

## Appendix A

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FACTORS THAT INFLUENCE AND PREDICT  
NURSES' ATTITUDES TOWARDS SUICIDAL PATIENTS

by

Karen Patterson Stevens

A dissertation

submitted in partial fulfillment

of the requirements for the degree of

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## Committee Approval

To the Graduate Faculty:

The members of the committee appointed to examine the thesis of KAREN PATTERSON STEVENS find it satisfactory and recommend that it be accepted.

---

Mary A. Nies, PhD, RN, FAAN, FAAHB  
Major Advisor

---

Peter Denner, PhD, Professor Emeritus  
Committee Member

---

Gina Clarkson, PhD, ARNP, NNP-BC  
Committee Member

---

Jane Doe PhD  
Graduate Faculty Representative

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May 3, 2017

Karen Stevens  
School of Nursing  
MS 8101

RE: regarding study number IRB-FY2017-250: Factors that Influence and Predict Nurses'  
Attitudes Towards the Suicide Patient

Dear Ms. Stevens:

I agree that this study qualifies as exempt from review under the following guideline: Category 2. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. This letter is your approval, please, keep this document in a safe place.

Notify the HSC of any adverse events. Serious, unexpected adverse events must be reported in writing within 10 business days.

You are granted permission to conduct your study effective immediately. The study is not subject to renewal.

Please note that any changes to the study as approved must be promptly reported and approved. Some changes may be approved by expedited review; others require full board review. Contact Tom Bailey (208-282-2179; fax 208-282-4723; email: [humsbj@isu.edu](mailto:humsbj@isu.edu)) if you have any questions or require further information.

Sincerely,

Ralph Baergen, PhD, MPH, CIP  
Human Subjects Chair

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## ABSTRACT

Suicide, a preventable public health problem, is at epidemic levels in the United States and globally (Bolster, Holliday, Oneal, & Shaw, 2015). Negative attitudes among nursing personnel present a major obstacle in providing appropriate and timely interventional care for the suicidal patient. On the other hand, a nurse's positive attitude toward a suicidal patient may be key in preventing a future suicide attempt or a completed suicide. The attitude a nurse has towards a suicidal patient has the potential to have a direct impact on patient safety, patient quality of care, and patient outcomes.

A non-experimental, descriptive, correlational design was utilized in this dissertation study. A total of 305 nurses completed the online questionnaire that was a combination of three surveys: Attitudes Towards Suicide Questionnaire (ATAS-Q), the Suicide Behavior Attitude Questionnaire (SBAQ) and the Professional Quality of Life Survey (ProQoL). The purpose of the research was to focus on multidimensional factors that are associated with nurses' attitudes towards the care of the suicidal patient in hospital settings. These relationships included the components of attitude, the demographics of the nurse, compassion, and the self-reported professional capacity to care for the suicidal patient. Nine research questions examined the unique and distinct relationships among attitude factors and between attitude and the care of the suicidal patient.

The results from the study showed that age and nursing experience are inversely related to overall attitude towards the care of the suicidal patient. Additionally, this study showed that a self-reported perception of professional capacity to care for the suicidal patient was inversely related to overall attitude. Another important finding of this study showed a strong relationship between cognitive attitude and behavioral attitude and another significant yet weaker relationship

between affective attitude and behavioral attitude. A strong inverse relationship was found between Compassion Satisfaction and Compassion Fatigue and a higher affective attitude towards the suicidal patient was associated with lower levels of Compassion Satisfaction.

Further research focused on components that have a direct relationship to the cognitive component of attitude is recommended. Additionally, a qualitative study examining how overall attitude is perceived from the patient's perspective would offer additional and important insight.

## **Chapter I: Introduction**

Suicide, a preventable public health problem, is at epidemic levels, in the United States (US) and globally (Bolster et al., 2015). The intersection of suicide, suicidal ideation, and suicide attempts within the healthcare system is significant and due to this, nurses routinely interact with patients experiencing suicidal thoughts and behaviors. These interactions take place in a variety of emergency, and in-patient hospital settings (Bolster et al., 2015). Regardless of their specialty or their hospital setting, many nurses will encounter and provide care for suicidal patients (Bolster et al., 2015). Studies have shown that a majority of people who complete suicides have had recent contact with health care professionals before they die (Demirkiran & Eskin, 2006). Therefore, suicide may be best conceptualized “as a process rather than an end point” (Demirkiran & Eskin, 2006, p. 893), emphasizing that nurses who care for the suicidal patient have the ability to provide positive therapeutic relationships and the ability to potentially intercede with life-saving measures. Negative attitudes, on the other hand, may reinforce feelings of perceived burdensomeness and could lead to an exacerbation of hopelessness and additional suicide thoughts and behaviors. The attitude a nurse has towards a suicidal patient may have a direct impact on patient safety, patient quality of care, and patient outcomes (Anderson & Standen, 2007; Bolster et al., 2015).

This chapter will provide an introduction and definition of the phenomenon of suicide. A brief review of the background, incidence, and prevalence of suicide thoughts and behaviors will be addressed. The intent of the dissertation study will be identified and the study’s objectives, aims, and research questions will be presented. Finally, the organization of the dissertation will be outlined.

## **Background of the Problem**

Suicide, as defined by Edwin Shneidman, is a “conscious act of self-induced annihilation, best understood as a multidimensional malaise in a needful individual who defines an issue for which the suicide is perceived as the best solution” (Shneidman, 1993, p. 4). Thus, suicide is the attempt to end unbearable psychological pain related to affective states such as shame, depression, guilt, and hopelessness (Leenaars, 2010). Despite attempts by public and private health care sectors to prevent and identify risk factors for suicide, the number of adult suicide attempts continues to grow (Gysin-Maillart, Schwab, Soravia, Megert, & Michel, 2016). The risk of completed suicide to those who have a history of attempting suicide is up to 100 times higher than that of the general population (Gysin-Maillart et al., 2016).

Suicidal thoughts and behaviors are a major public health problem (Franklin et al., 2016), with suicide leading to more than 800,000 deaths globally (World Health Organization, 2012b) and 140 million annual cases of suicidal ideation worldwide (Franklin et al., 2016). In the US, suicidal ideation was the chief complaint for an estimated 3% to 8% of all emergency department (ED) visits (Betz et al., 2013). Globally, there are an estimated 25 million suicide attempts each year (Crosby, Han, Parks, & Gfroerer, 2011) and in the US in 2013, over 900,000 people visited EDs for self-inflicted non-fatal injuries (Owens, Fingar, Heslin, Mutter, & Booth, 2017). Of those ED visits, 72% were admitted to the hospital and the average length of stay was 5.6 days (Owens et al., 2017).

Nurses routinely interact with patients experiencing suicidal thoughts and behaviors and these interactions take place in a variety of emergency and in-patient hospital settings. According to Bolster et al. (2015), “Nurses practice on the front-lines and have the greatest number of

opportunities to identify and intervene with suicidal patients” (p. 1). Regardless of their nursing specialty, nurses will encounter and provide care to suicidal patients (Bolster et al., 2015).

Historically, the general population has displayed negative and stigmatizing attitudes towards the mentally ill and towards suicidal people (Högberg, Magnusson, Ewertzon, & Lützén, 2008). These negative and stigmatizing attitudes are also found in nurses caring for suicidal patients (Carmona-Navarro & Pichardo-Martinez, 2012; Högberg et al.; Mårtensson, Jacobsson, & Engström, 2014) and this discriminatory behavior may have a negative impact on the suicidal patient’s care. A nurse who responds with a negative attitude to a suicidal patient may influence the suicidal patient to experience additional suicidal thoughts and behaviors (Ouzouni & Nakakis, 2013).

### **Significance of the Study**

Attitude is conceptualized as having three interdependent components: the affective component, the cognitive component, and the behavioral component (Ouzouni & Nakakis, 2009). While the cognitive and affective aspects of attitude are covert and internalized, the behavioral aspect is overt and can be recognized by the patient. A negative attitude by a nurse may prevent a patient from seeking or receiving help (Norheim, Grimholt, Loskutova, & Ekeberg, 2016). A study of 179 nurses and physicians, by Anderson & Standen (2007), found that negative attitudes towards suicidal patients might impact the providers’ ability to intervene therapeutically.

In an effort to evaluate nurses’ attitudes towards suicide, a measurement tool, the Attitudes Towards Attempted Suicide—Questionnaire (ATAS-Q)—was developed by researchers in Greece (Ouzouni & Nakakis, 2009). Factors associated with the *cognitive* aspect of attitude are “positiveness”, “personality”, “mental illness”, and “religiosity”(Ouzouni & Nakakis, 2009).



“Acceptability” is the factor associated with the *affective* aspect of attitude (Ouzouni & Nakakis, 2009). “Professional role and care”, “manipulation”, and “discrimination” are the components associated with the *behavioral* aspect of attitude (Ouzouni & Nakakis, 2009). Little is known about how each of the components of attitude—cognitive, affective, behavioral—covary and predict nurses’ overall attitude towards suicidal patients. A significant focus of this study is to evaluate the relationships among the components of attitude and to determine which are most important in addressing future suicide-prevention nursing interventions.

A few studies (McAllister, Creedy, Moyle, & Farrugia, 2002; Neville & Roan, 2013; Poreddi et al., 2015) have examined socio-demographic variables—age, gender, education, experience, and nursing specialty—and how these factors relate to nurses’ attitudes towards suicidal patients and towards self-harm patients. However, these studies have taken place in hospital silos and not across a wide range of nursing specialty settings in the US. One of these studies focused only on the self-harm patient and not the suicidal patient. The relationship between socio-demographic variables and nurses’ attitudes towards the suicidal patient is largely unknown.

Nurses need to feel confident in their knowledge to assess, intervene, and care for the suicidal patient. An important aspect affecting attitude is the knowledge of the nurse in caring for the patient exhibiting suicidal thoughts and behaviors (Jacobson, Osteen, Jones, & Berman, 2012). Suicide education at the pre-licensure level and in professional continuing education varies across campuses and hospitals. According to the conclusions of a pre-test, post-test, repeated measure study by Jacobson et al. (2012), increased knowledge leads to improved attitudes towards suicide prevention. The Suicide Behavior Attitude Questionnaire (SBAQ) includes three subscales, one of which measures the professional capacity of the nurse to assess and care for the suicidal patient (Botega et al., 2005). Higher total scores on the four items of this

subscale suggest an increased professional capacity or knowledge to care for and work with patients at risk for suicide (Botege et al., 2005; Jacobson et al., 2012).

Compassion satisfaction and compassion fatigue are two important aspects of a nurses' professional quality of life (Stamm, 2010). Compassion satisfaction is the positive aspect of helping others while decreased compassion satisfaction and compassion fatigue are the negative aspects of providing care for patients who are in pain and suffering (Sabo, 2006). The Emergency Nurses' Association (ENA) posits that compassion fatigue and burnout will lead to compromised decision-making ability and delayed reaction time with a direct impact on patient safety (Walsh, 2013). According to a meta-analysis by Sorenson (2013), the literature shows that compassion fatigue leads to decreased ability to feel empathy, avoidance of particular situations, and poor judgment (p. 462). All of these symptoms lead to a diminished ability to interact therapeutically with patients (Sorenson, Bolick, Wright, & Hamilton, 2016), which is a critical problem when managing and caring for suicidal patients.

Attitudes towards the suicidal patient have a relationship to suicidal thoughts, attempts, and behaviors (Bolster et al., 2015). This descriptive, correlational, cross-sectional study of hospital nurses compared groups and undertook an analysis of the variables described above—socio-demographic background, professional capacity, and compassion—in order to search for associations. A study of nurses' attitudes towards suicide and exploring the factors that are related to attitudes are necessary steps needed to improve the care of the suicidal patient, improve patient safety and improve patient quality of care.

### **Statement of the Problem**

Detecting and treating suicide thoughts and behaviors in all nursing settings is a national nursing priority (Joint Commission, 2016) and the 2012 National Strategy for Suicide Prevention

stresses transforming the health care systems to significantly and proactively reduce suicide (U.S. Department of Health and Human Services, 2012). Suicide is the second leading cause of hospital sentinel events (Neville & Roan, 2013) and literature shows that nurses have the best opportunity to identify and intervene with potentially suicidal patients (Bolster et al., 2015). Negative attitudes among nursing personnel present a major obstacle in providing appropriate and timely interventional care for the suicidal patient (Mårtensson et al., 2014). Evidence suggests that negative attitudes towards suicidal patients may adversely impact patient safety, patient quality of care, and patient outcomes (Kawanishi et al., 2006; Neville & Roan, 2013; Ouzouni & Nakakis, 2013). A nurse's positive attitude toward a suicidal patient may be key in preventing a future suicide attempt or a completed suicide (Ouzouni & Nakakis, 2013). Literature is limited regarding the relationship among multidimensional factors—socio-demographic background, compassion satisfaction, compassion fatigue, and professional capacity—that influence and predict hospital nurses' attitudes towards suicidal patients.

### **Purpose of the Study**

Attitudes towards the suicidal patient have a relationship to suicidal thoughts, attempts, and behaviors (Lee & Park, 2015). This dissertation study contributed to the body of knowledge concerning the relationships among multidimensional factors that influence and predict hospital nurses' attitudes towards suicidal patients.

The purpose of this dissertation study was to examine relationships between nurses' socio-demographic variables – age, gender, education, experience, specialty - and nurses' attitudes towards the suicidal patient. Secondly, this study investigated the relationship among the following attitudinal components: *cognitive*, *affective*, and *behavioral* (Ouzouni & Nakakis, 2013). Thirdly, this study explored the relationship between *self-reported* professional capacity

and nurses' attitudes towards suicidal patients. Additionally, this study examined how a nurse's level of compassion satisfaction and/or compassion fatigue was related to her attitude towards the suicidal patient. Finally, this study examined how a nurse's level of compassion and her self-reported level of professional capacity was predictive of her attitude towards the suicidal patient.

This was one of only a few studies that explored multidimensional factors of attitudes towards suicide across all hospital emergency and inpatient care settings. With suicide being the second leading cause of sentinel events in inpatient hospital settings (Neville & Roan, 2013), it is important to include nurses from most inpatient areas. Although areas such as neonatal nursing may not be appropriate for this study, there are few areas where adult and pediatric patients do not have the potential to be at risk for suicidal thoughts and behaviors. This study was also the first to predict nurses' attitudes towards suicide based on their self-reported level of compassion and their professional capacity.

### **Research Questions**

1. What is the overall attitude of nurses towards the care of the suicidal patient?
2. What are the attitudes scores of nurses towards the care of the suicidal patient on the subscales of the ATAS-Q (Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality traits, Mental illness, and Discrimination)? What are the individual attitudes of nurses towards the care of the suicidal patient for each attitude component (Cognitive, Affective, and Behavioral)?
3. What are the overall Compassion Satisfaction and Compassion Fatigue scores of nurses in the general hospital setting?
4. What is the *self-reported* professional capacity of nurses towards the care of the suicidal patient?

5. What is the relationship between age, gender, years of experience, education, nursing specialty, and nurses' overall attitudes towards the suicidal patient?
6. What are the correlations among the Cognitive, Affective, and Behavioral components of attitude and nurses' overall attitudes towards the suicidal patient?
7. How does a nurses' *self-reported* level of professional capacity to work with suicidal patients relate to her attitude (overall and component) towards the suicidal patient?
8. Does a nurses' self-reported level of Compassion Satisfaction and/or Compassion Fatigue correlate with the nurses' attitude (overall and component) towards the suicidal patient?
9. Is a nurses' overall attitude towards the suicidal patient predicted by a weighted combination of the nurses' level of compassion and the nurses' self-reported professional capacity to care for the suicidal patient? What is the relative contribution of these variables to the prediction?

## **Definitions**

*Attitude:* Attitude is a way of thinking about a person, place, thing, or event. It consists of three components: affective component, behavioral component, and cognitive component (Jain, 2014).

*Compassion:*

*Compassion satisfaction:* The pleasure derived from being able to perform the work involved with helping others who are experiencing suffering and trauma (Stamm, 2010).

*Compassion fatigue:* The negative aspect of helping others who are experiencing suffering and trauma. Compassion fatigue can lead to exhaustion, frustration, anger, and depression (Stamm, 2010).

*Burnout:* Burnout is one element of the negative effects of caring known as compassion fatigue. It is associated with feelings of hopelessness, difficulties in dealing with work, and caring effectively (Stamm, 2010).

*Secondary traumatic stress:* Secondary traumatic stress is an element of compassion fatigue. It is brought about by secondary exposure to extremely stressful events. Symptoms may include fear, having difficulty sleeping, and avoidance behavior (Stamm, 2010).

*Emergency department:* A department with specialty trained nurses and physicians prepared to respond and intervene to a variety of patient complaints ranging from life-threatening and urgent presentations to non-urgent complaints (Schneider, Hamilton, Moyer, & Stapczynski, 1998; Emergency Nurses Association, 2016).

*Emergency nursing:* Emergency nursing encompasses caring for patients of all ages and being prepared to care for, triage, and intervene with life saving measures in patients with a variety of chief complaints and comorbidities (Emergency Nurses Association, 2016).

*Hospital inpatient areas:* Hospital inpatient areas are areas of the hospital where admitted patients are cared for by nurses and physicians. A patient is considered an “inpatient” upon formal admission to the hospital by a physician order (Medicare, 2014). Depending upon the hospital, typical inpatient areas are the intensive care unit (ICU) or critical care unit (CCU), step-down units, the medical/surgical departments, orthopedic units, mental health areas, and mother/baby departments.

*The Joint Commission:* The Joint Commission seeks to continually improve healthcare for the public, by evaluating healthcare organizations and inspiring them to excel in providing safe and effective care of the highest quality and value (Joint Commission, 2017).

*Nurse:* Nurses actively working in emergency department settings and/or in-patient areas of general hospitals in the United States.

*Nursing:* “Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitation of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations” (American Nurses Association, 2017).

*Suicide:* Deaths caused by self-directed injurious behavior with an intent to die as a result of the behavior (Center for Disease Control and Prevention, 2016).

*Suicide attempt:* A non-fatal, self-directed, potentially injurious behavior with an intent to die as a result of the behavior; might not result in injury (Center for Disease Control and Prevention, 2016).

*Suicidal ideation:* Thinking about, considering, or planning a suicide (Center for Disease Control and Prevention, 2016).

*Suicide plan:* The formulation of a specific method through which one intends to die (Nock et al., 2008).

*Suicide thoughts and behaviors:* Pertaining to three areas: suicide ideation, suicide plan, and suicide attempt (Nock et al., 2008).

### **Assumptions**

The researcher assumed that those who participated in the survey were nurses and that the nurses worked in the patient-care setting that they identified. The researcher assumed that the study participants answered the survey questions honestly and with authenticity. An assumption was made that the three constructs of attitude were: cognitive, behavioral, and affective. Another assumption was that attitude affects behavior.

## **Delimitations**

Considering attitudes of nurses across multiple hospital settings towards the suicidal patient as the foundation of this study, the focus of the study was on nurses working in patient-care areas of hospitals. This included emergency departments, adult ICUs or CCUs, step-down units, medical/surgical floors, orthopedic floors, mother/baby units and mental health floors. An electronic survey format was selected for purposes of anonymity, convenience, and ease of access. Survey Monkey Professional was the electronic platform chosen for delivery of the survey and collection of data. The survey sample was recruited through nursing social media avenues such as Twitter, Facebook, and LinkedIn. Three surveys were selected for measuring data. The Attitudes Towards Attempted Suicide-Questionnaire measured an overall attitude score as well as an evaluation of eight factors that inform three constructs of attitude: cognitive, affective, and behavioral. Four items from the Suicide Behavior Attitude Questionnaire (SBAQ) measured the professional capacity of the nurse to assess and care for the suicidal patient. Finally, the Professional Quality of Life (ProQoL) survey measured each nurse's self-reported levels of compassion and compassion fatigue.

## **Limitations**

The study involved the investigation of multidimensional factors as they relate to attitude in the professional nurse. The self-reporting of the measurement instruments was dependent on the honesty and authenticity of the research subjects and on the validity and reliability of the instruments. A limitation of this study could be the response rate to the survey. The study participants share the profession of nursing, but their life experiences and day-to-day stressors are different. These items were not taken into account when assessing overall attitude, professional capacity, and compassion.



## **Organization of the Dissertation**

The first chapter has provided a brief introduction to the background, context, and significance of the study of nurses' attitudes towards suicidal patients. A statement of the problem, the purpose of the study, and nine research questions were presented in Chapter One. Chapter Two will include the theoretical framework of the study as well as an organized and summative literature review. Methodology of the study will be discussed in Chapter Three. The survey instruments will be presented and discussed in Chapter Three. Chapter Four will describe the results of the data analysis. Chapter Five will discuss the results of the analysis, major findings, strengths and limitations of the study, recommendations for nursing practice and education, and recommendations for future research.

## **Summary**

Patients with suicidal thoughts and behaviors will encounter nurses in a variety of hospital settings. Due to the significant time spent in contact with patients, nurses are considered “front-line” in identifying, managing, and intervening with potentially life-saving measures (Bolster et al., 2015). Studies have indicated that nurses often have negative attitudes towards patients with suicidal thoughts and behaviors. Opportunities for nurses to recognize and intervene therapeutically with suicidal patients may be thwarted by negative attitudes. Vulnerable patients may sense negative attitudes from their nurses and miss opportunities to engage and to heal. Overall attitude is informed by affective, behavioral, and cognitive components. Exploring the way that compassion satisfaction (affective), compassion fatigue (affective), and professional capacity (cognitive) inform the overall behavioral component of attitude is important first step in providing evidence-based education and policies that are tailored to the needs of the nursing profession in hospital settings. The following chapter will provide a detailed understanding of

nurses' attitudes towards suicidal patients and the theoretical underpinnings of this dissertation study.

## Chapter II: Review of the Literature

### Introduction

**Purpose.** The purpose of this review of the literature was to critically analyze and review the research related to nurses' attitudes towards the suicidal patient. Research on factors that influence attitude were explored. Theoretical underpinnings of this dissertation study were addressed and discussed. An alignment of research questions with the current scientific literature was presented and gaps in the literature were identified.

**Search Strategy.** A variety of resources were used to search the literature. The search strategy for current literature included the years from 2000 to 2017. The expanded search with the indicated number of years was used because of the lack of more recent literature focusing on the phenomenon of nurses' attitudes towards suicide. An even more comprehensive search (1950 – 2017) identified many older seminal studies to further inform this literature review and specifically the theoretical framework. Current and relevant sources from peer-reviewed journals, academic journals, textbooks, and dissertation databases were reviewed. The following databases were searched: EBSCO, Google Scholar, PubMed, Cochrane Library, CINAHL Complete, Clinical Key, ResearchGate and ProQuest. Queries were made across nursing, healthcare, and psychology disciplines. Search criteria involved keywords and terms such as *nurses, nursing, suicide, attempted suicide, suicide attempters, attitudes, attitudes towards, nurses attitudes towards, compassion, compassion fatigue, and nurse burn-out*. An initial unrestricted search provided 12,253 articles.

Narrowing the search strategy to scholarly peer-reviewed articles published between 2000 and 2017 yielded 289 articles. The title of these articles and their abstracts were reviewed for additional inclusion criteria including quantitative, mixed-methods, and qualitative studies that

specifically researched nurses' attitudes towards the direct care of the suicidal patient. This resulted in 47 studies. After eliminating duplicate studies and non-English language studies, the final yield was 23 studies. Most of these studies ( $N = 20$ ) were international. They included Greece ( $n = 2$ ), Sweden ( $n = 3$ ), Spain ( $n = 1$ ), Brazil ( $n = 2$ ), Australia ( $n = 3$ ), India ( $n = 1$ ), Taiwan ( $n = 2$ ), Turkey ( $n = 1$ ), Netherlands ( $n = 1$ ), United Kingdom ( $n = 1$ ), Finland ( $n = 1$ ) and Japan ( $n = 2$ ). Two current studies and one seminal study ( $n = 3$ ) were done in the United States.

Of the final yield of studies ( $N = 23$ ), only two studies used a sample of all nurses working in a general hospital setting. The other studies used a sample of ED nurses ( $n = 3$ ), mental health nurses ( $n = 2$ ), ER and mental health nurses ( $n = 2$ ), nurses combined with various other clinical staff such as physicians, certified nursing assistants, mental health assistants ( $n = 7$ ), non-clinical hospital personnel ( $n = 1$ ), other clinical personnel such as physicians and mental health assistants ( $n = 3$ ), students ( $n = 1$ ), urban residents ( $n = 1$ ) and patients ( $n = 1$ ).

The final 23 studies mostly focused on attitudes towards suicide or suicidal patients, however, several studies were retained that studied nurses' attitudes towards mental health patients and nurses' attitudes towards patients who self-harm. The retained studies included 21 quantitative studies; one was a mixed-methods study, and one qualitative study. Several studies focused on the use of socio-demographic variables to correlate with attitudes towards suicide and several focused on how knowledge predicts attitudes. These studies will be analyzed in this chapter. None of the studies ( $n = 0$ ) explored compassion and/or compassion fatigue and its relevance to nurses' attitudes towards suicide, although one article recommended this area of study for future research (Cocker & Joss, 2016). One important qualitative study explored mental health patients' perceptions of nurses' attitudes towards them during their hospitalization (Samuelsson, Wiklander, Asberg, & Saveman, 2000).

