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ALTRUISM AND SELF-CONCEPT IN PEDIATRIC INTENSIVE CARE UNIT NURSES: IS
THERE A RELATIONSHIP WITH REPORTS OF WORKPLACE VIOLENCE?

BY

MINNETTE MARKUS-RODDEN

Dissertation Committee

Dr. Judith Lothian, Chair

Dr. Pamela Foley

Dr. Bonnie Sturm

Submitted in partial fulfillment of the
Requirements for the degree of Doctor of Philosophy in Nursing

Seton Hall University

2021

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SETON HALL UNIVERSITY
COLLEGE OF NURSING
OFFICE OF GRADUATE STUDIES

APPROVAL FOR SUCCESSFUL DEFENSE

Minnette Markus-Rodden has successfully defended and made the required modifications to the text of the doctoral dissertation for the **Ph.D.** during the **Spring Semester 2021**.

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The mentor and any other committee members who wish to review revisions will sign and date this document only when revisions have been completed. Please return this form to the Office of Graduate Studies, where it will be placed in the candidate's file and submit a copy with your final dissertation to be bound as page number two.

Submitted in partial fulfillment of the
Requirements for the degree of Doctor of Philosophy in Nursing

ABSTRACT

Incidents of workplace violence (WPV) are pervasive in healthcare settings. WPV in the US occurs four times more frequently in the healthcare sector than in the private sector. However, the true incidence of WPV in healthcare settings is thought to be much higher secondary to significant under-reporting. The American Nurses Association (2019) reports, while one in four nurses are assaulted, only 20-60% of the incidents are reported. This extensive range is due to the lack of an accepted definition of what constitutes WPV, variable reporting mechanisms, and an overall perception by healthcare workers that WPV is “part of the job”. The factors contributing to WPV have been identified in previous studies predominantly within adult ED and psychiatric clinical settings. However, nurses working in the pediatric intensive care unit also treat patients and family members who possess similar risks factors towards perpetrating violence. This study utilized the Careful Nursing model to examine the relationship of altruism and nurses’ self-concept in order to better understand the relationship of these variables on PICU nurses’ reporting incidents of WPV. No known previous research had been performed in the PICU setting that evaluated the relationship of altruism and nurses’ self-concept on reporting incidents of WPV among PICU nurses.

An online survey evaluating altruism, nurses’ self-concept, the incidence of WPV and reporting of incidents of WPV was distributed to PICU nurses working the US. Two instruments were included in the survey, the Self-Report of Altruism Scale (SRA) (Rushton, Chrisjohn, & Fekken, 1981) and the Nurses’ Self-Concept Questionnaire (Cowin, 2002). A total of 119 participants completed the study. The results demonstrated 60% of the participants experienced an incident of WPV in the past five years. A total of 55.6 % of participants stated they did not report the incident of WPV. These results indicate PICU nurses both experience incidents of

WPV and report those incidents at a similar rate to those of previously published studies within adult settings. Logistic regressions were performed to assess for a relationship of altruism or nurses' self-concept on reporting incidents of WPV. There was no significant relationship present between altruism ($p= 0.61$) or nurses' self-concept ($p=0.1$) and PICU nurses' decisions to report incidents of WPV. This study demonstrated that neither altruism nor NSC had a relationship on PICU nurses' reporting incidents of WPV. However, this study elucidated that PICU nurses are equally vulnerable to WPV and report incidents similarly to other nurses. The implications of these findings are important for further research on barriers to reporting WPV, policy development to enhance reporting, and methods to improve the overall safety of healthcare workers in all settings.

Keywords: *workplace violence, reporting, altruism, self-concept*

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DEDICATION

This dissertation is dedicated to all PICU nurses who have suffered in silence while simultaneously advocating and giving voice to the most vulnerable children in their charge. They should be silent no longer.

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CHAPTER I

INTRODUCTION

Workplace violence (WPV) in healthcare settings is a significant public health issue for patients and healthcare providers (HCP) alike and is receiving international attention (Campbell, Burg, & Gammonley, 2015). Research regarding WPV in healthcare is still in its early stages. In 2008, the World Health Organization (WHO) acknowledged the international impact of WPV in healthcare settings. WPV in healthcare settings represents the majority of US incidents reported by The Occupational Safety and Health Administration (OSHA) in 2017. WPV in the healthcare sector within the US is four times more common than within the private sector. This represents 7.8 cases of serious WPV per 10,000 full time employees in healthcare settings as compared to an incidence of less than two cases of serious WPV per 10,000 full time employees in all other industries (OSHA, 2015).

Identifying WPV can be challenging as definitions and interpretations of what constitutes WPV vary. The American Nurses Association (ANA) defines WPV using the definition provided by the National Institute for Occupational Safety and Health (NIOSH, 2002) as, “Workplace violence consists of physically and psychologically damaging actions that occur in the workplace or while on duty.” The ANA further describes WPV by providing examples from OSHA 2015, to include, “direct physical assaults (with or without weapons), written or verbal threats, physical or verbal harassment, and homicide” (www.nursingworld.org, 2017).

There are four classifications of WPV described by NIOSH. These include Type I, in which there is criminal intent with no relationship held by the perpetrator to the business/employees, Type II, which is defined as violence towards employees perpetrated by a

client or customer such as a patient towards healthcare worker, Type III represents worker towards worker violence, and Type IV involves personal relationships in which the perpetrator has a relationship with the victim but not to the business (www.nursingworld.org, 2017).

Incidents of WPV in healthcare are largely perpetrated by patients to HCP and as such are classified as Type II incidents. Patients represent 80% of violence in healthcare settings with the remaining 20% composed of 12% other clients or customers, 3% students, 3% co-workers, 1% assailant/suspect/inmate, and 1% other person (not specified) (OSHA, 2015) (Figure 1).

Factors contributing to patient perpetrated assaults on healthcare workers include environmental, patient, process, and staff influences. Environmental factors known to contribute to assault can be administrative, such as lack of a safety culture (Lipscomb & London, 2015, OSHA, 2015). Additional environmental factors include overcrowding, noise, and unavailable hospital beds leading to prolonged holding time in hospital emergency departments (Arnetz, Hamblin, Sudan, & Arnetz, 2018; Phillips, 2016; OSHA, 2015). Patients with a history of psychiatric diagnoses, substance abuse, previous history of violence, and neurological conditions such as dementia are more likely to perpetrate violence (OSHA 2015; Gerberich et al., 2004). Process factors such as inadequate assessment and patient observation, inadequate medication, failure to recognize warning signs, and failure to communicate result in increased risk for WPV. Staff factors that contribute to WPV include inadequate staffing, training and assistance, along with increased workload (Lipscomb & London, 2015). Gerberich et al (2004) found increased rates of WPV incidents for staff working in nursing homes/long-term care facilities, intensive care units, psychiatric/behavioral or emergency departments and in settings caring for older adults.

The majority of research to date has focused on the incidence of WPV in the adult emergency department and adult psychiatric units. However, patients admitted to the Pediatric Intensive Care Unit (PICU) and their families often possess similar characteristics and risk factors that contribute to assaults on healthcare workers, such as the setting itself being an intensive care unit. An additional known risk factor for WPV includes the presence of substance abuse. The number of PICU admissions in the US due to opioid overdose more than doubled between 2004-2015 (Kane, Colvin, Bartlett, & Hall, 2018). Notably, 20% of those admitted patients aged 1-5 years had ingested methadone prescribed to a parent or caregiver. This highlights the influence of drug related admissions to PICUs of the patients, as well as the characteristics of the PICU patients' parents/guardians.

The ANA position statement on incivility, bullying, and WPV discusses complicity of WPV, and states that those who observe it and do not respond to it are thereby perpetuating WPV (ANA, 2015). Throughout training, both physicians and nurses are taught to practice altruistically, placing the needs of the patient above their own needs. This education creates a set of norms in which the student learns to accept this philosophy as the model. *The Selfish Gene* (1979), written by Richard Dawkins, describes how culture can be transmitted through the use of memes. Different from today's use of the term "meme" referring to an internet graphic, Dawkins used the term to describe the methods in which a culture communicates its cultural norms. Memes require three components in order to persist; longevity, fecundity, and copying fidelity (Dawkins, 1979). Memes can be compared to deoxyribonucleic acid (DNA) in that memes are also transmitted, although in the case of memes they are transmitted via social pathways. Longevity of a meme represents the ideas or connections that are strong enough to be replicated *en masse* and secure its survival. However, longevity is not a quantitative term and does not

represent length of time in which a meme is transmitted. Fecundity represents the speed of which a meme is transmitted, a rapidly accepted meme is deemed successful. Finally, copying fidelity allows a meme to change its original format in order to adapt to a new environment and ensure survival (Dawkins, 1979; Haigh, 2010).

The nursing profession encompasses all three of these memes. Representing longevity, nurses have passed their ideas of caring for the ill to nursing students for hundreds, if not thousands, of years. This education and these ideals rapidly spread internationally as exemplified by Florence Nightingale's first book reaching international shores within one year of its initial publication, a clear demonstration of fecundity of the profession. The last meme, copying fidelity, enables the nursing profession to adapt to new environments and change as necessary (Haigh, 2010). It is these distinct memes that serve to illustrate how professional culture is transmitted and its influence on WPV in healthcare settings.

Nursing, at its core, is a profession that is defined by professionals who care for others either during times of need or proactively by promoting health and wellness in an effort to prevent or mitigate the effects of illness or injuries. The education of nurses includes scientific methods to maintain or improve health and well-being. Additionally, nursing education often includes curricula that addresses the humanistic aspect of providing healthcare, specifically the compassion with which nurses interact with patients. At the forefront of the Guide to the Code of Ethics for Nurses, Provision One states, "The nurse practices with compassion and respect for the inherent dignity, worth, and unique attributes of every person" (Fowler, 2015, pp.1). It is therefore understood that compassion itself is fundamental to providing nursing care.

Compassion is derived from Latin, and is defined as the “sympathetic consciousness of others’ distress together with a desire to alleviate it” (<https://www.merriam-webster.com/dictionary/compassion>). Compassion differs from its related terms of sympathy, empathy and altruism. It is possible to think of these terms as lying along a continuum ranging from sympathy to altruism. Whereas sympathy is merely a non-judgmental recognition of another’s emotions, empathy enables an individual to identify with the emotions of another and to share feelings. Empathy results in a connection between two individuals. Progressing along the continuum, compassion builds upon the connection established in empathy but now involves taking action to alleviate the others’ suffering (Trezciak & Mazzarelli, p. xiii, 2019). Empathy is the precursor to compassion; without the development of empathy, no action can be taken to provide a compassionate response. Altruism, lying at the far end of the continuum, is defined as the selfless caring for others (Smith, 1995). Altruism was first introduced as a term in approximately 1892 by the nineteenth century French philosopher Auguste Comte (Haigh, 2010). The term was developed to be an antonym of ‘egoism’ and is described as the unselfish attention to the needs of others (Haigh, 2010) or as a guide to working in the interests of others (Harris, 2018). There are four critical attributes of altruism which include the following: (1) a sense of personal responsibility for another’s well-being, (2) the presence of empathy (3) a sense of compassion for another, and (4) the presence of an uncalculated selfless commitment to the needs of others (Smith, 1995).

Compassion, however, differs from altruism, and is often an associated socio-cultural expectation that is placed upon healthcare workers (Burks & Kobus, 2012). Social norms within healthcare professions such as medicine and nursing often include the concept of altruism as a

key part of the professional roles. Professionalism as defined by the American Board of Internal Medicine, includes the following statement,

Principle of primacy of patient welfare: The principle is based on a dedication to serving the interest of the patient. Altruism contributes to the trust that is central to the physician-patient relationship. Market forces, societal pressures, and administrative exigencies must not compromise this principle (American Board of Internal Medicine, 2019, Fundamental Principles, para. 1)

The Guide to the Code of Ethics for Nurses (2015) states in Provision two, “the nurse’s primary commitment is to the patient, whether an individual, family, group, community, or population.” This provision is a key component of nursing care; nurses are both actively educated to put the patient first and are passively socialized to maintain primacy of the care to the patient. However, current patient expectations regarding their HCPs versus the administrative and governmental constraints placed upon HCPs, including financial drivers and patient experience measures pose challenges to the concept of practicing altruistically (Burkes & Kobus, 2012; Harris, 2018).

