse participants' observations support earlier studies, which proposed the use of TIC in healthcare settings to potentially ameliorate retraumatization during the nursing process and improve patient's participation in care, self-regulation, self-esteem, and self-mastery (see Alvarez et al., 2017; Choi, 2016; Horowitz et al., 2015).

Although the current study's findings showed nurse participants' positive perception of the implementation of TIC, a deviating secondary behavioral belief emerged in the textual data, which revealed the nurse participants' perception of potential barriers that could negatively impact the implementation of TIC into nursing practice. In this regard, the present findings showed nurse participants' beliefs that the

implementation of TIC could present challenges such as arduous CMS (2017) regulatory expectations, over-extension of available nursing resources (e.g., time restrictions and staff's emotional capacity), and an imbalance in staff workloads. Specifically, it was found that 67% ($n = 10$) of nurse participants guessed in some manner that the newly enacted CMS regulations requiring SNF's to implement TIC into practice by November 2019 could potentially decrease the time nurses have to provide hands on care due to untenable administrative requirements. The present findings echo the results of earlier studies that examined perceived barriers to the implementation of TIC, which found that although nurses and other healthcare professionals valued TIC, they believed that obstacles may develop that disrupt the implementation of TIC (see Bruce et al., 2018; Hall et al., 2016; Kassam-Adams et al., 2015). Similarly, Felitti and Anda's (2014) seminal article on the lifelong effects of ACEs described that healthcare personnel may resist the implementation of TIC due to perceived barriers such as time factors and lack of sufficient training. For instance, Isobel and Edwards (2017) found that factions of resistance toward the implementation of TIC arose within the nursing unit during their study of nurses' perspectives of using TIC in practice. Unlike earlier research, the results of the current study did not identify resistance among the nurse participants toward the implementation of TIC into practice despite their perception that it may become burdensome.

Referents' Use and Approval of TIC

Findings from the current study revealed the nurse participants' normative beliefs and perceived uncertainty about whether important referents (i.e., nursing peers, nursing

supervisors, organizational leadership) would implement TIC into practice. Specifically, in the current study, important referents are described as individuals who approve of behavior, reward or punish behavior, has the authority to request the performance of a behavior (e.g., manager), or is respected by the participant as an official or unofficial expert (see Fishbein & Ajzen, 2010). As previously discussed, Ajzen and Fishbein (2014) described how normative beliefs are best understood via injunctive norms “i.e., perceptions of what others think one should do” (p. 199) and descriptive norms “i.e., perceptions of what others are doing” (p. 199). For example, descriptive normative beliefs are illustrated by the normative pressure to perform a behavior because of the participant’s belief that important referents are performing or not performing the behavior (Fishbein & Ajzen, 2010). In this regard, the present findings did not clearly determine the nurse participants’ descriptive normative beliefs regarding whether important referents would implement TIC into practice. Therefore, I postulated that the ambivalent normative results may infer a lack of dialogue between nurse participants and important referents about their use of TIC as demonstrated by the indirect nature of 93% ($n = 14$) of participant responses to interview questions that were designed to elicit participants’ descriptive normative beliefs (i.e., Interview Questions 6 & 7). I also considered that although the interview guide had been validated, interview Questions 6 & 7 may have been flawed and elicited ambiguous responses.

Conversely, the present findings reveal that nurse participants’ inductive normative beliefs show the perception that their own implementation of TIC into practice would be supported by important referents. As previously discussed, injunctive norms are

illustrated by the motivating factors that influence a participant to perform a behavior due to their belief that important referents support or expect the behavior (Fishbein & Ajzen, 2010). In this regard, I found that these nurse participants perceived those important referents would support their implementation of TIC based on referent's positive response to the participants use of TIC methods thus far. For instance, one nurse participant described that her effort to update patient care plans to include trauma-informed goals was well received by her supervisor and fellow nurses who she described, "did not complain."

Thereby, the results of the current study identified a disparate descriptive and injunctive normative belief that demonstrated the nurse participants' uncertainty of whether important referents would implement TIC into practice. This disparate belief contrasted with the nurse participants' firm belief that important referents would support the nurse's implementation of TIC into practice. The explanation for the present dichotomous findings may be found in earlier research that evaluated a trauma-informed communication workshop, which revealed that "the process of peer reflection and open feedback was uncommon in nursing practice" (Isobel & Delgado, 2018, p. 294). A review of earlier research that examined nurse's implementation of TIC did not describe findings related to how groups of nurses communicated about the implementation of TIC into practice. Therefore, the results of the current study may have revealed a gap in the literature about nurses' interprofessional communication related to each other's implementation of TIC in practice. Alternatively, the discrepant findings representing the

normative belief construct may indicate a flaw in interview questions 6 and 7, which were designed to elicit descriptive normative beliefs.

TIC Self Efficacy

The findings of the current study show that the nurse participants' control beliefs about implementing TIC into practice were partially influenced by the CMS (2017) TIC mandate to have sufficient staff with the appropriate competencies and skills sets to eliminate or alleviate triggers that may cause retraumatization of patients as described in the following CMS §483.40(a) directive:

The facility must have sufficient staff who provide direct services to residents with the appropriate competencies and skills sets to provide nursing and related services to assure resident safety and attain or maintain the highest practicable physical, mental and psychosocial well-being of each resident, as determined by resident assessments and individual plans of care and considering the number, acuity and diagnoses of the facility's resident population...These competencies and skills sets include, but are not limited to, knowledge of and appropriate training and supervision for: §483.40(a)(1) Caring for residents with mental and psychosocial disorders, as well as residents with a history of trauma and/or post-traumatic stress disorder, that have been identified in the facility assessment...and as linked to history of trauma and/or post-traumatic stress disorder (CMS, 2017, p. 454). All staff must have knowledge and skills sets to effectively interact with residents (communication, resident rights, meaningful activities.). (CMS, 2017, p. 401)

In this regard, results from the current study reveal that 100% ($n = 15$) of the participants expressed confidence in their personal ability to implement TIC into practice. Specifically, present findings illustrated nurse participants' perception that their improved understanding of the elements of TIC increased their level of self-efficacy in TIC. This finding is consistent with earlier studies that examined the implementation of TIC in nursing practice, which found that most nurses reported self-rated competence with many of the elements of TIC practice (see Bruce et al., 2018; Kassam-Adams et al., 2015).

Moreover, results from the current study illustrate the nurse participants' perception that their ability to implement TIC into practice was dependent upon sufficient organizational supports (i.e., interprofessional collaboration), professional preparedness (i.e., ongoing TIC training opportunities), and personal readiness (i.e., awareness of the effects of personal trauma history). For instance, the present findings show that 53% ($n = 8$) of participants believed that access to patients' trauma history would make it easier to implement TIC into practice. This present finding confirms earlier translational research that investigated TIC implementation, which described that healthcare providers require knowledge, skills, appropriate evidence-based resources, transparent communication, and educational support to effectively support patients with histories of trauma (see Bruce et al., 2018; Choi & Seng, 2014; Green et al., 2015; Isobel & Edwards, 2017; Kassam-Adams et al., 2015; Raja et al., 2015; Reeves & Humphrey, 2018).

In addition, the current study uncovered a set of alternative beliefs among a subsection of nurse participants, which illustrated their perception that a nurse's personal trauma experience may be helpful or detrimental in the implementation of TIC into

practice. Of note, this cohort was revealed within the larger study population ($N = 15$), which found that 66% ($n = 10$) of nurse participants self-disclosed a history of personal or family trauma. The current study's rate that showed 66% of nurse participants with reported personal trauma histories is nearly identical to the findings of a study that investigated the rates of historical trauma among psychiatric nurses and behavioral health practitioners, which found a 66.4% rate of reported personal histories of ACEs/TEs in its study population (see Butler et al., 2018). Moreover, the current study's elevated rate of disclosed personal trauma histories among the nurse participants confirms previous studies that examined the prevalence of intimate partner and family violence against health professionals, which reported a higher incidence of past physical violence, sexual interpersonal violence, and childhood sexual assault among nurses and other health care professionals compared to the general population (see Carmona-Torres et al., 2018; Lavoie et al., 2016; McLindon et al., 2018; Reeves, 2015; Sansbury et al., 2015).

As such, the current study revealed the cohort's perception that they had the ability to implement TIC into practice without difficulty due to the adaptive coping skills they acquired during their recovery from their personal traumatic experiences. In contrast, alternative findings were presented in earlier quantitative research that assessed trauma providers' knowledge, views, and practice of the principles of TIC (see Bruce et al., 2018). Specifically, Bruce et al. (2018) revealed that healthcare providers who reported intimate exposure to a close family member that had sustained serious traumatic injuries did not show a difference in their level of knowledge or competence in the use of TIC methods compared to other study participants. The results of Bruce et al. that showed

no comparative difference in trauma-exposed participant's competent use of TIC conflict with the present study's finding that showed nurse participants perception that their personal trauma experience would positively impact their ability to implement TIC into practice. It is unclear whether the participants in Bruce et al. received training in TIC prior to data collection as was the case in the present study, which may account for the comparative discrepant findings.