Of the three US studies, one was the development of a survey tool (Stamm, 2010). One explored age, education, and religious background as predictors to nurses' attitudes towards suicide (Neville & Roan, 2013). Another studied clinical and non-clinical personnel's attitudes after a brief educational training program (McAllister, Creedy, Moyle, & Farrugia, 2002).

**Organization.** The organization of this review of the literature began with this introduction. Next, the theoretical framework of the dissertation study was addressed. The foundational concepts of the study were researched and explained, including suicide, philosophical and historical attitudes towards suicide, and nursing and the care of the suicidal patient. A critical analysis of the retrieved literature was thoroughly discussed and evaluated. Gaps in the literature were identified and a synthesis of this chapter was presented.

### **Theoretical Framework**

**Peplau's Theory of Interpersonal Relations.** Nursing theorist, Hildegard E. Peplau (1952) stressed the position that the interactions that occur between the patient and the nurse are a phenomenon that has significant impact on patient outcomes. According to Peplau's theoretical work (1952), a human relationship develops between patient and nurse that is both custodial and therapeutic. The purpose of the nurse-patient relationship is the promotion of experiences leading to health (Peplau, 1952). The way that nurses respond to patients has a theoretical direct impact on how the patient feels about himself (Peplau, 1952). Nurses attend and relate to patients based on their own past experiences, knowledge, culture, values, expectations, and preconceived ideas (Peplau, 1991).

Nursing viewed through the lens of the interpersonal relationship between patient and nurse, becomes a collaborative, mutual, and interpersonal process. When a nurse is able to promote a therapeutic relationship, a patient is given permission to openly express and reorient their

feelings leading to the strengthening of positive forces in their personality (Peplau, 1952).

Perhaps central to her theory and most important to this study is this important proposition, “the kind of person each nurse becomes makes a substantial difference in what each patient will learn as he is nursed through his experience of illness” (Peplau, 1952). In summary, an emphasis on context and the human relationship is theorized to be associated with the health, well-being, and care of the patient (Peplau, 1988). Accordingly, the care provided to the patient by the nurse is not an example of expert technique, but instead is a “cultivation of human attitudes” (Gastmans, 1998, p. 1317). Consequently, the present study is premised on the belief that the attitudes of nurses towards the suicidal patient are critical to the development and maintenance of a therapeutic relationship. This means there is a need to understand the attitudes nurses hold towards the suicidal patient in order to determine the extent to which those attributes are conducive to a therapeutic relationship and to determine opportunities for professional development and other interventions to increase the effectiveness of nurses working with this patient population.

**Compassion Satisfaction and Compassion Fatigue Theory.** Jean Watson’s Theory of Human Caring advocates relationship-based nursing (Watson, 2010). Understanding a patient’s feelings, understanding the situation of a patient’s perspective, and therapeutically connecting with the patient is key to providing compassionate care (Watson, 2010). Watson (2010) emphasizes Peplau’s interpersonal domain and the notion of “therapeutic use of self” (p. 49) in providing care for patients.

According to Watson (2007), commitments to *receiving* through *giving* bring meaning to one’s professional life. “Nurses who are sensitive to others are better able to learn about another’s view of the world which, subsequently, increases concern for others’ comfort,

recovery, and wellness” (Watson, 2007, p. 133). The process of caring by the nurse demands the full use of knowledge, instincts, intuition, technology, skills, empirics, and personal knowing (Watson, 2007). Consequently, compassion fatigue is experienced by the nurse when, through the efforts of providing care and showing empathy, the helper subsequently experiences secondary trauma (Figley, 1995). According to Lombardo (2011), professional nursing practice depends upon the empathetic relationship between the patient and the nurse; however, this very relationship can lead to compassion fatigue and the inability of the nurse to complete her therapeutic duties. Decreased productivity, stress-related symptoms, high job turnover, and difficulty providing relationship-based care to patients is related to compassion fatigue (Lombardo & Eyre, 2011).

The Compassion Satisfaction and Compassion Fatigue theory posits that those caregivers who work with patients experiencing suffering will be impacted both positively and negatively (Stamm, 2010). Compassion satisfaction is the positive effect of working with patients who have experienced or are experiencing pain and suffering. Compassion satisfaction has been defined as the sense of fulfillment or pleasure that caregivers experience from performing their work (Larsen & Stamm, 2008). On the other hand, compassion fatigue is commonly used to describe the negative consequences of working with trauma patients (Sodeke-Gregson, Holttum, & Billings, 2013). As an overarching construct, compassion fatigue includes the phenomenon of secondary traumatic stress and burnout (Stamm, 2010). Compassion fatigue will result in relational difficulties and an inability to work effectively with patients (Collins & Long, 2003). While either construct may be present to some extent in all caregivers and helpers, the level of compassion satisfaction will serve to mitigate and provide a protective factor against compassion fatigue and burnout (Collins & Long, 2003).

Compassion is central to nursing care (Georges, 2014) and the challenge to provide compassion is essential and central to the practice of nursing. Because the present study was premised on the belief that the attitudes of nurses towards the suicidal patient are critical to the development and maintenance of a therapeutic relationship, it is important to understand how the nurses' level of compassion mitigate the attitude of the nurse working with this vulnerable patient population.

**Joiner's Interpersonal-Psychological Theory of Suicide.** Joiner's theory of suicidal behavior (Joiner, 2005) posits that an individual will not die from suicide unless they have the desire to die as well as the ability to do so. According to Joiner's theory, the intersection of three factors will contribute to the possibility of suicidal thoughts and behaviors: thwarted belongingness, perceived burdensomeness, and capability for suicide.

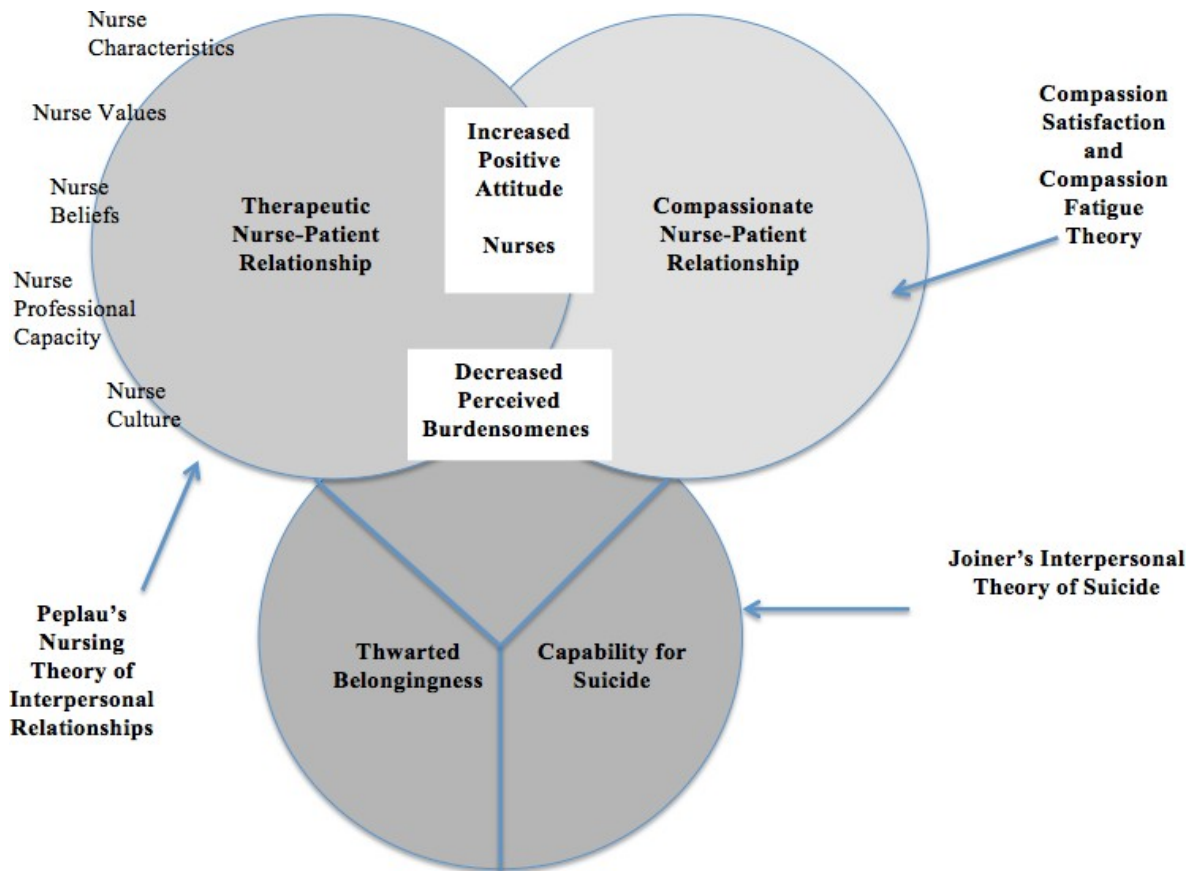
The ability to complete suicide refers to the ability to enact lethal self-injury. An example of this is the availability of guns in the home. Another example is the accrual of courage through subsequent multiple suicide attempts. According to Joiner (2005), "cognitive sensitization occurs when one undergoes a provocative experience, and subsequently, images and thoughts about that experience become more accessible and easily triggered" (Joiner, 2005, p. 82). An additional component in Joiner's theory is the concept of thwarted belongingness. Thwarted belongingness, or social alienation is the experience of feeling alienated and apart from others. Isolation from family, friends, and social groups are examples of thwarted belongingness (Joiner, 2009). According to Van Orden et al. (2010), a number of studies have demonstrated associations between various types of social isolation and suicide. These include loneliness, social withdrawal, living apart from family and friends, prisoners in single person cells, and losing a spouse through death or divorce (Van Orden et al., 2010).



Of the most pertinence to this study and to the profession of nursing is the phenomenon of perceived burdensomeness. Joiner (2005) states that not only do the potentially suicidal person feel they are ineffective or incompetent, but they also believe that those traits affect others as well. They feel a sense of permanence regarding their ineffectiveness and this is often accompanied by escalating feelings of shame (Joiner, 2005). Perceived burdensomeness leads to the idea that “my death will be worth more than my life to family, friends, society, etc.” and these escalating thoughts become a potentially fatal misconception (Joiner, 2009, p. 142). A patient experiencing suicidal thoughts and behaviors presents to a patient-care area in a vulnerable state of mind. If the nurse attending this patient does so with a negative attitude, the patient may feel an even more elevated sense of burdensomeness (Mårtensson et al., 2014; Gorvin & Brown, 2012). The alarming perception is that the self is so permanently incompetent and unworthy, that the person has become a liability for others (Van Orden, Lynam, Hollar, & Joiner, 2006). Finally, due to these feelings, the person perceives a choice of continued burdensomeness to others on the one hand, or death on the other hand (Joiner, 2005). Although this study will not address the relationship between nurses’ attitudes and the sense of burdensomeness felt by the suicidal patient, Joiner’s theory does provide another justification for understanding the attitudes of nurses towards the suicidal patient.

**Combined theoretical framework of this study.** Peplau’s Nursing Theory of Interpersonal Relations, Compassion Satisfaction and Compassion Fatigue Theory, and Joiner’s Interpersonal-Psychological Theory of Suicide intersect to provide the theoretical underpinnings for this dissertation study. Figure 1 shows a model of how the theories overlap. Figure 1 shows how perceived burdensomeness ought to be ameliorated by an improvement in the nurses’ attitude. Although this study only focused on the levels of nurses’ attitudes and their relationships to

compassion satisfaction and compassion fatigue, this combined theoretical framework underpinned this study—both in an independent sense and more importantly, as an interdependent context.



*Figure 1.* Overlapping theories with improved positive attitude in nurses and improved patient wellbeing.

The bedrock of this study was built upon the interconnectedness of these three theories. Understanding nurses' attitudes and factors that affect nurses' attitudes towards the suicidal patient may lead to the continuing professional development of nurses. In turn, this should lead to improvements in the safety and quality of care for suicidal patients in hospital settings.

## Foundation

**Suicide.** Suicide is a preventable public health problem accounting for more global deaths than homicide, motor vehicle collisions (MVCs) and war (World Health Organization, 2012a). More than 800,000 suicides occur each year globally (World Health Organization, 2012b) and suicide is the second leading cause of death in the 15-29 year old cohort (World Health Organization, 2014). In the US, the age-adjusted suicide rates has increased 24% from 1999 to 2014 (Curtin, Warner, & Hedegaard, 2016) and in 2014, over 44,000 Americans died from suicide (American Foundation for Suicide Prevention, 2014). In the 15-29 year old cohort in the US, suicide is the second leading cause of death (Centers for Disease Control, 2014) and in the rural US, the suicide rates are more than double that of their urban counterparts (Fontanella et al., 2015). The post-war *Baby Boomer Cohort* – those born between 1946 and 1964 – show the greatest increase in rates of suicide in this century (Phillips, Robin, Nugent, & Idler, 2010) with a 48% increase in suicide rates from 1999 to 2010 (Center for Disease Control and Prevention, 2013). Figure 2 shows the US 2000 – 2014 death rates per 100,000 population from suicide.

A suicide attempt is defined as a non-fatal, self-directed, potentially injurious behavior with an intent to die as a result of the behavior (Center for Disease Control and Prevention, 2016). Data from the CDC shows that in 2014, 1.3 million adults attempted suicide (Centers for Disease Control, 2014). The National Survey on Drug Use and Health (NSDUH) is a two-phase face-to-face household interview with the first phase being a screening process and the second phase being the actual interview. In 2014, the NSDUH sample size was 67,901 and is designed to be representative of the nation as a whole and for each of the 50 states and the District of Columbia (Lipari, Piscopo, Kroutil, & Miller, 2015). The study found that in 2014, 9.4 million adults in the US had suicidal thoughts, 2.7 million adults made a suicide plan, and 1.1 million adults make an actual attempt to end their life (Lipari et al., 2015).

Data from the survey showed that of the 1.1 million adults who made a suicide attempt, 55.2% of those sought medical attention (Lipari et al., 2015). Of the 1.1 million adults who attempted suicide, 42.7% stayed in a hospital for at least one night following the attempt (Lipari et al., 2015). The average length of stay for patients admitted to the hospital for suicide thoughts and behaviors was 5.6 days (Owens et al., 2017).

The Agency for Healthcare Research and Quality (AHRQ) collects comprehensive hospital data through the Healthcare Cost and Utilization Project (HCUP) from hospital and emergency departments in the US (Agency for Healthcare Research and Quality, 2014a). The Nationwide Emergency Department Sample (NEDS), collects and analyzes data from 945 hospital emergency departments in 33 states and the District of Columbia, approximating a 20% stratified sample of all emergency departments in the US, estimating 135 million ED visits (Agency for Healthcare Research and Quality, 2014b). In 2013, data from the NEDS showed that nearly 1% of all emergency department visits were related to suicidal ideation (Agency for Healthcare Research and Quality, 2014a).

**Nursing and the care of the suicidal patient.** Nurses interact with patients having suicidal thoughts and behavior across most hospital settings. Because of the significant amount of time nurses spend interacting with patients, they are considered *front-line* in identifying, managing and intervening in patients with suicidal thoughts and behaviors (Berlim, Perizzolo, Lejderman, Fleck, & Joiner, 2007). Regardless of their specialty area or their hospital setting, many nurses will encounter and provide care for suicidal patients (Bolster et al., 2015). The attitude a nurse has towards a suicidal patient may have a direct impact on patient safety, patient quality of care, and patient outcomes (Bolster et al., 2015; Anderson & Standen, 2007).

While a necessary focus of nursing must be on tending to injuries, evaluating risk factors, and preventing additional attempts, the neglect in attending to the moral dilemma faced by the suicidal patient must be addressed (Tzeng, Yang, Tzeng, Ma, & Chen, 2010). Samuelsson et al. (2000) found that patients who were admitted to an inpatient setting after a suicidal attempt complained of nurses who behaved in an uncaring and disrespectful manner. Patients often feel a sense of shame (Wiklander, Samuelsson, & Asberg, 2003) associated with their hospitalization. Because of this feeling, they often do not seek help and, more importantly, they do not allow themselves to be helped (Mårtensson et al., 2014). A phenomenological study by Raingruber (2003) found that when suicidal patients sensed a lack of caring, their feelings of helplessness intensified. Improving care and personal attention to human needs and interactions are of primary importance (Raingruber, 2003) and essential to providing safe and quality nursing care to the suicidal patient.

### **Nurses Attitudes Towards the Care of the Suicidal Patient**

Attitude is conceptualized as having three interdependent components: the Affective component, the Cognitive component, and the Behavioral component (Ouzouni & Nakakis, 2009). The Affective component is covert and consists of an emotional response to an issue or a person (Ouzouni & Nakakis, 2009). The Cognitive component of attitude is also covert and refers to the thoughts and the beliefs an individual has towards an issue or a person (Jain, 2014). The Behavioral component is overt and it refers to the observable responses and actions towards an issue or a person (Wicker, 1969). The Behavioral component may be verbal or non-verbal (Jain, 2014). This model of attitude and these three factors are important in understanding the overall concept of attitude as it relates to nurses' attitudes towards the suicidal patient.

## **Measuring Attitude of the Nurse Towards the Suicidal Patient**

Many attempts have been made to describe the factors and components that quantitatively measure attitudes towards suicide. This review of the literature focused on the development of two survey tools that have been typically used to assess attitudes towards suicide and the suicidal patient in clinical settings. While the tools used for this dissertation study are described in the Methods chapter, a review of the literature supporting the development and use of these tools follows.

**Factors and Components of Attitude.** A 2009 Greek study by Ouzouni & Nakakis sought to develop a method for measuring caregivers attitudes towards the care of the suicidal patient. A tool was developed to specifically assess health care personnels' attitudes towards the suicidal patient and this study used doctors, nurses, and nursing assistants as the study sample. An instrument was developed with 80 Likert-type questions and these questions were further organized into 8 subscales. The subscales were Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality Traits, Mental illness, and Discrimination (Ouzouni & Nakakis, 2009). The possible range of scores on the ATAS-Q was 80 to 400, with a higher score indicating a more positive overall attitude towards suicidal patients (Ouzouni & Nakakis, 2009).

In the development of this measurement instrument, previously validated attitudinal measures from the Suicide Opinion Questionnaire (Domino, 1982) were collected and modified for use with a pilot study consisting of doctors and nurses working in medical, surgical, intensive care units, and accident and emergency departments of general hospitals. After the pilot study using 40 doctors and nurses, participants were asked open-ended questions about the clarity of the questions. According to Ouzouni & Nakakis (2009), the structure of the questionnaire and the

questions were clearly understandable. Thus, according to the authors, the study had face validity (Ouzouni & Nakakis, 2009).

After the pilot study, a second study used a sample of 186 doctors and nurses from the above described settings. A factor analysis was performed and from the factor analysis, 8 factors extracted accounted for 55.451% of the total variance (Ouzouni & Nakakis, 2009). A total of twenty-two items were removed and the resulting ATAS-Q comprised 80 attitudinal statements organized into 8 factors as described above. According to Ouzouni & Nakakis, “each factor represents a different dimension to explain the form of health care personnel attitude towards attempted suicide people” (p. 229). According to the authors, “attempted suicide is a complex phenomenon which must be explored in a number of dimensions rather than just two opposing poles of positive or negative attitude of respondents” (Ouzouni & Nakakis, 2009, p. 229).

The 8 factors can be further organized into the three components of attitude: cognitive, affective, and behavioral (Ouzouni & Nakakis, 2009). Analyzing overall attitude towards suicide based on attitude in the three components of Cognitive, Affective, and Behavioral will be one purpose of this dissertation study. The Attitude Towards Attempted Suicide – Questionnaire (ATAS-Q) enables a measurement of the attitudes of nurses towards patients who have attempted suicide by examining factors that inform the components of attitude: Cognitive, Affective, and Behavioral. The relationship between the components and factors of attitude and is explained in the following three sections.

***Cognitive Component.*** The Cognitive component of attitude refers to what a person knows and what a person believes about an issue or about another person. Four subscales of the ATAS-Q fall under the cognitive component of attitude. These include Positiveness, Religiosity, Personality Traits, and Mental Illness (Ouzouni & Nakakis, 2009).



According to Ouzouni (2009), Positiveness measures both positive and negative attitudes of health care personnel to attempted suicide patients. Religiosity considers suicide and attempted suicide and its relation to religious issues. Personality Traits refers to the character and traits of those people who attempt suicide. Finally, Mental Illness refers to associating suicide and suicide attempts with mental illness.

Another study by Ouzouni & Nakakis (2013) used the ATAS-Q to study nurses' ( $n = 255$ ) attitudes towards suicidal patients. This study took place in Greece and “nurses” included professional nurses and nursing assistants. A one way analysis of variance (ANOVA) showed that nurses had an overall negative attitude ( $M = 263.52$ ;  $SD = 68.70$ ) towards those who had attempted suicide (Ouzouni & Nakakis, 2013). Despite this overall negative attitude, it was interesting that the scores for the Positiveness factor were high. The study's authors inferred this was because the nurses had a professional attitude focused on treating all patients equally (Ouzouni & Nakakis, 2013).

***Affective Component.*** The Affective component of attitude refers to what a person feels about another person or an object. One subscale – Acceptability - of the ATAS-Q consisting of 13 items was designed to measure the affective component of attitude (Ouzouni & Nakakis, 2009). Acceptability refers to the level of acceptance for suicide and suicide thoughts and behaviors that nurses have towards patients (Ouzouni & Nakakis, 2009). Among the 13 items are statements such as, “Sometimes suicide is the only escape from life's problems” and “Potentially every one of us can attempt suicide” (Ouzouni & Nakakis, 2009, p. 227).

***Behavioral Component.*** The behavioral component of attitude refers to responses and actions towards an issue or person. Three subscales of the ATAS-Q – Professional role and care, Manipulation, and Discrimination – were designed to measure the behavioral component of

attitude (Ouzouni & Nakakis, 2009). Professional role and care refers to the care that attempted suicide patients should receive and aspects of the professional role and work environment of the nurses (Ouzouni & Nakakis, 2009). Manipulation refers to the belief amongst nurses that attempted suicide patients try to manipulate their environment (Ouzouni & Nakakis, 2009). Finally, Discrimination refers to discriminatory attitudes of nurses towards the suicidal patient (Ouzouni & Nakakis, 2009).

**Self-Reported Professional Capacity.** A study by Botega et al. (2005) focused on developing a tool to specifically measure attitudes of nursing personnel towards suicide. A 21-item questionnaire used three subscales to measure attitude: Feelings towards the patient, Professional capacity, and Right to suicide (Botega et al., 2005). In the development of this tool, 317 nursing personnel – including nurses and nursing assistants – were placed in three separate focus groups to produce a list of 54 propositions on suicidal behavior (Botega et al., 2005). Examples of propositions were, “Do you feel capable of evaluating the suicidal risk of a patient and to handle this situation?” and “How do you feel towards a patient who tried suicide?” (Botega et al., 2005). After a factor analysis using maximum likelihood and orthogonal Varimax rotation, 25 of the highest scoring propositions were used to form the Suicide Behavior Attitude Questionnaire (SBAQ) and a pilot study was performed (Botega et al., 2005). After the pilot test, four items with low variance were removed and the survey tool was reduced to a final 21 attitude statements with a Likert style response (Botega et al., 2005).

**Professional capacity.** The SBAQ includes a subscale that measures the perceived professional capacity of the nurse to care for the suicidal patient. A higher total score on this subscale indicates the self-reported professional capacity of the nurse to care for and work with patients at risk for suicide (Jacobson et al., 2012). Professional capacity refers to the ability of

the nurse to care for the suicidal patient and includes concepts such as professional skills, perception, security, and capability (Botega et al., 2005). This survey instrument uses the following questions to evaluate the professional capacity of the nurse:

- I feel capable of helping a person who tried suicide;
- I have professional skills to handle patients under the risk of suicide;
- I feel I am capable of perceiving when a patient is under the risk of suicide;
- I feel insecure to care for patients under suicide risk (Botega et al., 2005).

According to the American Nurses Association, the professional role competency of a nurse is a responsibility shared by the individual professional nurse and by the nursing profession (American Nurses Association, 2014a). Additionally, regulatory agencies such as the state boards of nursing, the employer, and credentialing and certification entities share a burden of responsibility (American Nurses Association, 2014a). Nurses' professional capacity refers to the nurses' understanding of what the professional expectations are of a nurse, as well as the nurses' preparation to meet those expectations (American Nurses Association, 2014a). According to the ANA, context determines what is necessary to be adequately and safely prepared to meet professional responsibilities in a variety of healthcare settings (American Nurses Association, 2014a).

Botega (2005) found that nurses with a higher self-reported level of professional capacity had less of a condemnatory attitude towards suicidal patients—quantified by their scores on the SBAQ (2005). Botega et al. (2005) found that a more condemnatory attitude was higher among the staff who had never handled suicidal patients than those who were experienced with this type of nursing care ( $M = 404.5$  and  $382.4$ ,  $p = .04$ ). Additionally, Botega et al. (2005) found that those who had experience in attending suicidal patients had a higher perception of capacity to

care for the patient based on scores in the Professional Capacity subscale of the SBAQ ( $M = 199.7$  and  $165.9$ ,  $p = .004$ ).