Self-concept is an individual’s perception of self (Shavelson et al., 1976). Self-concept develops over time, is formed through experiences and interpretations of one’s environment and significant others. Furthermore, the perception of self is thought to influence the way an individual will act and in turn, those acts influence the ways in which the individual perceives oneself (Shavelson et al., 1976). Therefore, it would be logical to deduce, the acts which the nurse performs, the experiences the nurse encounters, and the influences of fellow nurses will all affect an individual nurse’s self-concept.

It is known that many incidents of WPV are in fact not reported and as such the true incidence of WPV is likely to be much higher (American Nurses Association, 2019; Lipscomb & London 2015; OSHA, 2015; Phillips, 2016). Data are obtained via officially reported incidents which are known to be poorly recorded. Therefore, much of the data regarding individual incidents of WPV is gathered anecdotally (Lipscomb & London, 2015).

There are multiple reasons contributing to poor reporting of WPV incidents and include inadequate reporting mechanisms, a lack of faith in the reporting system, fear of retaliation, and an acceptance of WPV as a social norm within the nursing profession (Lipscomb & London, 2015; OSHA, 2015). In more recent years there has been a focus by employers to increase patient satisfaction with patients being considered the customers of a business. This cultural shift has resulted in creating an environment in which the employee believes that administration values its patients, often identified as customers, more than it does its own employees. As a result, employees are less likely to report incidents of WPV as the workplace culture emphasizes patient satisfaction, and not employee satisfaction (Lipscomb & London, 2015).

The social mores of nursing as it contributes to reporting WPV incidents, includes attitudes regarding the incidents of WPV, the milieu of the environment in which the nurse practices, and the individual type of incident (e.g.: verbal, physical, or sexual). The ANA position statement on incivility, bullying, and WPV, asserts that accepting WPV as a social norm should no longer be tolerated, noting that social norms do not always coincide with moral norms or values (ANA, 2015). It is therefore the ANA's position that the nursing profession must work towards a professional change in culture in which acceptance of violence is no longer tolerated. As Dawkins explained in his discussion of memes, in order for a meme to survive it must be

allowed to change from its original format (Dawkins, 1979; Haigh, 2010). The delivery of healthcare has changed drastically over the past century but the ethics and ideals of the provision of healthcare has not changed from its original format. As long as the chasm between nursing's professional values and the values society places on nursing continues to exist, threats to professional self-concept may also be present. Promoting altruistic healthcare may be fundamentally incompatible with the current healthcare environment (Burks & Kobus, 2012), and may affect nursing self-concept.

Purpose of the Study

The purpose of this study is to identify the relationship between altruism and nurses' self-concept with reporting incidents of WPV by PICU nurses.

Research Questions

1. What is the relationship between altruism and PICU nurses' decisions to report incidents of WPV?
2. What is the relationship between nurses' self-concept and PICU nurses' decisions to report incidents of WPV?

Definitions of Variables

Altruism can be defined as selfless caring for others. It must encompass four critical attributes including: (1) a sense of personal responsibility for another's well-being, (2) the presence of empathy, (3) a sense of compassion for another, and (4) the presence of an uncalculated selfless commitment to the needs of others (Smith, 1995).

Nursing altruism is "the notion that human to human caring in times of sickness and vulnerability brings with it emotional benefits" (Haigh, 2010). The Self-Report of Altruism

(SRA) Scale developed by Rushton, Chrisjohn, and Fekken in 1981 is a reliable (Cronbach's alpha of 0.78- 0.87) and valid instrument to measure altruistic behavior. The discriminant validity of this instrument was found to be good after correlating it to a peer-rated-SRA-scale-altruism and a peer-rated-global altruism with results of $r(86)=0.35$, $p<0.001$ and $r(86)=0.21$, $p<0.05$ respectively. The SRA may be useful in measuring levels of nursing altruism. No conceptual definition of altruism is provided from the authors of this instrument.

Altruism will be operationally determined by response on Rushton et al. (1981) Self-Report of Altruism Scale.

Nurses' self-concept remains incompletely defined. The term self-concept itself is often used interchangeably with self-esteem, self-worth, and self-confidence.

A person's perception of himself. These perceptions are formed through his experience with his environment, perhaps in the manner suggested by Kelly (1973) and are influenced especially by environmental reinforcements and significant others. We do not claim an entity within a person called "self-concept". Rather, we claim that the construct is potentially important and useful in explaining and predicting how one acts. One's perceptions of himself are thought to influence the ways in which he acts, and his acts in turn influence the ways in which he perceives himself. (Shavelson et al., 1976, p. 411)

Bong and Skaalvik (2003) define self-concept as a composite view of oneself. Nurses' self-concept can be understood as an overarching term to describe an individual nurse's perception of adequacy and fit within the nursing profession. The Nurses' Self-Concept Questionnaire (NSCQ) designed by Leanne Cowin (2001) is a 36-item test that includes six dimensions to measure nurses' self-concept. These dimensions include, general, care, staff

relations, communication, knowledge and leadership. Each of the subscales is measured through both affective (I feel) and cognitive (I think) type declarative statements. No conceptual definition of nurses' self-concept is provided from the author of this instrument. All dimensions of the NSCQ will be included in this research study. The internal consistency of each of these dimensions range from 0.89-0.93 (Cowin, 2002). Nurses' Self-Concept will be operationally determined by response on the NSCQ.

Reporting incidents of workplace violence is not defined in the literature, perhaps in part due to the inconsistencies in defining workplace violence itself. However, Findorff et al. (2005) define under-reporting of violent events as the failure of victimized employees to report these events to their employers, the police or through other means. For the purposes of this study, reporting will be operationally determined by response to the two WPV experience questions included in this research study (Appendix C).

Conceptual Framework

Nursing theories and models provide the constructs to enable nurses to provide care systematically and use evidence-based science in order to facilitate critical thinking and decision-making (Alligood, 2014). Careful Nursing, a philosophy and professional practice model developed in Ireland during the 19th century, remains an applicable nursing theory to today's nursing professionals. The theory includes definitions of person, environment, health and nursing all of which are important factors when evaluating WPV in healthcare. Specifically, the "person" as the patient, the "environment" as both the physical environment of the healthcare setting and the cultural environment established within the healthcare setting, the "health" of the patient, such as risk factors for violence including the presence of dementia, mental illness, or substance

abuse (The Joint Commission, 2018), and “nursing” as the profession itself and the identification of attributes of nursing. The Careful Nursing framework includes three philosophical assumptions, four practice dimensions and 20 concepts within those practice dimensions (Meehan, 2012, p.2910) (Figure 1). Within the four practice dimensions is the concept of the “therapeutic milieu” which is defined as the nursing created conditions that enable “healing interpersonal relationships, cooperative attentiveness to patients and physical features which soothe patients and provide for optimum safety” (Meehan, 2012). This concept further includes five dimensions which importantly in evaluating WPV, includes nurses’ care for themselves both as individuals and as colleagues and the dimension of maintaining a safe and restorative physical environment (Meehan, 2012). Although the latter specifically discusses the environment in terms of safety for the patient, such as cleanliness and light, these environmental factors are also known to contribute to WPV prevention (Meehan, 2012; OSHA 2015).

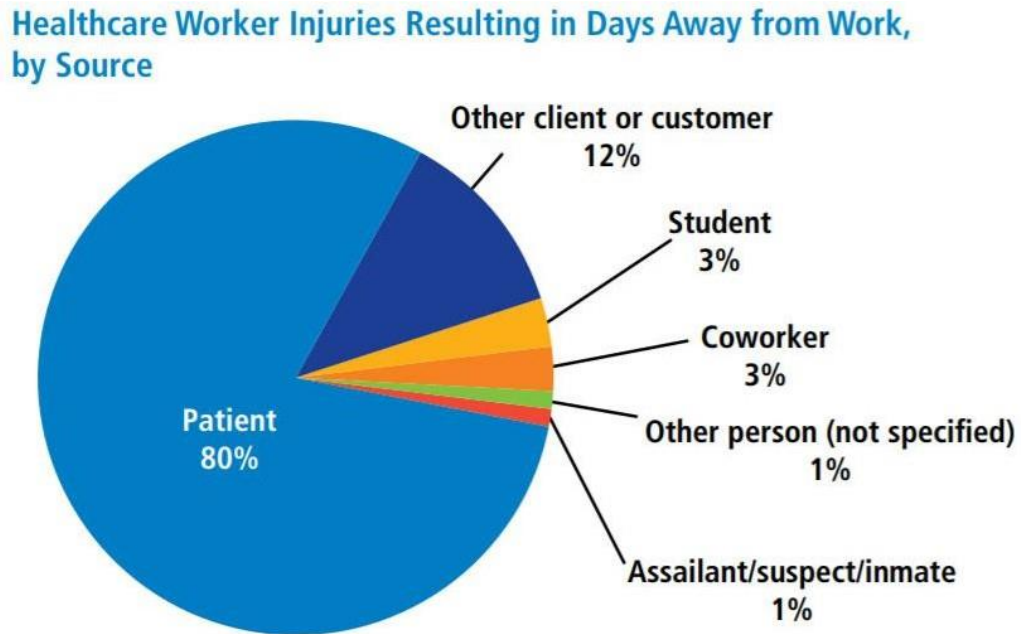
Significance of the Study

The incidence of WPV within healthcare settings is receiving increasing international attention within healthcare settings (Campbell, Burg, & Gammonley, 2015). Healthcare workers in inpatient settings experience workplace violence related injuries requiring days off from work at a rate of at least five to 12 times higher than the rate of private sector workers overall (<https://www.gao.gov/assets/680/675858.pdf>). The Minnesota Nurses’ Study identified rates of violence to be 13.2 per 100 persons for physical violence and 38.8 per 100 persons for non-physical violence (Gerberich et al., 2004). The full extent of the problem, including the costs incurred, is not completely understood in part due to poor reporting by HCPs who have experienced WPV (<https://www.gao.gov/assets/680/675858.pdf>). Most studies evaluating reporting incidents of WPV in healthcare settings have been performed in adult ED and adult

psychiatric settings. To date, no studies have been identified evaluating PICU nurses' reporting incidents of WPV, despite facing similar risk factors as compared to their adult ED nursing peers. A study designed to identify variables that affect PICU nurses' reporting of WPV may help to guide education to improve reporting mechanisms. Identification of WPV incidents and trends within the PICU setting is essential in order to design and implement policies and procedures that will decrease WPV in PICU settings.

Figure 1

Healthcare Worker Injuries Resulting in Days Away from Work, by Source



Data source: Bureau of Labor Statistics (BLS), 2013 data. These data cover three broad industry sectors: ambulatory healthcare services, hospitals, and nursing and residential care facilities. Source categories are defined by BLS.