Moreover, I identified an alternative thematic finding in the cohort's textual interview data, which revealed that 60% ($n = 6$) of the 10 trauma-exposed participants perceived that a nurse's personal history of ACEs/TEs may interfere with their ability to successfully implement TIC into practice if they have not developed coping strategies in anticipation of potential personal trauma triggers. This finding supports earlier research that investigated secondary posttraumatic stress and nurses' emotional responses to patient's trauma, which purported to show that incidents of vicarious trauma may be related to nurses' overidentification with the trauma-exposed patients due to the nurses own personal history of trauma (see Missouridou, 2017). In addition, the alternative thematic finding is consistent with the results of past studies that explored nurses' knowledge and experience of using TIC, which revealed the belief that barriers may exist that could affect the successful implementation of TIC such as nurse's personal history of trauma and vicarious trauma (see Reeves, 2015; Stokes et al., 2017). Similarly, prior research that investigated factors associated with post-traumatic stress in nurses described how negative outcomes may result if nurses do not address unresolved trauma histories

and vicarious trauma (see Creedy & Gamble, 2016; Morrison & Joy, 2016; Lavoie et al., 2016; Zerach & Shalev, 2015).

Limitations of the Study

There are four primary limitations that may affect the inferences that others can draw from this study. The first limitation of this study is the self-reported nature of the nurse participants' knowledge about the principles of TIC. As previously discussed, self-reported perceived knowledge is not always related to tested factual knowledge (Ladwig et al., 2012; Su et al., 2014). Since it was beyond the scope of this study to test the participants' factual knowledge of TIC, although I minimized this limitation with the implementation of study protocols that required all participants to have prior documented training in TIC. In this respect, the participants previous participation in TIC training was used to demonstrate their acquaintance with the topic. Second, as with all qualitative hermeneutical research, the themes that I identified in the findings of the study may be interpreted differently by other researchers because each is influenced by their preconceptions when interpreting data (see Koch, 2006; Lub, 2015). Consequently, differing views of the current study's results is a limitation of its transferability to other populations. Hence, to aid with the transfer of the study's findings to different settings, I included thick rich descriptions about the context of the study, data collection processes, and the procedures and research rationales that I used to analyze the data (see Bloomberg & Volpe, 2016). The third significant limitation of the study developed after only half of the data had been collected when the COVID-19 pandemic ensued. As a result, I abruptly lost access to the partner site to conduct in-person participant interviews, observe nurses

in the facility milieu, and examine facility documents. To overcome this unanticipated limitation, I amended the study's data collection process, in line with Walden University's IRB authorization, and the remaining interviews were completed in a virtual manner. Of note, due to the inability to access facility documentation and observe the nurse participants in their milieu the Gadamerian interpretation of the data may be incomplete since only a part of the data was collected in person. Similarly, the fourth limitation of the study is its ambiguous finding of nurse participants' descriptive normative beliefs about whether important referents would implement TIC into practice. This data limitation caused a gap in the results related to the study's theoretical model, which potentially limits the ability for added research to use the descriptive normative belief findings from this study. Although I validated the interview questions via an expert panel and pilot study, future research may wish to re-validate the interview questions that were designed to elicit participants descriptive normative beliefs. Equally, the ability to fully determine participants' descriptive normative beliefs may have been affected by the unavoidable diminished access to visit the partner site that I experienced mid-data collection as previously described.

As such, I believe this study might have achieved a deeper understanding about the meaning of all nurse participants elicited beliefs if the entire data collection process could have been conducted at the partner site. As previously discussed, the thematic outcomes presented in this study were developed with strident strategies to demonstrate trustworthiness. In this regard, ample evidence has been presented to attest to the credibility, transferability, dependability, and confirmability of the study's results

although prudence is advised when applying this study's findings related to descriptive normative beliefs in future research.

Recommendations

The strength of this study is its leading formative research design that I used to identify and examine nurses' a priori beliefs about implementing TIC into nursing practice. In addition, the study achieved a high level credibility, dependability, confirmability, and transferability due to its rigorous use of several strategies that increased the trustworthiness of the study's findings; which included prolonged participant engagement, data triangulation, audit trail, member checking, peer debriefing, inter-rater reliability, researcher reflexivity, theme development, acknowledgement of discrepant finding, and rich descriptions of the data collection, analysis, and interpretation processes. As such, future translational research should use the study's results to further investigate and measure nurses' intention to implement trauma-informed care into nursing practice to mitigate inadvertent patient retraumatization. In addition, additional research is needed to expand the study's findings that revealed participant's descriptive normative beliefs to better illustrate nurses' perceptions of whether important referents are implementing and encouraging the use of TIC methods (see Ajzen & Fishbein, 2014). Moreover, further research is needed to identify background factors (e.g., organizational culture, intelligence, personality traits, self-esteem, and global attitudes toward objects, issues, and events) that may contribute to the formation of nurses' beliefs about the use of TIC in practice as described in Fishbein and Ajzen's (2010) TPB reasoned action framework (see Figure 4; Chapter 2).

As previously discussed, the results from this study revealed a gap in the body of research, which showed that there is a lack of empirical studies to understand how nurses communicate with each other about the implementation of TIC into nursing practice. In this regard, the results of this study align with other studies in the field of TIC, which suggested that organizational processes that encourage nurse mentoring, regular debriefing, and reflection on practice may aid in embedding the translation of TIC knowledge into practice (see Hall et al., 2016; Muskett, 2014). Therefore, future research is needed to investigate organizational processes that promote interprofessional dialogue and beneficial communication strategies within nursing teams to help with the successful implementation of TIC into nursing practice. Furthermore, as described in Chapter 2, although TIC has been implemented in numerous organizations and specialty fields, I was unable to locate evaluation studies that have assessed the efficacy of TIC to mitigate patient retraumatization and improve health outcomes. Hence, outcome-based empirical studies are needed to evaluate the effectiveness of nurses use of TIC to mitigate patient retraumatization and improve health outcomes. Finally, future research should aim to use the study's belief-based findings to develop interventions that target the beliefs, which were revealed in the study, to improve nurses' use of TIC and mitigate patient retraumatization.

Implications

The results of the study could have positive social change implications in the following ways:

1. The findings of the study may contribute to the scant body of theoretically based formative studies to better understand the determinants that influence nurses' perceptions about implementing TIC into practice.
2. The outcomes of the study may expand nurse's knowledge and understanding about TIC the effects of trauma on patient behavior and assist nurses to implement TIC in a meaningful manner.
3. The results of this study may impact nurses' acceptance and use of TIC to potentially decrease stigmatization of patients who exhibit maladaptive coping mechanisms and mitigate inadvertent retraumatization of patients with disabilities and histories of trauma.
4. The findings of this study may encourage nurses' use of TIC to potentially improve patient's sense of empowerment and use of adaptive coping skills as a result of decreased retraumatization during episodes of nursing care.
5. The outcomes of the study may improve administrator's recognition that incidents of vicarious secondary trauma may affect some nurses' ability to effectively implement TIC to care for patients with histories of trauma.
6. The results of this study may expand strategies to implement theory-based trauma-informed nursing practices in private and public health organizations to improve the care of patients with known and unknown histories of ACEs/TEs.
7. The findings of the study may influence future research to investigate theory-based intervention strategies that target the beliefs nurses hold about implementing TIC into to nursing practice.

Conclusion

This study offered insight into the lived experience of nurses who implemented TIC into nursing practice for the care of patients with physical disabilities, known or unknown histories of ACEs/TEs, and secondary maladaptive coping behaviors at a skilled-nursing facility in a midsized city in the State of Michigan. I conducted this study with the heartfelt desire to positively influence nurses understanding about the effects of trauma and adaptation of TIC into nursing practice. It is my hope that the findings from this study will bring awareness to the need to implement theory-based trauma-informed nursing methods of practice to avoid and mitigate inadvertent retraumatization of patients with histories of trauma during nursing care. Advancement of nurses understanding and response toward trauma-exposed individuals with maladaptive coping mechanisms has the potential to improve the health outcomes in this population.

I appreciate the opportunity to examine how nurse participants experienced the implementation of the novel method of TIC into nursing practice. Graciously, I was able to develop a partnership with the nurse participants to co-discover the beliefs that emerged during of their journey of implementing TIC into practice following TIC education and introduction of trauma-informed guidelines at the partner site. Out of this endeavor, the nurses and I discovered their deeply held conviction of empathy and sense of duty to protect patients from inadvertent retraumatization. As co-researchers, we also revealed the nurse participants' perception of empowerment and reprieve via TIC because they were given the tools and knowledge to better care and support patients with known and unknown histories of ACEs/TEs. In discovering these results, many

participants self-revealed their personal histories of trauma and how their experience impacted their nursing practice. This subset of nurse participants provided powerful testimony about how they were able to use their personal trauma experience and recovery process to provide enhanced empathetic care and adapt trauma-informed practices with all patients.

In closing, empathetic, caring, professional, and evidenced-based nursing practice and community health have been my passion for over 30 years as a registered nurse and health educator. Although this study only represents a small sample of nurses in one skilled-nursing facility in the State of Michigan, the findings supply a new understanding about nurse's perspectives of TIC and their implementation of TIC into nursing practice. I encourage more research to better understand the impact of nurses use of TIC to care for patients with disabilities and the adaptation of trauma-informed principles across all spectrums of patient care.