A study in Australia (2002) was undertaken in order to develop a survey tool to determine emergency nurses' attitudes towards patients who self-harm. Although this study was not directly linked to suicidal patients, the results of the study showed that confidence in the ability to assess and refer self-harm patients was correlated to positive attitudes towards those patients (McAllister et al., 2002). The authors concluded that if staff perceive themselves as skilled, they are less likely to hold negative attitudes to the self-harm patient (McAllister et al., 2002).

A Florida State University Study (2012) used the Professional Capacity subscale from the SBAQ in order to examine mental health professionals' attitudes towards the suicidal patient. The 2012 repeated-measures design study at Florida State University collected three waves of data to determine mental health practitioners' attitudes towards suicidal patients before, after, and three months post-training with a *Recognizing and Responding to Suicide Risk* (RSRR) training program offered by the American Association of Suicidology (Jacobson et al., 2012). Results based on the SBAQ measurement tool showed significant improvement in nurses' attitudes from pre-training to post-training and the improvement was sustained over three months (Jacobson et al., 2012). The authors concluded that when clinicians perceive themselves as feeling prepared and confident to care for the suicidal patient and respond to suicide risk, that their attitudes towards the patients will significantly improve (Jacobson et al., 2012).

Yet another study by Berlim et al. (2007) used the SBAQ instrument to investigate perceived professional capacity in general hospital staff's attitude after a three-hour training video. This study included clinical ( $N = 102$ ) and non-clinical ( $N = 40$ ) staff. With the use of a pre-test, post-test design, the researchers concluded that the attitudes of both clinical and non-clinical staff

improved after the educational intervention (Berlim et al., 2007). Following the educational intervention, clinical participants felt they had the professional skills necessary to handle patients at risk of suicide and they reported an improvement in their ability to perceive suicidal behaviors (Berlim et al., 2007). The researchers reported the effect size of the intervention on perceived professional capacity was large (Cohen's  $d = 0.96$ ) after the education intervention (Berlim et al., 2007).

An additional study demonstrates the importance of education and preparation in improving attitudes towards the suicidal patient. A 2014 study in Sweden sought to focus on stigmatization towards and discrimination against suicidal patients by nursing staff (Mårtensson et al., 2014). According to Mårtensson et al. (2014), “stigmatization and discriminatory behavior constitute a major obstacle in psychiatric care” (p. 783). In this study mental health nurses ( $N = 256$ ) were surveyed with the Community Attitudes Towards Mental Illness (CAMI-S) questionnaire. The CAMI-S four factors are: *Fear and avoidance*, *Open-minded and pro-integration*, *Community mental health ideology*, and *Intention to interact* (Mårtensson et al., 2014). An additional scale—the Mental Health Knowledge Scale (MAKS)—measured stigma-related mental health knowledge. The Reported and Intended Behavior Scale (RIBS) measured staff members personal contact with persons with mental illness (Mårtensson et al., 2014). The findings demonstrated that mental health workers have more positive attitudes towards mental health patients if their knowledge about mental illness is less stigmatized (Mårtensson et al., 2014). The authors concluded that staff not only need knowledge to improve their attitudes, but also education processes that challenge their own beliefs and attitudes (Mårtensson et al., 2014).

A quasi-experimental study in Taiwan studied a group of second-year nursing students ( $n = 174$ ). The group was divided into two groups: the intervention group ( $n = 95$ ) and a control

group ( $n = 79$ ). The intervention group attended a four-hour suicidal education program designed to educate the students on the theoretical background of suicide and to inform the students of various intrapsychic conflicts that may lead to suicidal thought (Sun, Long, Huang, & Chiang, 2011). A 30-item questionnaire contained five subscales: *Acceptability of suicidal behavior*, *Morality and mental illness*, *Professional role, work, and care*, *Communication and attention*, and *Beliefs* (Sun et al., 2011). Data analysis showed that there were no significant differences in the two groups before the educational intervention. After the intervention, the results showed the average scores across all five factors were significantly different between the groups (Sun et al., 2011). In summary, the intervention group was less judgmental in their morality and mental illness scores towards suicidal patients and was more likely to show a belief that those who attempt suicide are expressing psychic pain and reaching out for help (Sun et al., 2011). The authors concluded that the “synthesis of knowledge on the range of theoretical perspectives on suicide facilitated the experimental group to embrace more positive attitudes towards suicide and people who commit suicide. It also helped the participants to be less judgmental” (Sun et al., 2011, p. 844).

An Australian study utilizing a convenience sample of emergency department nurses ( $N = 43$ ) investigated the ED nurses’ attitudes towards patients who self-harm through the use of a modified-SOQ survey (McCann, Clark, McConnachie, & Harvey, 2007). Most of the surveyed nurses revealed they had received no educational training for caring for patients who self-harmed. Based on the modified-SOQ scores, most of those surveyed showed an overall positive attitude towards this type of patient. Most alarming was that one question asked if they had ever heard another nurse say: ‘why didn’t he do it right this time and save us a lot of trouble’ (McCann et al., 2007). Of the nurses surveyed, 88.4% ( $n = 38$ ) had heard other nurses make this

statement (McCann et al., 2007). However, of those respondents who had overheard these statements, 97.4% ( $n = 37$ ) indicated the care they gave patients who self-harm was not influenced by other nurses' attitudes. These nurses also indicated they provided the same level of care or gave more care than they normally would after hearing the above statement (McCann et al., 2007).

Finally, another study utilizing the SBAQ showed the importance of education in improving the professional capacity of those caring for the suicidal patient. The study by Berlim et al. (2007) evaluated clinical ( $n = 102$ ) and non-clinical ( $n = 40$ ) general hospital staff's attitude after a three-hour training video in Brazil. The SBAQ was used to survey the sample using a pre-test, post-test design. Of interest, there were no significant differences between the scores on the SBAQ when comparing the clinical and non-clinical staff (Berlim et al., 2007). As the previous studies have shown, the attitudes of both clinical and non-clinical staff improved after the intervention (Berlim et al., 2007). The authors concluded that since the clinical and non-clinical staff had few differences in their responses to the SBAQ survey, both pre-test and post-test, that the "need for enhanced training on understanding, assessing, and preventing suicidal behavior" was needed for all clinical hospital personnel (Berlim et al., 2007, p. 236).

### **Measuring Compassion Satisfaction and Compassion Fatigue**

**Professional Quality of Life.** Compassion satisfaction and compassion fatigue represent both the positive and negative aspects of helping others and this influences a professional's overall quality of life (Stamm, 2010). According to Stamm (2010), the professional quality of life is affected by two aspects, the positive (Compassion Satisfaction) and the negative (Compassion Fatigue). Compassion Fatigue is further broken down into two additional components, Burnout and Secondary Trauma.

Joinson (1992) first used the term compassion fatigue to describe a nurse's loss of the ability to nurture in the setting of emergency departments. A sense of apathy and detachment in nurses was associated with "multiple environmental stressors, such as expanding workload and long hours, coupled with the need to respond to complex patient needs, including pain, traumatic injury, and emotional distress" (Joinson, 1992, p. 116). Compassion fatigue is characterized by compassion discomfort, compassion stress, and finally compassion fatigue, "where the compassion energy that is expended by nurses surpasses their ability to recover from this energy expenditure, resulting in significant negative psychological and physical consequences" (Boyle, 2011, para. 6). The result of compassion fatigue is a decreased quality of care with patients, a reduced ability to feel sympathy and empathy, and an impaired ability to make decisions and to care for patients (Cocker & Joss, 2016).

**Compassion.** Compassion is best defined by the Dalai Lama as the wish that others should be free from suffering (Dalai Lama, 2002). A thought-provoking definition of compassion is thus: "Compassion asks us to go where it hurts, to enter into the places of pain, to share in the brokenness, fear, confusion, and anguish. Compassion challenges us to cry out with those in misery, to mourn with those who are lonely, to weep with those in tears. Compassion requires us to be weak with the weak, vulnerable with the vulnerable, and powerless with the powerless. Compassion means full immersion into the condition of being human" (McNeill, Morrison, & Nouwen, 1982, p. 4). Therefore in the profession of nursing, compassion involves not the simplicity of taking away another's pain, but the phenomenon of "entering into that person's experience so as to share their burden in solidarity with them and hence enabling them to retain their independence and dignity" (Dietze & Orb, A., 2000, p. 169). "A requisite competency is the



repeated generation of compassion energy to foster connectedness and offer nurturance to those requiring nursing care” (Boyle, 2011, p. 1).

Based on these profound definitions of compassion, it is no surprise that compassion on the part of a nurse may also lead to compassion fatigue over time. The term compassion fatigue was first coined by a nurse, Carla Joinson, in 1992 and it describes the negative feelings that nurses have when caring for those who are suffering (Joinson, 1992). Joinson (1992) described compassion fatigue as the loss of the ability to nurture. A sense of apathy and detachment in nurses was associated with “multiple environmental stressors, such as expanding workload and long hours, coupled with the need to respond to complex patient needs, including pain, traumatic injury, and emotional distress” (Joinson, 1992, p. 116).

Compassion fatigue is brought about by relationships with others and, in turn, compassion fatigue on the part of the nurse affects her quality of life and the quality of life of those she is caring for (Todaro-Franceschi, 2013). Compassion fatigue is characterized by compassion discomfort, compassion stress, and finally compassion fatigue, “where the compassion energy that is expended by nurses surpasses their ability to recover from this energy expenditure, resulting in significant negative psychological and physical consequences” (Boyle, 2011, para. 6). The theory posits that the result of compassion fatigue is a decreased quality of care with patients, a reduced ability to feel sympathy and empathy, and an impaired ability to make decisions and to care for patients (Cocker & Joss, 2016). Compassion fatigue is consistent with a reduced capacity in feeling empathy and a non-interest in bearing the suffering of others (Adams, Boscarino, & Figley, 2009). According to Boyle (2011), compassion fatigue descriptors include: borrowed stress, disabled resiliency, empathetic distress, and existential suffering. The natural

outcomes of compassion fatigue are decreased empathetic responses to patients, withdrawal from care, and an imbalance of empathy and objectivity (Boyle, 2011).

Based on the combined theoretical model of this study, withdrawing from a suicidal patient may increase that patient's sense of perceived burdensomeness, while showing compassion to a suicidal patient may decrease their perceived burdensomeness and lead to improved patient safety and quality of care. Additionally, compassion or compassion fatigue may predict nurses' attitudes towards suicide patients.

Literature relevant to studies about compassion and compassion fatigue and the way they influence nurses' attitudes towards the suicidal patient were not found. However, one qualitative study found in the search of the literature described the importance of compassionate care to the suicidal patient. Samuelsson et al. (2000) interviewed patients who had survived a suicide attempt ( $N = 18$ ) to learn more about their experiences with caregivers during their hospitalization. In regard to perceptions of the caregivers and the care they received, there were positive and negative statements (Samuelsson et al., 2000).

On a positive note, one patient stated, "Being in their care gave me a sense of security" and another stated, "You feel welcome, relaxed and secure" (Samuelsson et al., 2000). On a more negative note were these statements, "There was nobody who cared. Nobody took care of me, at least that's what I thought" and "He had emergency duty the previous night so he was tired. It felt difficult, like being a *burden*. My being here is causing trouble" (Samuelsson et al., 2000).

Kevin Hines is one of five people who have been known to survive a suicide attempt by jumping off of the Golden Gate Bridge in San Francisco, California (Hines, 2013). Hines has since dedicated his life to suicide prevention. When he had decided to end his life, he took a bus to the Golden Gate Bridge. According to Hines (2013), he was crying and emotional during the

bus ride to the bridge. In a recent lecture in Ketchum, Idaho, Hines stated that had one person asked him if he was okay, he would have taken that opportunity to reach out for help (Hines, 2013). According to Edwin Shneidman, the thing that all suicides and suicide attempts have in common is that they are a cry for help – the common purpose is seeking a solution (Shneidman, 1985). Nurses have the opportunity to answer the cry for help through therapeutic interpersonal relationships and through the practice of compassion.

Based on the combined theoretical model of the present study presented earlier, withdrawing from a suicidal patient may increase the patient's sense of perceived burdensomeness, while showing compassion to a suicidal patient may decrease their perceived burdensomeness and lead to improved patient safety and quality of care. Hence, it is important to understand the general level of compassion satisfaction and compassion fatigue among nurses and the extent to which the levels are conducive to therapeutic relationships. Additionally, compassion satisfaction and compassion fatigue have not been studied in relation to nurses' attitudes, but they may predict nurses' attitudes towards the care of the suicidal patient. Examining the levels and their possible relations to attitudes are major purposes of this present investigation.

### **Demographics and Nurses' Attitudes Towards the Suicidal Patient**

Socio-demographics, such as age, gender, education, experience, and nursing specialties are some factors to explore when studying the overall attitude of nurses towards the suicidal patient. The religious background of nurses is another demographic that has been studied, but that demographic was not investigated in this dissertation study.

**Age.** A study examined demographic and nurses' attitudes towards the suicidal patient using the SBAQ survey instrument (2005). In this study, nurses and nursing assistants ( $n = 317$ ) were given the SBAQ survey to determine the associations between characteristics of the nurses and

their attitudes towards suicidal patients (Botega et al., 2005). The results of the study indicated that older nurses and nursing assistants (>50 years of age), compared to younger (20-29 years of age) showed a more condemnatory attitude towards suicidal patients based on a comparison of their mean scores (Average Scores: 414.9 and 366.9, respectively;  $p = 0.04$ ).

Another study by Neville and Roan (2013) sought to investigate nurses' attitudes towards suicidal patients in a medical-surgical area of the hospital. A convenience sample of 45 nurses was used in this descriptive, non-experimental design study. Demographic data was collected from the nurses and this included gender, nursing specialty, age, education, religion, ethnicity, and race. The nurses' attitudes were measured using the ATAS-Q (Ouzouni & Nakakis, 2009) that was presented previously.

Correlational analysis were performed on the demographic variables and the ATAS-Q items. The possible overall score on the ATAS-Q ranges from 80 to 400 with the higher score indicating a more positive attitude towards suicide patients (Ouzouni & Nakakis, 2009). The study showed a mean score of 262.51 ( $SD = 16.34$ ) and the scores on the ATAS-Q were not related to the categories of the demographic variables (Neville & Roan, 2013). Nurses' age showed a significant relationship to Positiveness ( $r = -.35$ ,  $p = .03$ ) with younger nurses having a more positive attitude to suicide patients than their older counterparts (Neville & Roan, 2013). This study concentrated on demographics only as they relate to nurses' attitudes towards the suicidal patient. Although the results of the Neville & Roan (2013) study proved interesting, the sample size was small. Research using a larger and more appropriate sample size would provide more stable estimates and better information about the correlations among demographic variables and nurses' attitudes towards the suicidal patient. This is a goal of the present study.

In contrast to the other studies that have been reviewed above, Vines (2015) found that as nurses age, their attitudes towards patients improve. The conflicting evidence regarding age and attitudes towards the suicidal patient justifies additional research in this area.

**Gender.** In a study in Turkey, a group of physicians ( $N = 158$ ) and a group of nurses ( $N = 206$ ) were given a questionnaire to study the predictors of a therapeutic versus a nontherapeutic reaction to suicidal attempters (Demirkiran & Eskin, 2006). The Attitude Towards Suicide Scale (ATTS) was used to survey the healthcare team. The ATTS is a 24-question survey with 6 factors: *Acceptability of Suicide*, *Consideration of suicide as a sign of mental illness*, *Believing in punishment of suicide committers after life*, *Necessity of communicating suicidal problems*, *Indispensability of hiding suicidal behavior in the family*, and *Open reporting and discussion of suicide* (Ghasemi, Shaghaghi, & Allahverdipour, 2015). The findings indicated men scored much higher on average than women on suicide as a sign of mental illness. Women scored higher on average than men on punishment after death for suicide (Demirkiran & Eskin, 2006). On the whole, the study showed that women were more tolerant and sympathetic than men towards suicidal patients.

In a study by Ouzouni (2013) in Greece, using the ATAS-Q survey nurses and nursing assistants in general hospitals ( $N = 255$ ) were given the questionnaire in order to determine the overall attitude of “nurses” to the suicidal patient. The results showed that respondents held a generally negative attitude towards suicidal patients (Ouzouni & Nakakis, 2013). However, it was found that women held more positive attitudes towards suicide patients than men did (Ouzouni & Nakakis, 2013).

**Experience.** A study found that age and years of experience showed significant influence on nurses’ attitudes towards suicidal patients (Ouzouni & Nakakis, 2013). The results showed that

nurses who were younger and less experienced had more positive attitudes than older nurses with more experience (Ouzouni & Nakakis, 2013).

Another study directed towards the patient who self-harms was an Australian dissertation study using a mixed-methods exploratory design to study nurses' attitudes. The Attitudes Towards Deliberate Self-Harm Questionnaire (ATDSHQ) and the Self-Harm Antipathy Scale (SHAS) were used to survey nurses ( $N = 175$ ) and the surveys were followed ( $N = 25$ ) by a follow-up phone interview to some of the surveyed nurses (Vine, 2015). One of the research questions examined years of experience and how that correlated with nurses' attitudes towards patients who self-harm. The study concluded 0.3% of the variance in the entire survey was related to years of experience (Vine, 2015).

**Education.** Based on the results of the study by Demirkiran and Eskin (2006) showing that women were more tolerant and sympathetic than men toward suicidal patients, they inferred that education background had an impact on health care workers attitude towards suicide, because most of the physicians were men who believed suicide was the result of a biological etiology while most of the women were nurses who showed greater tolerance and sympathy toward suicidal patients (2006). Unfortunately, their study was not able to examine the effect of occupation on attitudes toward suicide apart from gender.

A 2005 study in Taiwan investigated the attitudes of casualty (ED) nurses ( $N = 155$ ) to patients who had attempted suicide showed the significance of nursing education on nurses' attitudes towards suicide patients. A modified SOQ was used to survey the nurses. The scale permitted scores of 22 to 10 with high scores reflecting an overall positive attitude towards suicidal patients (Sun, Long, & Boore, 2007). Results showed that there was a significant

relationship between nurses' level of education and their attitudes towards suicidal patients (Sun et al., 2007).

**Nursing Speciality.** An interesting finding of the Ouzouni & Nakakis (2013) study was that nurses and nursing assistants in medical, surgical, and orthopedic wards showed a more positive attitude towards patients who had attempted suicide than those working in intensive care units and in emergency departments. This finding indicates that occupational role can have an influence on nurses' attitudes towards the suicidal patient.

**Religious Background.** Neville & Roan (2013) showed that there was a significant inverse relationship with the subscale of Positiveness and religion ( $r = -.35, p = .03$ ). Those nurses who identified with religion had more positive attitudes towards suicide patients.

Another study showed a significant relationship found between religion and attitudes towards suicidal patients. As a previously described study showed (Botega et al., 2005), ED nurses who indicated they had no association with religion had more positive attitudes towards suicide patients (Sun et al., 2007).

In addition, in the Botega (2005) study, those nurses and nursing assistants who attended church on a regular basis had a more condemnatory attitude towards suicide patients than those who did not attend church based on a comparison of means scores (average scores of 404 and 361 respectively;  $p = .008$ ).

### **Synthesis and Gaps**

Previous research on nurses' attitudes towards suicide were mostly exploratory survey studies. Based on this literature review, a number of studies explored predictors of attitude towards suicide patients and these included socio-demographic characteristics of the care givers and a perceived professional capacity to care for suicidal patients. Only two studies used a

sample of nurses from emergency departments and in-patient floors in a general hospital setting. Most of the studies used samples of nurses and nursing assistants, or nurses and physicians, or nursing and mental health providers. Two of the studies used non-clinical participants—family and urban residents. One study used student nurses. This present study will focus on nurses who care for patients in general hospital settings and will include nurses from all areas of nursing specialities. This is another goal of the present study.

Nurses can and will interact with patients who manifest suicide thoughts and behavior patients across all hospital settings. The theoretical foundation of this dissertation study was built upon the interconnectedness of therapeutic nurse-patient relationships, compassionate nurse-patient relationships and the care of the suicidal patient. Understanding how compassion satisfaction, compassion fatigue, professional capacity, and socio-demographic variables influence the nurse's attitude towards the suicidal patient are important goals of this dissertation research.

Research developed to study compassion and its relationship to nurses' attitudes towards suicide was not found. Few studies were found to investigate the relationship between professional capacity and nurses' attitudes towards suicide. Those that were found did not use a sample of nursing from all hospital settings. More studies looked at various socio-demographic characteristics of the caregiver and the association with attitudes towards the suicidal patient; however, the findings were somewhat inconsistent and rarely associated with only nurses.

Exploring multidimensional factors that influence and predict nurses' attitudes towards the suicidal patient was an identified gap in the literature. Additional justification for this study was that there are only two US studies from 2000 – 2017 and only one used a small sample of hospital nurses representing the medical/surgical area of the hospital. A third justification was



the recent statement by the Joint Commission (2016) calling for the detection and treatment of suicide thoughts and behaviors in all nursing settings to be a national nursing priority (Joint Commission, 2016). This research will make a significant contribution to the body of knowledge in the nursing research by identifying factors related to a nurses' attitude towards the suicide patient. The following chapter discusses the methodology for this study.

## **Chapter 3: Methodology**

### **Introduction**

The purpose of this research methodology chapter was to present the strategies that were used to answer the research questions and justify this dissertation study. This chapter reviewed the research questions, discussed the research design, identified the target population and the study sample, discussed study sample recruitment, explained the strategies to ensure human subjects protection, discussed the instruments, explained the data collection methods and the data analysis, and discussed the validity and reliability of the dissertation study.

### **Research Questions**

The aim of this dissertation study was to investigate nurses' attitudes towards the care of the suicidal patient. In the following research questions, "nurse(s)" refers to nurses actively working in emergency department settings and/or in-patient areas of general hospitals in the United States. The research questions that underpinned this study follow:

1. What is the overall attitude of nurses towards the care of the suicidal patient?
2. What are the attitudes scores of nurses towards the care of the suicidal patient on the subscales of the ATAS-Q (Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality traits, Mental illness, and Discrimination)? What are the individual attitudes of nurses towards the care of the suicidal patient in each attitude component (Cognitive, Affective, and Behavioral)?
3. What are the overall Compassion Satisfaction and Compassion Fatigue scores of nurses in the general hospital setting?

4. What is the *self-reported* professional capacity of nurses towards the care of the suicidal patient
5. What is the relationship between age, gender, years of experience, education, nursing specialty, and nurses' overall attitudes towards the suicidal patient?
6. What are the correlations among the Cognitive, Affective, and Behavioral components of attitude and nurses' overall attitudes towards the suicidal patient?
7. How does a nurses' *self-reported* level of professional capacity to work with suicidal patients relate to her attitude (overall and component) towards the suicidal patient?
8. Does a nurses' self-reported level of Compassion Satisfaction and/or Compassion Fatigue correlate with the nurses' attitude (overall and component) towards the suicidal patient?
9. Is a nurses' overall attitude towards the suicidal patient predicted by a weighted combination of the nurses' level of compassion and the nurses' self-reported professional capacity to care for the suicidal patient? What is the relative contribution of these variables to the prediction?

## **Research Design**

This study utilized a non-experimental, descriptive, correlational design to examine emergency and in-patient hospital nurses' attitudes towards the care of the suicidal patient. A descriptive study design was utilized in order to depict the nurse study participants in an accurate way and to answer the question "What is?" A correlational study design was used because this study examined relationships between variables (Polit & Beck, 2012).

Along with socio-demographics information – including age, gender, years of experience, education, nursing specialty – three self-reported surveys were used to obtain quantitative data describing attitude towards suicidal patients, professional capacity, and compassion satisfaction

and/or compassion fatigue. Nurses were asked about their self-reported professional capacity to care for suicidal patients, their self-reported level of compassion satisfaction and/or compassion fatigue, and their overall attitude towards care of the suicidal patient. Surveys are useful for this type of study, because surveys provide a quantitative description of attitudes and opinions of a population by surveying a sample of that population (Creswell, 2014). Results from the survey of the representative sample provide the data needed to analyze inferences about the population (Creswell, 2014).

### **Target Population and Study Sample**

The targeted population for this study was nurses working in emergency and in-patient settings in general hospitals in the US. According to a 2011 report from the American Association of Colleges of Nursing (AACN), there are 3.1 million registered nurses (RNs) in the US (American Association of Colleges of Nursing, 2011). Of those RNs, 84.8% are currently employed (American Association of Colleges of Nursing, 2011). Approximately 58% of those RNs, or 1.5 million, work in a general hospital setting (American Association of Colleges of Nursing, 2011).

The sample for this study included RNs working full-time, part-time, or per diem in either the emergency department or in-patient settings of general hospitals in the US. Nurses referred only to Registered Nurses. Other healthcare providers, such as physicians, nursing assistants, licensed practical nurses, physician assistants, mental health providers, social workers, psychologists, etc. were excluded from this study sample.

### **Sample Recruitment and Data Collection**

**Social Media Sampling.** According to a recent publication by the Pew Research Center (2013), three waves of technology revolutions are linked to the nearly ubiquitous nature of

Internet use in the US. These waves were the shift to broadband Internet access, mobile internet access, and the rise of social media and social networking (Pew Research Center, 2013). Despite the widespread nature of Internet use in the US, 13% of US adults remain unconnected (Anderson & Perrin, 2016). While this number has decreased from 48% in the early century, it is important to ascertain who the 13% of non-users are and if the inability to contact those users would affect this dissertation study.