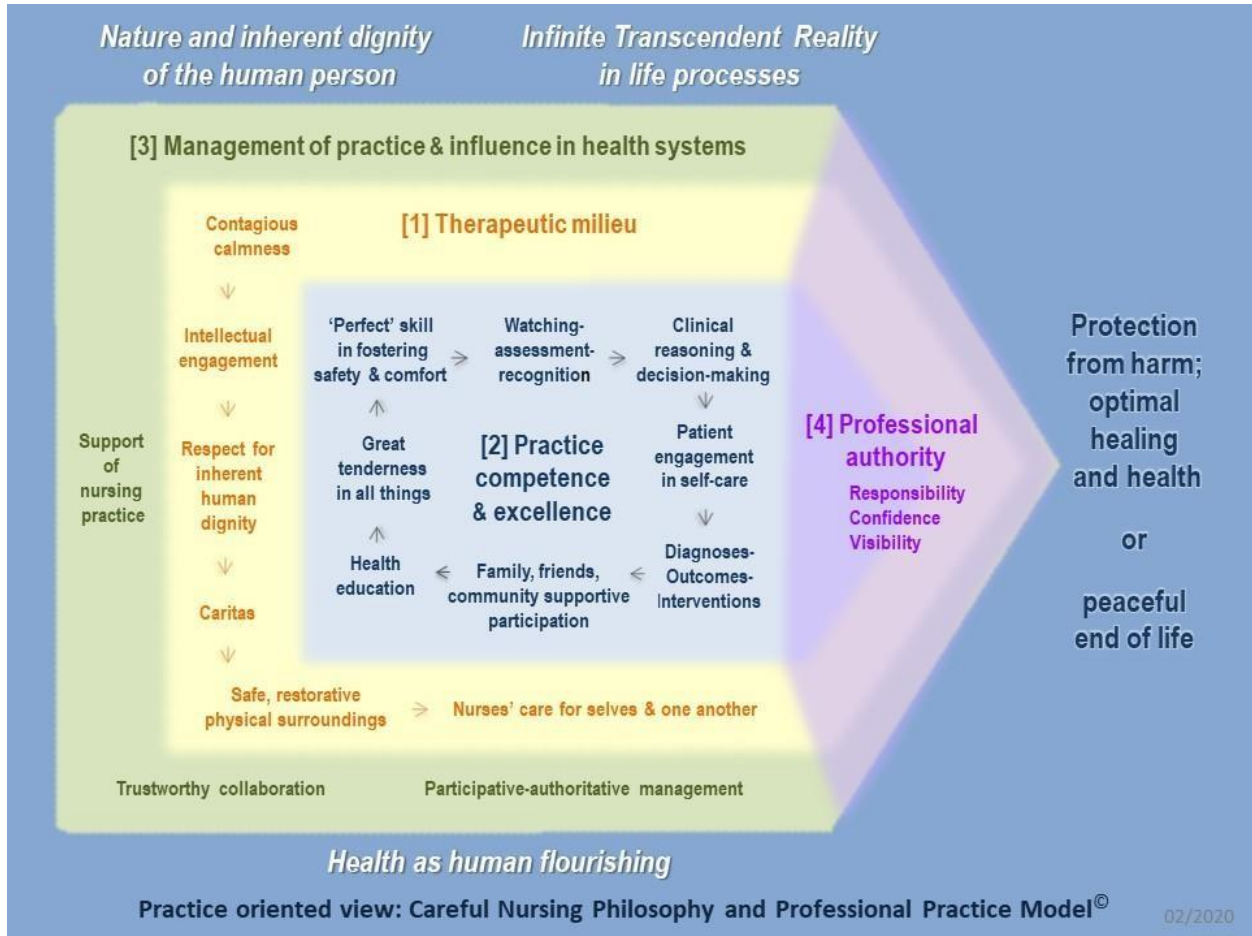
Figure 2

Guidelines for Preventing WPV for Healthcare & Social Service Workers, 2016



Figure 3

The Careful Nursing Philosophy and Professional Practice Model



From <http://www.carefulnursing.ie>. Copyright 2020 by T.C. Meehan.

Table 1

The Fifteen Main Concepts Encompassing Nursing Practice

- Person
- Environment
- Health
- Nursing
- Disinterested love
- Contagious calmness
- Creation of a restorative environment
- ‘Perfect skill’ in fostering safety and comfort
- Nursing interventions
- Health education
- Participatory-authoritative management
- Trustworthy collaboration
- Power derived from service
- Nurses’ care for themselves

Adapted from “Careful Nursing: A Model for Contemporary Nursing Practice”, by T.C. Meehan, 2003, *Journal of Advanced Nursing* 44(1).

CHAPTER II

REVIEW OF THE LITERATURE

Healthcare workers are the victims of a significant portion of all incidents of workplace assaults. Occupational Safety & Health Administration's (OSHA) report, *Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers* (2016), states that less than 20% of all workplace injuries are sustained by healthcare workers; however, greater than 50% of all assaults in the workplace are sustained by healthcare workers (Figure 1). Healthcare workers are four times more likely to be assaulted than any private industry worker (OSHA, 2015). The American Nurses Association (2019) reports, while one in four nurses are assaulted, only 20-60% of the incidents are reported. This wide range of reporting is due to inconsistent methods to identify incidents as well as varying definitions and interpretations of what classifies as an incident of WPV. Aggressive patients threaten the right of nurses, other healthcare professionals, and other patients to be free from fear of threat or assault (Baby & Carlyle, 2014). As a result, health care professionals (HCPs) are required to develop a variety of skills dedicated to self-protection within the workplace, a concept that is antithetical to the fundamental basis of caring in the nursing profession (Baby & Carlyle, 2014; Chapman, Styles, Perry & Combs, 2010).

Workplace violence (WPV) in healthcare settings is a vastly under-reported, ubiquitous, persistent and largely socially acceptable problem (Arnetz et al, 2015, Lipsomb & London, 2015; Occupational Health & Safety Administration, 2015, Wolf, Delao & Perhats, 2014). Historically and politically, incidents of WPV suffered by healthcare workers have been accepted as "part of the job" (Lipscomb & London, 2015). Nurses and other members of the healthcare team have been socialized both within healthcare settings and within the justice system to accept WPV,

given that perpetrators often represent marginalized or protected populations, such as psychiatric patients or developmentally disabled persons (Lipscomb & London, 2015). There are abundant examples of nurses attempting to report incidents of WPV or press criminal charges with police or within the court systems that have been dismissed (Lipscomb & London, 2015). This dismissal may be due to a rationalization of the assault being a known and acceptable risk to healthcare workers (Lipscomb & London, 2015; Wolf et al., 2014).

Underreporting of WPV by nurses is a known phenomenon. Underreporting of WPV is thought to be due to a variety of factors including, lack of physical injury sustained by the nurse, time constraints preventing the nurse to complete a report, lack of administrative or coworker support, the nurse's fear of retaliation, the belief that the workplace emphasizes patient satisfaction and customer service over staff satisfaction, and the nurse's belief that nothing will change (Arnetz, et al, 2015; Wolf, et al., 2014; Lipscomb & London, 2015).

Emergency department (ED) and psychiatric nurses are the most common nursing groups studied regarding WPV. May and Grubb (2002) investigated nurse perceptions of the incidence and nature of verbal and physical Type II WPV experienced by ED, ICU and general floor nurses in one Florida medical center. A 27-item self-report survey developed by the authors was distributed to three specialty groups of nurses. A total of 86 surveys were returned yielding a response rate of 68.8%. Results were notable for emergency room nurses reporting the highest rate of WPV with 100% of ED nurses reporting verbal assaults and 82% reporting physical assaults within the previous year. There are minimal studies evaluating WPV in pediatric settings. Shaw (2015) studied a near-miss incident involving a pediatric patient with a gun in an urban, Midwestern pediatric ED. This mixed methods study was implemented following this event and described the pediatric ED staff's views regarding WPV. The study researchers aimed

to subsequently implement methods to address staff concerns revealed in their study. A total of 234 health care staff participated (59%) in a survey distributed through an internal email invitation. Data was collected anonymously, and participation was voluntary. The survey included multiple choice questions, forced rank, Likert scale, as well as, open-ended responses for narrative response. Four categories were measured: work-based demographics, perception of security fears/concerns, local police presence, and hospital security presence. This survey was developed by the hospital employees as the author reports that no validated tool to measure staff perception of workplace safety/security exists. Results yielded 43% of the respondents were concerned for their personal safety/security several times per month while at work. Thirty percent of the respondents were also noted to have experienced situations that made them fearful several times per month. The narrative responses regarding actual situations at work resulting in fear by staff included three themes: (1) agitated visitors, (2) agitated patients, and (3) weapons brought into the pediatric ED. These results highlight the prevalence of fear of WPV experienced by pediatric ED nurses. Additionally, the themes identified in this pediatric ED study coincide with those expressed by nurses in adult EDs and psychiatric departments (Shaw, 2015). This study highlights the similarities of WPV threats faced by nurses working within both adult and pediatric ED settings.

There are no studies to date that evaluate WPV experienced by PICU nurses. As of 2019, the US had a total of 77,809 intensive care unit beds of which 4,044 (approximately 5%) are PICU beds (<https://www.sccm.org/Communications/Critical-Care-Statistics>). Although, there are relatively few PICUs throughout the US, PICUs possess similar WPV risk factors to those present within adult EDs or psychiatric settings, as delineated within Chapter I. These include risks such as the presence of patients and or family members with a substance abuse dependence,

neurological conditions, and process factors such as inadequate medication, inadequate staffing, and communication breakdown (Lipscomb & London, 2015; OSHA, 2015; Gerberich et al., 2004).

Literature searches were performed utilizing the following databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane database of Systematic Reviews, ProQuest and PsychInfo. All database searches were limited to peer-reviewed studies published within the past 10 years and written in English. Separate searches were performed for each of the variables being investigated: reporting, altruism and nurses' self-concept related to workplace violence. ProQuest search terms included *workplace violence in nursing*, paired with each of the following terms, *measures, scales, incident reporting, violence, healthcare, patient and provider*. This search was completed a second time using *workplace violence in healthcare* paired with the same terms. This search resulted in a total of 79 articles. Using this same technique and search terms with CINAHL initially yielded zero studies. A secondary search in CINAHL using the search term *workplace violence in nursing*, with the same above-mentioned limits and limited to the US, yielded a total of 32 results. Searches within Cochrane and Psych Info using *workplace violence in healthcare* and the same limits yielded 37 studies and 58 studies respectively. For literature searches related to altruism, ProQuest search terms included *altruism and workplace violence* which yielded zero results. *Altruism in nursing* was limited to 10 years and resulted in 2,842 articles. One concept analysis on altruism in nursing was identified and reviewed. Nurses' self-concept searches included the terms, *self-concept, nurse, not self-esteem, not self-confidence*. A total of 1,943 articles were identified. One dissertation was obtained and reviewed. This dissertation included the development of a specific self-concept tool developed for nurses. Articles obtained were reviewed and references from included articles were also

reviewed for possible inclusion. References from retained articles were also reviewed and several were retained when applicable to the study. Articles retained were based upon content and applicability to the study and country of origin.

Theoretical Framework

Nursing theories and models provide the constructs whereby professional nurses can provide care in a systematic and evidence-based fashion, enabling critical thinking and decision-making (Alligood, 2014). The development of Careful Nursing as a philosophy and professional practice model was undertaken to help close the gap between nursing practice and nursing science (Meehan, 2012). Careful Nursing, a philosophy and professional practice model, was initially developed in Ireland in the 19th century and used during the Crimean War. Documents from 19th century Irish nurses, physicians and military personnel were reviewed and categorized using the nursing metaparadigm concepts of human being, environment, health and nursing (Meehan, 2012). These documents were analyzed in depth with 15 main concepts identified as encompassing nursing practice (Table 1) (Meehan, 2003).

Subsequently the Careful Nursing Model has been re-evaluated and adapted for 21st century use. Careful Nursing includes three philosophical principles, four practice dimensions and 20 concepts within those practice dimensions (Figure 2). These practice dimensions include, (a) therapeutic milieu which can be summarized as the caring environment the nurse creates for the patient, the nurse, and fellow co-workers, (b) the professional expertise of the nurse, (c) the management of practice and influence in health systems, a holistic approach to professionalism affecting both the nursing profession itself and other healthcare realms, and (d) professional authority which addresses professional self-confidence and professional visibility. Careful

Nursing addresses and clearly defines its components allowing for a clear and concise description of nursing practice and will be used as a guiding perspective for this research work.

Careful Nursing recognizes that the provision of care must begin with nurses' therapeutic capacity, defined by nurses' care for themselves. Additionally, Careful Nursing includes "protection from harm; optimal healing and health or peaceful end of life", as a measurable outcome goal. Nursing care is to be provided to patients with *caritas* and with tenderness while also maintaining a therapeutic milieu which facilitates the nurse's ability to care for self and colleagues.

Most often violent incidents within healthcare occur within a clinical setting. Previous research has demonstrated risk for WPV to correspond with each of the four dimensions within Careful Nursing, including the therapeutic milieu, the individual nurse's competence (such as years of experience), the management of practice or safety climate, and professional authority (Gerberich et al. 2004; Gillespie, Gates, Miller, & Howard, 2010; Arnetz et al, 2015, & Gerberich et al., 2005). Therefore, the practice dimensions of the Careful Nursing Model will be utilized to guide this study of the influence on altruism and nurses' self-concept with PICU nurses' reporting incidents of WPV.