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Appendix A: Demographic Screening Survey

Thank you for agreeing to participate in my dissertation research project. Please remember that all information disclosed at any point in the process will be kept strictly confidential.

1. First name: _____ Last name: _____
2. E-mail address: _____ Cell Phone number: _____
3. Best way to contact (circle one): Phone Text Email
4. What is the best time and way to contact you? _____
5. Are text messages okay? Yes No
6. Are you currently a licensed nurse in the State of Michigan? Yes or No
7. Please circle if you are an: LPN or RN
8. Are you currently working in a skilled nursing facility that has implemented Trauma Informed Care? Yes or No
9. Have you received prior training in Trauma Informed Care? Yes or No
10. Are you able to read, write, and speak English? Yes or No
11. Do you have at least one year of full-time nursing experience? Yes or No
12. Do you have Internet and email access, competence in using email, and basic computer skills?
13. Do you have experience caring for patients that have been exposed to traumatic events and have manifested maladaptive coping mechanisms? Yes or No

This study has been reviewed and approved by the Research Ethics Review Board, Walden University. IRB# 09-25-19-0083644 approval expires on September 24th, 2020.

Appendix B: Sample Recruitment Protocol

The following steps will be used to recruit participants:

1. Contact Healthcare Association of Michigan (HCAM) via phone call or in person to request a list of skilled nursing facilities who have implemented TIC with their nursing staff including the contact information for the Chief Nursing Officer (CNO) (note: if the facility does not have a CNO, or the CNO isn't the appropriate person to contact at the facility, the proper designated decision authority, per information provided by HCAM, will be contacted).
2. Contact CNOs or designated authority, whom the HCAM representative has identified, via phone call or in person, or via email if available, with a request to schedule a meeting to discuss the possibility of performing my proposed study at their facility.
3. Obtain site approval.
4. Attend scheduled dates to recruit participants in staff areas and at staff meetings to present the proposed study the last few minutes of the meeting to introduce the study and distribute study informational flyers, such that the potential participants can then take their time to decide later about participation.
5. Prospective participants will be sent a solicitation email (See Attachment K: Participant E-mail Solicitation Letter) inviting them to participate in the study and requesting a preferred contact email, phone number, and a time when I can review the study information form with them.
6. When interested participants contact me, I will complete a phone screening using the demographic screening survey.
 - a. Have the schedule with timeline of research activities available at time of phone call.
 - b. Select study participants based on the criterion for the study and schedule qualified participants for face-to-face interview.
 - c. Verify interested participant's email address and ask them to check their email for information and informed consent to review prior to the interview.
 - d. Email study information to prospective participant. Request for the prospective participant to review the informed consent which will be signed at the interview.
7. Collect the data for the study.

This study has been reviewed and approved by the Research Ethics Review Board, Walden University. IRB# 09-25-19-0083644 approval expires on September 24th, 2020.

Appendix C: Interview Guide

Demographic Information

Date: _____

Name: _____

Address: _____

Phone Number: _____

Email: _____

1. Participant pseudonym: _____
2. Gender: _____ Female _____ Male _____ Other
3. Age: _____ years
4. What term do you use to describe your ethnicity? _____.
5. Length of time practicing as a licensed nurse _____.
6. Authorized to be recorded during the interview: YES NO

Interview Questions

Behavioral beliefs

1. Describe the positive feelings or emotions (i.e., likes or gratification) you have about using TIC in nursing practice over the next 12 months?
2. Describe the negative feelings or emotions (i.e., dislikes or loathing) you have about using TIC in nursing practice over the next 12 months?
3. In your opinion, what do you see are the positive effects (i.e., benefits or advantages) of using TIC in nursing practice over the next 12 months?
4. In your opinion, what do you see are the adverse effects (i.e., inconveniences or disadvantages) of using TIC in nursing practice over the next 12 months?
5. What else influences your feelings about using TIC in nursing practice over the next 12 months?

Normative beliefs

6. Which individuals or groups do you think are most likely use TIC in nursing practice over the next 12 months?
7. Which individuals or groups do you think are least likely to use TIC in nursing practice over the next 12 months?
8. Who in your life (i.e., individuals or groups) do you think would support or approve of you using TIC in nursing practice over the next 12 months?
9. Who in your life (i.e., individuals or groups) do you think would object or disapprove of you using TIC in nursing practice over the next 12 months?

Control beliefs

10. What are some of the things you believe would make it easier for you to use TIC in nursing practice over the next 12 months?
11. What are some of the things you believe would make it harder for you to use TIC in nursing practice over the next 12 months?
12. If you have the desire to use TIC in nursing practice, how certain do you feel that you can use TIC over the next 12 months?

13. Please describe what personally comes up for you (i.e., personal traumatic experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?
14. Please describe what professionally comes up for you (i.e., traumatic work experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?

Probing questions

- “What did that do for you?” (Munhall, 2007, p. 185)
- “(After a sentence) Go on...Could you elaborate more on that?” (Munhall, 2007, p. 185)
- “(After a period of silence, ask) Can you tell me what you are thinking about?” (Munhall, 2007, p. 185).
- “Would you elaborate on that?” (Patton, 2015, p. 465).
- “What was that like for you?” (Seidman, 2013, p. 88).

Holistic debriefing questions (Moldjord & Hybertsen, 2015)

- How did this interview experience affect you emotionally?
- How did this interview experience affect you physically?
- What did you learn from the interview experience?
- What do you need after completing the interview?

Pilot study questions (Francis et al., 2004)

These questions will not be included in the main study.

- Are any items ambiguous or difficult to answer?
- Does the questionnaire feel too repetitive?
- Does it feel too long?
- Does it feel too superficial?
- Are there any annoying features of the wording or formatting?
- Are there inconsistent responses that might indicate that changes in response endpoints are problematic for respondents who complete the questionnaire quickly? (p. 27)

This study has been reviewed and approved by the Research Ethics Review Board, Walden University. IRB# 09-25-19-0083644 approval expires on September 24th, 2020.

Appendix D: Reflexivity Journal Template

Reflexivity Matrix: The Position of the Subject of Objectivation

Research process stage	In the overall social space	Within the field of specialists	Within everything that is linked to membership of the scholastic universe
Pre-research	Cell 1 How do researchers' broader motivations affect the reason to conduct research in the first place, the choice of topic and research question, and the choice of methodology? What is the researcher's conceptualization of "health?"	Cell 2 What is the relationship between the researcher and the health care field? How is the choice of topic relevant to health care?	Cell 3 Where does the researcher's interests (and conflicts of interest) lie within the relevant literature and its interpretations?
Data collection	Cell 4 What are the shared and divergent understandings between the researcher and participants with regard to research generally and to the health-related topic? Are there any differences of a social nature, for example, gender, education, or experience? To what extent are meanings negotiated between the researcher and participants, and how is this influenced by life experiences? Is the researcher prepared to undergo change as a result of their interaction with the research? What of the potential for change in the participant?	Cell 5 Do the researcher and participants share the same language, especially if they come from different health disciplines? Are there any power differentials between the researcher and participant, based on positions held (present or past), health discipline, or education?	Cell 6 Are questions (or prompts) inadvertently shaped by popular (perhaps fleeting) scholarly opinion?
Data analysis	Cell 6 [Intentionally blank]	Cell 7 How does the researcher's experience with the field shape analysis? Are some data dismissed as being commonplace, whereas they might warrant deeper interrogation? To what extent does the researcher consider the balance of analytical authority to rest with the participant or with the researcher?	Cell 8 How does the researcher moderate any drive for outcomes that might inadvertently lead to data omissions or fabrications?

Note. Adapted from "Portraying Reflexivity in Health Services Research," by J. Rae and B. Green, 2016, *Qualitative Health Research*, 26(11), p. 1545. Copyright 2016 by SAGE Publishing. Adapted with permission by authors (see Appendix J).

Appendix E: Therapy Referrals

All participants who may need or want mental health services following participation in this study can find resources through therapistfinder.com and psychologytoday.com. These sites state that they have trauma-informed therapists available. Therapists' contact information can be obtained on the websites by location and zip code.

Therapy referral websites:

www.therapistfinder.com

www.psychologytoday.com

This study has been reviewed and approved by the Research Ethics Review Board, Walden University. IRB# 09-25-19-0083644 approval expires on September 24th, 2020.

Appendix F: Data Collection Plan

The following steps will be used in the data collection process:

1. For each scheduled face-to-face interview bring recording device, a note pad, pen, and copies of the study information sheets.
2. At the beginning of the interview, I will introduce study and read aloud the following information about the interview process:
 - a. This interview will be semi-structured with prewritten questions that I will verbally ask to you. However, there may be times that we depart from the questions and probe deeper into the conversation .
 - b. The purpose of this study was to examine nurses lived experience of implementing trauma-informed care (TIC) into nursing practice for the care of patients with physical disabilities, known or unknown histories adverse childhood experiences or traumatic experiences (ACEs/TEs), and secondary maladaptive coping behaviors at a skilled-nursing facility in a mid-sized Michigan city.
 - c. The final dissertation manuscript will not contain any identifying information connecting you to statements that you make. To prevent identification, I will use a pseudonym in place of your name in my dissertation manuscript.
 - d. This interview is scheduled to last 1 hour and will be audio recorded for transcription purposes. After the interview is transcribed, the recordings will be deleted.
 - e. You can choose to stop the interview at any time or pass on any questions.
3. Do you have any questions?
4. During the interview, provide a copy of the informed consent form to each participant and verbally review the contents of the consent form.
5. Ask participant to sign the consent form.