According to Anderson & Perrin (2016), the greatest majority of the 13% of non-users are from the following demographics: Adults over the age of 65, adults earning less than \$30,000 a year, and adults with less than a high school education. This dissertation study recruited professional nurses through the use of the Internet. Professional nurses do not fall into any of the demographics that are typical of non-users of the Internet. In fact, professional nurses are of working age, they make more than \$30,000 a year, and they have at least an associated degree from a college (American Nurses Association, 2014b; Bureau of Labor Statistics, 2016).

As the Internet continues to evolve, the study of survey use for research purposes has progressed significantly. Even when email addresses are available for a study sample, recruitment by email has been shown to produce response rates lower even than those achieved by telephone surveys (Dillman, Smyth, & Christian, 2014). Additionally, the millennial generation has replaced email communication with texting and social media exchange (Dillman et al., 2014; Stevens, 2017). Responses to email surveys have declined as much as responses to telephone surveys and US Postal Service mailed surveys (Messer & Dillman, 2011).

A challenge is reporting the survey's response rate in a historically accepted manner. Traditionally, response rates have been reported as the number of people presented with the survey divided by the number of people who complete the survey (Polit & Beck, 2012).

According to Eysenbach (2004), response rates of online surveys can be calculated in multiple ways. Response metrics are determined based on view rate, participation rate, and completion rate (Eysenbach, 2004). As per the recommendations of The Checklist for Reporting Results of Internet Surveys (CHERRIES), this dissertation study reported response rate as completion rate – the number of people completing the survey divided by the number of people who accessed the first page of the survey (Canadian Medical Association, 2016; Litchman, 2015; Eysenbach, 2004).

Sample recruitment took place through social media platforms including Facebook, Twitter, and LinkedIn. According to Yuan et al. (2014), there are many advantages to online recruitment of research participants through social media platforms. “By accessing online venues where potentially qualified participants are already spending time, it is possible to bridge the psychosocial and physical divides between research participants and researchers to achieve a successful outcome” (Yuan, Bare, Johnson, & Saberi, 2014, para 4). According to Ryan (2013), the use of online social media for research recruitment is successful, cost-effective, and efficient. In a study such as this, the ability to transcend barriers such as physical distance, limited financial resources, and time constraints (Yuan et al., 2014). Recruitment through online social networking has the potential to increase sample sizes and improve the diversity of participants (Ryan, 2013). Additionally, the importance of reducing the time it takes to recruit participants and reducing costs associated with more traditional methods of recruitment are important considerations (Yuan et al., 2014; Ryan, 2013).

**Reach.** The potential reach of social media is significant (Stevens, 2017). As an example, during a one-hour online dialogue among 119 professional nurses on Twitter, a total of 996 Tweets were exchanged. This one-hour online dialogue had a potential reach of over 3 million

Twitter users (Richardson, Grose, Nelmes, Parra, & Linares, 2016). As another example, one professional nursing group on Twitter has 63,200 nurse followers (Stevens, 2017) and the number of nurse profiles on LinkedIn is over one million with 721,385 of those having experience in general hospital settings (LinkedIn, 2017).

**Efficient and Cost-Effective.** Utilizing social media to recruit participants is efficient and cost-effective (Yuan et al., 2014). In seeking US nurses from a variety of general hospital employment backgrounds, the use of social media transcended barriers to recruitment such as time, physical distance, transportation requirements, and financial resources” (Yuan et al., 2014). Additionally, with a sensitive survey such as this dissertation survey, the improved benefits of privacy and anonymity were a bonus. Although a limitation to an online survey was the inability to verify nurse credentials, the lack of financial incentives minimized fraudulent responses (Yuan et al., 2014).

**Sampling Strategy.** After Human Subjects Committee (HSC) approval, an online announcement inviting RN study participants was posted in communities that are specifically designed for professional registered nurse membership. Due to the viral nature of social media (Litchman, 2015) a targeted snowball-sampling model was utilized. Targeted snowball-sampling allowed the researcher to maintain greater control over who initially received the study invitation as well as encouraging the invitation to be passed on to other like-minded professionals who mirrored the population to be studied (Dusek, Yurova, & Ruppel, 2015). In order to encourage participation, the opportunity to win a number of prizes was offered to those who completed the entire survey. However, to improve validity and decrease the chance of fraudulent survey participation, compensation for completing the survey was not offered. While a limitation of

online surveys is a reliability on the online user being unqualified to participate, this issue was strongly mitigated by removing compensation and thus the incentive to cheat (Shatz, 2016).

**Survey Software.** The survey was housed on Survey Monkey Gold, an advanced survey paid subscription service. The three surveys to be used in this study were converted to questions on the Survey Monkey platform. Survey Monkey Gold provided authentication through a single username and password, data encryption, restrictive firewalls, and an enhanced HIPAA and PCI compliant platform (SurveyMonkey, 2016). The data that were gathered from the Survey Monkey questionnaires were automatically downloaded to a secure Excel spreadsheet that was additionally encrypted and password-protected. Surveys could only be filled out one time per person and duplication was reasonably controlled by not allowing a second survey to be completed by the same computer or the same email address (SurveyMonkey, 2016).

The initial page of the Survey Monkey Gold link was an informational leaflet from the researcher (See Appendix A). This leaflet also encouraged RN participants to pass the original survey link on to other registered nurses employed in general hospitals in the US. The second page of the survey was the informed consent page. Potential participants were notified of the following things: a) this study involved research, b) description of the research procedures, c) participation was voluntary, d) participants could withdraw at any time, e) the data was secure and completely de-identified, anonymous, and confidential, f) contact information for the researcher, g) contact information for any concerns about the research study. After reading the consent page, potential survey participants were asked to check a box stating that they understood and agreed to be part of the research study. Once the box was checked, the survey began.



**Questionnaire.** The survey itself was in four parts. Part 1 identified inclusion criteria and gathered demographic information including age, gender, years of experience, education, and nursing specialty.

- Are you a Registered Nurse licensed in the United States?
- Do you work full-time, part-time, or per diem in a hospital setting?
- Do you work in an in-patient or emergency area of a hospital setting?
- What is your department? (Emergency, Medical/Surgical, Orthopedics, Mother/Baby, Intensive Care Unit, Other)
- Do you work in a critical access hospital? (Yes, No, I don't know)
- Age
- Gender
- Years of experience
- Education (Diploma, ADN, BSN, MSN, Other Masters Degree, NP, DNP, PhD)

Part 2 of the survey was the ATAS-Q (See Appendix B). Part 3 of the survey was the SBAQ (See Appendix E). Part 4 of the survey was the ProQoL Tool(see Appendix H).

Part 5 of the survey thanked the survey participant and included a boldface word phrase: **COFFEE FOR ME**. Instructions followed for the participant to email the researcher with that phrase in order to be entered into the drawing for a \$20.00 Starbucks Gift Certificate. This assured the researcher that the survey participant saw the last page of the survey. The drawing took place on February 1, 2018 and the ten winners were sent an online link to a \$20.00 gift certificate to Starbucks. (See Appendix J).

### **Statistical Power**

Two analyses were run by G\*Power 3.1. A correlation: Point biserial model and a Linear multiple regression: fixed model with  $R^2$  increase.

According to an analysis by G\*Power 3.1, a minimum sample of at least 82 participants was the desired sample based on an a priori power analysis using the Correlation: Point biserial model option (Faul, Lang, & Buchner, 2007). See Figure 3.

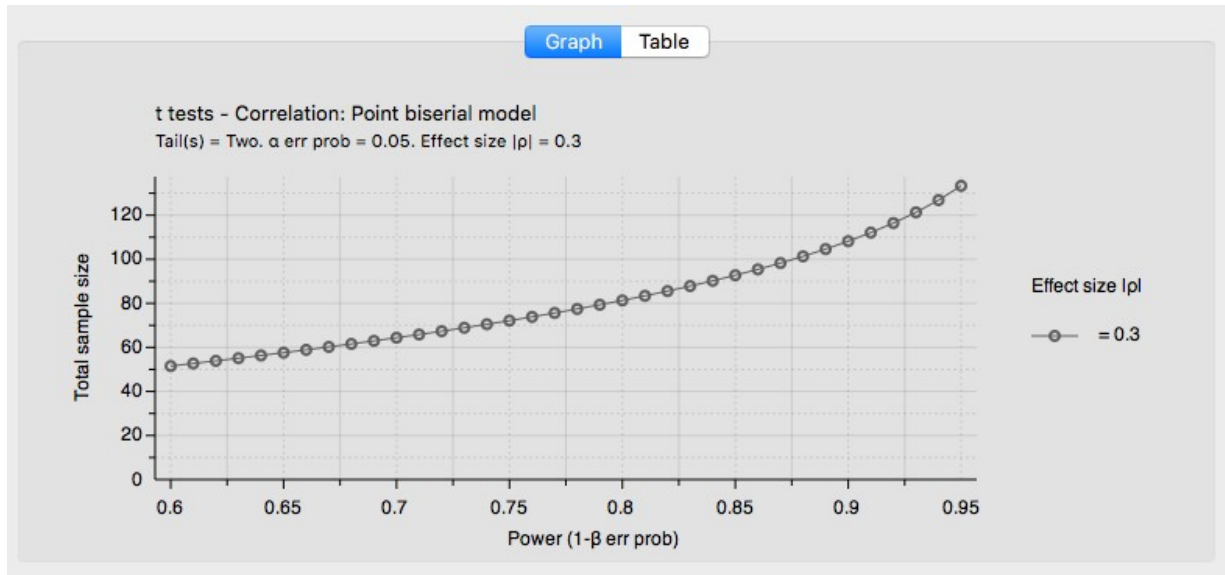


Figure 3: Statistical power

A minimum sample of 161 participants as the target sample size based on an a priori power analysis using the G\*Power 3.1 option of Linear multiple regression: fixed model,  $R^2$  increase (Faul et al., 2007). See Figure 4.

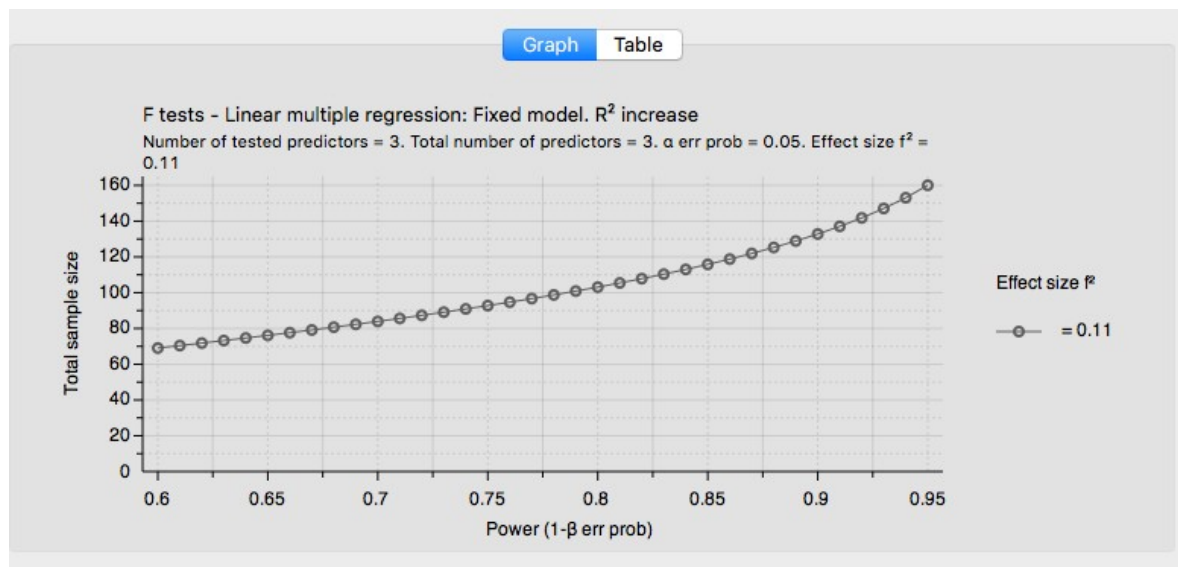


Figure 4: Statistical power

## Human Subjects Protection

This study was initiated only after full approval by the Idaho State University Human Subjects Committee (HSC) was received. The researcher completed the Collaborative Institutional Training Initiative (CITI). The study was an anonymous survey housed by Survey Monkey Gold and targeted to registered nurses. Survey Monkey Gold provided authentication through a single username and password, data encryption, restrictive firewalls, and an enhanced HIPAA and PCI compliant platform (SurveyMonkey, 2016).

## The Instruments

Three survey instruments were used for this dissertation study.

The first of the three surveys was the Attitude Towards Attempted Suicide – Questionnaire (ATAS-Q) - See Appendix B - developed by Christina Ouzouni in Greece in 2009 (Ouzouni & Nakakis, 2009). The request for permission to use this tool and the document granting permission are found in Appendix C and D. This tool was developed in order to assess health care personnel's attitudes towards the suicidal patient. This tool is an 80-question Likert type

survey with 8 subscales: *Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality traits, Mental illness, and Discrimination*. Additionally, the subscales are divided into the three components of attitude: *Cognitive, Affective, and Behavioral*. The range of the score on this survey is 80 to 400, with a higher score reflecting a more positive attitude towards care of the suicidal patient.

Factor analysis was done by Ouzouni and Nakakis (2009) to establish face validity and construct validity. The eight factors listed above explained 55.45% of the total variance and the Cronbach's alpha co-efficient for the overall ATAS-Q was reported to be 0.96 (Neville & Roan, 2013). Test-retest reliability is reported to be 0.97 (Ouzouni & Nakakis, 2009).

The second of the three survey instruments were four questions from the Suicide Behavior Attitude Questionnaire (SBAQ) – See Appendix E. Permission to use this tool and the document granting permission are found in Appendix F and G. The SBAQ was designed by Botega et al. (2005) to specifically measure attitudes of nursing personnel towards suicide. Three subscales are used on the tool, including *Feelings towards the patient, Professional capacity, and the Right to suicide* (Botega et al., 2005). A 2009 study by Jacobson et al. utilized the Professional capacity subscale of the survey in order to evaluate the professional capacity of nurses responding to a suicide risk-training program. Although prior results of the SBAQ reflect average internal consistency (Cronbach's alpha = .60), the study by Jacobson et al. demonstrated a Cronbach's alpha coefficient of .82 (Jacobson et al., 2012). The range of the score on this survey subscale is 5 to 20, with a higher score reflecting a higher self-reported level of professional capacity to care for the suicidal patient.

The third of three survey instruments was the Professional Quality of Life Survey 30-item survey tool measuring compassion satisfaction and compassion fatigue in nurses – see Appendix

H. Permission to use this tool is found in Appendix I. The ProQOL Scale is the most commonly used tool to measure both the positive and negative effects of working with people who have either experienced or are experiencing stressful events (Stamm, 2010). This instrument is an 30-question Likert type survey. Three subscales were measured on this survey tool: *Compassion satisfaction*, *Burnout*, and *Secondary Trauma*. Burnout and Secondary Trauma are components of *Compassion Fatigue*. The scoring of this instrument allowed the researcher to obtain an overall compassion satisfaction score as well as established cutoff scores that identify the study participant has having low compassion, average compassion, or high compassion (Stamm, 2010). Burnout could also be measured as a high level of burnout, average, or low (Stamm, 2010). Secondary trauma measurements were not fully analyzed in this study, although the entire survey was completed. The ProQoL shows good construct validity “with over 200 published papers” using the survey (Stamm, 2010, p. 13). The Cronbach’s alpha for the scales were reported as being between .84 and .90 (Stamm, 2010). The ProQOL can be measured in continuous from or through the use of cut scores.

### **Data Analysis**

Quantitative data analysis is the process of analyzing the raw data gathered from the study participants and converting it to meaningful information that specifically addresses the study’s research questions (Creswell, 2014). The Statistical Package for the Social Sciences (SPSS) Version 24.0 was used to perform data analysis.

Initially, the data were cleaned. Each item in each questionnaire was checked for completeness. The data were double-checked for entry errors before analyses were run. Numerical codes were assigned to nominal data, such as gender, education, and nursing specialty. These codes were arbitrary, however they were consistently used throughout the

research and analysis process (Meyers, Gamst, & Guarino, 2013). The data were also checked to be certain the values were legitimate for each variable.

Missing data was screened and evaluated to determine the mechanism of missingness and the patterns of missing data (Meyers et al., 2013). If the data was missing completely at random (MCAR) or missing at random (MAR), then it was evaluated as an “ignorable missingness” situation (Meyers et al., 2013). If the missing data was not missing at random (NMAR), then it was addressed by either deletion of cases or value imputation methods (Meyers et al., 2013).

Finally, values that were extreme or unusual – outliers – were identified and evaluated. There were many reasons for outliers in data, including errors, extraordinary events, or no explanation (Meyers et al., 2013). The use of the box plot was helpful in identifying outliers as the data is explored (Meyers et al., 2013).

After the data were cleaned and screened, the next step was addressing the research questions of this study. In the following section, each question was addressed and the plan to analyze the data based on each question was explained.

*What is the overall attitude of nurses towards the care of the suicidal patient?*

This question was answered by analyzing the data from the ATAS-Q. Each RN study participant had an overall score ranging from 80 to 400. A frequency distribution was analyzed showing overall score, frequency, percent, valid percent, and cumulative percent (D. F. Polit & Beck, 2012). The sum of the frequencies was equal to the size of the study sample. The mean and standard deviation for the overall attitude was reported. Additionally, a histogram showing overall attitude and the modality, skewness, and kurtosis of the distribution was presented and discussed.

These analyses provided descriptive information about the study sample characteristics with respect to their overall attitudes towards suicidal patients.

*What are the attitudes scores of nurses towards the care of the suicidal patient on the subscales of the ATAS-Q (Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality traits, Mental illness, and Discrimination)? What are the individual attitudes of nurses towards the care of the suicidal patient in each attitude component (cognitive, affective, and behavioral)?*

This question was answered by analyzing the data from the ATAS-Q. A frequency distribution was analyzed showing individual attitude score, frequency, percent, valid percent, and cumulative percent by subscales and by components. The mean and standard deviation for the overall attitude was reported. Additionally, a histogram showing overall attitude and the modality, skewness, and kurtosis of the distribution was presented and discussed.

*What are the overall compassion satisfaction and compassion fatigue scores of nurses in the general hospital setting?*

This question was answered by analyzing the data from the Pro-QOL survey. A frequency distribution was analyzed showing scores on the Compassion Satisfaction scale and on the Compassion Fatigue scale. The mean and standard deviation for each scale was reported. Additionally, a histogram showing overall compassion satisfaction and compassion fatigue as well as the modality, skewness, and kurtosis of the distribution was presented and discussed. In addition, a grouped attitude frequency table was analyzed showing the frequency of high compassion, moderate compassion and low compassion.

*What is the self-reported professional capacity of nurses towards the care of the suicidal patient?*

This question was answered by analyzing the data from the SBAQ. A frequency distribution was analyzed showing individual professional capacity score, frequency, percent, valid percent, and cumulative percent. The mean and standard deviation for the overall professional capacity score were reported. Additionally, a histogram showing overall professional capacity score and the modality, skewness, and kurtosis of the distribution was presented and discussed.

*What is the relationship between age, gender, years of experience, education, nursing specialty, and nurses' overall attitudes towards the suicidal patient?*

Descriptive and inferential statistics were used to analyze the second research question. Measures of central tendency, including means, standard deviations, ranges, and frequencies were evaluated for each of the five socio-demographic questions. A frequency table was presented to show the socio-demographic characteristics of the study participants. Responses for each of the socio-demographic characteristic questions were visualized with the use of histograms or bar charts.

Individual correlations between each independent variable (age, gender, years of experience, nursing specialty, education) and the dependent variable (nurses' attitude towards the suicidal patient) were examined. In the case of age and years of experience, both were continuous independent variables so a Pearson's correlation was used to assess the strength of the linear relationship between these variables with the attitude scores. In the case of education, nursing specialty, and gender – dummy coding was used for gender, education, and nursing specialty. Thus, a simple linear regression was used to assess the strength of each of the relationships between education, nursing specialty, gender and the overall attitude of the nurse towards the suicidal patient.



*What are the correlations among the cognitive, affective, and behavioral components of attitude and nurses' overall attitudes towards the suicidal patient?*

In order to evaluate this research question, a table of inter-correlations among the components was presented. Because the variables are continuous total score measures, Pearson correlation were used to assess the strength of the relationships. An adjusted alpha of .05 was used to determine the significance of each correlation.

*How does a nurses' self-reported level of professional capacity to work with suicidal patients affect her attitude (overall and component) towards the suicidal patient?*

A Pearson's correlation was utilized to assess the strength of the linear relationship among the self-reported level of professional capacity and the attitude scores (overall and component) towards the suicidal patient. A significance level of  $\alpha = .05$  was used to determine the statistical significance of the correlation.

*Does a nurse's self-reported level of compassion satisfaction and/or compassion fatigue correlate with the nurse's attitude (overall and component) towards the suicidal patient?*

A Pearson's correlation was utilized to see if there was a relationship among compassion scores and nurses' attitudes (overall and component) towards the suicidal patient. Again, an unadjusted alpha of .05 was used to determine the statistical significance of each correlation.

*Is a nurse's overall attitude towards the suicidal patient predicted by a weighted combination of the nurses' level of compassion and the nurses' self-reported professional capacity to care for the suicidal patient? What is the relative contribution of these variables to the prediction?*

Based on an evaluation of the nurses' level of compassion combined with the self-reported level of professional capacity to care for the suicidal patient, an evaluation of how these two

variables predicted nurses' overall attitude towards the suicidal patient was assessed using multiple linear regression.

### **Summary**

This chapter explained the plan for this dissertation study. The design, sample, data collection, instruments, and data analysis were presented. The plan for the protection of human subjects was addressed. The following chapter describes the results of this study.

## **Chapter 4: Results**

### **Introduction**

The purpose of this dissertation study was to explore multidimensional factors related to nurses' attitudes towards the suicidal patient across all hospital emergency and inpatient settings. Multidimensional factors include the relationships between nurses' socio-demographic variables, attitudinal components, perceived professional capacity, compassion satisfaction/compassion fatigue – and nurses' attitudes towards the suicidal patient.

### **Recruitment Results**

According to a 2016 Pew Research Study, 86% of Americans are Internet users. With a focus on social media, 8 out of every 10 adult online Americans (79%) use Facebook and 68% of all American adults are active in some form of social media (Greenwood, Perrin, & Duggan, 2016). For those who use social media, 76% of Americans report using social media on a daily basis; this number has increased from 70% in 2015 (Greenwood et al., 2016). In the most recent US Census, there were 3.5 million employed nurses practicing in the US (*United States Census*, 2015). Of those 3.5 million nurses, 2.73 million were adult registered nurses actively practicing nursing in the US (*United States Census*, 2015). Based on the 2016 Pew Research Study, 2.35 million working Registered Nurses are active on social media (Greenwood et al., 2016). Of those 2.35 million nurses, 1.79 million would be expected to use social media on a daily basis.

Over a period of 5 days, social media links were posted on known nurse communities on Facebook, Instagram, Twitter, and LinkedIn. A LinkedIn post shared a direct link to the survey with a community of nurse professionals in the Nursing Network Group and in the Sigma Theta Tau International Honor Society for Nursing. Facebook boosted posts were targeted to United States individual male and female adults listing nursing as their occupation. Additionally,

#Hashtags were utilized to target known nurse populations on both Twitter and on Instagram.

Nurse participants were asked to share the social media link with other registered nurses as part of the participation process.

In a period of 5 days, 494 Registered Nurses responded to the social media recruitment campaign and many participated in subsequent online referrals to other registered nurses. There were 92 responses to the survey during the first 24 hours. The second 24-hour period showed a significant increase of response rate with 304 nurses participating in the survey. Over the remaining 3 days, the response rate dwindled from 55 to 31 to 11. The survey was closed at the end of the 5<sup>th</sup> day.

Of the 494 respondents, 305 Registered Nurses (62%) fully completed the survey. The demographic portion of the survey automatically excluded participants ( $N = 171$ ) if they did not meet the inclusion criteria. A number of research participants ( $N = 18$ ) retired from the survey before addressing each question. The logistics of the survey were built to require an answer to each question in order to answer the subsequent query. Only fully completed surveys were utilized in the data analysis. A total of 305 Registered Nurses completed the entire survey.

### **Participant Characteristics**

The descriptive characteristics of the 305 research participants are presented in this section. All of the participants were RNs working in US hospitals. All of the participants consented to participating in the dissertation research study. All of the participants worked in patient-care settings in US hospitals.

Of the 305 RNs, 252 (83%) were employed full-time, 27 (9%) were part-time employees, and 25 (8%) worked in per-diem roles. Only 13 (4%) of the 305 RNs reported working as travel

nurses. Critical access hospital nurses were representative of 45.2% of the total participant population, however, 17.4% were unsure of the meaning of a critical access hospital designation.

Participants were asked to identify the region of the US where they resided. A choice of nine regions of the US included New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. Table 1 indicates the states included in each US region.