The obligation of nurses to provide care, both in the sense of caring actions and in the sense of a caring attitude, is inherent to the nursing profession. However, this obligation and the boundaries between providing care to the patient while simultaneously caring for oneself or colleagues can become unclear, particularly when caring for an aggressive patient (Baby & Carlyle, 2014). When faced with a threatening patient, the nurse may experience an increase in anxiety, eliciting a fight or flight response thereby challenging the nurse's ability to maintain a therapeutic milieu (Baby & Carlyle, 2014). The reality is that today's nurses, professionals who

within the Careful Nursing model serve to protect others from harm, now need to acquire knowledge and skills to protect themselves in an increasingly violent and aggressive workplace.

Altruism Background

Caring is inherent to the practice of nursing. Nursing includes caring for others either during times of mental or physical health needs or caring through the promotion of health and wellness. Nursing education often includes curricula which addresses the manner in which nursing care should be provided including the compassion with which nurses interact with patients. The Guide to the Code of Ethics for Nurses, Provision One states, “The nurse practices with compassion and respect for the inherent dignity, worth, and unique attributes of every person” (Fowler, 2015). It is therefore understood that compassion itself is fundamental to providing nursing care.

Compassion is derived from Latin, and is defined as the “sympathetic consciousness of others’ distress together with a desire to alleviate it” (<https://www.merriam-webster.com/dictionary/compassion>). Compassion differs from its related terms of sympathy, empathy and altruism. It is possible to think of these terms as lying along a continuum ranging from sympathy to altruism. Whereas sympathy is merely a non-judgmental recognition of another’s emotions, empathy enables an individual to identify with the emotions of another and to share feelings. Empathy results in a connection between two individuals. Progressing along the continuum, compassion builds upon the connection established in empathy but now involves taking action to alleviate the others’ suffering (Trezciak & Mazzarelli, p. xiii, 2019). Empathy is the precursor to compassion; without the development of empathy, no action can be taken to provide a compassionate response. Altruism, envisioned as lying at the far end of the continuum, is defined as the selfless caring for others (Smith, 1995).

Altruism was first introduced as a term in approximately 1892 by the 19th century French philosopher Auguste Comte (Haigh, 2010). The term was developed to be an antonym of ‘egoism’ and is described as the unselfish attention to the needs of others (Haigh, 2010) or as a guide to working in the interests of others (Harris, 2018). There are four critical attributes of altruism that include: (1) a sense of personal responsibility for another’s well-being, (2) the presence of empathy (3) a sense of compassion for another, and (4) the presence of an uncalculated selfless commitment to the needs of others (Smith, 1995). Rushton, Chrisjohn and Fekken developed the Self-Report Altruism Scale in 1981 which remains the most widely used measure of altruism today. Currently, there is no other similarly reliable and valid self-report scale for measuring altruism (D. Nguyen, Center for Compassion and Altruism Research and Education, Stanford University, personal communication, April 11, 2019).

Compassion, however, differs at times from the socio-cultural expectation of altruism that is placed upon healthcare workers (Burks & Kobus, 2012). Social norms within healthcare professions such as medicine and nursing, often include the concept of altruism as a key part of the professional roles. Professionalism as defined by the American Board of Internal Medicine, includes the following statement, “Principle of primacy of patient welfare: The principle is based on a dedication to serving the interest of the patient. Altruism contributes to the trust that is central to the physician-patient relationship. Market forces, societal pressures, and administrative exigencies must not compromise this principle” (American Board of Internal Medicine, 2019). *The Guide to the Code of Ethics for Nurses* (2015) states in Provision two, “the nurse’s primary commitment is to the patient, whether an individual, family, group, community, or population.” This provision is a key component of nursing care; nurses are both actively educated to put the patient first and are passively socialized to maintain primacy of the care to the patient. Altruistic

care has been socialized to place greater importance to the interests of the individual receiving care as opposed to the individual providing care (Pettersen, 2012). Self-care and integrity of the provider are not morally wrong, nor are they less valuable than those of others (Pettersen, 2012).

Self-Concept Background

Self-concept is the individual's perception of oneself (Shavelson, Hubner, & Stanton, 1976). It develops over time and is formed through experiences and interpretations of one's environment and one's significant others. Self-concept incorporates a developmental aspect, developing over time with increasing experiences and acquisition of skills. Shavelson et al., (1976) describes these contributions to self-concept in the following manner. Life experiences provide the data with which an individual develops a perception of self. The individual, based upon environmental contributions such as culture, family and friends, categorizes these experiences. The process of categorizing life experiences provides a context and meaning to each experience. The multi-faceted features of self-concept reflect how behaviors are interpreted and adopted by individuals and/or shared groups such as within a nursing team. An evaluative component of self-concept exists, enabling an individual to self-reflect and judge self within a particular situation. This dimension can vary depending upon the specific situation and past experiences. The final component of self-concept is that it is differentiable from other similar constructs such as self-esteem, self-worth, and self-confidence (Shavelson, et al., 1976; Cowin 2002).

The construct of self-concept is thought to influence an individual's actions which in turn affects the individual's perception of self (Shavelson, et. al 1976). Self-concept is both an important outcome as well as a predictor of sequential behavior (Zelege, 2004). It is influenced by one's environment and the cultural norms within that environment. For instance, self-concept

for an individual nurse is affected both by the individual nurse's self-concept as well as the self-concept of the group of nurses working together. Self-concept informs us that the more an individual feels connected to a specific situation, the stronger the relationship between self-concept and the resultant behaviors.

Nurses' professional experiences are shaped by their work environment and the cultural norms within that environment. Negative experiences such as feelings of powerlessness affect nurses' self-concept (Andrews et al., 2011). Additionally, self-concept is shaped by one's environment and is known to affect sequential behavior (Shavelson et al, 1976; Zeleke, 2004). This sequential behavior and decision making may affect reporting incidents of WPV as well. Nurses' professional self-concept therefore has important implications in reporting incidents of WPV.

Empirical Research Related to Reporting Incidents of WPV

There are relatively few research studies completed that scientifically evaluate the underreporting of WPV. Most literature related to underreporting incidents of WPV are anecdotal or descriptive reports. Underreporting results in an underestimation of the true quantity of incidents of WPV experienced by nurses. Additionally, underreporting results in a skewed perspective of the incidents (e.g.: only the more violent incidents are reported) (Arnetz, et al, 2015) and may therefore affect prevention methods by focusing only on those types of incidents which are documented.

Arnetz, et al. (2015) completed a study that evaluated underreporting of WPV by comparing self-report of documentation and the actual documentation within an electronic reporting system of hospital incidents. The aim of the study was to increase the understanding of underreporting by evaluating the differences between self-report and actual documentation of

incidents of WPV (Arnetz et al, 2015). Further, the study aimed to explore traits that contributed to the reported incidents and among the reporters themselves (Arnetz, et al., 2015). The study was performed in a US hospital system with 15,000 employees working within seven hospitals. The hospital system utilized a centralized electronic database for employees to report any occupational related incident. Hospital policy required employees to document all WPV incidents with or without any resultant injury.

A questionnaire was distributed to employees within 42 unique hospital units that had previously been identified as units at risk for violence. Questionnaires were mailed to the employees' homes for completion. The questionnaire was developed for this study and sought to measure employees' experience with violence and aggression at work within the previous year. Validity of the questionnaire was not reported. Cronbach α scores ranged from 0.82 to 0.91, except for questions related to management support with a Cronbach α of 0.64. A total of 446 employees participated in the study of which more than 80% were female, 35% were 50 years of age or older, and 60% were nursing staff.

The findings of the study were remarkable. A total of 275 participants, representing 62% of the respondents, stated they were the target of violence within the past year. Survey responses related to WPV incidents were further evaluated to compare the number of employees who stated they reported an incident of WPV (self-report) versus the actual documentation of reports within the hospital database system. A total of 77% of employees stated, "I did not report the violence" leaving 23% stating "I reported the violence". However, in evaluating the actual documentation, only 12% of the total participants that had experienced WPV within the past year had actually formally reported the incident within the hospital database system. Thus, 88% of the total amount of WPV incidents were never reported.

Further evaluation was completed of the respondents who did document incidents of WPV in the database system. No significant differences were found between reporters and non-reporters in terms of gender, age, or length of employment. Employees were more likely to report the incident within the database system if the employee sustained a physical injury ($OR=6.22, p<0.001$) or required time away from work ($OR=3.56, p<0.001$).

The findings starkly depict the significant underreporting that exists related to incidents of WPV. The study participants worked within a hospital system in which policy mandated all incidents of WPV be reported and yet 88% of incidents remained unreported. As a result, the actual incidence was vastly under-reported and unrealized. However, the authors do note, only 22% of employees responded to the questionnaire. Although no significant differences between reporters and non-reporters were found in terms of demographic data, it is possible there is a selection bias present among the actual participants in the study. Additionally, participants were asked to recall incidents of WPV over the course of the previous year. It is possible recall bias also affected the results of the study. Nevertheless, it remains that a significant portion of incidents were unreported. The differences between participant self-reporting and actual documentation needs further research.

Findorff, McGovern, Wall, & Gerberich (2005) completed a cross-sectional study that evaluated the individual and employment characteristics associated with reporting WPV and identified the relationship between reporting and characteristics of the incident. Employees in a major US health care system as well as employees who left the health system within the previous year were randomly selected for participation in the study. A total of 4,166 employees were mailed surveys with a total of 1,751 (42%) respondents. The survey dependent variables included the experience of physical violence and non-physical violence and whether each had

been reported or not reported. Independent variables included employment characteristics, such as hospital type (urban vs suburban), hospital unit or department, work environment which included questions regarding the type of supervisory support (supportive versus hostile), history of violence (both work related and non-work related), demographic characteristics, severity measures such as lost time from work or specified symptoms after experiencing an assault such as feelings of depression, and perpetrator characteristics including impairment related to disease, medications or drugs and alcohol.

Results included 53% of respondents ($n=923$) experienced either physical or non-physical violence within the previous year, and 5% experienced both. Of the participants who stated they experienced physical violence at work, 57% made their report orally to a supervisor or to the human resources department, 38% of participants who experienced non-physical violence, orally reported the incident to a supervisor and 8% reported the incident to human resources. The only factor identified to be associated with reporting physical violence was the use of health care by the employee following an assault ($OR=30.5$, 95% CI 3.0, 307.4). The authors note the wide confidence interval because of the infrequent use of such care.

The authors limitations include a modest overall response rate (42%) which may represent a selection bias. Additionally, participants were asked to recall incidents that occurred over a one-year time span and as such recall bias may have influenced the results. There is no discussion regarding the low rate of employees that reported both physical and non-physical violence ($n=86$, 5%). For instance, it can be expected a perpetrator will be verbally threatening while physically assaulting an employee. Therefore, it seems unlikely that those individuals experiencing physical violence did not simultaneously experience non-physical violence. Overall, this was a large study evaluating six separate independent variables, and found the only

factor associated with reporting physical violence was the need for the employee to receive health care. Additionally, the majority of reports were completed via verbal report to a supervisor. The study does not mention any method with which those oral reports may or may not have been formally documented.