Appendix G: TPB Figure Copyright Permission

5/1/2019

Mail - Lee Blazejewski - Outlook

Re: Copyright permission

Icek Aizen xxx@psych.umass.edu>

Wed 5/23/2018 12:01 PM

To: Lee Blazejewski xxx@waldenu.edu>

The theory of planned behavior is in the public domain. No permission is needed to use the theory in research, to construct a TPB questionnaire, or to include an ORIGINAL drawing of the model in a thesis, dissertation, presentation, poster, article, or book. If you would like to reproduce a published drawing of the model, you need to get permission from the publisher who holds the copyright. You may use the drawings on my website ("<https://people.umass.edu/aizen/tpb.diag.html>" or "<https://people.umass.edu/aizen/tpb.background.html>") for non-commercial purposes, including publication in a journal article, so long as you retain the copyright notice.

Best regards,

Icek Ajzen
Professor Emeritus
University of Massachusetts - Amherst
<https://people.umass.edu/aizen>

On Mar 24, 2018, at 11:43, Lee A. Blazejewski xxx@waldenu.edu> wrote:

Hello,

I am using the Theory of Planned Behavior in my PhD dissertation and my university informed me that I need written expressed permission from the publisher to use the Theory of Planned Behavior diagram by Dr. Icek Ajzen, Copyright 2006. Please tell me how to obtain written permission to incorporate this diagram in my dissertation proposal. Thank you very much!

Sincerely,

Lee Ann Blazejewski
xxx@waldenu.edu
Cell: xxx-xxx-xxxx

Appendix H: TRA Figure Copyright Permission



Permissions
4th Floor, Auto Atlantic
Corner, Hertzog Boulevard &
Heerengracht
Cape Town, 8001
South Africa
USAPermissions@pearson.com

May 2, 2019

PE Ref # 208788

Lee Ann Blazejewski
WALDEN UNIVERSITY

Dear Lee Ann Blazejewski,

You have our permission to include content from our text, *UNDERSTANDING ATTITUDES & PREDICTING SOCIAL BEHAVIOR, 1st Ed. by AJZEN, ICEK; FISHBEIN, MARTIN*, in your dissertation or masters thesis at Walden University.

Content to be included is:
100 Figure 8.1

Please credit our material as follows:
AJZEN, ICEK; FISHBEIN, MARTIN, UNDERSTANDING ATTITUDES & PREDICTING SOCIAL BEHAVIOR, 1st, ©1980. Reprinted by permission of Pearson Education, Inc., New York, New York.

Sincerely,
Michael Prince,
Permissions Granting Analyst

Appendix I: Reasoned Action Figure Copyright Permission

12/27/2018

RightsLink - Your Account

Welcome To RightsLink

Dec 27, 2018

This is a License Agreement between Lee A Blazejewski ("You") and Taylor and Francis Group LLC Books ("Taylor and Francis Group LLC Books") provided by Copyright Clearance Center ("CCC"). The license consists of your order details, the terms and conditions provided by Taylor and Francis Group LLC Books, and the payment terms and conditions.

All payments must be made in full to CCC. For payment instructions, please see information listed at the bottom of this form.

License Number	4342581221692
License date	May 05, 2018
Licensed Content Publisher	Taylor and Francis Group LLC Books
Licensed Content Title	Predicting and Changing Behavior : The Reasoned Action Approach
Licensed Content Date	Feb 14, 2011
I would like to...	Thesis/Dissertation
Requestor type	Academic institution
Format	Print
Portion	chart/graph/table/figure
Number of charts/graphs/tables/figures	2
The requesting person/organization is:	Lee Ann Blazejewski
Title or numeric reference of the portion(s)	Schematic presentation of the reasoned action model.
Title of the article or chapter the portion is from	Chapter 1
Editor of portion(s)	NA
Author of portion(s)	Martin Fishbein, Icek Ajzen
Volume of serial or monograph.	NA
Issue, if republishing an article from a serial	1st Edition
Page range of the portion	18
Publication date of portion	2010
Rights for	Main product
Duration of use	Life of current edition
Creation of copies for the disabled	no
With minor editing privileges	no
For distribution to	Worldwide
In the following language(s)	Original language of publication
With incidental promotional use	no
The lifetime unit quantity of new product	Up to 499
Title	Nurses Perspectives Of Trauma Informed Care
Instructor name	Dr. Harold Griffin
Institution name	Walden University

Appendix J: Reflexivity Matrix Copyright Permission

5/1/2019

Mail - Lee Blazejewski - Outlook

RE: Reflexivity Matrix Copyright problem

Rae, John <jrae@csu.edu.au>

Mon 3/11/2019 5:35 PM

To: Lee Blazejewski <lee.blazejewski@waldenu.edu>

Cc: Green, Bill <bigreen@csu.edu.au>

Dear Lee

Thanks you for your email.

Bill Green and I do not see any problem in you referring to our paper and using the reflexivity matrix that we described. As you suggested, all that is required is for you to reference in the usual way.

I have noticed other doctoral students using the matrix and you may be interested to see how that have done that. One example would be: Stroud, K. (2018). *"You have to sometimes be like a bulldog": Filial Caregiver Experiences Supporting their Parents During the Transition from Hospital to Home in Ontario* (Doctoral dissertation).

We always thought that the matrix should be applied flexibly and that researchers should feel free to modify the cell questions to suit their research context.

Good luck with your project.

John

From: Lee Blazejewski [mailto:lee.blazejewski@waldenu.edu]

Sent: Monday, 11 March 2019 3:03 AM

To: Rae, John <jrae@csu.edu.au>; Green, Bill <bigreen@csu.edu.au>

Cc: Harold Griffin <dochraygriffin@yahoo.com>; Harold R. Griffin <harold.griffin@mail.waldenu.edu>

Subject: Reflexivity Matrix Copyright problem

Dear Dr. Rae and Dr. Green,

I am a PhD student and I tried to obtain copyright permissions via the Copyright Clearance Center to use the Reflexivity Matrix that you presented in your distinguished article, "Portraying Reflexivity in Health Services Research". However, I received an email from the Copyright Clearance Center that my request was cancelled and denied. I have attached the cancelled request to this email.

I am appealing to you directly to ask if you could please reconsider my request and allow me to use your Reflexivity Matrix solely for the purposes of demonstrating in my dissertation how I accomplished reflexivity in my study. I am currently at the proposal approval stage in my dissertation process and I have not completed my study yet. The purpose of my proposed study is to examine the lived experience of nurses whose skilled-nursing rehabilitation facility, in Oakland County, MI, has adopted research-based trauma-informed care in the treatment of physically disabled patients who were subjected to Adverse Childhood Experiences/Traumatic Experiences (ACEs/TEs) and developed maladaptive coping mechanisms. Also, my proposed study will use a qualitative hermeneutic phenomenological research tradition and will explore rehabilitation nurses' perceptions about TIC through the lens of Icek Ajzen's theory of planned behavior (TPB) (Ajzen, 1985).

Appendix K: Piloted Validation Tool

Subject matter expert appraisal of interview questions to establish content validity

Title of Study: Nurses Perspectives of Trauma-Informed Care

Student Investigator: Lee Ann Blazejewski, MBA, MPH, BS, RN

PhD Candidate Walden University

E-mail: lee.blazejewski@waldenu.edu

Phone: 517-282-6341

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study was to examine nurses lived experience of implementing trauma-informed care (TIC) into nursing practice for the care of patients with physical disabilities, known or unknown histories adverse childhood experiences or traumatic experiences (ACEs/TEs), and secondary maladaptive coping behaviors at a skilled-nursing facility in a midsized Michigan city.

INSTRUCTIONS FOR VALIDATING THE QUESTIONNAIRE: This tool has 14 questions that fall into the following five thematic domains:

1. Universal trauma precautions
2. Educating patients and families about ways to cope with ACEs/TEs
3. Preventing re-traumatization of patients
4. Nurses' personal history of ACEs/TEs
5. Vicarious trauma

In addition, please see the *Appendix: Interview Guide Rationale* which demonstrates the relationship between the research questions, the theory of planned behavior theoretical constructs, domain themes, interview items, and citations of the thematic domains.

Kindly review this tool and provide your feedback related to the five thematic domains listed above including:

1. The relevance of each question in the tool (how important is the question)
2. The clarity of each question (how clear is the wording)
3. The essentiality of each question (how necessary is the question)
4. Recommendations for improvement of each question

If you have any comments or correction regarding the Interview Questionnaire, please make them on the space provided on the validation tool. Thank you so much for your valuable time!!

This study has been reviewed and approved by the Research Ethics Review Board, Walden University. IRB# 09-25-19-0083644

Relevant Scale: 1 = Not relevant; 2 = Somewhat relevant; 3 = Quite relevant; 4 = Very relevant
Clarity Scale: 1 = Not clear; 2 = Item needs some revision; 3 = Very clear
Essential Scale: 1 = Not essential; 2 = Useful but not essential; 3 = Essential

Instructions that will be given to the study participants at the beginning of the interview: "The following questions ask your personal experience of implementing trauma-informed care into nursing practice in the past 12-months. There are no right or wrong responses; I am merely interested in your personal opinions. In response to the questions below, please list the thoughts that come immediately to mind."