Table 1

*Regions of the United States*

Region	States, Districts, and Territories
New England	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
Middle Atlantic	New York, New Jersey, Pennsylvania
East North Central	Ohio, Indiana, Illinois, Michigan, Wisconsin
West North Central	Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas
South Atlantic	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, the Virgin Islands
East South Central	Kentucky, Tennessee, Alabama, Mississippi
West South Central	Arkansas, Louisiana, Oklahoma, Texas
Mountain	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
Pacific	Washington, Oregon, California, Hawaii, Alaska

Each US region was represented by at least 5.9% of the study's research participants. The most highly represented regions included the East North Central and South Atlantic area of the US. These coincide with the two most highly concentrated areas of working RNs in the US (The Henry J. Kaiser Family Foundation, 2016). Underrepresented was the Middle Atlantic Region and overrepresented was the West North Central Region. The other 7 regions of the US were closely matched. Table 2 reflects the regional demographics of the study participants compared to the current nurse demographics of the United States.

Table 2

*Regional Demographics of Study Compared to National Statistics*

US Region	RN Participant Frequency	Study %	National %
New England	18	5.9	5.9
Middle Atlantic	19	6.2	12.6
East North Central	57	18.7	17.0
West North Central	42	13.8	8.4
South Atlantic	55	18.0	19.2
East South Central	18	5.9	7.3
West South Central	37	12.1	11.0
Mountain	23	7.5	6.7
Pacific	36	11.8	12.4

This study specifically examined the relationships between age, gender, years of experience, education, nursing specialty and nurses' overall attitudes towards the care of the suicidal patient. Each of the aforementioned specific demographic characteristics of the study is thoroughly addressed in the write-up of the research questions.

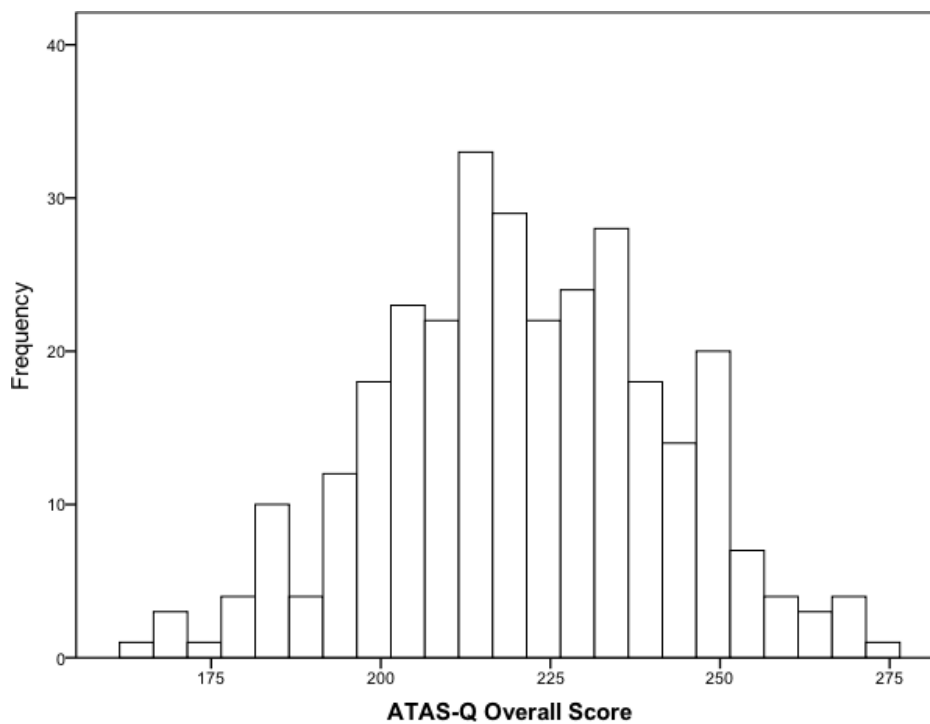
### **Analysis of the Research Questions**

The following section addresses each of the dissertation study's research questions. SPSS version 24 (SPSS) was used to analyze the data from the research survey.

**Research question 1.** What is the overall attitude of nurses towards the care of the suicidal patient?

The first research question was answered by analyzing data from the ATAS-Q portion of the research survey. Each RN participant had an overall attitude score between 80 and 400. According to the ATAS-Q author, a higher overall score indicates a more positive overall attitude towards the suicidal patient (Ouzouni & Nakakis, 2009).

The average overall score on the ATAS-Q for the nurse research participants was  $M = 220.96$ , ( $SD = 20.81$ ), 95% CI [218.62, 223.31]. The lowest score was 164 and the highest score was 275. Figure 5 shows the overall attitude scores and the frequency of those scores for the research participants. A Shapiro-Wilk's test ( $p > .05$ ), a visual inspection of the histogram, the Q-Q plot, and the box plot showed that the ATAS-Q scores suggested the scores had a normal distribution.



*Figure 5.* Bar chart showing overall attitude scores by frequency.

**Research question 2.** What are the attitudes scores of nurses towards the care of the suicidal patient on the subscales of the ATAS-Q (Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality traits, Mental illness, and Discrimination)? What are the individual attitudes of nurses towards the care of the suicidal patient in each attitude component (Cognitive, Affective, and Behavioral)?

Eight subscales were measured by the 80-question ATAS-Q survey. According to the survey author, these eight subscales each represent a different factor to explain the complex phenomenon of nurses' attitudes towards the care of suicidal patients (Ouzouni & Nakakis, 2009). The eight factors were further organized into the three components of attitude: cognitive, affective, and behavioral. This question will present an overview of nurses' attitudes towards the suicidal patient based on the eight factors and the three components of attitude.



**Factor 1: Positiveness.** Each RN participant ( $N = 305$ ) had a potential overall score on the Positiveness of 26 to 130. The scores of the participants fell between a score of 50 and a score of 89. The majority of surveyed nurses demonstrated a mid-range score on the Positiveness factor and there were no extremely low or high scores. The mean attitude score on this factor was  $M = 70.35$  ( $SD = 7.34$ ), 95% CI [69.53, 71.58]. The skew of the scores was 0.02 ( $SE = 0.14$ ) and the kurtosis was -0.31 ( $SE = 0.28$ ). The scores had a normal distribution.

**Factor 2: Acceptability.** Each RN participant ( $N = 305$ ) had a potential overall score on the Acceptability factor between 13 and 65. The scores of the participants fell between a score of 20 and a score of 53. The majority of surveyed nurses demonstrated a slightly lower than mid-range score on the Acceptability factor. The mean was 35.48, ( $SD = 6.41$ ), 95% CI [34.75, 36.20]. Although a visual inspection of the Acceptability histogram suggested a leptokurtic distribution, a visual inspection of the Q-Q plot supported a normal distribution. Skew of the scores on the Acceptability factor was -0.06 ( $SE = 0.14$ ) and the kurtosis was -0.09 ( $SE = 0.28$ ).

**Factor 3: Religiosity.** The Religiosity factor had a potential overall score ranging from 7 to 35. Nurses' ( $N = 305$ ) scores gravitated towards the lower end of the potential scores with a mean score of 15.5 ( $SD = 5.70$ ), 95% CI [14.91, 16.20]. The nurses' scores on the *Religiosity* factor varied from 7 to 31. The Religiosity histogram and the scores on this factor suggested extreme views related to the survey questions (See Table 3). The scores of the nurses on the *Religiosity* factor had a skew of 0.14 ( $SE = 0.14$ ) and a kurtosis of -0.66 ( $SE = 0.28$ ).

Table 3

*Frequency Distribution of Scores on Religiosity Factor*

Score	Frequency	%
7	36	11.8
8	20	6.6
9	5	1.6
10	13	4.3
11	11	3.6
12	12	3.9
13	11	3.6
14	17	5.6
15	17	5.6
16	22	7.2
17	21	6.9
18	21	6.9
19	23	7.5
20	16	5.2
21	15	4.9
22	15	4.9
23	7	2.3
24	5	1.6
25	5	1.6
26	4	1.3
27	2	0.7
28	4	1.3
29	1	0.3
31	2	0.7
Total	305	

**Factor 4: Professional role and care.** The Professional role and care factor consists of 10 questions with a potential for scores to vary from 10 to 50. The average score of the nurses ( $N = 305$ ) was towards the middle of the possible scores with a mean of 30.70 ( $SD = 4.08$ ), 95% CI [30.24, 31.17]. The lowest score was a 20 and the highest score was a 44. The skew of the score on this factor was 0.13 ( $SE = 0.14$ ) and kurtosis was -0.31 ( $SE = 0.28$ ). The scores had a normal distribution.

**Factor 5: Manipulation.** The Manipulation factor only consisted of six questions, so the potential factor scores were from 6 to 30. Nurses ( $N = 305$ ) actual scores varied from low scores of 6 to a highest score of 30. The mean was 15.65 ( $SD = 4.99$ ), 95% CI [15.08, 16.21]. The scores on the Manipulation factor had a skew of 0.20 ( $SE = 0.14$ ) and a kurtosis of -0.20 ( $SE = 0.28$ ). The scores had a normal distribution.

**Factor 6: Personality traits.** The Personality traits subscale consisted of only four questions with potential factor scores from 4 to 20. Nurses ( $N = 305$ ) actual scores varied from the lowest score of 4 to a high score of 19. The mean was 12.83 ( $SD = 2.637$ ), 95% CI [12.53, 13.12]. The scores on the Personality trait factor had a skew of -0.27 ( $SE = 0.14$ ) and a kurtosis of 0.21 ( $SE = 0.28$ ). The scores were negatively skewed.

**Factor 7: Mental illness.** The Mental illness factor of the survey consisted of 8 questions offering potential scores from 8 to 40. The nurses ( $N = 305$ ) scored from 10 to 35. The mean was 24.27 ( $SD = 4.00$ ), 95% CI [23.82, 24.72]. The scores of this factor had a skew of 0.34 ( $SE = 0.14$ ) and the kurtosis was 0.22 ( $SE = 0.28$ ). The scores had a normal distribution.

**Factor 8: Discrimination.** The Discrimination factor of the survey consisted of 5 questions providing potential scores from 5 to 25. The nurses ( $N = 305$ ) scored between 6 and 25, indicating a large spread to their scores on this factor. The mean was 16.14 ( $SD = 3.314$ ), 95% CI [15.77, 16.51]. The scores on the Discrimination factor had a negative skew of -0.26 ( $SE = 0.14$ ) and a kurtosis of -0.10 ( $SE = 0.28$ ).

**Component 1: Cognitive.** The cognitive component of attitude is represented by the following factors from the ATAS-Q survey tool: Positiveness, Religiosity, Personality traits, and Mental illness. The potential scores on the Cognitive component of attitude were from 45 to 225. The nurses ( $N = 305$ ) scores on the Cognitive component of attitude varied from a low

score of 91 to a high score of 158. The average Cognitive component score for all research participants was toward the lower end of the scale with a mean of 123.01 ( $SD = 13.982$ ), 95% CI [121.43, 124.58]. The scores on the Cognitive component of attitude had a skew value of 0.13 ( $SE = 0.14$ ) and a kurtosis of -0.46 ( $SE = 0.28$ ). The scores were approximately normally distributed.

**Component 2: Affective.** The Affective component of attitude is represented by the following factor from the ATAS-Q survey tool: Acceptability. As discussed earlier in this section, each RN participant ( $N = 305$ ) had a potential overall score on the Acceptability factor from 13 to 65. The scores for the participants fell between 20 and 53. The average score on the Affective component was a mean of 35.48 ( $SD = 6.41$ ), 95% CI [34.75, 36.20]. Hence, the nurses typically had attitudes that were moderate on this component. The scores on this component had a normal distribution. The skew of the scores on the affective component was 0.06 ( $SE = 0.14$ ) and the kurtosis was -0.09 ( $SE = 0.28$ ).

**Component 3: Behavioral.** The Behavioral component of attitude is represented by the following factors from the ATAS-Q survey tool: Professional role and care, Manipulation, and Discrimination. A total of 21 questions on the ATAS-Q were designed to measure the Behavioral component of attitude. Potential scores could vary from 21 to 105. The scores of the nurses ( $N = 305$ ) scores on the Behavioral component of attitude were near the middle. The mean was 62.49 ( $SD = 8.86$ ), 95% CI [61.61, 63.38]. The scores on this component had skew of -0.01 ( $SE = 0.140$ ) and a kurtosis of 0.04 ( $SE = 0.278$ ). The scores had a normal distribution.

**Research Question 3.** What are the overall Compassion Satisfaction and Compassion Fatigue scores of nurses in the general hospital setting?

This research question was answered by analyzing data from the Professional Quality of Life Scale portion of the study survey. This scale measures Compassion Satisfaction, or the pleasure derived from helping others who are experiencing suffering and trauma (Stamm, 2010). It also measures Compassion Fatigue - a combination of Burn-out and Secondary Traumatic Stress. Burn-out is associated with feelings of hopelessness, difficulties in dealing with work, and difficulty caring (Stamm, 2010). Secondary Traumatic Stress manifests itself in fear, difficulty sleeping, and avoidance behavior (Stamm, 2010). The Professional Quality of Life Scale provides a score for Compassion Satisfaction and a score for Burn-out and for Secondary Traumatic Stress.

***Compassion Satisfaction.*** According to the Concise Professional QOL Manual, the average score for Compassion Satisfaction among people working in helping professions is 50 ( $SD = 10$ ) with 25% of people scoring higher than 57 and 25% of people scoring below 43 (Stamm, 2010). To score the Compassion Satisfaction element of the survey, the nurses ( $N = 305$ ) raw scores were first converted to z-scores. This was done by subtracting the mean of their raw scores ( $M = 40.90$ ) from each individual raw score and dividing the difference by the standard deviation ( $SD = 5.90$ ). Next, the z-scores were converted to T-scores. This was done by multiplying the z-score by 10 and adding 50.

The nurse research participants ( $N = 305$ ) had an overall average T-score on Compassion Satisfaction of 50.00 ( $SD = 10.00$ ), 95% CI [48.88, 51.14]. The scores varied from 9 to a high of 65. The skew of the subscale scores was -0.72 ( $SE = 0.14$ ) and the kurtosis was 0.56 ( $SE = 0.28$ ). The histogram showed the aforementioned negative skew of the data.

***Burn-out.*** The Concise Professional QOL Manual explains that the average score on Burn-out is 50 ( $SD = 10$ ) with 25% of people scoring higher than 57 and 25% of people scoring below

43 (Stamm, 2010). To score the Burn-out element of the survey, the nurses ( $N = 305$ ) raw scores were first converted to z-scores. This was done by subtracting the mean of the raw scores ( $M = 36.90$ ) from each individual raw score and dividing the difference by the standard deviation ( $SD = 12.59$ ). Next, the z-scores were converted to T-scores. This was done by multiplying each z-score by 10 and adding 50.

The nurse research participants ( $N = 305$ ) had an overall average score on Burn-out ( $M = 50.00$ ,  $SD = 10$ ), 95% CI [48.88, 51.13]. The scores varied from a low of 29 to a high of 76. The skew of the subscale was 0.15 ( $SE = 0.14$ ) and the kurtosis was 0.56 ( $SE = 0.28$ ). The histogram suggested a bimodal shape.

**Secondary Traumatic Stress.** The Concise Professional QOL Manual explains that the average score on Secondary Traumatic Stress is 50 ( $SD = 10$ ) with 25% of people scoring higher than 57 and 25% of people scoring below 43 (Stamm, 2010). To score the Secondary Traumatic Stress element of the survey, the nurses ( $N = 305$ ) raw scores were first converted to z-scores. This was done by subtracting the mean of the raw scores ( $M = 22.94$ ) from each individual raw score and dividing the difference by the standard deviation ( $SD = 5.65$ ). Next, the z-scores were converted to T-scores. This was done by multiplying the z-score by 10 and adding 50.

The nurse research participants ( $N = 305$ ) had an overall average score on Secondary Traumatic Stress ( $M = 50.00$ ,  $SD = 10.00$ ), 95% CI [48.88, 51.13]. The scores ranged from a low of 29 to a high of 93. The scores on the subscale had a positive skew of 0.51 ( $SE = 0.14$ ) and a kurtosis of 0.56 ( $SE = 0.28$ ).

**Research Question 4.** What is the *self-reported* professional capacity of nurses towards the care of the suicidal patient?

This research question was answered by analyzing data from the SBAQ portion of the research survey. The professional capacity subscale of the SBAQ was designed to measure the perceived capacity of the nurse to care for the suicidal patient (Botega et al., 2005). This subscale consists of 4 questions. Potential scores could vary from 4 to 20. A higher score indicates a higher perceived professional capacity to care for the suicidal patient (Botega et al., 2005). The nurses ( $N = 305$ ) in this study scored high on the perceived professional capacity subscale ( $M = 15$ ,  $SD = 2.98$ ), 95% CI [14.66, 15.34]. The actual scores varied from 4 to 20. The scores on the subscale had a negative skew of -0.74 ( $SE = 0.14$ ) and a kurtosis of 0.68 ( $SE = 0.28$ ).

**Research Question 5.** What is the relationship between age, gender, years of experience, education, nursing specialty, and nurses' overall attitudes towards the suicidal patient?

To begin addressing this research question, measures of central tendency, including means, standard deviations, ranges, and frequencies will be evaluated for each of the five socio-demographic characteristics of the nurse study participants. To continue addressing this research question, individual correlations between each independent variable (age, gender, years of experience, nursing specialty, education) and the dependent variable (overall attitude of the nurse towards the care of the suicidal patient) will be examined. In the case of education, nursing specialty, gender, and age – dummy coding will be used and a simple linear or multiple regression will assess the strength of each of the relationships.

In review, the nurse research participants' ( $N = 305$ ) overall attitude towards the care of the suicidal patient is reflected by the overall score on the ATAS-Q section of the research survey ( $M = 220.96$ ,  $SD = 20.81$ ) with a 95% CI (218.62, 223.31). The lowest score among the nurses was 164 and the highest score was 275.

**Age.** An important demographic characteristic of the research sample was the age of the participants. The survey asked the age of the participants based on seven age groups. The mode of the age range of the research participants fell into the 35 to 44 year-old age group ( $SD = 1.16$ ). A small percentage of participants – 3.6% and 2.3% respectively – represented the youngest and the oldest age group classifications. The majority of the participants (94.1%) were between the ages of 25 and 65. Due to the low number of participants in the lowest and oldest age groups, a new age group classification was developed. Table 4 reflects the age-range categories of the nurse participants based on the new categorical model.

Table 4

*Grouped Frequency Distribution by Age-Range Categories*

Category	Age Ranges	Frequency	%
1	18-34	105	34.4
2	35-54	152	49.8
3	55-74	48	15.7

***Age and the overall attitude towards the suicidal patient.*** Because of the categorical nature of this variable, dummy coding was utilized to enable an analysis using multiple regression. The respondents' ages were classified as youngest (18-34), middle (35-54), and oldest (55-74). The youngest age group (18-34) was defined as the referent category in the regression analysis. The other two age groups were entered as separate variables where 1 indicated group membership and 0 indicated non-membership.

Age was used to predict nurses' overall attitude towards the suicidal patient using ordinary least squares regression. A statistically significant degree of prediction was obtained,  $F(2, 304) = 4.94, p = .008, R^2 = .032, \text{Adjusted } R^2 = .025$ . The predicted overall attitude of the younger aged nurse participants towards the suicidal patient is equal to 225.57 ( $SE = 2.01$ ),  $p < .001$ . The



middle-aged nurse participants' overall attitude towards the suicidal patient was lower than the youngest participants with an overall attitude of 219.64 ( $SE = 2.61$ ),  $p = .024$ . The oldest nurse participants showed an overall attitude towards the suicidal patient that was lower than the youngest and the middle-aged research participants; 215.06 ( $SE = 3.580$ ),  $p = .004$ . Overall, this model demonstrated that age explained 3.2% of the variance of the nurse participants' overall attitude towards the care of the suicidal patient. A nurses' overall attitude towards the care of the suicidal patient was lower for the older age ranges and higher for the younger aged nurses.

**Gender.** Another important demographic characteristic of the survey participants was gender. Research participants were asked to write in their gender on the survey. According to the latest census data, approximately 90% of employed US nurses are female (*United States Census*, 2015). The demographic results of this survey showed that 94.4% of the participants identified with the female gender and 4.9% identified with the male gender. Two participants described themselves as gender fluid.

**Gender and the overall attitude towards the suicidal patient.** Research participants identified their gender during the demographic portion of the survey. The respondents' gender was classified as female, male, and gender fluid. A comparison of means between the male and the female nurses and nurse participants' overall attitude towards the suicidal patient was explored. The average overall score on the ATAS-Q for the nurse research participants was  $M = 220.96$ , ( $SD = 20.81$ ), 95% CI [218.62, 223.31]. The lowest score was 164 and the highest score was 275.

The average overall score on the ATAS-Q for the female nurse research participants was  $M = 220.32$ , ( $SD = 20.77$ ), 95% CI [217.92, 222.72]. The lowest score for female nurses was 164 and the highest score was 275.

The average overall score on the ATAS-Q for the male nurse research participants was  $M = 233.40$ , ( $SD = 17.98$ ), 95% CI [233.44, 243.36]. The lowest score was 193 and the highest was 254.

Gender could not be used to predict nurses' overall attitude towards the suicidal patient using linear regression due to the small size of the male group.

***Years of nursing experience.*** Research participants were asked to identify their years of experience as nurses. A number of participants (4.9%) were new graduate nurses with one year of experience or less. Others (1.9%) had as many as 40 or more years of experience as a nurse. One participant reported 51 years of experience in the nursing profession. The mean of the years of experience of the nurse participants was 11.78 ( $SD = 10.68$ ) and the years varied from 0.5 to 51 years of experience. Figure 6 is a visualization of the frequency distribution based on the years of nursing experience of each of the research participants.

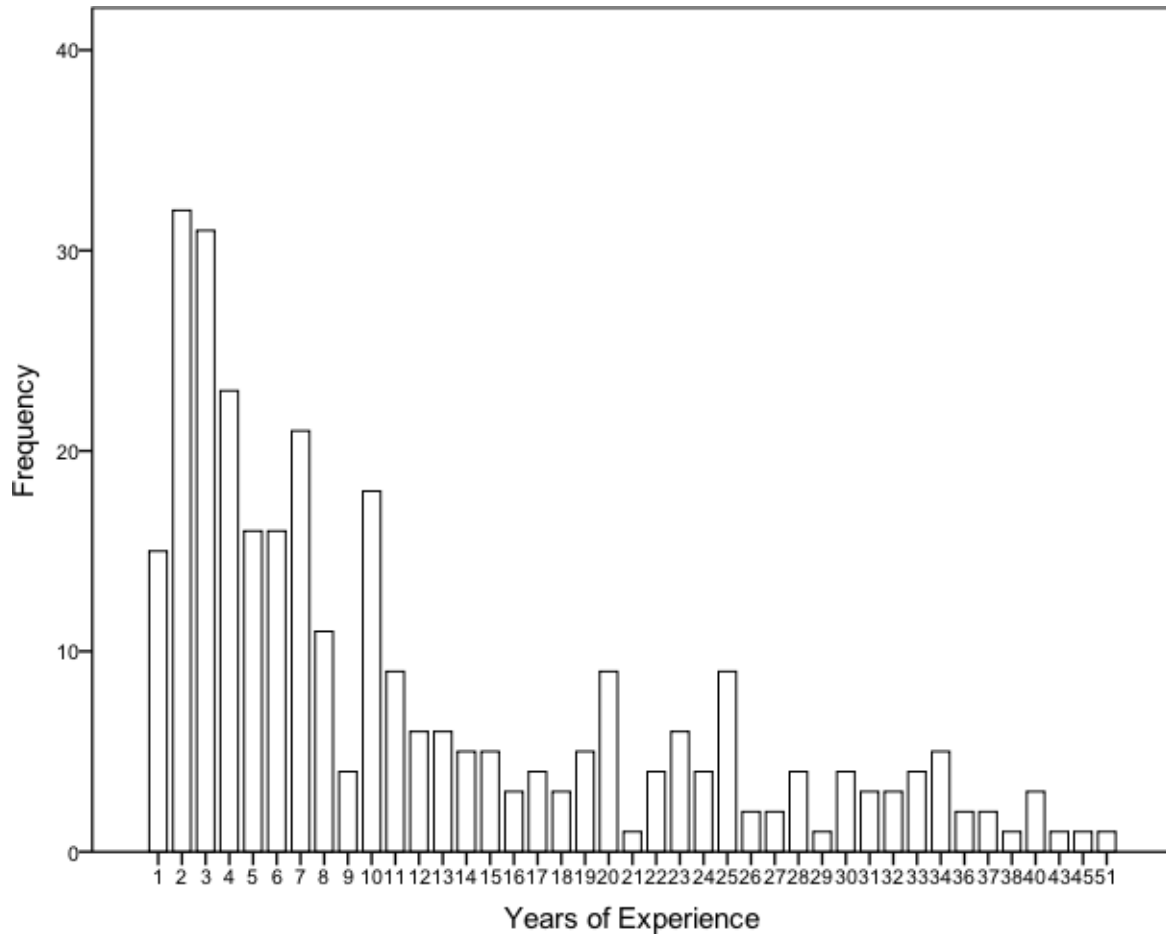


Figure 6. Bar graph showing the frequency of the years of experience of the nurse participants.