Building upon their previous study, Arnetz et al. (2018) evaluated the organizational attitudes toward and practices related to WPV prevention in healthcare settings. In order to further evaluate these risks, organizational factors contributing to workplace violence, and employee experiences with violence and aggression at work, were measured. Survey questions included socio-demographic items, the experience of violence in the past year including both physical and verbal violence, and questions pertaining to the perpetrator. Violence was further delineated by type including identifying the type of verbal aggressions (e.g.: shouting, swearing) or physical violence (e.g.: hitting, punching). Organizational measures included questions related to work stress (Cronbach $\alpha=0.82$), staff interaction (Cronbach $\alpha=0.86$), and organizational safety climate (Cronbach $\alpha=0.90$). Participants were recruited from 41 hospital units within a multi-site hospital system in the Midwest US. These 41 sites had been identified as high risk for violence based upon documented incidents within the previous 30 months. A total of 446 participants were recruited in this study, of which registered nurses represented 58.1% of the participants and 81.8% of the total participants were female. Other participants included patient care associates (7.6%), mental health technicians (2.2%), security (9.2%), and other (22.9%). Nearly 63% of respondents had experienced violence or aggression at work during the past year. Work stress was positively correlated with interpersonal conflict and negatively correlated with efficiency, teamwork, and a violence prevention climate. RNs, mental health technicians, and security staff were at increased risk for physical violence. Employees aged greater than 60 years were at a

decreased risk. Results yielded interpersonal conflict was a risk factor for verbal violence, low work efficiency was a risk factor for physical violence, and a poor violence prevention climate was a risk factor for both verbal and physical violence ($p < .05$). The researchers concluded that interventions aimed to improve interpersonal relationships, improve work efficiency, and improve the management promotion of a hospital violence prevention climate may help to reduce workplace violence in healthcare settings.

The findings from Arnetz's (2018) study can be evaluated using Careful Nursing as a guide to help understand the findings of the research on reporting incidents of WPV. Arnetz's (2018) research demonstrated increased work stress positively correlated with interpersonal conflict and increased the risk for verbal violence. The first dimension of Careful Nursing is therapeutic milieu and within that dimension lie the factors of a safe and restorative physical surroundings, respect for human dignity and contagious calmness, characteristics which most certainly contribute to the presence or absence of work stress for nurses. Furthermore, work stress negatively correlated with efficiency and teamwork, ultimately increasing the risk for physical assaults. Dimensions two and three, practice competence and excellence and management of practices and influence in health systems respectively, include factors such as family/friends and community supportive environments, trustworthy collaboration and support of nursing practice. These dimensions are threatened with increased work stress. Ultimately, this impedes the nurse's ability to attain professional authority and diminishes the nurse's ability to protect patients and self from harm.

Studies, such as the qualitative descriptive exploratory study performed by Wolf, et al. (2014) provides a real-world description of ED nurses' experiences after physical or verbal assaults. A total of 46 emergency nurses were recruited via an email post to the Emergency

Nurses Association roster. Three themes emerged from this study, (1) environmental- including the physical ED environment as well as the institutional culture & the legal and judicial realms outside of the healthcare setting (2) personal- the impact of the incident on the individual nurse including job performance, coping, and personal experience with the legal and judicial realms, and (3) cue recognition- both the recognized and unrecognized cues leading up to the violent incident. The environmental theme was further categorized as, “culture of acceptance”, “unsafe workplace”, and “nobody cares, nothing changes”. One male pediatric ED nurse participant in study who was assaulted in the children’s hospital ED described the response by administrations as, “because they want the Children’s Hospital to appear friendly, they have not secured the doors...They refuse to install weapons detectors, even though on more than one occasion weapons have been found...Administration will only take action when some lethal event happens”. The nurses included descriptions of an apathetic judicial/legal system in which charges against the patient/family member who assaulted a nurse are not pursued. This was identified as social complacency regarding violence against nurses. It is plausible, that this social complacency affects the environmental and peer influences on PICU nurses’ decisions to report or not report incidents of WPV. Identifying WPV as an acceptable risk to the PICU nurse may threaten professional self-concept and potentially contribute to the decision making of PICU nurses to report or not to report WPV incidents.

Empirical Studies Related to Altruism

The concept of altruism and its meaning in nursing was explored in a qualitative study involving 13 intensive care unit (ICU) nurses in Sweden (Slettmyr, Schandl, & Arman, 2017). Two focus groups were held over a span of five months in which Socratic dialogues were performed. Socratic dialogues are described as an interview method which enables a deeper

philosophical understanding of a phenomenon by interviewing participants regarding clinical experiences. Data was analyzed using a phenomenological hermeneutical method. A main theme of “the ambiguity of altruism” was identified along with three sub-themes including, “the other-relating to the individual(s) other than the nurse”, “the professional self,” and “the society.” The nurses described altruism as involving sacrifice, either large sacrifices which would impart a personal cost, or small sacrifices without personal cost but nevertheless resulting in a great value to the recipient. The theme of ambiguity continued within the sub-theme of “the other” when nurses described altruism to mean placing the needs of the other before one’s own needs.

The participants described altruism as being a core foundation of nursing included within their professional knowledge. However, the ambiguity of altruism among the participants was described throughout the context of nursing care, including the relationships of the individual nurse to patient and the relationships of nursing to society at large. There is significant ambiguity surrounding the boundaries related to altruism. The boundaries between where the obligation to provide nursing care altruistically and the boundary necessitating the maintenance one’s own personal safety can be challenging.

Pediatric settings are not immune to violence. Although the research and data predominantly discuss incidents within adult EDs and adult psychiatric units it is reasonable to suspect that there is underreporting of WPV in pediatric settings as well. In a study performed by Ryan et al. (2008), 63% of psychiatric staff, comprised of physicians, nurses, teachers and other staff in an in-patient pediatric psychiatry unit (patient ages ranged from 4-17 years old), reported being assaulted by pediatric patients within the previous six months. The study found assaulted staff reported higher anxiety, $t=3.5$; $p < .01$, experience somatic symptoms greater than non-assaulted, $t=2.5$; $p < .05$, and report a higher level of work impairment, $t=4.0$; $p < .01$.

There was no difference between the two groups (assaulted vs non-assaulted) in overall job satisfaction. Nevertheless, assaulted staff were more likely to consider terminating employment, $p < .01$. The authors hypothesize this could reflect a level of altruism present among pediatric mental health workers; despite the inherent risks to self-harm, pediatric mental health workers persist in the important work of providing psychiatric healthcare to children. This finding supports the need to further explore the relationship of altruism on pediatric nurses' decision making to report incidents of WPV. Ryan et al. (2008) study suggests altruism affects how pediatric psychiatric nurses work within environments known to pose significant personal risks. It is possible these risks are also viewed as part of the job, particularly in the presence of altruistic ideals in providing care to this protected population.

This hypothesis by Ryan et al. (2008) approaches an additional concept of altruism, that of pathological altruism. Pathological altruism can be defined as “altruism in which attempts to promote the welfare of others instead result in unanticipated harm” (Oakley, 2013). Pathological altruism differs from altruism in that the behavior enacted in order to promote the welfare of another or others can be reasonably expected to result in harm to the individual providing the welfare when observed by an outsider. Specifically, pathological altruism, is the implementation of an action meant to provide help to another, but which poses significant risk or has obvious negative consequences to the individual providing the altruistic act (Oakley, 2013). There is no instrument which measures pathological altruism. It is likely a spectrum exists in defining the concept of altruism with pathological altruism lying on the far end of the spectrum. Hence, the ability to quantify self-reported levels of altruism and evaluate its relationship on reporting incidents of WPV in the PICU may help to further understand the challenges present to reporting WPV.

Empirical Studies Related to Nurses' Self-Concept

A comparative study evaluating professional self-concept between four strata of nursing students was performed at a single university in Canada in order to assess professional self-concept across a spectrum of nursing experience (Arthur & Thorne, 1998). The Professional Self-Concept of Nurses Instrument contains 27 items and three dimensions, professional practice, satisfaction, and communication. Cronbach alpha scores were 0.89, 0.86 and 0.40 respectively, representing strong internal consistency only for professional practice and satisfaction. Construct validity was partially supported through factor analysis. Questions are all Likert-type and scaled from one to four, representing options of disagree, tend to disagree, tend to agree or agree. A total of 127 participants were included in the study, representing a response rate of 50%. Participants included second year undergraduates, post- fourth year undergraduate students, RN to BSN students, and master's level graduate students. Participants were recruited during class time and asked to voluntarily participate in the survey. All participants were ensured their survey responses would remain anonymous.

The findings revealed a stronger professional self-concept as students advanced in their studies from second year undergraduate students through the graduate level. The more experienced nurses, particularly those pursuing master's degrees, had the strongest professional self-concept when compared to undergraduate nursing students with no nursing experience. These findings suggest students gain professional self-concept over time corresponding to advancement from student subculture to nurse subculture.

Guided by the findings from the above study and those performed by others, Cowin (2001) developed The Nurse Self-Concept Questionnaire (NSCQ), which measures six dimensions of self-concept to assess how nurses perceive themselves within their work

environment. As part of Cowin's study (2001), a total of 15 nurse participants were informally interviewed by the researcher over a six- month time period. Following an analysis of the interviews, six dimensions were identified. These dimensions were further delineated and measured in six scales, (1) general nursing, (2) care, (3) staff relations, (4) communication, (5) knowledge, and (6) leadership. Following these informal interviews, an expert panel reviewed the developed questionnaire and revisions were made accordingly. The identified domains were operationalized with the instrument, including Nurse General Self-Concept as, "an inclusive sense of self-esteem that is not specific to any area of the profession but encompasses a positive regard of the self within nursing (Cowin, 2002)."

The subsequent study sample was divided into two groups of nurses. Group 1 ($n=506$) were last semester Bachelor of Nursing students from six universities in the Sydney, Australia region and Group 2 ($n=528$) consisted of RNs working in New South Wales, Australia. Cronbach alpha scores showed high reliability for the combined groups ranged from 0.89-0.93 among all six subsets and indicated that all six scales possessed good construct validity. Findings revealed Group 1 participants rated their self-concept highly positive in all the subscales except leadership. Given the participants in Group 1 were still in their undergraduate studies, a lower score in the subscale of leadership was not surprising. Group 2 also rated their self-concept positively although leadership was again the lowest of the mean scores. Notably, there was a significant difference in leadership scores between master's prepared nurses and those without a graduate degree did exist.

Overall, the NSCQ provides a reliable and valid tool to measure self-concept among professional nurses. The final NSCQ tool includes 36 items with Cronbach alphas ranging from a

low of 0.83 in measures of knowledge to a high of 0.93 for Nurse General Self-Concept and Leadership. These data therefore reveal good internal consistency of the measure.

An additional descriptive correlational design study evaluating student nurses and experienced nurses' self-concept (Cowin, Craven, Johnson & Marsh, 2006) further examined possible differences between the two groups and changes to self-concept over time among student nurses and experienced nurses. Participants completing their final semester of nursing studies were recruited from six universities in the Sydney, Australia region as well as experienced RNs randomly selected from an Australian national database. Two questionnaires were utilized in this study, the Self-Description Questionnaire III and the Nurses' Self-Concept Questionnaire. The Self-Description Questionnaire III scales used in this study included four areas of self-concept: emotional stability, honesty/trustworthiness, problem solving, and general self-esteem. Both groups of participants answered these two questionnaires via surveys at time one (T1) and again eight months later representing time two (T2).

Paired sample t-tests were performed at baseline and again at 8 months follow-up. Additionally, a series of MANOVA statistics were applied to evaluate if multi-dimensions of self-concept differ by group and/or by time. Results demonstrated all dimensions assessed were scored higher by experienced nurses as compared to the undergraduate nurses. An overall significant main effect was present for time, $p < 0.001$. Additionally, an overall significant group by time interaction was revealed, $p < 0.001$. These results indicate that experienced nurses' self-concept remained stable over time whereas changes in the students' self-concept increased significantly from T1 to T2, specifically within the Honesty/Trustworthiness dimension. This finding supports the belief that self-concept develops over time and once fully developed remains relatively stable. The MANOVA results also revealed substantial decline in Nurse

General Self-Concept for the student/graduate group from T1 to T2. The author suggests this may be due to the transition experienced by newly registered graduate nurses who may be comparing themselves to more experienced nurse colleagues. The study suggests that there may be a relationship of how self-concept among PICU nurses affects reporting incidents of WPV. We know self-concept is affected by peer relationships, environmental factors and years of experience as a nurse. Risk factors for WPV include many similar risks which threaten healthy professional self-concept, such as communication with peers and administrative support of nursing practice. These also coincide with the dimensions of Careful Nursing that are essential to the nurse's ability to provide care to patients and each other.