Interview Questions

Section 1. Informational prompt that will be read to each participant: "Trauma-informed care is based on the understanding that many patients have suffered traumatic experiences. Therefore, according to the principles of TIC, using universal trauma precautions is defined as approaching all patients as if they have experienced psychological trauma regardless of whether a person has a known history of a traumatic event"

- Q1. What do you like or enjoy about using TIC? Please describe your feelings about what you like about using TIC in nursing practice.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q1	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input checked="" type="radio"/>	1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q2. What do you dislike or hate about using TIC? Please describe your feelings about what you dislike about using TIC in nursing practice.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q2	1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input checked="" type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q3. What do you see as the advantages of using universal trauma precautions?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q3	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q4. What do you see as the disadvantages of using universal trauma precautions?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q4	1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q5. What else comes to mind when you think about using universal trauma precautions?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q5	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

Section 2. Informational prompt that will be read to each participant: "Sometimes, when we are not sure what to do, we look to see what others are doing."

- Q6. Please describe individuals or groups who are most likely to educate patients and families about ways to cope with distressing experiences.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q6	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q7. Please describe individuals or groups who are least likely to educate patients and families about ways to cope with distressing experiences.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q7	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

Section 3. Informational prompt that will be read to each participant: "When it comes to using trauma-informed practices, there might be individuals or groups who would think you should or should not perform this behavior."

- Q8. Is there anything else you associate with other people's views about you personally educating patients and families about ways to cope with distressing experiences?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q8	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q9. What comes to mind when you think of those individuals who educate patients and families about ways to cope with distressing experiences?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q9	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q5. What else comes to mind when you think about using universal trauma precautions?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q5	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

Section 2. Informational prompt that will be read to each participant: "Sometimes, when we are not sure what to do, we look to see what others are doing."

- Q6. Please describe individuals or groups who are most likely to educate patients and families about ways to cope with distressing experiences.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q6	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q7. Please describe individuals or groups who are least likely to educate patients and families about ways to cope with distressing experiences.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q7	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

Section 3. Informational prompt that will be read to each participant: "When it comes to using trauma-informed practices, there might be individuals or groups who would think you should or should not perform this behavior."

- Q8. Is there anything else you associate with other people's views about you personally educating patients and families about ways to cope with distressing experiences?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q8	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q9. What comes to mind when you think of those individuals who educate patients and families about ways to cope with distressing experiences?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q9	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

Section 4. Informational prompt that will be read to each participant: "TIC focuses on rebuilding a patient's sense of control and empowerment by enhancing their emotional, physical, and psychological wellbeing via a safe environment that avoids re-traumatization."

- Q10. What factors or circumstances would make it easy for you to use trauma-informed communication practices to prevent re-traumatization of trauma-exposed patients?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q10	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q11. What factors or circumstances would it difficult for you from using trauma-informed communication practices to prevent re-traumatization of trauma-exposed patients?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q11	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q12. What else comes to mind when you think about using trauma-informed communication practices to prevent re-traumatization of trauma-exposed patients?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q12	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q13. What factors in your personal history (i.e., personal ACEs/TECs) do you believe effect your ability to implement trauma-informed care and avoid re-traumatization with your patients? Please give examples.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q13	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- Q14. What experiences in your nursing career (i.e., vicarious trauma) do you believe effect your ability to implement trauma-informed care and avoid re-traumatization with your patients? Please give examples.

	How relevant is this item?	Is this item clear?	How essential is this item?
Q14	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

Submit

Appendix L: Validation Tool Modified with Final Interview Items

Subject matter expert appraisal of interview questions to establish content validity

Title of Study: Nurses Perspectives of Trauma-Informed Care

Student Investigator: Lee Ann Blazejewski, MBA, MPH, BS, RN

PhD Candidate: Walden University

E-mail: lee.blazejewski@waldenu.edu

Phone: 517-282-6341

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study was to examine nurses lived experience of implementing trauma-informed care (TIC) into nursing practice for the care of patients with physical disabilities, known or unknown histories adverse childhood experiences or traumatic experiences (ACEs/TEs), and secondary maladaptive coping behaviors at a skilled-nursing facility in a mid-sized Michigan city.

INSTRUCTIONS FOR VALIDATING THE QUESTIONNAIRE: This tool is based on the theory of planned behavior's constructs of behavioral beliefs, normative beliefs, and control beliefs. Kindly use this tool to reevaluate the revised interview questions and rate each interview item's relevance, clarity, and essentiality using these definitions:

1. The relevance of each question in the tool (how important is the question)
2. The clarity of each question (how clear is the wording)
3. The essentiality of each question (how necessary is the question)
4. Recommendations for improvement of each question

If you have any comments or correction regarding the Interview Questionnaire, please make them on the space provided on the validation tool. Thank you so much for your valuable time!

This study has been reviewed and approved by the Research Ethics Review Board, Walden University, IRB# 09-25-19-0083644

**Follow-up Expert Panel Validation Tool
for qualitative TPB interview guide**

Instructions for expert panel raters: Kindly use this tool to reevaluate the revised interview questions and rate each interview item's relevance, clarity, and essentiality using these definitions:

1. The relevance of each question in the tool (how important is the question)
2. The clarity of each question (how clear is the wording)
3. The essentiality of each question (how necessary is the question)
4. Recommendations for improvement of each question

Relevant Scale: 1 = Not relevant; 2 = Somewhat relevant; 3 = Quite relevant; 4 = Very relevant
Clarity Scale: 1 = Not clear; 2 = Item needs some revision; 3 = Very clear
Essential Scale: 1 = Not essential; 2 = Useful but not essential; 3 = Essential

- **Q1.** Describe the positive feelings or emotions (i.e., likes or gratification) you have about using TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q1	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q2.** Describe the negative feelings or emotions (i.e., dislikes or loathing) you have about using TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q2	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q3.** In your opinion, what do you see as the positive effects (i.e., benefits or advantages) of using TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q3	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q4.** In your opinion, what do you see as the adverse effects (i.e., inconveniences or disadvantages) of using TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q4	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q5.** What else influences your feelings about using TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q5	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q6.** Which individuals or groups do you think are most likely use TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q6	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q7.** Which individuals or groups do you think are least likely to use TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q7	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q8.** Who in your life (i.e., individuals or groups) do you think would support or approve of you using TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q8	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q9.** Who in your life (i.e., individuals or groups) do you think would object or disapprove of you using TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q9	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q10.** What are some of the things you believe would make it easier for you to use TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q10	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q11.** What are some of the things you believe would make it harder for you to use TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q11	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q12.** If you have the desire to use TIC in nursing practice, how certain do you feel that you can use TIC over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q12	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q13.** Please describe what personally comes up for you (i.e., personal traumatic experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q13	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

- **Q14.** Please describe what professionally comes up for you (i.e., traumatic work experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?

	How relevant is this item?	Is this item clear?	How essential is this item?
Q14	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>	1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/>

Reviewer comment:

Submit

Appendix M: Thematic Codes

TPB belief-based constructs	Interview Questions	A priori codes	Thematic codes	Participant quote exemplars
Behavioral Beliefs	Describe the positive feelings or emotions (i.e., likes or gratification) you have about using TIC in nursing practice over the next 12 months? In your opinion, what do you see are the positive effects (i.e., benefits or advantages) of using TIC in nursing practice over the next 12 months?	Positive	Relieves burden	“I think it will assist us in relieving our undue or unnecessary our behaviors.” #Nurse12
			Benefit to staff	“I think it will assist patients and staff in relationship building which in long term care is a core component in getting good care.” #Nurse1
			Benefit to residents	“I think is very helpful because you have to know your residents and once you know them you know the little things about them.” #Nurse12
			Trust/relationship building	“So, it's really important that you build that rapport with them so that they trust you so they will take their medications and they will open up and it's like your part of their family, so, they have to be able to trust you.” #Nurse10
			Person-centered model	“I just think it's going to be a positive step to like I said treat everyone as an individual and not like in the care or you know everyone.” #Nurse12
			Sensitivity to needs (of patients)	I liked it because it lets each resident know that we're being sensitive to their issues whether they have them or not. Like especially if somebody has like a history of sexual abuse we try, if they're a female we will just automatically ask them, “Would you prefer a female caregiver?” #Nurse12 “...just being sensitive to different needs of residents. Like if you have a resident that was a victim of physical abuse just keep in mind that you're not, you're explaining to them what you're doing.” #Nurse10
			Patient comfort	“So, it'll make them.