***Years of experience and the overall attitude towards the suicidal patient.*** Years of nursing experience was used to predict nurses' overall attitude towards the suicidal patient using ordinary least squares regression. A statistically significant degree of prediction was obtained,  $F(1, 303) = 5.41, p = .021$ , with an  $R^2$  of .018, Adjusted  $R^2 = .014$ . The overall attitude of the nurse participants was 224.01 and this attitude score decreased 0.26 for each year of nursing experience. These results indicate a slight inverse relationship between years of experience and overall attitude towards the care of the suicidal patient that accounted for about 2% of the variance in the attitude scores.

***Education.*** Educational background of the research participants was part of the demographic

portion of the survey. Educational background was organized into eight levels. The levels varied from a diploma in nursing to a doctorate in nursing. The greatest majority of participants (50.2%) reported a Bachelor of Science in Nursing; while 31.1% reported an Associate Degree in Nursing. Table 5 shows the full range of educational characteristics of the research participants

Table 5

*Frequency Distribution by Educational Categories*

Category	Education	Frequency	%
1	Diploma	10	3.3
2	Associates Degree in Nursing	95	31.1
3	Other Bachelors Degree	21	6.9
4	Bachelors Degree in Nursing	153	50.2
5	Other Masters Degree	4	1.3
6	Masters Degree in Nursing	18	5.9
7	Nurse Practitioner (Masters)	2	0.7
8	PhD or DNP	2	0.7
	Total	305	

Due to the small number of participants in the various categories representing the highest educational background, a new distribution was created with 3 categories. Table 6 shows the frequency distribution that will be used in the data analysis. The educational background of the nurse participants in this study is similar to the background of all US nurses. Currently, 53% of working nurses in the US hold bachelor degrees (Robert Wood Johnson Foundation, 2015) and 33.62% have associates degrees (Nursing.org, 2016).

Table 6

*Frequency Distribution by Educational Categories of Nurse Participants (N = 305)*

Category	Education	Frequency	%
1	Diploma or Associates Degree	105	34.4
2	Bachelors Degree	174	57.0
3	Graduate Degree	26	8.5

***Education and the overall attitude towards the suicidal patient.*** Because of the categorical nature of this variable, dummy coding was utilized to enable an analysis using linear regression. The respondents' educational levels were classified as Diploma or Associates Degree, Bachelors Degree, or Graduate Degree. The Diploma or Associates Degree was defined as the constant in this model.

Education was used to predict nurses' overall attitude towards the suicidal patient using ordinary least squares multiple regression. The effect of education on attitude was not significant,  $F(2, 302) = 0.35$ ,  $p = .70$ ,  $R^2 = .002$ , Adjusted  $R^2 = .00$ . The three levels of education of the nurse participants did not differ on their overall attitude towards the care of the suicidal patient.

***Nursing specialty.*** The largest portion of the research participants reported working in emergency departments and the remainder of the participants worked in other in-patient care areas of the hospital. Of the 305 participants, 217 (71%) were ED nurses, 36 (11.8%) were Intensive Care Unit (ICU) nurses, 36 were Medical/Surgical nurses (11.8%), and the remaining 16 participants (5.2%) worked in hospital areas such as Mental Health, Mother/Baby, Surgical Services, and Pediatrics. Table 7 shows the frequency distributions of the research participants

based on their nursing specialty.

Table 7

*Frequency Distribution by Nursing Specialty*

Nursing Specialty	Frequency	%
Emergency Department	217	71.1
Critical Care	36	11.8
Surgical Services	5	1.6
Medical Surgical Units	36	11.8
Mother/Baby and Pediatrics	4	1.3
Mental Health	6	2.0

***Nursing specialty and the overall attitude towards the suicidal patient.*** As part of the demographic data, research participants indicated their nursing specialty area. Because of the categorical nature of this variable, dummy coding was utilized to enable an analysis using linear regression. The respondents classified their specialty as Emergency Department, Critical Care Areas, Surgical Services, Medical/Surgical Areas, Mother/Baby and Pediatrics, and Mental Health. The Emergency Department specialty area was defined as the referent category in the regression analysis. The other specialty areas were entered as separate variables where 1 indicated group membership and 0 indicated non-membership.

Specialty area was used to predict nurses' overall attitude towards the suicidal patient using ordinary least squares regression. A statistically significant degree of prediction was obtained,  $F(5, 299) = 4.07, p = .001, R^2 = .064, \text{Adjusted } R^2 = .048$ . The specialty area of the nurse explained approximately 6.4% of the variance of the nurses' overall attitude towards the care of

the suicidal patient. The Emergency Department had the highest overall attitude with decreases in attitude by ICU nurses, followed by Medical/Surgical nurses, Surgical care area nurses, and Mother/Baby and Pediatric Nurses. Of interest, the Mental Health specialty nurse had the lowest score.

An additional analysis recoded the specialty areas to indicate either Emergency Department Nurses or Non-Emergency Department Nurses. In this analysis, the Emergency Department nurses were also defined as the constant in the regression analysis.

A statistically significant degree of prediction was obtained,  $F(1, 303) = 11.05, p = .001, R^2 = .035$ , Adjusted  $R^2 = .032$ . The standardized regression coefficient was  $-0.188$ , the raw regression coefficient was  $-8.601$  ( $SE = 2.588$ ), and the intercept was  $223.44$ . Area of nursing specialty explained approximately 3.2% of the variance of the nurses' overall attitude towards the care of the suicidal patient. The average overall score on the ATAS-Q was 8.60 points higher with Emergency Department Nurses than non-Emergency Department nurses.

**Research Question 6.** What are the correlations among the Cognitive, Affective, and Behavioral components of attitude and nurses' overall attitudes towards the suicidal patient?

A Pearson correlation was utilized to assess the strength of the relationships between the Cognitive, Affective, and Behavioral components of attitude and the nurses' overall attitude towards the suicidal patient. Each component of attitude – Cognitive, Affective, and Behavioral – has a distinct contribution to make to the relationship between the components and the overall attitude of nurses to the care of the suicidal patient. The Cognitive and Behavioral components were positively correlated, however, the Affective component was only slightly correlated with the Behavioral component. There was no relationship shown between the Affective component

of attitude and the Cognitive component of attitude. Table 8 is a visualization of the inter-correlations among the components.

Table 8

*Inter-Correlation Table Among the Components (N = 305)*

	1.	2.	3.	4.
1. ATAS-Q Overall	-	.88*	.33*	.81*
2. Cognitive Overall		-	-.04	.58*
3. Affective Overall			-	.14*
4. Behavioral Overall				-

\* $p < .05$

**Research Question 7.** How does a nurses' *self-reported* level of professional capacity to work with suicidal patients affect her attitude (overall and component) towards the suicidal patient?

The overall score on the SBAQ reflects the nurses' self-reported level of professional capacity to work with suicidal patients. Self-reported level of professional capacity was used to predict overall attitude toward the suicidal patient using ordinary least squares regression. A statistically significant degree of prediction was obtained,  $F(1, 303) = 6.06$ ,  $p = .014$ ,  $R^2 = .020$ , Adjusted  $R^2 = .016$ . The standardized regression coefficient was  $-0.14$ , the raw regression coefficient was  $-0.98$  ( $SE = 0.40$ ), and the intercept was  $235.62$ . Self-reported level of professional capacity only explained 2% of the variance of overall attitude. Surprisingly, this was an inverse relationship. Hence, a higher level of self-reported professional capacity to work with suicidal patients reflected a lower overall attitude towards those patients.



*Self-reported* level of professional capacity was also used to predict the three components of overall attitude: Cognitive, Affective, and Behavioral.

*Self-reported* level of professional capacity was used to predict the Cognitive component of overall attitude towards the care of the suicidal patient using ordinary least squares regression. A statistically significant degree of prediction was obtained,  $F(1, 303) = 16.52, p < .001, R^2 = .052$ , Adjusted  $R^2 = .049$ . The standardized regression coefficient was  $-0.228$ , the raw regression coefficient was  $-1.068$  ( $SE = 0.26$ ), and the intercept was  $139.02$ . Self-reported level of professional capacity explained approximately 5% of the variance of the Cognitive component of overall attitude. This was also an inverse relationship meaning that a higher level of self-reported capacity to work with suicidal patients was reflected in a lower Cognitive component score on attitude towards the suicidal patient.

*Self-reported* level of professional capacity was also used to predict the Affective component of attitude towards the care of the suicidal patient. A statistically significant degree of prediction was not obtained,  $F(1, 303) = 0.60, p = .44, R^2 = .00$ , Adjusted  $R^2 = -.00$ .

Finally, *self-reported* level of professional capacity was used to predict the Behavioral component of attitude towards the care of the suicidal patient. Again, a statistically significant degree of prediction was not obtained,  $F(1, 303) = 0.00, p = .99, R^2 = .00$ , Adjusted  $R^2 = -.00$ .

**Research Question 8.** Does a nurse's self-reported level of Compassion Satisfaction and/or Compassion Fatigue correlate with the nurse's attitude (overall and component) towards the suicidal patient?

A Pearson correlation was utilized to assess the strength of the relationships between compassion satisfaction and compassion fatigue and the Cognitive, Affective, and Behavioral components of attitude and the nurses' overall attitude towards the suicidal patient. The

correlations between the individual components of attitude and overall attitude were discussed in Research Question #5 (see Table 8). While some components of attitude are not significantly correlated to one another, this is not the case with compassion. As expected, the analysis reveals an inverse correlation ( $p < .05$ ) between Compassion Satisfaction and the components of Compassion Fatigue – Burn-out and Secondary Traumatic Stress. However, the correlation between Secondary Traumatic Stress and Compassion Satisfaction was minimal, while the correlation between Burn-out and Compassion Satisfaction was moderate. Additionally a moderate inverse correlation was revealed between Burn-out and Secondary Traumatic Stress ( $p < .05$ ). The only other significant correlation is an inverse relationship ( $p < .05$ ) between Compassion Satisfaction and the Affective component of overall attitude. Of interest, while the Affective component of attitude was inversely correlated to Compassion Satisfaction, it is also positively correlated to the Behavioral component of attitude and the overall attitude of the nurse towards the care of the suicidal patient. Table 9 is a display of the inter-correlations among these components.

Table 9

*Inter-correlations Table Among Overall and Components of Compassion and Attitude (N = 305)*

	1.	2.	3.	4.	5.	6.	7.
1. Compassion Satisfaction	-	-.47*	-.18*	-.08	.00	-.14*	-.08
2. Burn-Out		-	-.37*	.00	-.01	.06	.04
3. Secondary Traumatic Stress			-	.10	.07	.11	.05
4. Overall Attitude				-	.88*	.33*	.81*
5. Cognitive Component					-	-.04	.58
6. Affective Component						-	.14*
7. Behavioral Component							-

\* $p < .05$

**Research Question 9.** Is a nurse's overall attitude towards the suicidal patient predicted by a weighted combination of the nurse's level of compassion and the nurse's *self-reported*

professional capacity to care for the suicidal patient? What is the relative contribution of these variables to the prediction?

Based on an evaluation of the nurse participants' level of compassion (Compassion satisfaction, Burn-out, Secondary Traumatic Stress) combined with the *self-reported* level of professional capacity (SBAQ) to care for the suicidal patient, an evaluation of how these variables predict the nurses' overall attitude (ATAS-Q) was assessed using multiple linear regression.

A multiple linear regression was calculated to predict the overall attitude of nurses towards the care of the suicidal patient based on Compassion Satisfaction (CS), Burn-Out (BO), Secondary Traumatic Stress (STS), and self-reported level of professional capacity (SBAQ). Table 10 shows the inter-correlations among compassion, professional capacity, and overall attitude. The prediction model was statistically significant,  $F(4, 300) = 2.45, p = .046$  with an  $R^2$  of .03 and an adjusted  $R^2$  of .02, and accounted for 2% of the variance of overall attitude.

Table 10

*Inter-correlations Among Compassion, Prof. Capacity, and Overall Attitude Factors (N = 305)*

	1.	2.	3.	4.	5.
1. Overall Attitude	-	.08	.00	.00	-.14*
2. Compassion Satisfaction		-	-.48*	-.18*	.28*
3. Burn-out			-	.37*	-.18*
4. STS				-	-.19*
5. SBAQ					-

\* $p < .05$

The nurse participants' attitude score towards the suicidal patient was inversely related to the self-reported level of professional capacity to care for the suicidal patient. As discussed earlier, a higher level of self-reported professional capacity to work with suicidal patients reflected a lower overall attitude towards those patients. The factors related to compassion were not significant in this model. Only self-reported professional capacity to care for the suicidal patient was a significant predictor of overall attitude. The raw and standardized regression coefficients of the predictors together with their structure coefficients are shown in Table 11.

Table 11

*Multiple Regression Results of Multidimensional Factors and Attitude*

Model	<i>b</i>	<i>SE-b</i>	Beta	Pearson <i>r</i>	<i>sr</i> <sup>2</sup>	Structure Coefficient
Constant	240.33	13.30				
Prof. Capacity*	-.88	.42	-.12	-.14	-.01	-.78
Compassion	.24	.23	-.07	-.08	.00	.45
Burn-out	-.15	.11	-.10	.00	.00	.00
STS	.36	.23	.11	.10	.01	.56

*Note.* The dependent variable was overall attitude.  $R^2 = .08$ , Adjusted  $R^2 = .08$ .

*sr*<sup>2</sup> is the squared semi-partial correlation.

\* $p < .05$ .

**Ancillary Analyses and Factors and Components of Attitude.** A number of ancillary analyses were done to further explore the factors and components of attitude and the age and years of nursing experience of the research participants. The attitude factor of Positiveness reflects the nurses' positive and negative attitudes towards the suicidal patient (Ouzouni & Nakakis, 2009). The possible score on this factor ranges from 27 to 135. An ancillary analysis was done to further explore the subscale of Positiveness as it correlates to age and experience.

To review, the mean attitude score on this factor was  $M = 70.35$  ( $SD = 7.34$ ), 95% CI [69.53, 71.58]. The younger nurses predicted Positiveness attitude score was equal to 71.94 ( $SE = 0.71$ ),  $p < .001$ . The middle-aged nurses Positiveness attitude score was lower than the younger nurses and the lowest of all was the oldest group of nurses with a mean score of 66.96 ( $SE = 1.27$ ),  $p = .04$ .

The relationship between years of experience and the Positiveness factor was also significant. Years of nursing experience were used to predict nurses' Positiveness score using ordinary least squares regression. A statistically significant degree of prediction was obtained,  $F(1,303) = 4.36$ ,  $p = .038$ ,  $R^2 = .014$ , Adjusted  $R^2 = .011$ . The Positiveness score decreased 0.09 for each year of nursing experience.

Another factor in the Cognitive component of attitude is Religiosity. The possible score on this factor ranges from 7 to 35. This factor reflects nurses' neutral affect in forming attitudes towards suicidal patients (Ouzouni & Nakakis, 2013). The results of this ancillary analysis show that age was a significant predictor of the Religiosity factor with the youngest nurses Religiosity score equal to 16.81 ( $SE = 0.55$ ),  $p < .001$ . As with the Positiveness factor, the oldest nurses showed a lower score on Religiosity than both the youngest and the middle-aged nurses. In terms of nursing experience, a statistically significant degree of prediction was obtained,  $F(1,303) = 4.32$ ,  $p = .039$ ,  $R^2 = .014$ , Adjusted  $R^2 = .011$ . The Religiosity subscale score was decreased 0.06 for each year of nursing experience. Hence, those nurses with the most experience and those nurses in the oldest age groups have more extremely negative attitudes towards suicidal patients.

The two other factors in the Cognitive component of attitude are Personality traits and Mental illness. No significant relationships were found between age and the factors of Personality traits

and Mental illness. Likewise, a significant relationship was not found between years of nursing experience and Personality traits. However, a significant relationship was found between years of experience and the Mental illness factor,  $F(1,303) = 24.84, p < .001$ , with a  $R^2$  of .017, Adjusted  $R^2$  of .013. Hence, the youngest nurses tend to relate suicidal thoughts and behavior to mental illness and that score on the subscale decreases .05 for each year of nursing experience.

Another ancillary analysis explored the relationship between age and years of nursing experience and the overall Cognitive component of attitude. A significant relationship was found between age and the Cognitive component of attitude,  $F(2,302) = 6.49, p = .002, R^2 = .041$ , Adjusted  $R^2 = .035$ . The range of scores on the Cognitive component of attitude was from 46 to 230. The youngest age group of nurses predicted overall cognitive score was 126.83 ( $SE = 1.34$ ),  $p < .001$ . The middle-aged nurses predicted overall cognitive score was lower than the youngest participants with an overall cognitive score of 121.40 ( $SE = 1.74$ ),  $p = .002$ . The oldest nurse age group overall cognitive score was 119.73 ( $SE = 2.34$ ),  $p = .003$ . Overall, this model explained 3.5% of the variance in the nurses' Cognitive attitude score.

A significant relationship between years of nursing experience and the overall Cognitive component of attitude was also found,  $F(1,303) = 7.78, p = .006, R^2 = .025$ , Adjusted  $R^2 = .022$ . Thus, years of nursing experience explains 2.2% of the variance in the nurses' overall Cognitive attitude.

Additional ancillary analyses explored the relationships between age and experience with the Behavioral component of attitude and the factors that make up that component: Professional role and care, Manipulation, and Discrimination. There were no significant relationships found between these factors and the targeted demographics. Additionally, there was not a significant relationship found between the Behavioral component of attitude and the demographics of age,

$F(2,302) = 1.85, p = .16, R^2 = .012$ , Adjusted  $R^2 = .006$  and nursing experience  $F(1,303) = 0.68, p = .409, R^2 = .002$ , Adjusted  $R^2 = .00$ .

A final ancillary analysis explored the relationship between the Affective component of attitude and the demographic characteristics of age and years of nursing experience.

Acceptability is the only factor included in the Affective component of attitude. There were no significant relationships found between age and the affective component of attitude,  $F(2,302) = 0.687, p = .504, R^2 = .005$ , Adjusted  $R^2 = .00$ , and years of nursing experience and the affective component of attitude,  $F(1,303) = 0.27, p = .606, R^2 = .001$ , Adjusted  $R^2 = .00$ .

**Ancillary Analyses and Self-Reported Professional Capacity.** The size of the correlation between *self-reported* professional capacity and overall attitude was minimal in the regression model. An ancillary analysis was done to explore the relationship between age and self-reported professional capacity to care for the suicidal patient,  $F(2,302) = 0.221, p = .802, R^2 = .001$ , Adjusted  $R^2 = .00$ , and years of nursing experience and self-reported professional capacity to care for the suicidal patient,  $F(1,303) = 0.076, p = .783, R^2 = .000$ , Adjusted  $R^2 = .00$ . A significant relationship between age and years of nursing experience and self-reported professional capacity was not found.

**Ancillary Analyses and Compassion.** Additional ancillary analyses studies were done to determine the relationships between age and nursing experience and compassion. A significant relationship was not found between age and Compassion Satisfaction,  $F(2,302) = 1.25, p = .288, R^2 = .008$ , Adjusted  $R^2 = .002$ , or age and Compassion Fatigue:  $F(1,303) = 0.177, p = .674, R^2 = .001$ , Adjusted  $R^2 = 0$  for burn-out and  $F(1,303) = 0.036, p = .851, R^2 = .000$ , Adjusted  $R^2 = .00$  for secondary traumatic stress. Additionally, a significant relationship was not found between years of experience and Compassion Satisfaction,  $F(1,303) = 0.008, p = .927, R^2 = .000$ ,

Adjusted  $R^2 = .00$ , or years of experience and Compassion Fatigue,  $F(2,302) = 0.435$ ,  $p = .647$ ,  $R^2 = .003$ , Adjusted  $R^2 = .00$  for burn-out and  $F(2,302) = 0.905$ ,  $p = .406$ ,  $R^2 = .006$ , Adjusted  $R^2 = .00$  for secondary traumatic stress.

A final ancillary analysis explored the relationship between *self-reported* professional capacity and compassion. A significant relationship was found between self-reported professional capacity to care for the suicidal patient and Compassion Satisfaction,  $F(1,303) = 26.42$ ,  $p < .001$ ,  $R^2 = .080$ , Adjusted  $R^2 = .077$ . Another significant inverse relationship was found between *self-reported* professional capacity to care for the suicidal patient and Burn-out,  $F(1,303) = 10.64$ ,  $p = .001$ ,  $R^2 = .034$ , Adjusted  $R^2 = .031$ . A similar significant inverse relationship was found in terms of Secondary Traumatic Stress,  $F(1,303) = 11.83$ ,  $p < .001$ ,  $R^2 = .038$ , Adjusted  $R^2 = .034$ .

## **Summary**

This chapter has presented a description of the recruitment efforts, the recruitment results, the analysis of the collected data, and the results of ancillary analyses. The following chapter will summarize the conclusions of this dissertation study.



## **Chapter 5: Discussion**

### **Introduction**

The purpose of this dissertation study was to explore multidimensional factors related to nurses' attitudes towards the suicidal patient across all hospital emergency and inpatient settings. This chapter will summarize the conclusions of this dissertation study. Additionally, the chapter will discuss the study's findings in relation to the literature and in relation to the theoretical foundation of this research. The chapter will conclude with the implications of the research, the strengths and limitations of the study, and recommendations for future research.

### **Aim and Research Questions**

The aim of this descriptive, correlational, cross-sectional study of general hospital nurses was to investigate nurses' attitudes towards the care of the suicidal patient. The research questions guiding this study were:

1. What is the overall attitude of nurses towards the care of the suicidal patient?
2. What are the attitudes scores of nurses towards the care of the suicidal patient on the subscales of the ATAS-Q (Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality traits, Mental illness, and Discrimination)? What are the individual attitudes of nurses towards the care of the suicidal patient in each attitude component (Cognitive, Affective, and Behavioral)?
3. What are the overall Compassion Satisfaction and Compassion Fatigue scores of nurses in the general hospital setting?
4. What is the *self-reported* professional capacity of nurses towards the care of the suicidal patient?

5. What is the relationship between age, gender, years of experience, education, nursing specialty, and nurses' overall attitudes towards the suicidal patient?
6. What are the correlations among the Cognitive, Affective, and Behavioral components of attitude and nurses' overall attitudes towards the suicidal patient?
7. How does a nurses' *self-reported* level of professional capacity to work with suicidal patients relate to her attitude (overall and component) towards the suicidal patient?
8. Does a nurses' self-reported level of Compassion Satisfaction and/or Compassion Fatigue correlate with the nurses' attitude (overall and component) towards the suicidal patient?
9. Is a nurses' overall attitude towards the suicidal patient predicted by a weighted combination of the nurses' level of compassion and the nurses' self-reported professional capacity to care for the suicidal patient? What is the relative contribution of these variables to the prediction?

## **Discussion**

**Sample and Generalizability.** The research participant characteristics were thoroughly described in Chapter 4. The following discussion compares the characteristics of the research sample with the characteristics of the population as a whole. The research participants were all RNs working in US hospitals. Each research participant worked in direct patient-care settings in US hospitals. In many ways, the research sample closely mirrored the characteristics of the nursing population, but in a few ways there were differences as will be discussed.

Because this dissertation study utilized social media to recruit participants, it was important to understand the regional demographics of the participants. In regards to geographical backgrounds, the research participants closely matched the regional demographics of all US RNs with a slight underrepresentation of the Middle Atlantic Region and a slight overrepresentation

of the West North Central Region. Each of the nine regions of the US was represented by at least 5.9% of the research participants.

As would be expected, the majority of the research participants fell into the 25 to 65 year old age group just as is mirrored in the working RN population in the US. The survey delineated ages into seven age groups and the mode of the research participants fell into the 35 to 44 year old age group. Due to the low number of research participants in the oldest and youngest age group, a new age-group classification was developed. The grouped frequency distribution of these age-range categories closely mirrored that of the US RN population.

Gender and years of experience were closely matched when comparing the research sample and the RN population. While 90% of employed US nurses are female (*United States Census*, 2015), 94.4% of the research participants were female. Years of nursing experience varied among the participants with the mean being 11.78 years ( $SD = 10.68$ ). Years of experience in the sample varied from 0.5 years to 51 years.

Bachelor degrees were held by 50.2% of the research participants as compared to 53% of US RNs (Robert Wood Johnson Foundation, 2015). Despite the close matching in undergraduate educational background, the sample was underrepresented by RNs who had earned graduate degrees. The number of nurses holding graduate degrees in the US is 13% (Nursing.org, 2016) compared to only 8.5% of the research participants.

Emergency department nurses were overrepresented in the sample with 217 of the 305 research participants working in the emergency department. An additional 36 RNs were employed in critical care areas and 36 worked in Medical/Surgical areas. Underrepresented were Mother/Baby (excluding NICU), Pediatrics, Mental Health, and Surgical Services. This could be due to more opportunities for emergency department nurses to engage in professional social

media groups. As an example, on LinkedIn there are 16 professional groups dedicated to emergency department nurse membership while there are three critical care groups and only one medical/surgical nurse group.

With the exception of nursing specialty and graduate nursing education, the demographic characteristics of the sample were similar to those of the population. Despite the fact that emergency department nurses were overrepresented and nurses with graduate degrees were slightly underrepresented in the sample, the purpose of the study was to explore relationships among multidimensional factors that influence and predict hospital nurses' attitudes towards suicidal patients. All of the research participants were employed in patient-care areas of general hospitals and while only 82 participants were needed for the first eight research questions and 161 were needed for the final question, a total of 305 nurse participants completed the survey. The generalizability of the research sample was enhanced by the size and the representativeness of the participants.