Summary

The empirical literature related to altruism repeatedly demonstrates that there is much ambiguity among nurses in understanding the boundaries of providing care altruistically. The lines of where caring for one's patient and caring for oneself can become blurred. Careful Nursing acknowledges nurses must be able to care for oneself as well as one's colleagues in order to provide care to patients. However, there is a societal belief that individuals who provide care to others should sacrifice their own needs to a far greater extent than employees in other occupations (Pettersen, 2012). Employers in turn may utilize this value to the detriment of their nurse employees, requiring them to deliver care far beyond reasonable employer: employee expectations (Pettersen, 2012), including incidents in which patients threaten nurses (Lipscomb, 2015). As long as the chasm continues to exist between nursing's professional values such as practicing altruistically, and the values society imposes on nursing practice, threats to the safety of nurses will continue to exist.

Self-concept develops over time and is influenced by both individual and group experiences. Empirical literature has demonstrated self-concept among groups of nurses, evolves with time and professional experience. It is possible that professional experiences in which WPV is repeatedly tolerated or deemed to be “part of the job” nurses’ self-concept will be affected by the normalization of violent behavior. Conversely, the research regarding WPV in healthcare consistently demonstrates more experienced nurses to be less at risk for assaults (although still significantly at risk when compared to other work sectors). Similarly, the research has found more experienced nurses to have a higher self-concept. Given that self-concept strengthens over time, more experienced nurses may possess skills which provide for better self-protection than less experienced nurses when facing potentially violent patients or families. Therefore, understanding the relationship of self-concept on reporting WPV, may yield important factors which influence reporting.

It is possible that the ambiguity surrounding boundaries of altruism are more well-defined when self-concept is fully developed and is stable. Nurses who possess higher self-concept may be better able to delineate the concept of altruistic practice and the practice of caring for oneself as described in Careful Nursing. Understanding the relationship between self-concept and altruism may aid in the development of educational strategies to delineate boundaries of providing altruistic care and enhance self-protection methods for nurses. The relationship of altruism and self-concept on PICU nurses’ reporting WPV in PICU should be further explored in order to better understand their influence on reporting. It is difficult to predict the true incidence of WPV without accurate reporting, and without more complete data it is difficult to quantify the scope of the problem. Consequently, nurses’ have limited protection and face significant risks to themselves while providing care to their patients.

It is clear that WPV among healthcare workers is a significant problem in the US. The factors contributing to WPV have been identified in previous studies predominantly among adult ED and psychiatric clinical settings. However, nurses working in the PICU also treat patients and family members with similar risks factors towards perpetrating violence. Previous research of WPV has identified RN years of experience, self-concept, and health care administrative components to significantly contribute to incidents of WPV. PICUs may be staffed with both novice RNs and more experienced RNs. Utilizing the Careful Nursing model and examining the relationship of altruism and nurses' self-concept may help to understand influences affecting reporting incidents of WPV within the PICU. No known previous research has been performed in the PICU setting that evaluates the relationship of altruism and nurses' self-concept on reporting incidents of WPV among PICU nurses. Understanding the relationship between altruism and nurses' self-concept with PICU nurses' reporting incidents of WPV adds to the knowledge of influences on reporting WPV incidents, specifically in settings outside of the adult ED and psychiatric settings. Knowledge garnered from this study may help to contribute to the application of methods which can serve to protect healthcare workers in the US.

CHAPTER III

METHODS & PROCEDURES

Introduction

The purpose of this research was to explore the relationship between altruism, and nurses' self-concept with pediatric intensive care unit (PICU) staff nurses' reporting incidents of workplace violence (WPV). This chapter will discuss the research questions, the design of the research and the research procedures. A description of the population and sample, the setting, instruments & measures, data collection procedures, the plan for analysis of the data and ethical considerations of the research will be discussed. Each data collection instrument is described including statistical data for each instrument.

Research Questions

1. What is the relationship between altruism and PICU nurses' decisions to report incidents of WPV?
2. What is the relationship between nurses' self-concept and PICU nurses' decisions to report incidents of WPV?

Design of the Study

This descriptive, correlational study investigated the relationships between altruism and nurses' self-concept with PICU nurses' reporting of incidents of WPV. The purpose of descriptive correlational research is to describe relationships among variables as opposed to supporting inferences or causality (Polit & Beck, 2017). No previous studies were identified which evaluated these relationships with PICU nurses' reporting incidents of WPV. Little is known about the phenomenon of WPV in PICUs and nurses' reporting WPV incidents.

However, previous research in other healthcare settings has provided background knowledge. Reporting incidents of WPV in healthcare settings has previously been studied, particularly among adult emergency department nurses and in-patient psychiatric nurses. No studies have been identified which evaluate the relationship of altruism or nurses' self-concept and reporting incidents of WPV in any setting. Therefore, this research built upon previous studies regarding reporting WPV and examined the possible relationships between the variables of interest.

Description of the Population and Sample

The population for this research study included US PICU staff registered nurses (RNs). For the purposes of this research, the term staff RN was used to describe RNs who provide direct patient care in PICU settings. PICU educators, nurse managers and PICU APNs were not considered staff RNs in this study. After Institutional Review Board (IRB) approval was obtained at Seton Hall University, a convenience sample of PICU nurses was recruited through a variety of methods.

The sample was limited to pediatric RNs working as staff RNs in a US PICU setting who indicated they had experienced an incident of WPV in the past five years. Any participant who had not experienced WPV within the past five years was thanked for their participation in the study and no further research questions were available to the participant. All participants were RNs licensed in the US and therefore had passed the national council licensure examination (NCLEX) which requires English proficiency and age greater than 18 years old. Demographics collected included years working as an RN, years working as an RN within the PICU, age, highest level of education completed, and self-identified gender (Appendix D). The American Association of Critical Care Nurses (AACN) is the credentialing body for PICU nurses seeking certification as a Pediatric Critical Care RN. The AACN reports (2018) there were 6,456 RNs

with Critical Care Registered Nurse (CCRN) pediatric certification. The AACN, upon IRB receipt as well as ensuring that the study coincided with AACN mission, vision and values, posted this survey on their website's Participate in Research section. AACN had also invited me to recruit participants at AACN professional conferences. I also subscribe to a PICU Advanced Practice Nurse (APN) listserv and asked fellow PICU APNs to recruit PICU bedside RNs into the study via a study link provided in an email. Additional PICU nurse participants were recruited through both professional meetings, professional outreach, and on-line list serves, to obtain enough participants necessary to achieve statistical power.

Sample Size & Statistical Power

A power analysis was performed using the G*Power statistical software program in order to ascertain the necessary sample size for the proposed study (Faul, Erdfelder, Buchner, & Lang, 2009). Power, represented by the formula $1 - \beta$ equals the probability of detecting a particular effect. Power analysis minimizes the possibility of a Type II error, retaining a false null hypothesis (Witte & Witte, 2015). The study included three variables: self-reported altruism, nurses' self-concept, and reporting incidents of WPV. Logistic regression was utilized for data analysis. Logistic regression was used in this study because the outcome measure of reporter versus non-reporter represents dichotomous data. Logistic regression uses maximum likelihood estimation (MLE). MLE represents the parameters which are most likely to explain the observed data (Polit & Beck, 2017). Logistic regression converts the probability of an event occurring into the odds of the event occurring or not occurring (Polit & Beck, 2017). Odds ratio represents the likelihood of one probability occurring to the probability of the event not occurring (Polit & Beck, 2017). It informs the nature of the relationship between the two variables as well as the strength of the relationship between the two variables (Grimm & Yarnold, 1995).

There is no true effect size index for logistic regressions. Instead odds ratios are used as a method to ascertain the probability of an event occurring. Therefore, in order to set the criteria used in the G*Power analysis for this study, a review of the literature of related studies and odds ratios from those studies were used to inform and support the criteria set for analysis. No studies were identified which evaluated the relationships of altruism or self-concept on reporting incidents of WPV among healthcare workers. However, alternative studies which evaluated reporting incidents of WPV or evaluated the incidence of physical vs. non-physical violence were used in order to support the parameters, including the odds ratios, in order to calculate the necessary sample size for this proposed study (Findorff et al., 2005; Gerberich et al., 2004). Utilizing G* Power, a z-test, logistic regression, two-tail t-test power analysis was performed with limits set at an odds ratio of 1.5, alpha error of .05 and a power of 0.8, the calculated sample size necessary to achieve power is a total of 308 participants.

Setting

All data was collected utilizing Qualtrics™ Survey Software. Qualtrics™ is an online survey tool which enables its users to create and distribute a survey via the internet. Participants were be able to access the survey via the internet on their own personal electronic devices with internet service.

Instrumentation and Measurements Methods

There are three variables in this study: altruism, nurses' self-concept (NSC) and PICU nurses' reporting incidents of WPV. Altruism is operationalized as the score on The Self-Report Altruism Scale (Rushton, Chrisjohn, & Fekken, 1981). Nurses' Self-Concept is operationalized as the score on the Nurse Self-Concept Questionnaire (Cowin, 2002). PICU nurses' reporting incidents of WPV will be operationally defined by participants' responses to

two questions related to WPV experience and incident reporting (Appendix C). Respondents were then coded as non-reporters (0) and reporters (1). Demographic data including age, self-identified gender, years working as an RN, and years working as a PICU staff nurse RN were also obtained.

The Self-Report Altruism (SRA) Scale (Rushton, Chrisjohn, & Fekken, 1981) was developed in order to assess if individuals possess traits of altruism, such as consistently being more generous, helpful and kind than others. The SRA consists of 20 items, each measured on a 5-point rating scale indicating the frequency of engagement in altruistic behaviors. Initial data during the questionnaire's development yielded high internal consistency ranging from 0.78-0.87 among the 5 separate sample groups tested. Furthermore, the SRA and a measure of social desirability were assessed for correlation, $r=0.05$, indicating the SRA was not measuring social desirability.

Several self-concept instruments are available; however, only one instrument is designed to assess the multi-dimensionality of self-concept, specifically among nurses. The Nurses' Self-Concept Questionnaire (NSCQ) was influenced by the previous work of Arthur & Thorne (1998) who developed the professional Self-Concept of Nurses Instrument, which evaluated self-concept among nursing students. The NSCQ however, is the only instrument designed which specifically measures multi-dimensionality of professional self-concept among nurses (Cowin, 2002). Multi-dimensionality within the NSCQ includes the specific dimensions of caring, communication, staff relationships, leadership, nursing skills and knowledge and nursing ability. Measuring nurses' self-concept and its relationship to reporting incidents of WPV in the PICU, may help to further understand the environment and cultural norms within a PICU setting. As

such, nurses' self-concept may be an important outcome and predictor of sequential behavior in terms of reporting incidents of WPV within the PICU.

The Nurses' Self-Concept Questionnaire (NSCQ) was developed to assess the professional self-concept of nurses. The questionnaire was designed and underwent several pilot and subsequent trials before reaching its final version consisting of 36 items and six subscales. There are six dimensions within the scale which include: caring, communication, staff relations, leadership, nursing skills, and knowledge and nursing ability. All items are positively worded. Each subscale has a possible maximum score of 48 and the overall measure total score is a maximum of 288. The internal consistency of each subscale was high ranging from 0.83-0.93. Confirmatory factor analysis was performed to assess validity and revealed subscales were distinctive for each factor aside from communication and staff relations remaining at greater than 0.8. These results indicate the NSCQ is a valid and reliable tool to measure nurses' self-concept and can be confidently used in research studies assessing the influence of NSCQ on other variables. The NSCQ, including all subscales, was utilized for this research.

Data Collection Procedures

The comprehensive survey was loaded onto Qualtrics™ Survey Software. The study consent form was the first page available to the participant and included an option for participants to agree or disagree to participate in the research. If the participant chose not to participate, a message appeared thanking the subject for their time and consideration. Once the agree option was chosen, two qualifying questions were asked, 1. Does the participant work as a staff PICU RN within the US and 2. Has the participant experienced an incident of WPV within the past five years? A definition of staff RN and a definition of workplace violence was provided prior to asking each of the qualifying questions. If the participant answered no to either or both

of these questions, the participant was thanked for their time and consideration, and a statement appeared which informed the participant that they did not qualify, and the survey subsequently closed. If the participant qualified, the survey opened for completion. Once the last question on the survey was completed, a screen appeared that thanked the participant for their time and interest.