TPB belief-based constructs	Interview Questions	A priori codes	Thematic codes	Participant quote exemplars
				[residents] maybe more comfortable in their environment.” #Nurse13
	Describe the negative feelings or emotions (i.e., dislikes or loathing) you have about using TIC in nursing practice over the next 12 months?	Negative	Model inflexibility/limitations	“Yeah, because it’s a model...You’re having to do it on everybody, which tends to overwhelm assessors when you have to do something for everyone.” #Nurse1
	In your opinion, what do you see are the adverse effects (i.e., inconveniences or disadvantages) of using TIC in nursing practice over the next 12 months?		Time consuming & overwhelming	“We have to be able to make decisions based on what the situation is, not what is current or popular in a field. We need to be straight across the board.” #Nurse1
			Staff burnout/trauma	“Is there a way to find interventions that aren’t people focused?” #Nurse12
				“You’re creating and causing burnout by limiting individuals instead of focusing on other programs and options that could help get through and prevent retraumatization other than limiting people caring for other people.” #Nurse12
				“But I feel like when you push a certain model, you have to assess everyone for those indicators, not just people that are symptomatic or showing difficulties in certain areas. You have to do it with everybody. That’s additional time, additional stress on assessors.” #Nurse1
			Subjectivity (trauma)	“Who is to say one person’s trauma is more important than another person’s trauma?” #Nurse1
				“You have a resident who wants a female caregiver, well, what if we don’t have any? So, what if we have all male caregivers? Then we’ve started this trend of all you’re only going to have females and then suddenly we can’t and then that trust is broken.” #Nurse9
Normative beliefs	Which individuals or groups do you think are most likely use TIC in nursing practice	Most likely to use TIC	Social workers	“Social Work” #Nurse1

TPB belief-based constructs	Interview Questions	A priori codes	Thematic codes	Participant quote exemplars
	over the next 12 months?		Critical and curious thinkers	“I prefer more than somebody that doesn’t ask questions. Because then I think that that person is going through the critical thinking process and needs to understand why they’re doing something. Which when you’re in a professional environment and as a nurse or a social worker, we should always be asking why we’re doing something before we do it.” #Nurse1
			Well-managed, committed nurses	“If I’m doing that and taking care of them that way, they will turn around and give me that back in the care that they give to the patients that live here.” #Nurse1
			Newer (more recently trained) nurses	“I think definitely the younger new nurse, well, new nurse don’t have to be young. But like the newer graduates I guess will use it more. Just because it’s being taught more and it’s going to more implemented.” #Nurse13
			CNAs	
	Which individuals or groups do you think are least likely to use TIC in nursing practice over the next 12 months?	Least likely to use TIC	LPNs	“I think LPNs in the nursing spectrum would be least likely to practice using Trauma-Informed Care. I’m going to say that because the program is so tight, and they get so much in that LPN program to get them through to be able to take their NCLEX. They don’t focus a lot on leadership and critical thinking, you’re more of course, a practical nurse, so, you’re more task focused.” #Nurse1
			Older/senior nurses	“And I think the older nurses or older people who have been in nurse longer. I think it will take more to get him on board and start getting in that Trauma Informed Care.” #Nurse13
			Less “hands-on” nurses (e.g., those dealing with admin)	“I think just, definitely people who haven’t, for nurses will use it more. So, more I don’t know paperwork, nurses, MDs nurses. I think they will use it a little less just because you don’t have the interaction you do with the hands on.” #Nurse13
			Pantry staff	“I would say probably the pantry staff, just because they’re not really thinking about that, they’re

TPB belief-based constructs	Interview Questions	A priori codes	Thematic codes	Participant quote exemplars
				just there to serve the food.” #Nurse9
	Who in your life (i.e., individuals or groups) do you think would support or approve of you using TIC in nursing practice over the next 12 months?	Support for TIC	Other managers and directors (peer influence)	“Most of my professional acquaintances are directors in other buildings and it’s a regulation world...all of them.” #Nurse1
			Nurses with aides	“I think the, I think everyone with the aids will definitely because it makes their job easier. They know, you know, what happened in the past and how to avoid it.” #Nurse12
			Residents’ family members	“I think family members would definitely be on board. Because the more we know about their loved ones the better we can care for them.” #Nurse12
			Personal family influence	“My dad’s a firefighter, so, he like talking, my whole life I’ve heard about things that’s important. I myself am a victim trauma. So, I feel like I’m always just aware that everybody’s got something going on.” #Nurse10
			Personal experience/history	“Certainly, my past trauma and knowing how it affects my life, knowing that it could possibly affect somebody else’s life exactly the same way.” #Nurse9
	Who in your life (i.e., individuals or groups) do you think would object or disapprove of you using TIC in nursing practice over the next 12 months?	Disapproval of TIC	Fellow nurses/nurse leaders	“My guess is the same people that are going to have to do it are the same people that are going to object or disapprove.” #Nurse1
	What else influences your feelings about using TIC in nursing practice over the next 12 months?	Personal Opinion of TIC	Universally useful	“I think it’s really important. I think everybody’s even if they don’t work in healthcare should be, go through this course because no matter what you’re doing, if you’re a cashier at Walmart, you’re going to have to be sensitive.” #Nurse9
Control beliefs	What are some of the things you believe would make it easier for you to use TIC in nursing practice	Easy	Clarity	“Clear cut instructions and examples in the SOI manual.” #Nurse1

TPB belief-based constructs	Interview Questions	A priori codes	Thematic codes	Participant quote exemplars
	over the next 12 months?		Background information	<p>“So, if families if we had a more specific questionnaire, we could ask them about or a family.” #Nurse12</p> <p>“Yeah, any sort of information we can get from the family when they're admitted or previous medical history would be phenomenal.” #Nurse9</p>
	If you have the desire to use TIC in nursing practice, how certain do you feel that you can use TIC over the next 12 months?			<p>“I'm pretty confident in it” #Nurse5</p> <p>“Very much.” - #Nurse3</p>
	What are some of the things you believe would make it harder for you to use TIC in nursing practice over the next 12 months?	Hard	No background information	<p>“...if we don't get a past medical history like if our resident has family who lives far away, or they don't have any family there and then they don't want to talk about it there would really be no way of us knowing that there's something underlying going on.” #Nurse9</p>
	Please describe what personally comes up for you (i.e., personal traumatic experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?		Time consuming	<p>“Just because things would be so individualized with the residents that I can get my take longer we might have to work harder or spend more closing time.” #Nurse12</p>
			Older generation	<p>“...a lot of people don't like to talk about their traumas like, especially this older generation.” #Nurse9</p>
	Please describe what professionally comes up for you (i.e., traumatic work experiences) that you believe may impact your ability to use TIC in nursing practice over the next 12 months?		Personal trauma (nurse)	<p>“I think if they had like the same traumatic event or something that could bring up like memories or trigger something.” #Nurse12</p>

Appendix N: Preliminary Themes and Subthemes

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
Behavioral beliefs (attitudes)	Positive feelings	Advantages of TIC	Lessens workload		“I think it will assist us in relieving our undue or unnecessary our behaviors.” - #nurse3
			Increases compassion		<p>“Wanting to let them know that you are there for them and willing to make their day a little bit more positive, because that whole experience can be very traumatic.” - #nurse7</p> <p>“Well, you definitely got to have a caring heart and you got to have compassion. You can maybe make that person’s day just as simple as things, giving them a hug, paying attention to them and acknowledging their feelings. - #nurse6</p> <p>“Trying to pay attention to facial gestures, body gestures. To understand what they want and what they need when they can’t speak for themselves.” - #nurse6</p> <p>“Something positive is being able to show that you are not necessarily relating but you are understanding of the circumstance that the particular patient is going through...but just more understanding, being more understanding and aware of the different feelings and emotions that that particular resident might be going through.” - #nurse7</p> <p>“I would expect the person to be compassionate and want to do whatever is necessary and appropriate for the patients to feel comfortable, to let them know that we have their best interests at heart.” - #nurse7</p> <p>“I think it could if they really care and really want to know their resident or patient. I think, you know, it can open their eyes, “oh, that’s why</p>

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
			Lessens anxiety and increases compliance		<p>they're acting that way.” - #Nurse4</p> <p>“The residents tend to be more comfortable, you know, they feel probably more at home, and you know, not as much anxiety or feelings of that nature or uncertainty.” - #Nurse5</p> <p>Compliance yeah. I mean, a lot of times they're afraid to take things they're afraid that you know.... But, you know...it's always something to better that relationship and make again that resident or patient feel safe and take their medications.” - #Nurse4</p> <p>“They'll be more likely to maybe open up with you and they'll see you more as like a friend instead of just like a caregiver... it's really important that you build that rapport with them so that they trust you so they will take their medications and they will open up and it's like you're part of their family, so, they have to be able to trust you.” -#Nurse1</p> <p>“It's always something to better that relationship and make again that resident or patient feel safe and take their medications.” - #Nurse3</p>
			Creates individually tailored (personal) plan		<p>“I just think it's going to be a positive step to like i said treat everyone as an individual and not like in the care or you know everyone.” - #Nurse2</p> <p>“I think is very helpful because you have to know your residents and once you know them you know the little things about them.” - #Nurse2</p> <p>“I liked it because it lets each resident know that we're being sensitive to their issues whether they have them or not. Like especially if somebody has like a history of sexual abuse we try, if they're a female we will just automatically ask them, “Would you prefer a female caregiver?” - #Nurse2</p>