Despite the sample characteristics and the robust response to the survey, it should be noted that selection bias is the risk when utilizing social media recruitment. As an example, there are 800 million active Facebook users, but despite this, 13% of the US adult population remains unconnected (Anderson & Perrin, 2016). As discussed earlier, the demographics of that 13% include adults over the age of 65, adults earning less than \$30,000 a year, and adults with less than a high school education (Anderson & Perrin, 2016). While most professional nurses do not fall into any of those categories, it is still important to consider selection bias when analyzing the results of social media research.

## Outcome Variables

**Overall attitude.** A total of 305 US Registered Nurses working in general hospital settings and providing direct care to patients fully completed the survey for this dissertation study. The potential score on the ATAS-Q is between 80 and 400 with the higher scores indicating a more positive attitude towards the care of the suicidal patient (Ouzouni & Nakakis, 2009). A 2013 Greek study by the authors of the attitude portion of the survey (ATAS-Q) used in this dissertation study reported that the overall attitude of nurses ( $N = 255$ ) was negative ( $M = 263.52$ ,  $SD = 68.70$ ). The nurse research participants in this dissertation study ( $N = 305$ ) had similar results with an even lower overall attitude towards the care of the suicidal patient ( $M = 220.96$ ,  $SD = 20.81$ ).

Some differences in attitude may be related to the target populations used in each study. In the Greek study, a convenience sample of nurses, doctors, and nursing assistants from four local general hospitals were surveyed. In this dissertation study, only registered nurses were surveyed and the RNs represented hospitals from each region of the entire US (see Table 2). Additionally, the standard deviation in this dissertation study was noticeably smaller than the standard deviation in the Greek study. Hence, in the present study, the nurses' scores were more closely clustered around the mean than those research participants in the Greek study. A high standard deviation shows that the data is widely spread and less reliable, while a lower standard deviation shows that the data is more clustered around the mean and more reliable (Polit, 2010). An additional consideration was that the Greek study reported that 36% of the respondents were male (Ouzouni & Nakakis, 2009) while males only represented 6% of this dissertation study's respondents. In the dissertation study, male nurses had a more favorable attitude towards the suicidal patient.

A 2013 study by Neville & Roan measured overall attitude using the ATAS-Q and the results revealed that the mean overall attitude score was 262.51 ( $SD = 16.34$ ). Again, an overall negative score but higher than the score in this dissertation study. The Neville & Roan (2013) study was also small using a convenience sample of only 45 nurses from one hospital setting. The study also showed a higher standard deviation as the responses of the nurses in this study varied more.

**Demographics and attitude.** A number of socio-demographic characteristics were collected from the nurse research participants. Among those were age, gender, geographical region, experience, nursing specialty, hospital classification, full-time equivalent status (FTE), travel nurse status, and educational background. The socio-demographic factors used in the data analyses for this study were age, gender, experience, educational background and nursing specialty. The demographic results of this study mirrored many of the results of other studies presented in this dissertation study's literature review. Some results from this research study differed significantly from the research presented in the literature.

**Age.** The older nurses in the dissertation study showed a lower overall attitude than their younger counterparts. This was similar to the Greek study where younger nurses and less experienced nurses showed significantly higher overall attitudes towards the suicidal patient (Ouzouni & Nakakis, 2013). A study by Neville & Roan (2013) showed that the age of the nurse showed a significant relationship to the attitude of nurses to the suicidal patient with younger nurses having a more positive attitude than their older colleagues. Another study using a different research tool showed that older nurses had a more condemnatory attitude towards suicidal patients than younger nurses (Botega et al., 2005). Contrary to the previous discussion,

although examining self-harm patients and not suicidal patients, a 2015 study concluded that as nurses age, their attitudes towards self-harm patients improve (Vine, 2015).

**Gender.** As would be expected, the number of male participants responding to the survey was small compared to the number of female participants. While the number of males ( $n = 16$ ) participating was small compared to the number of females ( $n = 287$ ), the average age, education, and years of experience were nearly the same for each group. A comparison of means revealed that the difference in means between the male nurses and the female nurses was large with male nurses having a higher overall attitude towards suicidal patients than female nurses. However, caution should be used in generalizing this finding due to the small percentage (5.9%) of males in the study.

Similar findings were found in a Turkish study indicating that men scored higher on recognizing suicidal ideation as mental illness while women's attitudes were condemnatory (Demirkiran & Eskin, 2006). However, in this same study, the authors concluded that while men associated suicide with a biological etiology, the women were more tolerant and sympathetic in their delivery of care (Demirkiran & Eskin, 2006). These findings suggest that the complex relationships between gender, overall attitude, and delivery of care are worthy of additional study. Studies that are planned to recruit an equal number of male and female nurse participants may bring additional clarity to this aspect of attitude research.

**Experience.** This study showed that there was a slight inverse relationship between years of experience and overall attitude with those with more experience having a lower overall attitude towards suicidal patients than newer, less experienced nurses. Neville & Roan (2013) did not show any significant relationship between overall attitude towards the suicidal patient and years of nursing experience. The Greek study did not include this demographic in its analyses.

**Education.** The findings of this dissertation study regarding educational background of the nurse and overall attitude are at odds with some of the findings of studies presented in the literature review. Surprisingly, the educational background of the nurse participants of this dissertation study did not have a significant relationship to overall attitude. However, Sun et al. (2007) found that a nurses' level of education had a significant relationship to attitude with those with higher education having higher attitude scores. In this study, emergency department nurses were surveyed using a modified Suicide Opinion Questionnaire (Domino, 2005). The Likert scale had a possible score range of 22 to 110 (Sun et al., 2007). The average attitude score for those with five years of university education was  $M = 76.28$ , ( $SD = 5.34$ ). A lower overall attitude score of  $M = 75.39$  ( $SD = 4.84$ ) was reported for those nurses having a two year educational background (Sun et al., 2007).

However, Neville & Roan (2013) reported that there was not a significant relationship between educational background and overall attitude. Additionally, after further review of the literature, the dissertation findings are consistent with an additional recent study showing that nurses' attitudes towards suicide are not influenced by education, but instead appear to be more connected with personal and familial history (Kavalidou, 2013).

The lack of a relationship between educational background and attitude in this study could be attributed to cultural differences in educational progression. In the US, many new graduate nurses begin their practice at the Associates Degree level and return to school later to achieve higher educational goals such as undergraduate and graduate degrees. Based on the previous discussion, older nurses and nurses with more experience tend to have lower overall attitudes towards the suicidal patient than their younger, less experienced colleagues. This could be a possible explanation for the lack of a relationship between higher education and overall attitude.



***Nursing Specialty.*** In this dissertation study, emergency department nurses had a significantly higher overall attitude towards suicidal patients than non-emergency department nurses. Mental health nurses showed the lowest attitude scores. These findings are consistent with previous research such as a study by Sun et al. (2007) finding that emergency nurses held overall positive attitudes towards the suicidal patient. Additionally, this study confirmed the results of the Sun et al. (2007) study in terms of the experience of the nurse and attitude. Sun et al. (2007) found that those emergency nurses who had cared for more than 10 suicidal patients had lower attitude scores than those who had cared for less than ten suicidal patients. McCann et al. (2007) found that emergency nurses had generally sympathetic and non-discriminatory attitudes towards patients who self-harm. Contrary to these findings, a Greek study showed the opposite with non-emergency nurses having higher attitude scores than emergency nurses (Ouzouni & Nakakis, 2013).

**Factors of attitude.** The ATAS-Q survey identified eight factors of attitude and those eight factors were further organized into the three components of attitude. The factors of attitude are: Positiveness, Acceptability, Religiosity, Professional role and care, Manipulation, Personality traits, Mental illness, and Discrimination. The cognitive component of attitude includes these attitude factors: Positiveness, Religiosity, Personality traits, and Mental illness. The behavioral component of attitude includes these factors: Professional role and care, Manipulation, and Discrimination. The affective component of attitude includes Acceptability. The nurses' scores in this study were largely mid-range on Positiveness, Acceptability, Professional role and care, Manipulation, and Mental illness. However, their overall scores were more negative on Discrimination and Personality traits. The scores of the nurses were extreme on the Religiosity factor with a high number of very low attitude scores within this factor.

These findings are in line with other research studies using the same tool. A study by Ouzouni et al. (2013) showed similar results and an additional study by Neville & Roan (2013) using the ATAS-Q tool concluded that there was an inverse relationship between Positiveness and Religiosity. In each of the discussed studies, the score on Positiveness was relatively high. This may reflect a nurse's professional dedication to treating all patients equally despite having negative attitudes towards the act of attempted suicide. According to Ouzouni et al. (2013), overall attitude towards attempted suicide is complex and includes both positive and negative aspects.

Alternatively, while a nurse may be able to overcome negative feelings towards an act through professional self-expectations, it may be more difficult to overcome religious bias. A study by Botega et al. (2005) showed that those nurses who attended church on a regular basis showed a more condemnatory attitude score towards the suicidal patient than those who did not attend church (Botega et al., 2005). Another study showed that emergency department nurses with no association with religion had more positive attitudes towards suicidal patients (Sun et al., 2007). The Suicide Opinion Questionnaire (SOQ) has been used repeatedly to study attitude towards suicide for decades. Religiosity has consistently been found to be a significant factor in shaping attitude towards suicide (Domino, 2005). While Religiosity has been shown to correlate with attitude, there is a lack of evidence of how this affects the care that patients receive. Future studies examining the connections between Religiosity and patients' perception of care would provide more understanding of this complex relationship.

**Components of Attitude.** The components of attitude are Cognitive, Affective, and Behavioral. While the Cognitive and Affective aspects of attitude are covert and internalized, the Behavioral aspect is overt and may be recognized by the patient. The average overall

Cognitive score was low and the average overall Affective and Behavioral scores were moderate among the nurse research participants in this study. Each of the components of attitude—Cognitive, Affective, and Behavioral—had a distinct relationship to each other and to the overall attitude of nurses to the care of the suicidal patient. The original study by Ouzouni & Nakakis (2009) looked at the relationships among the eight factors of attitude in the ATAS-Q. The findings regarding the relationships among the components of attitude was a unique contribution of this dissertation study.

While the Cognitive and Behavioral components of attitude had a significant relationship and a strong correlation, the Affective component, while significantly correlated to the Behavioral component, had a weaker correlation. Of note, there was no relationship between the Cognitive component and the Affective component. Hence, the Behavioral component of attitude may be influenced by both knowledge and to a lesser extent feeling; however, a relationship between knowledge and feelings was not apparent. This finding further supports the role of professional continuing education targeted in improving the Cognitive component of attitude. A significant relationship between Behavioral attitude (overt) and Cognitive attitude (covert) was demonstrated by this study. A suicidal patient's perception of a nurse's attitude towards their care will be influenced by the nurse's behavioral attitude. Thus, supporting improvement of the Cognitive aspect of attitude will correlated with what is seen and perceived by the suicidal patient.

***Ancillary Analyses and Factors and Components of Attitude.*** Ancillary analyses were done to further explore the factors and components of attitude and the age and years of nursing experience of the research participants. The factor of Positiveness reflects the nurses' positive and negative attitudes towards the suicidal patient (Ouzouni & Nakakis, 2009). In the study by

Neville & Roan (2013), the researchers found that the subscale of Positiveness yielded the most significant findings of their study. Similarly, in this dissertation study, the relationship between Positiveness and age was significant with younger nurses having more positive attitudes towards suicidal patients than their older counterparts.

The relationship between years of experience and the Positiveness factor was also significant. Years of nursing experience were used to predict nurses' Positiveness score and a statistically significant degree of prediction was obtained. As in the case of the overall attitude towards the care of the suicidal patient, these results indicate a slight inverse relationship between years of experience and the Positiveness score.

Another factor in the cognitive component of attitude is Religiosity. This factor reflects nurses' neutral affect in forming attitudes towards suicidal patients (Ouzouni & Nakakis, 2013). The results of this ancillary analysis show that age was a significant predictor of the Religiosity factor with the oldest nurses showing a lower score on Religiosity than their younger counterparts. According to Ouzouni & Nakakis (2013), this means that the older nurses have less ability to show a neutral attitude towards patients who are having suicidal thoughts and behaviors. In terms of nursing experience, a statistically significant degree of prediction with a small effect size was obtained showing that those nurses with the most experience and those nurses in the oldest age groups have more extreme attitudes towards suicidal patients.

The two other factors in the cognitive component of attitude are Personality traits and Mental illness. The Personality traits factor refers to the belief that certain characteristics and traits are associated with suicidal behavior. The Mental illness factor is the belief that suicidal behavior is linked to mental illness. Ancillary analyses explored the relationships between age and experience and these two factors. No significant relationships were found between age and the

factors of Personality traits and Mental illness. Likewise, a significant relationship was not found between years of nursing experience and Personality traits. However, a significant relationship with a small effect size was found between years of experience and the Mental illness factor. Hence, the youngest nurses tend to relate suicidal thoughts and behavior to mental illness and that tendency decreases .05 for each year of nursing experience.

Another ancillary analysis explored the relationship between age and years of nursing experience and the overall cognitive component of attitude. A significant relationship was found between age and the cognitive component of attitude. The youngest age group of nurses predicted overall cognitive score was higher than the older aged nurses. Overall, this model explained 3.5% of the variance in the nurses' cognitive attitude score. Additionally, a significant relationship between years of nursing experience and the overall Cognitive component of attitude was also found, with years of nursing experience explaining 2.2% of the variance in the nurses' overall Cognitive attitude. Again, those with more experience had lower overall scores on the Cognitive component of attitude.

Additional ancillary studies explored the relationships between age and experience with the behavioral component of attitude and the factors that make up that component: Professional role and care, Manipulation, and Discrimination. There were no significant relationships found between these factors and the targeted demographics. Additionally, there was not a significant relationship found between the Behavioral component of attitude and the demographics of age and nursing experience.

A final ancillary study explored the relationship between the Affective component of attitude and the demographic characteristics of age and years of nursing experience. Acceptability is the only factor included in the Affective component of attitude. There were no significant

relationships found between age and years of nursing experience and the Affective component of attitude.

Based on these additional analyses, it is clear that the Cognitive component of attitude – namely, the Positiveness, Religiosity, and Mental illness factors – all have an inverse relationship to both age of the nurse and level of experience of the nurse. These findings further support the role of professional continuing education in order to support the improvement of the Cognitive component of attitude, especially as nurses age and as they gain experience. As explained earlier, a significant relationship exists between Cognitive attitude and Behavioral attitude. An improvement in Cognitive attitude is correlated to an improved Behavioral attitude. The Behavioral aspect of attitude is what is overt and what the suicidal patient will perceive, thus the importance of supporting improvements in the Cognitive component of attitude cannot be underestimated. Based on these ancillary analyses, this is most important in the older and more experienced nurse.

**Professional capacity and attitude.** The nurses' *self-reported* level of professional capacity to care for the suicidal patient was used to predict overall attitude of the nurses towards the suicidal patient in this dissertation study. Surprisingly, an inverse relationship showed that those with a higher self-reported professional capacity to work with suicidal patients reflected a lower overall attitude towards those patients. Additionally, another inverse relationship was found between self-reported professional capacity and the cognitive component of attitude. Thus, those who self-report higher levels of professional capacity to work with suicidal patients also scored lower on the cognitive portion of overall attitude. A relationship was not found between professional capacity and the affective or the behavioral components of attitude.

Professional capacity refers to the ability of the nurse to care for and work with patients at risk for suicide (Jacobson et al., 2012). This study measured a nurses' *self-reported* level of professional capacity by using a subscale of the SBAQ (2005). A higher score on this subscale reflected a nurses' self-reported professional skills, perception, security, and capability (Botega et al., 2005). The author of this subscale found that nurses with a high score on this subscale had a less condemnatory attitude towards the suicidal patient (Botega et al., 2005). Additional studies supported this finding showing that educational interventions improved attitude towards the suicidal patient (Berlim et al., 2007, Jacobson et al., 2012, McAllister et al., 2002, Sun et. al, 2011). However, this dissertation study showed an inverse relationship between the scores on the professional capacity subscale and overall attitude towards the care of the suicidal patient. Additionally, the self-reported level of professional capacity was shown to have an inverse relationship on the cognitive component of attitude and no relationship with the affective and behavioral components. A regression model examining the relationships between professional capacity, compassion satisfaction, burn-out, secondary traumatic stress, and overall attitude revealed a significant inverse relationship with a small effect size between professional capacity and overall attitude with no other variables making a significant contribution to the model.

A possible explanation for this is that with an increased level of self-reported level of professional capacity come more exposure to suicidal patients and the reality of recidivism with those patients. While being prepared is important, a pessimistic attitude towards the efficacy of the preparation may evolve over time causing the nurse to have a decreased overall attitude towards the care of the suicidal patient. As the results of this study show, those nurses with more experience had lower overall attitudes towards suicidal patients than those with little experience. This explanation is supported by the Sun et al. (2007) study showing that the nurses who had

cared for more than 10 suicidal patients experienced a more negative overall attitude towards care of the suicidal patient than those who had cared for less than ten. According to Carmona-Navarro et al. (2012), experienced caregivers may label suicidal ideation as a “call for attention” and this attitude may lead to additional risk with the suicidal patient. Additionally, this study points out that self-reported evaluation of knowledge is subject to bias and social desirability (Carmona-Navarro & Pichardo-Martinez, 2012).

***Ancillary Analyses and Self-Reported Professional Capacity.*** A further ancillary follow-up analysis showed that there is not a significant relationship between age or years of experience and self-reported professional capacity to care for the suicidal patient.

***Compassion and attitude.*** The nurse participants showed an average overall level of Compassion Satisfaction and Burnout according to the scale definitions of the Professional Quality of Life Survey Manual (Stamm, 2010). Nurses scored even slightly lower than average on Secondary Traumatic Stress. As would be expected, an inverse relationship of moderate size was found to exist between compassion satisfaction and the components of compassion fatigue – burnout and secondary traumatic stress. A significant inverse relationship of minimal size was found to exist between the affective component of attitude and compassion satisfaction. Hence, a higher level of affective attitude towards the suicidal patient resulted in a lower level of compassion satisfaction, although the relationship was not strongly predictive.

***Ancillary Analyses and Compassion.*** Additional ancillary analyses studies were done to determine the relationships between age and nursing experience and compassion. A significant relationship was not found between age and compassion satisfaction or age and compassion fatigue. Additionally, a significant relationship was not found between years of experience and compassion satisfaction or years of experience and compassion fatigue.



**Multidimensional factors and attitude.** The multidimensional factors of Compassion Satisfaction, Burn-out, Secondary Traumatic Stress, *self-reported* professional capacity, and overall attitude towards the suicidal patient were considered together in a regression model. The nurses' self-reported professional capacity to care for the suicidal patient was the only factor that contributed significantly to the regression model when predicting the nurses' overall attitude towards the suicidal patient. The size of the correlation between self-reported professional capacity and overall attitude was minimal in the regression model.

***Ancillary Analysis and Multidimensional Factors.*** An ancillary analysis revealed that the *self-reported* professional capacity of the nurse to work with the suicidal patient had a larger correlation with the factors of compassion. A significant relationship was found between self-reported professional capacity to care for the suicidal patient and compassion satisfaction and another significant inverse relationship was found between self-reported professional capacity and compassion fatigue. These relationships highlight the importance of future studies focusing on compassion and the care of the suicidal patient.

## **Implications**

The intersection of Peplau's Nursing Theory of Interpersonal Relations, Compassion Satisfaction and Compassion Fatigue Theory, and Joiner's Interpersonal-Psychological Theory of Suicide were used to provide the theoretical underpinnings for this study. The interconnectedness of these three theories suggest that understanding nurses' attitudes and the factors that affect nurses' attitudes towards the suicidal patient will lead to the continuing professional development of nurses. In turn, this professional development will lead to improvements in the safety and quality of care for suicidal patients in the general hospital setting.

This theoretical framework was useful in guiding the researcher in understanding the results of this study. The aspects of the model illuminate the importance of applying the results of this research study to an outcome-based patient-care model. While it is important to know the relationships between multidimensional factors and overall attitude, it is more important to understand how to apply the results in order to improve patient quality of care.

Based on the theoretical underpinnings of this study, the lower overall attitude of nurses' towards the care of the suicidal patient in this dissertation study may indicate that a therapeutic relationship between nurses and the suicidal patient is not likely. As discussed earlier, negative attitudes on the part of a nurse towards this vulnerable population may elevate the patient's sense of burdensomeness (Gorvin & Brown, 2012) and could lead to a feeling that the patient has become a liability for others (Van Orden et al., 2006).

While educational background was not shown to have a relationship to attitude in this study, the level of nursing experience and the nurses' age was inversely related to positive attitudes towards the suicidal patient. Previous studies have shown that professional continuing education programs for nursing staff will improve attitudes towards the suicidal patient (Berlim et al., 2007; Jacobson et al., 2012). Providing opportunities for older and more experienced nurses to participate in intensive suicide training that focuses on understanding, assessing, and preventing suicide is worthy of further exploration.

While this is the first research to examine how compassion satisfaction and compassion fatigue are related to nurses' attitudes towards the care of the suicidal patient, other studies have examined how compassion affects overall attitude towards care. A 2016 dissertation study concluded that compassion fatigue was a significant predictor of crisis worker attitude (Loolo, 2016). Compassion fatigue is the result of prolonged emotional energy and empathic concern on

the part of the caregiver that results in disengagement from the patient's suffering (Figley, 1995). Thus, a higher level of attitude towards patients could lead to loss of empathy or compassion fatigue. However, higher levels of compassion satisfaction in a caregiver can moderate compassion fatigue and lead to improved empathy in working with patients in crisis (Loolo, 2016). Finding ways to strengthen and sustain compassion satisfaction may lead to less compassion fatigue and less disengagement from the suffering of patients (Figley, 1995; Stamm, 2010).

According to Stamm (2010), compassion satisfaction is the result of feeling satisfied in the role of caregiver. Compassion satisfaction brings a nurse happiness, a feeling of success, and a belief that they can make a difference in their patients' lives (Stamm, 2010). On the other hand, compassion fatigue may bring about feelings of being overwhelmed, trapped, exhausted, and "infected by others' trauma" (Stamm, 2010, p. 21). The theoretical underpinnings of this study imply that improving compassion satisfaction and decreasing compassion fatigue will lead to optimal care of the suicidal patient. According to Stamm (2010), changing the person-event interaction is key to improving the balance. A dynamic workgroup that supports the individual and the interest of the group by responding to the needs of the nurses may be key to introspection and positive change (Stamm, 2010).

Compassion satisfaction and compassion fatigue theory posits that compassion fatigue will result in a withdrawal from care and the inability to work effectively with patients. Previous studies have found that compassion satisfaction is an important mediator in overall compassion fatigue (Loolo, 2016). This study showed that a strong inverse relationship exists between compassion satisfaction and the components of compassion fatigue. As discussed earlier, the most positive result of the Professional Quality of Life is to have high compassion satisfaction

and moderate to low burnout and secondary traumatic stress (Figley, 1995; Stamm, 2010). The results of this study support the conclusion that improved compassion satisfaction is associated with decreased levels of compassion fatigue—burnout and secondary traumatic stress.

Peplau's theory explains in part that a therapeutic nurse-patient relationship is the result of a nurse's characteristics, beliefs, values, culture, and professional capacity. This study has shown that there was a significant relationship between the Cognitive (covert) and the Behavioral (overt) components of attitude. Although a slight relationship exists between the Affective (overt) component and the Behavioral component, there is no relationship between the Cognitive component and the Affective component. Hence, a more positive Cognitive attitude is clearly related to a more positive overt when caring for the suicidal patient. Additionally, the results of this study show that higher self-reported professional capacity to care for the suicidal patient predicts a decrease in overall attitude of nurses towards the suicidal patient. This study showed that while a higher Cognitive attitude score was related to a higher overall attitude towards the suicidal patient, a self-reported perception of knowledge had an inverse relationship to overall attitude. This mismatch between self-reported perception of knowledge and actual cognitive knowledge is an important concept. Future studies should seek to clarify actual knowledge and perceived knowledge and ways to improve both.

Joiner's theory explains that a patient will be more likely to have suicidal thoughts and behaviors if that patient senses that he is a burden to those around him. As discussed in an earlier chapter, although this study will not address the relationship between nurses' attitudes and the sense of burdensomeness felt by the suicidal patient, Joiner's theory does provide another justification for seeking understanding of nurses' attitudes towards the suicidal patient.

Because nursing is an interpersonal relationship between patient and nurse, the relationship is collaborative, mutual, and an interpersonal process. According to Peplau (1952), when a nurse is able to promote a therapeutic relationship, a patient is given permission to openly express and reorient their feelings leading to positive outcomes. Hence, an emphasis on the human relationship between the patient and the nurses has been theorized to be associated with health, well-being, and the care the patient receives (Peplau, 1988). Understanding attitude and the multidimensional factors that affect attitude has been the focus of this study. Opportunities for professional development should be structured around those factors that have been shown to be associated with the overall attitude of a nurse towards the suicidal patient.

Attitudes towards the suicidal patient are critical to the development and maintenance of a therapeutic relationship and a higher overall attitude towards the suicidal patient will lead to improved therapeutic relationships with suicidal patients (Ouzouni & Nakakis, 2013). Therapeutic nurse-patient relationships lead to a generalized improvement in the health, well-being, and care of the patient (Peplau, 1988). Therapeutic relationships with suicidal patients improve the care and safety of suicidal patients and decrease the likelihood of additional suicidal thoughts and behaviors (Carmona-Navarro & Pichardo-Martinez, 2012). As discussed in the theoretical framework, the care provided to a patient is not an example of expert technique, but it is a “cultivation of human attitudes” (Gastmans, 1998, p. 1317).