Data was stored on the Qualtrics™ website and downloaded onto two memory sticks which are maintained in a locked box accessible only by me. All data was collected anonymously. No names, birthdates or other personal identifiers were collected. Data was only be reported in aggregate. All survey respondents utilized their own device of choice to access the online survey.

Plan for Analysis of Data

The data collected in the Qualtrics™ software was reviewed for accuracy by me and subsequently transferred to Statistical Package for Social Sciences (SPSS®) for statistical analysis. Descriptive statistics, simple regressions and bivariate correlations was used to analyze the data. Logistic regression analysis was utilized to determine the relationships of the independent variables of altruism and nurses' self-concept on PICU nurses' reporting incidents of WPV. A correlation matrix was used to display continuous variables (e.g. age) and the predictor variables of altruism and nurses' self-concept. Demographic variables include both categorical and continuous variables. Frequencies and percentages were calculated for the demographic categorical variables of self-identified gender and highest level of education completed. Frequency distributions were reviewed for any outliers. Graphics were utilized to further describe the distribution of the scores. Graphics included scatterplots and histograms.

Range, mean, and standard deviation were calculated for demographic continuous variables collected including, age, years working as an RN and years working as an RN within the PICU.

Ethical Considerations

Permission to conduct this study was obtained from the IRB at Seton Hall University prior to recruiting any subjects into the study. This was a voluntary study and participants were informed they could withdraw at any time with no repercussions. Informed consent was obtained prior to beginning of the survey. Anonymity was maintained. All data was stored on two memory sticks which are secured in a lock box only accessible by me.

This study posed minimal risk; however, due to the nature of some of the questions being related to experience of WPV it is possible some participants wished to discuss this topic with a mental health professional. Therefore, participants experiencing mental health concerns after completing the survey were directed to contact the US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration via phone at 1-800-662-HELP or via the web at <https://www.samhsa.gov/find-help/national-helpline>.

Potential benefits of participation included knowledge that results obtained from this survey may influence nursing education, clinical practice, and policies which serve to benefit PICU nurses. Knowledge garnered from this study may help to implement methods that can protect healthcare workers in the US from WPV assaults.

Limitations

All participants must have been working in the US as a PICU staff RN and have experienced an incident of WPV within the past five years.

Timeline

Participants were recruited over a 6-months from August 2020 through January 2021.

CHAPTER IV

RESULTS

Introduction

This research study sought to identify the relationship of altruism and nurses' self-concept with reporting incidents of workplace violence (WPV) by pediatric intensive care unit (PICU) nurses using the Careful Nursing philosophy and professional practice model. A total of 233 individuals responded to the survey. One hundred and nineteen of those participants (51%) met criteria for inclusion in the study. However, only 99 participants completed the survey in its entirety.

There were two scales included in this research study: Rushton's Self-Report of Altruism Scale (SRA) (Rushton, Chrisjohn, & Fekken, 1981) and the Nurse Self-Concept Questionnaire (NSCQ) (Cowin, 2002). Two qualifying questions were included which ensured the participant had practiced as a PICU RN for at least one year and had experienced an episode of WPV in the past five years. There were five demographic questions included in the survey and three specific questions related to WPV. Analysis of data was performed using the Statistical Package for the Social Sciences (SPSS® 27.0 for Mac) and utilizing logistic regression and Pearson Product-Moment Correlation.

Research Participants

The sample inclusion criteria included working as a staff RN for a minimum of one year in a US PICU and having experienced an incident of WPV within the past five years. A definition of staff nurse and WPV was provided to the participants in these qualifying questions. There was a total of 233 participants. Of those, 211 (90.56%) worked as an RN in a PICU for at least one year and were qualified to take the second question; however only 200 participants

answered question two, “Have you experienced an incident of workplace violence in the past five years?” A total of 119 participants (59.5%) answered yes and 80 (40.5%) participants answered no, yielding a total of 119 eligible participants (51%) for this study. There was a total of 101 participants that completed the questions pertaining to altruism and 103 who answered questions pertaining to nurses’ self-concept. A total of 99 individuals completed the WPV questions and the demographics section. This sample size was not adequate for power when setting an odds ratio of 1.5, alpha error of 0.5 and a power of 0.8. It was determined that no further significance would have resulted with the addition of more participants given the considerable lack of significant results yielded from this sample size. Hence, further recruitment of participants was terminated. The survey was released on August 18, 2020 and data was downloaded on January 10, 2021.

Demographic information obtained from the participants included age, self-identified gender, years licensed as an RN, years working as a PICU RN, and highest level of education. The average age of the participant was 35.59 years, and female participants represented 95.96% of the total. Years licensed as an RN ranged from 1 year to 42 years ($M=11.52$ years, $SD=10.26$) and years working as a PICU RN ranged from 1 year to 35 years ($M=8.83$ years, $SD =7.97$) (Table 2). The highest level of education obtained included: seven with associate degrees (7.14%), 75 with bachelor’s degrees (76.53%), 13 with master’s degrees (13.27%), three with doctoral degrees (3.06%), and zero with a nursing diploma (Table 3). These data differ from the 2017 National Nursing Workforce survey (Smiley et al., 2018) results which revealed the average age of RNs in the US is 53 years old, 90.9% are female, and 45.2% possess a bachelor’s degree. There is no demographic data available that is specific to the PICU nurse population.

Table 2*Descriptive Statistics: Demographic Variable Responses*

	N	Minimum	Maximum	Mean	SD
What is your age?	96	23	63	35.59	10.32
How many years have you been a licensed RN?	99	1	42	11.52	10.26
How many years have you worked as a PICU staff RN?	99	1	35	8.83	7.97

Table 3*Descriptive Statistics: Highest Level of Education Obtained*

	Frequency	Percent	Valid Percent	Cumulative Percent
Associate's Degree	7	3	7.1	7.1
Bachelor's Degree	75	32.2	76.5	83.7
Master's Degree	13	5.6	13.3	96.9
Doctorate Degree	3	1.3	3.1	100

Statistical Analysis

An initial review of the data included an assessment for missing values. There were missing values for a few of the data points within the SRA and the NSCQ. SPSS® does not include missing values in the analysis. In this research study, there were minimal missing data points. The SRA had an average of 101 participants complete all of the questions with only one question, “ I have given a stranger a lift in my car” having 99 responses. There were seven questions with 100 responses and the remainder all had 101 responses. The NSCQ had an average of 103 respondents with a variability of +/- 1 participant in six of the questions.

Researchers can handle missing value problems through a variety of methods, including deletions or imputations (Polit & Beck, 2017). In this study, there was no substantial missing data points. Several respondents indicated years of experience or age in qualitative terms (e.g. “4 and a half years”) in which case the value was changed to represent an equivalent numerical value. A mean was calculated and reported for each of the two scales. This mean score was used in performing the logistic regressions analyses.

Descriptive Statistics of the Study Variables

The SRA and the NSCQ instruments were used to operationalize the study variables to answer the following two research questions:

1. What is the relationship between altruism and PICU nurses’ decisions to report incidents of WPV?
2. What is the relationship between nurses’ self-concept and PICU nurses’ decisions to report incidents of WPV?

Self-Report of Altruism Scale (SRA)

The SRA consists of 19 questions using a 5-point Likert scale to evaluate an individual’s self-report of altruism. Each score can range from 1(*never*) to 5 (*very often*) representing the likelihood an individual has performed a specific altruistic action (Rushton, Chrisjohn, & Fekken, 1981). Cronbach’s alpha was 0.85 in this study. Participant scores ($n=101$) ranged from a minimum of 1.79 to a maximum of 4.37 ($M= 2.93$, $SD=0.52$) (Figure 4). Total scores for the SRA were approximately normally distributed as demonstrated in the histogram. Individual item statistics are provided in Table 4.

Figure 4

Self-Report of Altruism Score

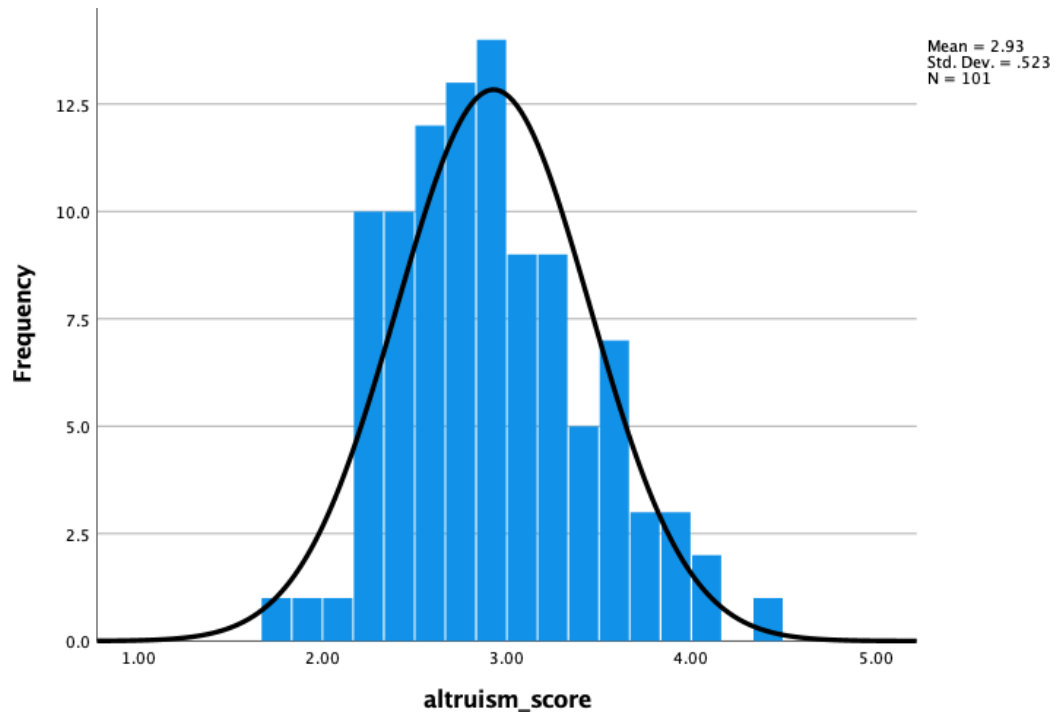


Table 4*Self-Report of Altruism Item Statistics*

	Mean	<i>SD</i>	<i>N</i>
I have helped push a stranger's car out of the snow.	1.49	0.76	99
I have given directions to a stranger.	3.85	0.8	99
I have made change for a stranger.	2.94	1.13	99
I have given money to a charity.	3.85	0.8	99
I have given money to a stranger who needed it (or asked me for it).	2.86	1.04	99
I have donated goods or clothes to a charity.	4.3	0.72	99
I have done volunteer work for a charity.	3.45	0.88	99
I have donated blood.	2.62	1.18	99
I have helped carry a stranger's belongings (books, packages, etc.)	2.92	0.96	99
I have allowed someone to go ahead of me in a line (at a photocopy machine, in the supermarket).	3.63	0.78	99
I have given a stranger a lift in my car.	1.19	0.53	99
I have pointed out a clerk's error (in a bank, at the supermarket) in undercharging me for an item.	2.66	1.04	99
I have let a neighbor whom I didn't know too well borrow an item of some value to me (e.g., a dish, tools, etc.)	2.48	1.19	99
I have bought "charity" Christmas cards deliberately because I knew it was a good cause.	2.19	1.28	99
I have helped a classmate who I did not know that well with a homework assignment when my knowledge was greater than his or hers.	3.53	1.04	99
I have before being asked, voluntarily looked after a neighbor's pets or children without being paid for it.	3	1.26	99
I have offered to help a disabled or elderly stranger across a street.	2.59	1.25	99
I have offered my seat on a bus or train to a stranger who was standing.	3.29	0.99	99
I have helped an acquaintance to move households.	2.75	1.25	99

Nurses' Self-Concept Questionnaire

The NSCQ is a 36-item questionnaire which uses an 8-point Likert scale to evaluate nurses' self-concept. The scale ranges from 1 (*definitely false*) to 8 (*definitely true*) (Cowin, 2002). Cronbach's alpha was 0.95 in this study. Participant scores ($n=103$) ranged from a minimum of 5.33 to a maximum of 8.00 ($M=6.92$, $SD=0.60$) (Figure 5). The data was approximately normally distributed as seen in the data in Figure 2. Individual item statistics are provided in Table 5.