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					<p>“...just being sensitive to different needs of residents. Like if you have a resident that was a victim of physical abuse just keep in mind that you're not, you're explaining to them what you're doing.” - #Nurse1</p> <p>“I think it's important because you have different, you have different types of residents or patients that you come in contact with. And it's good to kind of be informed about how you can help them, how you can assist them.” - #Nurse4</p> <p>“Being aware and then being presented with those different skills better able to help us take care of them. So yes, i guess you would say plan of care, being able to write the plan of care basically in their particular needs related to the trauma.” - #Nurse7</p> <p>“So, if someone was molested or raped as a child or as a young adult, they may have difficulty with a certain race, a certain sex. Being caregivers, seeing them intimately. So, identifying that or using a risk tool and identifying what are interventions we can use for people with these things.” - #Nurse3</p>
			Personally rewarding		<p>“You can maybe make that person's day just as simple as things, giving them a hug, paying attention to them and acknowledging their feelings. Then at the same time you feel rewarded because you got to make somebody day.” - #Nurse6</p>
			Preventive		<p>“I just like that it kind of helps prevent potential incidents literally, and that may occur. Sometimes, you know, residents in the dementia unit, because they're not quite cognizant of what it is that they are doing.” - #Nurse5</p>
	Negative feelings	Disadvantages of TIC	Model is inflexible		<p>“We have to be able to make decisions based on what the situation is, not what is</p>

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					current or popular in a field. We need to be straight across the board." #Nurse1
				Overwhelming (time and stress)	Yeah, because it's a model...you're having to do it on everybody, which tends to overwhelm assessors when you have to do something for everyone." - #Nurse3 "But i feel like when you push a certain model, you have to assess everyone for those indicators, not just people that are symptomatic or showing difficulties in certain areas. You have to do it with everybody. That's additional time, additional stress on assessors." - #Nurse3
				Staff shortages (especially male staff)	"You have a resident who wants a female caregiver, well, what if we don't have any? So, what if we have all male caregivers? Then we've started this trend of all you're only going to have females and then suddenly we can't and then that trust is broken." - #Nurse1
					"Sometimes it can be a little difficult in providing care to some particular residents like those that want, you know, female only care providers or male only care. Because sometimes, you know, depending on who you have on staff and who is available, you know, and how busy you are." - #Nurse5
				Trauma is subjective	"Who is to say one person's trauma is more important than another person's trauma?" - #Nurse3
				Burnout	"You're creating and causing burnout by limiting individuals instead of focusing on other programs and options that could help get through and prevent retraumatization other than limiting people caring for other people." - #Nurse3
			Traumatic/difficult (for nurse)		"I guess, one thing i don't like is the fact that some of them aren't going to get better. This is good as it gets. At least if

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					<p>you know things are going to improve and get better you're hopeful but it's sad." - Nurse6</p> <p>Maybe sometimes depending on connections with certain patients maybe you have a connection because you really feel for that person and then it affects your thinking and it's just hard to be around that person because it's really affecting you or maybe some patient, maybe some healthcare workers they might not have a good attitude towards it." - #Nurse6</p>
			Opportunity for manipulation		<p>"I think, you know, if somebody has a bad intent, that they can use that experience to force that person to do what they want them to do. You know, i think there's people out there that can have. - #Nurse3</p>
Normative beliefs (subjective norms)	Most likely to use TIC	People most likely to use TIC	Social workers		<p>"Social work" - #Nurse3</p> <p>"Then, you have the social workers which play a huge part because, they're the ones that are performing the assessments to see exactly where are we starting off with this patient? What can we do to better benefit their quality of life or help improve it?"- #Nurse7</p>
			Critical and curious thinkers		<p>"I prefer more than somebody that doesn't ask questions. Because then i think that that person is going through the critical thinking process and needs to understand why they're doing something. Which when you're in a professional environment and as a nurse or a social worker, we should always be asking why we're doing something before we do it." - #Nurse3</p>
			Well-managed, committed nurses		<p>"If I'm doing that and taking care of them that way, they will turn around and give me that back in the care that they give to the patients that live here." - #nurse3</p>
			Newer (more recently trained) nurses		<p>"I think definitely the younger new nurse, well, new nurse don't have to be young. But</p>

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					like the newer graduates i guess will use it more. Just because it's being taught more and it's going to more implemented." - #nurse2
			CNAs		<p>"Oh, i definitely think that the CNAs because they're first on the scene...so, they're the first ones to see if there's any, if the resident is nervous, if they're guarding, if they don't want to take off their clothes, if they don't." - #nurse1</p> <p>"CNAs yes." - #nurse7</p>
			Any health care worker aware of TIC's usefulness		"But i think that each group, whether it's the nurse down to the volunteer. If they're informed, they're educated and they're shown how effective it is to approach a resident with trauma-informed care. They're going to be more likely to use it."- #nurse3
			Senior nurses		"I mean ultimately, you know, more senior nurses might have a little bit of an advantage to pick up on things quicker."- #nurse5
			LSNs		"Licensed skilled nurses" - #nurse7
			Universally useful		"I think it's really important. I think everybody's even if they don't work in healthcare should be, go through this course because no matter what you're doing, if you're a cashier at Walmart, you're going to have to be sensitive." - #nurse1
	Least likely to use TIC	People least likely to use TIC	LPNs		"I think LPNs in the nursing spectrum would be least likely to practice using trauma-informed care. I'm going to say that because the program is so tight, and they get so much in that LPN program to get them through to be able to take their NCLEX. They don't focus a lot on leadership and critical thinking, you're more of course, a practical nurse, so, you're more task focused." - #nurse3
			Older/senior nurses		"And I think the older nurses or older people who have been

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					in nurse longer. I think it will take more to get him on board and start getting in that trauma informed care.” -#nurse2
			Less “hands-on” nurses (e.g., those dealing with admin)		“I think that sometimes when people have been doing nursing for a long time, I’m just speaking in general for some people they become desensitized. It’s like they don’t feel the compassion there because they’re burnt out.” - #nurse6
			Pantry staff		“I think just, definitely people who haven’t, for nurses will use it more. So, more i don’t know paperwork, nurses, MDs nurses. I think they will use it a little less just because you don’t have the interaction you do with the hands on.” - #nurse2
			Nurses who have not experienced trauma firsthand		“I would say probably the pantry staff, just because they’re not really thinking about that, they’re just there to serve the food.” - #nurse1
			Anyone who thinks tic is unnecessary		“...if they haven't had experience with it [trauma]. Maybe if they haven't had experience with it, they don't really know little cues and stuff to look for, they would need training or something.” - #nurse6
			Assisted living staff		“If they don't think it's beneficial. They're not going to attempt it.” - #nurse3 “So, i would say assisted living staff members just because they don't have that extensive nursing background or education... so, they have patient techs, and then over here, we're certified nursing assistant, so, skilled.” - #nurse7
	Support for TIC	People who are supportive of TIC	Peer influence	Managers and directors (peer influence)	“Most of my professional acquaintances are directors in other buildings and it’s a regulation world...all of them.” - #nurse3 “The management i obviously very much so.” - #nurse4
				Fellow nurses (peer influence)	“...and our coworkers if they truly care about it.” - #nurse4

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
				Nurses with aides	“I think the, i think everyone with the aids will definitely because it makes their job easier. They know, you know, what happened in the past and how to avoid it.” – #nurse2
				Residents’ family members	“I think family members would definitely be on board. Because the more we know about their loved ones the better we can care for them.” - #nurse2
			Family/personal influence	Parents	“My dad’s a firefighter, so, he like talking, my whole life I’ve heard about things that’s important. – #nurse9 “My mom because she takes care of my sister. My father too. Yeah, i would think mainly with them because they take care of her, they deal with it on a daily basis.” - #nurse6
				Trauma victim	“I myself am a victim trauma. So, i feel like I’m always just aware that everybody’s got something going on.” - #nurse1
			Societal influence		“I just feel like a society. I would hope that we’re all learning and growing all together, kind of like, even if it’s not true, 100% fact.” - #nurse5 “Pretty much everybody...it just doesn’t have to be just healthcare workers, just anybody in general who has a heart, and you want to, as long as you explained it to them.” - #nurse7
	Disapprove of TIC	People who disapprove of TIC	Peer influence	Fellow nurses/nurse leaders	“My guess is the same people that are going to have to do it are the same people that are going to object or disapprove.” - #nurse3
				Nobody	“I don’t think anybody.” - #nurse6 “I don’t think anybody would.” - #nurse3 “I can’t think of anyone.” - #nurse5

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					<p>No, I think pretty much everybody would be on board with that." - #nurse7</p> <p>"I really don't think anyone would object." - #nurse3</p> <p>"Nobody." - #nurse2</p>
Control beliefs (perceived behavioral control)	Easy to use	Factors that facilitate use of TIC	Clarity		<p>"Clear cut instructions and examples in the SOI manual." - #nurse3</p>
			Background information		<p>"So, if families if we had a more specific questionnaire we could ask them about or a family." - #nurse2</p> <p>"Yeah, any sort of information we can get from the family. when they're admitted or previous medical history would be phenomenal." - #nurse1</p> <p>"Maybe a little more of patient history on kind of the, just their emotional, you know, where they're at, you know, not necessarily needing to know you know, specific details or anything, but just kind of, they've been through some things." - #nurse5</p> <p>"Just being able to have that information prior to dealing with a particular patient. just kind of knowing what you're dealing with so you're not blindsided." - #nurse7</p>
			Personal trauma		<p>"Some of them if they are aware of themselves i think and have learnt how to cope, deal with their trauma or whatever has happened in their life, they sometimes can be more sympathetic to somebody else that has gone through a traumatic experience. they'll be more sympathetic." - #nurse4</p> <p>"Oh, yeah, definitely. I do feel like it will [trauma background with sister] help because i have that background and i also help my mom, they have help too with services. In the beginning it</p>