### **Strengths**

The study had a robust recruitment response with 494 Registered Nurses responding to the survey. Although the demographic portion of the survey excluded 38% of the respondents, most of the nurses who met the inclusion criteria completed all of the questions. Despite the length of the survey, most of the nurses completed the survey with only 18 of 323 retired from the survey

before finishing. As discussed previously in this study, as per the recommendations of The Checklist for Reporting Internet Surveys (CHERRIES), this dissertation study reported response rate as completion rate – the number of people who completed the survey divided by the number of people who accessed the first page of the survey (Canadian Medical Association, 2016; Litchman, 2015; Eysenbach, 2004). Based on this criteria, the high response rate (62%) associated with this study supports favorable generalizability of the findings (Polit & Beck, 2012). The number of participants gave this study strong statistical power or the ability of the research to detect true relationships between variables (Polit & Beck, 2012).

According to a priori analysis by G\*Power 3.1, a total of 82 participants were needed for the first eight research questions and a total of 161 participants were needed for the last research question. Nearly 4 times the required number of participants were recruited for the first eight research questions and more than 144 more participants than needed were recruited for the last research question. The number of participants gave this study strong statistical power, supporting the ability of the research to detect true relationships between variables (Polit, 2010). Additionally, the demographics of the nurse survey participants closely resembled the demographics of the nurse population in terms of gender, age, geographical location, experience, and education.

An additional strength of the study was the three survey tools used in the dissertation study. The first research tool - the ATAS-Q – had established face validity and construct validity. The eight factors explored by the questionnaire explained 55.45% of the total variance and the Cronbach's alpha co-efficient for the overall ATAS-Q was reported to be 0.96 (Neville & Roan, 2013). Test-retest reliability was reported to be 0.97 (Ouzouni & Nakakis, 2009). The second instrument – the SBAQ – had a demonstrated Cronbach's alpha of 0.82 (Jacobson et al., 2012).

The third survey instrument - The ProQOL – shows good construct validity with over “200 published papers” using the survey (Stamm, 2010). The reported Cronbach’s alpha is between .84 and .90 (Stamm, 2010).

### **Limitations**

This study had several limitations. The design of the study involved self-reporting through the survey tool and because of this participant honesty and authenticity must be assumed (Polit & Beck, 2012). Although there were a large number of nurse participants ( $N = 305$ ) in this study, the study would have been strengthened with more male participants and a greater variation of hospital settings. Additional questions or surveys that inform the self-reported professional capacity portion of the survey would have provided better understanding of this aspect of the research.

Another limitation was the fact that the recruitment took place on the Internet over a short period of time. Although the response was hardy, it is likely that some nurses were not exposed to the social medial links to the study and that nurses were not involved with social medial were excluded by this method of recruitment. The lack of probability sampling is another limitation of this research because the research participants may not have been representative of the general population of all nurses in the US, despite their general similarity on the many characteristics discussed previously. Finally, an additional limitation of social media based recruitment is selection bias as a small portion of the nurse population is not active in social media.

### **Recommendations**

There are several recommendations for additional research. One recommendation is to study components that have a direct and predictive relationship on the cognitive component of attitude. The cognitive component of attitude was shown to have a significant relationship with overall

attitude of the nurse to the suicidal patient. Additionally, further study of compassion as it relates to attitude would be recommended. While this study showed the relationships between compassion and overall attitude, it would be valuable to understand how compassion is related to the eight factors of attitude. Additionally, understanding how self-reported professional capacity is related to actual professional capacity would be an important future focus of study.

This research would also be strengthened by a supplemental qualitative study allowing some of the participants to expand upon their survey responses and examining related research questions with a qualitative perspective. In addition, examination of the qualitative perspective of the patient would explain how overall care and attitude is perceived from the patient's point of view.

## **Conclusion**

The purpose of this research was to examine relationships between nurses' socio-demographic variables, the factors and components of attitude, self-reported professional capacity to care for the suicidal patient, compassion and the overall attitude towards the suicidal patient. Attitudes towards the suicidal patient have an overall affect on suicidal thoughts, attempts, and behaviors (Lee & Park, 2015). This dissertation contributed to the body of knowledge by showing the relationships between overall attitude and multidimensional factors. The results of this study showed that age and experience are inversely related to overall attitude towards the suicidal patient. Additional ancillary analyses strengthened this finding by revealing that age and experience are inversely related to the Cognitive component of attitude. This study also showed that *self-reported* professional capacity to care for the suicidal patient is inversely related to overall attitude. Hence, older nurses, nurses with more experience, and nurses who self-report a high level of professional capacity have a lower level of overall attitude towards the



suicidal patient. A strong relationship was found between Cognitive attitude and overall attitude. Finally, a significant but weaker relationship was found between the affective component of attitude and overall attitude towards the suicidal patient.

Educational support should be directed towards improving the Cognitive and Affective components of attitude. Cognitive attitude is improved with specific knowledge about the attitude object (McLeod, 2014) with the hope that individual nurse constructs and beliefs will be changed with specific education about theory, interventions, and treatment (Tierney, 2016). Education designed to improve Affective attitude is not as well defined as cognitive instruction. However, education that challenges values and mindsets may lead to internalization of fresh ideas and constructs leading to affective attitude change (Mottet, 2015). Of great importance is providing support to older and more experienced nurses.

Finally, although a significant relationship was not found between compassion and overall attitude towards the care of the suicidal patient, a strong, inverse relationship was shown to exist between Compassion Satisfaction and Compassion Fatigue. Furthermore, a higher Affective attitude towards the suicidal patient was associated with lower levels of Compassion Satisfaction. This finding is substantiated by the literature showing that a nurse has a reduced ability to feel sympathy and empathy and an impaired ability to make decisions and to care for patients when experiencing compassion fatigue (Cocker & Joss, 2016). Therefore, it is important to offset Compassion Fatigue, Burn-out, and Secondary Traumatic Stress among nurses through measures designed to sustain Compassion Satisfaction, such as a supportive work environment, positive nurse leaders, and a culture of caring (Stamm, 2010). Improved Compassion Satisfaction will sustain empathy and caring behaviors among general hospital nurses.

Patients with suicidal thoughts and behaviors will encounter nurses in a variety of hospital settings. Nurses are considered “front-line” in identifying, managing, and intervening with potentially life-saving measures (Bolster et al., 2015). This study has shown that hospital nurses have an overall negative attitude towards the care of the suicidal patient. Opportunities for nurses to recognize and intervene therapeutically with suicidal patients may be thwarted by these negative attitudes (Joiner, 2009). Vulnerable patients may sense negative attitudes from their nurses and miss opportunities to engage in therapeutic and healing relationships. It is important for nurses to transform their attitudes through reflection, education, and collaborative efforts in order to improve their overall attitude and form therapeutic and potentially life-saving relationships with their patients who are experiencing suicidal thoughts and behaviors.

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## Appendix B

### Attitudes Towards Attempted Suicide – Questionnaire (ATAS- Q)

Please think about the following questions and choose one of the following for each statement:

1. Strongly Disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly Agree

- *Factor 1 – Positiveness (this line will not be included on Survey Monkey Gold)*
- I would feel ashamed if a member of my family attempted suicide.
- People who attempt suicide are irresponsible.
- Once a person attempts suicide, he is suicidal forever.
- A suicide attempt is essentially a cry for help.
- Attempted suicide, such as an overdose of sleeping pills, is more acceptable than violent suicide such as by gunshot.
- People who attempt suicide have sensibilities that are not detectable by others around them.
- Those who attempt suicide are cowards who cannot face life's challenges.
- People who attempted suicide occupy more staff time so staff are unavailable to patients who are "in greater need of help".
- Empathy demonstrated by the health professional may positively influence an attempted suicide patient to reconsider future suicide attempts.
- The majority of people who attempt suicide misuse health care services.
- Whenever I care for attempted suicide patients, I feel uncomfortable.
- If unpleasant methods (e.g. gastric lavage) are used in the treatment of attempted suicide patients they can prevent the patient from attempting suicide again.
- Sometimes I feel nervous when I have to care for an attempted suicide patient in hospital.

- A person who has made numerous suicide attempts is at high risk of succeeding in the future and needs help and understanding.
- I am happy to care for attempted suicide patients and I feel the same sympathy as I care for other patients.
- It is frustrating to treat patients who have attempted suicide.
- I like to help patients who have attempted suicide.
- I try to establish communication with an attempted suicide patient so he may express the problems he encounters.
- I often feel sympathy and understanding towards attempted suicide patients.
- Hospitalized attempted suicide patients will make future suicide attempts, regardless of how supportive health care professionals were to them.
- I believe that hospitalized, attempted suicide patients will be unable to have a normal life following their discharge.
- It is difficult and unpleasant to treat an attempted suicide patient.
- Attempted suicide patients think only of themselves.
- Attempted suicide patients must be treated using “strict” methods.
- Attempted suicides are not responsible for their actions but are victims of their environment and they need understanding.
- The fact that a person attempted suicide it doesn’t mean that the normal course of their life tipped over.
- *Factor 2 – Acceptability (this line will not be included on Survey Monkey Gold)*
- People with incurable diseases should be allowed to commit suicide in a dignified manner.

- People who attempt suicide have a high level of responsibility.
- Attempt suicide is acceptable for old or infirm people.
- Suicide is an acceptable means to end an incurable illness.
- There may be situations where the only reasonable resolution is suicide.
- External factors, like lack of money, are a major reason for suicide.
- Sometimes suicide is the only escape from life's problems.
- If someone wants to commit suicide, it is their business and we should not interfere.
- People who die by suicide should not be buried in the same cemetery as those who die naturally.
- Potentially, every one of us can attempt to suicide.
- People do not have the right to take their own lives.
- A suicide attempt is a brave act.
- An attempt to suicide is an acceptable act in specific cases.
- *Factor 3 – Religiosity (this line will not be included on Survey Monkey Gold)*
- The higher incidence of suicide is due to the lesser influence of religion.
- In general, suicide is a sin not to be condoned.
- Suicide is a very serious moral transgression.
- Suicide goes against the laws of God.
- People who commit suicide lack religious convictions.
- Most people who attempt suicide do not believe in God.
- People who attempt suicide are, as a group, less religious.
- *Factor 4 – Professional Role and Care (this line will not be included on Survey Monkey Gold)*

- Suicide is a natural way of obliterating people with psychiatric problems.
- Patients in the place/unit I work receive good care.
- I believe that the training I have completed to date, has given me adequate skills to care for patients who have attempted to commit suicide.
- In the place I work, there is considerable number of employees who have indifferent attitude towards their work.
- I think there is “esprit de corps” in the unit I work.
- Patients who have attempted suicide are treated with sympathy in the unit where I work.
- Attempted suicide patients receive good therapeutic care in the unit where I work.
- An attempted suicide patient benefits psychologically by his hospitalizations in a general hospital.
- Some attempted suicide patients are aggressive and there is a need for security staff in the unit of the hospital to which they are admitted.
- When I care for attempted suicide patients, I feel depressed.
- *Factor 5 – Manipulation - (this line will not be included on Survey Monkey Gold)*
- People who attempt suicide are in essence trying to hurt somebody with their actions.
- Attempted suicide patients mainly try to manipulate their situation to their advantage.
- Suicide attempters who use public places (such as bridge or tall buildings) are more interested in getting attention.
- Those people who attempt suicide are usually trying to get sympathy from others.
- People who bungle suicide attempts really did not intend to die in the first place.
- People who attempt suicide hope to achieve something other than death.
- *Factor 6 – Personality Traits - (this line will not be included on Survey Monkey Gold)*

- Most people who attempt suicide are lonely and depressed.
- Most people who attempt suicide don't really want to die.
- Those who threaten to commit suicide rarely do so.
- People with no roots or family ties are more likely to attempt suicide.
- *Factor 7 – Mental Illness - (this line will not be included on Survey Monkey Gold)*
- Many attempts to suicide are the result of the desire of the victim to “get even” with someone.
- It is rare for someone who is thinking about suicide to be dissuaded by a “friendly ear”.
- People who attempt suicide are usually mentally ill.
- People who attempt suicide and live should be required to undertake therapy to understand their inner motivation.
- Attempted suicide patients must be treated on a psychiatric ward of a general hospital on the day of their admission.
- People who attempt suicide are so mentally ill that they should be treated in a psychiatric hospital from the outset.
- People who attempted suicide must be treated by community services.
- I think I need additional psychiatric training in order to care for the hospitalized attempted suicide patients.
- *Factor 8 – Discrimination - (this line will not be included on Survey Monkey Gold)*
- Almost everyone has at one time or another thought about suicide.
- We care for all attempted suicide patients in the same room/ward on the unit in which I work.

- I feel more sympathy towards a person who attempted suicide for the first time than for those who make repeated suicidal attempts.
- Only health care professionals with psychiatric training should take care of attempted suicide patients.
- We should have separate rooms in hospitals for the care of attempted suicide patients.

(Ouzouni & Nakakis, 2009)

## Appendix C

### Permission to use ATAS-Q

Αγαπητέ Δρ Ουζούνη,

Είμαι στο δεύτερο έτος του διδακτορικού μου στη Νοσηλευτική. Φοιτώ στο Πολιτειακό Πανεπιστήμιο του Αϊντάχο στις Ηνωμένες Πολιτείες.

Η διατριβή μου εστιάζεται στη στάση των νοσηλευτών στους ασθενείς με τάσεις αυτοκτονίας. Έχω διαβάσει το σημαντικό έργο σας σχετικά με τις στάσεις απέναντι στην αυτοκτονία και θα ήθελα να χρησιμοποιήσω το ερωτηματολόγιο σας με τίτλο Στάσεις προς την μελετημένη απόπειρα αυτοκτονίας, για να συλλέξω τα δικά μου ερευνητικά στοιχεία.

Παρακαλώ πολύ θα μπορούσα να έχω την άδειά σας να χρησιμοποιήσω το ερωτηματολόγιό σας; Φυσικά και θα σας στείλω τα αποτελέσματα της μελέτης μου και θα σας αναφέρω ως συντάκτη της έρευνας.

Σας ευχαριστώ πολύ εκ των προτέρων,

Karen Patterson Stevens MSN, RN, CEN  
PhD in Nursing Student  
Idaho State University

Translation:

Dear Dr. Ouzouni,

I am a 2<sup>nd</sup> year PhD in Nursing student from Idaho State University in the United States. My dissertation study focuses on nurses' attitudes towards suicide patients.

I have read your important work on attitudes towards suicide and I would like to use your – Attitudes Towards Attempted Suicide – Questionnaire (ATAS-Q) to survey my research subjects.

May I have your permission to use your survey? I will, of course, send you the results of my study and cite you as the author of the survey.

Thank you for your consideration,

Karen Patterson Stevens MSN, RN, CEN  
PhD in Nursing Student  
Idaho State University

## Appendix D

### **Answer and Permission to use the ATAS-Q And additional permission for survey method**

Dear Stevens,

I am giving you the permission to utilise ATAS-Q with the condition to refer to the scale in any piece of work as well as in any future publication. I would also ask you to not upload the current email on the Internet or in any online form. I have attached the publication of ATAS-Q in which you can find Information regarding the scale. I wish you all the best for your dissertation.

With best wishes

Christina Ouzouni  
Associate professor

---

Dear Dr. Ouzouni,

Thank you very much for providing permission for me to utilize the ATAS-Q in my dissertation study. I will credit you the full authorship of this important suicide attitude scale.

As you have requested, I will not publish your email on the Internet or in any online form.

My plan is to reach out to nurses through social media and survey them with a professional and reliable and private survey form. The survey would only be available to the nurse completing it and the results of the survey would be available only to me.

**Is this acceptable to you?**

Thank you again for your kindness,

Karen

---

Dear Karen,

thank you for accepting my conditions.. The way you have planned to conduct your research is up to you. and I am not going to involve in any way. If at all possible let me know the results whenever complete your study. Once again I would like to wish you all the best for your endeavour.

With best wishes

Christina Ouzouni  
Associate professor



## Appendix E

### **Suicide Behavior Attitude Questionnaire**

#### **Professional Capacity Subscale**

Please think about the following questions and choose one of the following for each statement:

1. Strongly Disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly Agree

- I feel capable of helping a person who tried suicide.
- I have professional skills to handle patients under the risk of suicide.
- I feel I am capable of perceiving when a patient is under the risk of suicide.
- I feel insecure to care for patients under suicide risk. (reverse scored)

(Botega et al., 2005)

## Appendix F

### **Asking for Permission to use the Suicide Attitude Behavior Questionnaire – SABQ**

Hello,

I have been trying to reach this author: Neury José Botega  
to get permission to use his survey that was published in your journal:

Suicide Behavior Attitude Questionnaire (SBAQ)

I have not been able to reach Mr. Botega.

Are you able to grant permission for me to use this survey for my research?

Thank you for any help you can give me.

Here is a link to your article:

[http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1516-44462005000400011](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1516-44462005000400011)

Thank you,  
Karen Patterson Stevens  
[stevkare@isu.edu](mailto:stevkare@isu.edu)  
Idaho State University  
PhD in Nursing Student

Olá,

Tenho vindo a tentar chegar a este autor: Neury José Botega

Para obter permissão para usar sua pesquisa que foi publicada em seu diário:

Suicide Behavior Attitude Questionnaire (SBAQ)

Não consegui chegar ao Sr. Botega.

Você pode conceder permissão para que eu use esta pesquisa para minha pesquisa?

Obrigado por qualquer ajuda que você pode me dar.

Aqui está um link para seu artigo:

[http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1516-44462005000400011](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1516-44462005000400011)

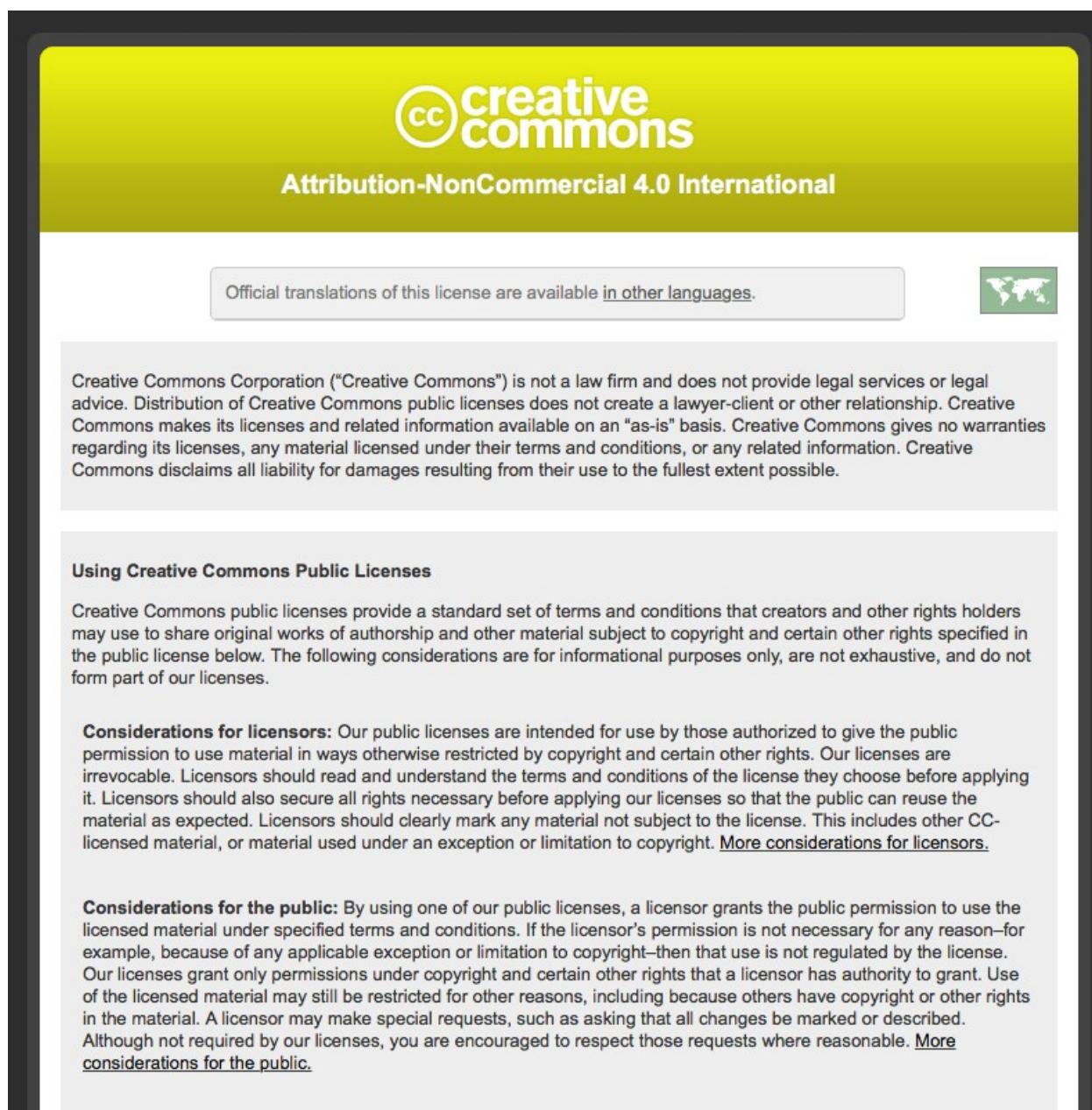
Thank you,  
Karen Patterson Stevens  
[stevkare@isu.edu](mailto:stevkare@isu.edu)  
Idaho State University  
PhD in Nursing Student

## Appendix G

### Permission to use the SBAQ

Permission to use the SABQ is found at this link: <https://creativecommons.org/licenses/by-nc/4.0/legalcode>

The first page of the Creative Commons License is below:



## Appendix H

### Professional Quality of Life Survey (ProQoL)

#### Professional Quality of Life Scale (ProQOL)

##### *Compassion Satisfaction and Compassion Fatigue (ProQOL) Version 5 (2009)*

When you [help] people you have direct contact with their lives. As you may have found, your compassion for those you [help] can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a [helper]. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

1. I am happy.
2. I am preoccupied with more than one person I [help].
3. I get satisfaction from being able to [help] people.
4. I feel connected to others.
5. I jump or am startled by unexpected sounds.
6. I feel invigorated after working with those I [help].
7. I find it difficult to separate my personal life from my life as a [helper].
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].
9. I think that I might have been affected by the traumatic stress of those I [help].
10. I feel trapped by my job as a [helper].
11. Because of my [helping], I have felt "on edge" about various things.
12. I like my work as a [helper].
13. I feel depressed because of the traumatic experiences of the people I [help].
14. I feel as though I am experiencing the trauma of someone I have [helped].
15. I have beliefs that sustain me.
16. I am pleased with how I am able to keep up with [helping] techniques and protocols.
17. I am the person I always wanted to be.
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a [helper].
20. I have happy thoughts and feelings about those I [help] and how I could help them.
21. I feel overwhelmed because my case [work] load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].
24. I am proud of what I can do to [help].
25. As a result of my [helping], I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a [helper].
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

(Stamm, 2010)

## Appendix I

### Permission to use the ProQoL

#### **Standard Use Permissions**

You may also use the ProQOL in for-profit settings such as a training course as long as the course is the item sold, not the ProQOL which may be used in the course.

The ProQOL measure may be freely copied as long as (a) author is credited, (b) no changes are made other than those authorized below, and (c) it is not sold. You may substitute the appropriate target group for / [helper] / if that is not the best term. For example, if you are working with teachers, replace / [helper] /with teacher. Word changes may be made to any word in italicized square brackets to make the measure read more smoothly for a particular target group.

Additionally you are granted permission to convert the ProQOL into other formats such as a computerized or taped version for the visually impaired.

## Appendix J

Thank you for completing this survey.

If you would like to be entered into a drawing to win one of ten

\$20.00 Gift Certificates to Starbucks

Please email the researcher, Karen Stevens  
[stevkare@isu.edu](mailto:stevkare@isu.edu)

with this code:

**COFFEE FOR ME**

**Thank you!**

## Appendix K

### Permission to use Survey Monkey Gold



SurveyMonkey Inc.  
[www.surveymonkey.com](http://www.surveymonkey.com)

For questions, visit our Help Center  
[help.surveymonkey.com](http://help.surveymonkey.com)

#### Re: Permission to Conduct Research Using SurveyMonkey

To whom it may concern:

This letter is being produced in response to a request by a student at your institution who wishes to conduct a survey using SurveyMonkey in order to support their research. The student has indicated that they require a letter from SurveyMonkey granting them permission to do this. Please accept this letter as evidence of such permission. Students are permitted to conduct research via the SurveyMonkey platform provided that they abide by our Terms of Use, a copy of which is available on our website.

SurveyMonkey is a self-serve survey platform on which our users can, by themselves, create, deploy and analyze surveys through an online interface. We have users in many different industries who use surveys for many different purposes. One of our most common use cases is students and other types of researchers using our online tools to conduct academic research.

If you have any questions about this letter, please contact us through our Help Center at [help.surveymonkey.com](http://help.surveymonkey.com).

Sincerely,

**SurveyMonkey Inc.**