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					<p>was bad. It got better as time progressed, she's still not where she was. So, I've had that experience helping her and i have cared for her when my mom went on vacation for like a week. So, i have experienced with that." - #nurse6</p>
			Teamwork		<p>"Well, i have an aunt. She's diagnosed with bipolar and seasonal depression plays a big part. So, as a family i think we use trauma-informed care without even knowing it... So, just being a little bit more understanding and aware of those different triggers for some people." - #nurse7</p>
					<p>"I think is, if we work like with the staff as a team, we help each other, we network, we come together and say, okay, like, for example, let's say this patient is very high tech, he needs lots of care. Just coming together and saying, "okay, what kind of plan are we going to set for the day at work so that we can make sure this patient's needs are met, we can keep ourselves from getting stressed because we don't want the patient to see that we are stressed." - #nurse6</p>
	Hard to use	Factors that impede use of TIC	No background information		<p>"...if we don't get a past medical history like if our resident has family who lives far away, or they don't have any family there and then they don't want to talk about it there would really be no way of us knowing that there's something underlying going on." - #nurse1</p>
				Time consuming	<p>"Just because things would be so individualized with the residents that i can get my take longer, we might have to work harder or spend more closing time." - #nurse2</p>
				Generational difference	<p>"...a lot of people don't like to talk about their traumas like, especially this older generation." - #nurse1</p> <p>"It's not such a taboo as it used to be previously in the</p>

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
			Personal trauma/retraumatizes (nurse)		<p>world war veterans' days. Where you had to bundle it up and hide it, it was kind of almost an embarrassment that they felt that way." - #nurse7</p> <p>"I think if they had like the same traumatic event or something that could bring up like memories or trigger something." - #nurse2</p> <p>"Certainly, my past trauma and knowing how it affects my life, knowing that it could possibly affect somebody else's life exactly the same way." - #nurse1</p> <p>Some it triggers. In them and they can't help The person." - #nurse4</p>
			Stress of trauma care		<p>"I also know working in trauma care, for example, like spectrum continuing care i know that can be very stressful after a while because if that's all the patients you have. You can only do it for so long and i do believe people will get burnt out." - #nurse6</p>
			Lack of staff		<p>"I guess the only thing, i mean if i have the right training and certain things and I'm already confident as far as taking care of patients but if i have that extra training and we have staff that will work with you that's fine but i know sometimes you might not." - #nurse6</p> <p>"[no]...other than just sometimes with, you know, staffing and what, who we have available to care for who? I mean, sometimes that can be a little bit of a challenge." - #nurse5</p>
			Nothing		<p>"I don't think there is anything. The more informed you are the better..." - #nurse3</p>
	Personal opinion of TIC	Sense of efficacy	Confident		<p>"I'm pretty confident in it" - #nurse5</p> <p>"Very much." - #nurse3</p>

Constructs	A priori codes	Thematic categories	Themes	Subthemes	Exemplars
					<p>“I’m confident to a certain extent and the reason why i say that is because some things...we don't do a lot of that there. If we had a little training more on that I know once I've learned it in school, but it's like if you don't use it, you lose it...” -#nurse6</p>
					<p>“I think the more we use the more we get a better understanding of exactly what it is...it's like a skill” - #nurse7</p>
					<p>“95-100%” confident. - #nurse3</p>
					<p>“I think it'd be easy to do like I said once we, once you started and get a little background.” - #nurse2</p>

Appendix O: Codebook of Evaluative Categories

Code label	Definition	Description	Qualifications or exclusions	Exemplars
Advantages of TIC	“Expressions of anticipated positive... affect (e.g., satisfied, calm, pleased, relaxed)” in relation to implementing TIC into practice (Fishbein & Ajzen, 2010, p. 199).	“Directing attention to positive...consequences of performing the behavior in line with the positive evaluation of” implementing TIC into practice (Fishbein & Ajzen, 2010, p. 257).	Can be expressed as positive feelings about implementing TIC related to an expected positive effect/outcome for patient, self, profession, or facility rather than positive feelings about the TIC model itself.	“I just think it’s going to be a positive step to like I said treat everyone as an individual and not like in the care or you know everyone.” – #Nurse2
Disadvantages of TIC	“Expressions of anticipated... negative affect (e.g., regret, apprehension, anxiety, shame, guilt, anger, fear)” in relation to implementing TIC into practice (Fishbein & Ajzen, 2010, p. 199).	“Directing attention to negative consequences of performing the behavior in line with the negative evaluation of” implementing TIC into practice (Fishbein & Ajzen, 2010, p. 257).	Can be expressed as negative feelings about implementing TIC related to an expected negative effect/outcome for patient, self, profession, or facility rather than negative feelings about the TIC model itself.	“You’re creating and causing burnout by limiting individuals instead of focusing on other programs and options that could help get through and prevent retraumatization other than limiting people caring for other people.” - #Nurse1
People most likely to use TIC.	Expressions of participant’s perceptions of which individuals or groups are likely to implement TIC into practice (Fishbein & Ajzen, 2010).	“People form beliefs that important ...referents themselves perform...the behavior in question” (Fishbein & Ajzen, 2010, p. 16).	Can be expressed as perceptions about coworkers, ancillary workers, or groups of health professionals who are most likely to use TIC rather than the general public, patients, or patient’s families.	“I think definitely the younger new nurse, well, new nurse don’t have to be young. But like the newer graduates I guess will use it more. Just because it’s being taught more and it’s going to more implemented.” - #Nurse7
People least likely to use TIC	Expressions of participant’s perceptions of which individuals or groups will likely not implement TIC into practice (Fishbein & Ajzen, 2010).	“People form beliefs that important ...referents themselves...don’t perform the behavior in question” (Fishbein & Ajzen, 2010, p. 16).	Can be expressed as perceptions about coworkers, ancillary workers, or groups of health professionals who are least likely to use TIC rather than the general public, patients, or patient’s families.	“I think LPNs in the nursing spectrum would be least likely to practice using Trauma-Informed Care. I think it will take more to get them on board and start getting into Trauma Informed Care.” - #Nurse2
People who are supportive of TIC	Expressions of participant’s perceptions of important referents support for their implementation of TIC in practice (Fishbein & Ajzen, 2010).	“People form beliefs that important individuals or groups in their lives would approve... of their performing the behavior...” (Fishbein & Ajzen, 2010, p. 16).	Can be expressed as perceptions about specific important referents who support the participant’s use of TIC rather than non-specific referents.	“Most of my professional acquaintances are directors in other buildings and it’s a regulation world...all of them.” - #Nurse3
People who disapprove of TIC	Expressions of participant’s perceptions of important referents disapproval of their implementation of TIC	“People form beliefs that important individuals or groups in their lives would ...disapprove of their performing the	Can be expressed as perceptions about specific important referents who disapprove of the participant’s use of TIC	“My guess is the same coworker [nurse] who always complains about new policies is the same person that is going to object or disapprove of

Code label	Definition	Description	Qualifications or exclusions	Exemplars
	in practice (Fishbein & Ajzen, 2010).	behavior..." (Fishbein & Ajzen, 2010, p. 16).	rather than non-specific referents.	having to use TIC. She doesn't like change." - #Nurse3
Factors that facilitate use of TIC	Expressions of anticipated "personal and environmental factors that can help...their attempts to" implement TIC into practice (Fishbein & Ajzen, 2010, p. 16).	"Perceived capacity and perceived autonomy with respect to performing a behavior reflect beliefs about the presence of internal as well as external factors that may facilitate" ability to implement TIC into practice (Fishbein & Ajzen, 2010, p. 162).	Can be expressed as hypothetical or real factors that can facilitate the participant's use of TIC rather than another person's use of TIC.	"I think it'd be easy to do like I said once we, once you started and get a little background." - #Nurse2
Factors that impede use of TIC	Expressions of anticipated "personal and environmental factors that can... impede their attempts to" implement TIC into practice (Fishbein & Ajzen, 2010, p. 16).	"Perceived capacity and perceived autonomy with respect to performing a behavior reflect beliefs about the presence of internal as well as external factors that may impede" ability to implement TIC into practice (Fishbein & Ajzen, 2010, p. 16).	Can be expressed as hypothetical or real factors that can impede the participant's use of TIC rather than another person's use of TIC.	"Sometimes it can be a little difficult in providing care to some particular residents like those that want, you know, female only care providers or male only care. Because sometimes, you know, depending on who you have on staff and who is available, you know, and how busy you are." - #Nurse6
Sense of self-efficacy	Expressions of feelings, opinions, and ideas about implementing TIC into practice.	Assumption that opinions or beliefs about an object can be viewed as verbal expressions of attitude toward the object (Fishbein & Ajzen, 2010, p. 79).	Can be direct or abstract person opinions about implementing TIC into practice rather than opinions about other people's use of TIC or about the TIC model in general.	"I'm confident to a certain extent and the reason why I say that is because some things...we don't do a lot of that here. If we had a little training more on that I know once I've, I've learned it in school, but it's like if you don't use it, you lose it..." - #Nurse6

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