Figure 5

Nurses' Self-Concept Score

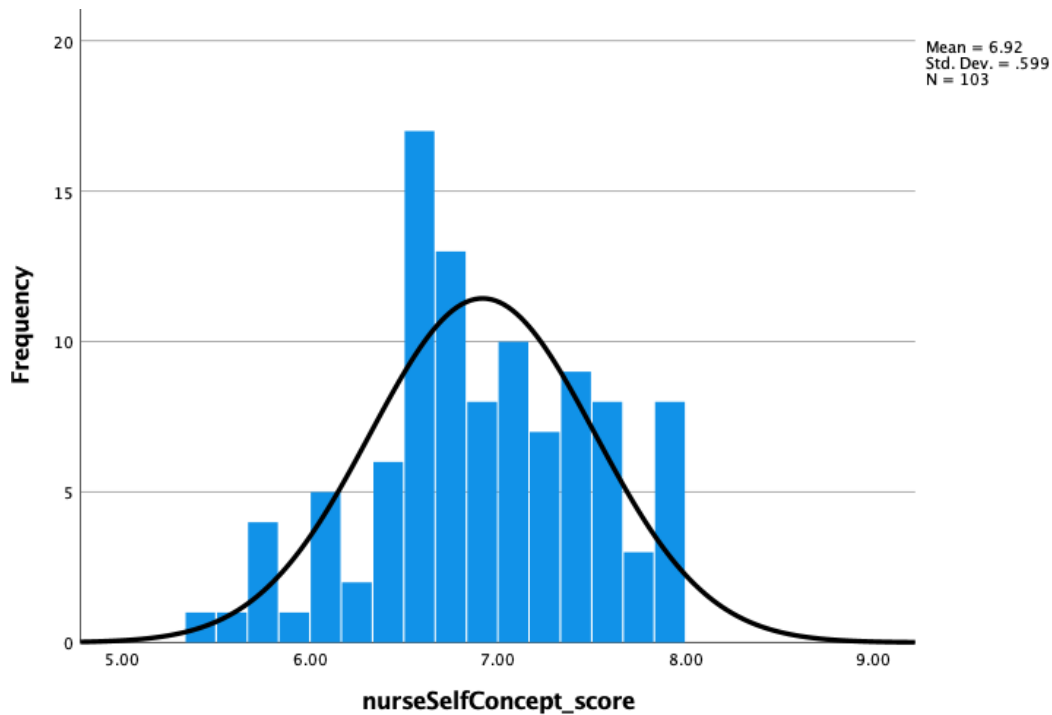


Table 5*Nurse Self-Concept Item Statistics*

NSC Statement	Mean	SD	N
I have the ability to care for my patients' needs.	7.40	0.74	101
I enjoy working with other health professionals.	7.32	0.77	101
I get a lot of enjoyment out of being a nurse.	6.99	1.03	101
I find new nursing knowledge stimulating.	7.40	0.79	101
I am recognized as the leader of the nursing team.	5.84	1.75	101
Being a nurse gives me great enjoyment.	6.93	1.07	101
I am good at verbally communicating with colleagues and patients.	7.13	0.80	101
I get a lot of respect for my nursing leadership skills.	6.01	1.55	101
I gain a lot of professional pleasure from my relationships with colleagues.	6.49	1.29	101
I am able to master new nursing knowledge.	7.12	0.85	101
I can easily relate to my colleagues.	6.43	1.14	101
I like being a nurse.	7.13	0.91	101
I enjoy communicating information and ideas with colleagues and patients.	7.01	0.96	101
I look forward to taking further courses that improve my nursing knowledge.	6.79	1.26	101
I get along well with other health professionals.	7.08	0.98	101
I am proud to be a nurse.	7.59	0.67	101
I can keep a nursing group together as a team.	6.60	0.96	101
I am enthusiastic about nursing.	6.70	1.20	101
I am constantly incorporating new nursing knowledge into my patient care.	6.77	1.06	101
Taking care of patients is easy for me.	6.70	0.86	101
I can confidently communicate with patients and colleagues.	7.00	0.80	101
I enjoy having nursing leadership responsibility.	6.02	1.54	101
I am interested in caring for my patients.	7.58	0.71	101
I have a good working relationship with other health professionals.	7.19	0.83	101
I am respected as a nurse because of my nursing knowledge.	6.82	1.03	101
Communicating effectively with patients and colleagues is easy for me.	6.90	0.90	101
My work as a nurse is very interesting.	7.21	0.84	101
I confidently approach nursing leadership tasks.	6.25	1.25	101
I am confident about my ability to care for patients.	7.25	0.74	101
I have the ability to communicate effectively with patients and colleagues.	7.13	0.77	101
I look forward to caring for my patients.	6.99	0.91	101
I am able to form good working relationships with other health professionals.	7.09	0.78	101
Good nursing leadership is easy for me.	6.18	1.19	101
I am proud of my ability to care for patients.	7.42	0.65	101
I enjoy learning new nursing knowledge.	7.29	0.77	101
I am good at communicating with colleagues and patients.	7.05	0.71	101

There are six subscales in the NSCQ, nurse general self-concept (NGSC), care, staff relations, communication, knowledge and leadership. All items are positively worded with six items in each scale. Each subscale includes a balance of affective (I feel) and cognitive (I think) statements. The descriptive statistics for each subscale is included in Table 6.

Table 6

Descriptive Statistics: Nurse Self Concept Questionnaire Subscales

Subscale	N	Minimum	Maximum	Mean	SD
NGSC1	102	4.17	8.00	7.09	0.80
Care	103	5.67	8.00	7.23	0.57
Staff	102	4.17	8.00	6.93	0.75
Communication	102	4.67	8.00	7.04	0.67
Knowledge	102	5.00	8.00	7.03	0.68
Leadership	102	3.17	8.00	6.14	1.05

The leadership subscale had the lowest mean ($M=6.14$) and the care subscale had the highest mean ($M=7.23$). The care subscale did have a weak, positive correlation to age ($r=0.21$, $p=0.39$). Leadership had a weak, positive correlation to age ($r=0.25$, $p=.016$) and a weak, positive correlation to highest level of education ($r=0.29$, $p=0.003$). Correlations for each subscale compared to age and highest level of education are included in Table 7.

Additional correlations were performed to assess the relationship of years licensed as an RN and years working as a PICU RN with each of the NSCQ subscales. Leadership had a weak, positive correlation with years licensed as an RN ($r=0.3$, $p=0.003$) and a weak, positive correlation with years working as a PICU RN ($r=0.3$, $p=0.004$). Correlations for each subscale compared to years licensed as an RN and years working as a PICU RN are included in Table 8.

Table 7*Correlations of Age and Education to Nurses' Self Concept Questionnaire Subscales*

		What is your highest level of education?	What is your age?	NGSC1	Care	Staff	Communication	Knowledge	Leadership
What is your highest level of education?	Pearson Correlation	1.00	-0.07	-0.15	-.21*	-0.02	-0.12	-0.05	.29**
	Sig. (2-tailed)		0.500	0.140	0.040	0.870	0.240	0.660	0.000
	N	98	95	98	98	98	98	98	98
What is your age?	Pearson Correlation	-0.07	1.00	0.17	.21*	0.10	0.16	0.11	.25*
	Sig. (2-tailed)	0.50		0.09	0.04	0.34	0.11	0.29	0.02
	N	95	96	96	96	96	96	96	96
NGSC1	Pearson Correlation	-0.15	0.17	1.00	.75**	.44**	.46**	.71**	.41**
	Sig. (2-tailed)	0.14	0.09		0	0	0	0	0
	N	98	96	102	102	102	102	102	102
Care	Pearson Correlation	-.21*	.21*	.75**	1	.43**	.63**	.61**	.35**
	Sig. (2-tailed)	0.04	0.04	0		0	0	0	0
	N	98	96	102	103	102	102	102	102
Staff	Pearson Correlation	-0.02	0.10	.44**	.43**	1.00	.59**	.56**	.62**
	Sig. (2-tailed)	0.87	0.34	0	0		0	0	0
	N	98	96	102	102	102	102	102	102
Communication	Pearson Correlation	-0.12	0.16	.46**	.63**	.59**	1	.60**	.51**
	Sig. (2-tailed)	0.24	0.11	0	0	0		0	0
	N	98	96	102	102	102	102	102	102
Knowledge	Pearson Correlation	-0.05	0.11	.71**	.61**	.56**	.60**	1	.51**
	Sig. (2-tailed)	0.66	0.29	0	0	0	0		0
	N	98	96	102	102	102	102	102	102
Leadership	Pearson Correlation	.29**	.25*	.41**	.35**	.62**	.51**	.51**	1
	Sig. (2-tailed)	0	0.02	0	0	0	0	0	
	N	98	96	102	102	102	102	102	102

Table 8

Correlations of Years Licensed as an RN and Years Working as a PICU RN to NSCQ Subscales

		NGSC1	Care	Staff	Communication	Knowledge	Leadership	How many years have you been a licensed RN?	How many years have you worked as a PICU staff RN?
NGSC1	Pearson Correlation	1	.75**	.44**	.46**	.71**	.41**	0.13	0.15
	Sig. (2-tailed)		0	0	0	0	0	0.2	0.13
	N	102	102	102	102	102	102	99	99
Care	Pearson Correlation	.75**	1	.43**	.63**	.61**	.35**	0.17	.26**
	Sig. (2-tailed)	0		0	0	0	0	0.09	0.01
	N	102	103	102	102	102	102	99	99
Staff	Pearson Correlation	.44**	.43**	1	.59**	.56**	.62**	0.12	0.13
	Sig. (2-tailed)	0	0		0	0	0	0.23	0.22
	N	102	102	102	102	102	102	99	99
Communication	Pearson Correlation	.46**	.63**	.59**	1	.60**	.51**	0.17	.26**
	Sig. (2-tailed)	0	0	0		0	0	0.09	0.01
	N	102	102	102	102	102	102	99	99
Knowledge	Pearson Correlation	.71**	.61**	.56**	.60**	1	.52**	0.11	0.11
	Sig. (2-tailed)	0	0	0	0		0	0.29	0.28
	N	102	102	102	102	102	102	99	99
Leadership	Pearson Correlation	.41**	.35**	.62**	.51**	.52**	1	.30**	.29**
	Sig. (2-tailed)	0	0	0	0	0		0.00	0.00
	N	102	102	102	102	102	102	99	99
How many years have you been a licensed RN?									
How many years have you worked as a PICU staff RN?	Pearson Correlation	0.13	0.17	0.12	0.17	0.11	.30**	1	.88**
	Sig. (2-tailed)	0.2	0.09	0.23	0.09	0.29	0		0
	N	99	99	99	99	99	99	99	99
How many years have you worked as a PICU staff RN?									
RN?	Pearson Correlation	0.15	.26**	0.13	.26**	0.11	.29**	.88**	1
	Sig. (2-tailed)	0.13	0.01	0.22	0.01	0.28	0		0
	N	99	99	99	99	99	99	99	99

Logistic regression analysis was performed to determine the relationship of altruism and nurses' self-concept on PICU nurses' reporting incidents of WPV. Data were assessed prior to the statistical analysis to ensure the level of measurement and independence assumptions for logistic regression were met. A Hosmer and Lemeshow test was performed to assess for goodness of fit for the binary question related to reporting an incident of WPV. A total of 99 participants (83%) out of the 119 qualified participants, answered the dichotomous question pertaining to reporting incidents of WPV at their place of work within the past five years. Of those respondents, 55.6% stated they did not report the incident and 44.4% stated they did report.

Results revealed a non-significant p value ($p=0.780$), indicating the set of predictors were not significantly related to the choice to report, or power was too low to assess for this relationship. Results also demonstrated no significant relationship was present between altruism ($p=0.61$) or nurses' self-concept ($p=0.1$) and PICU nurses' decisions to report incidents of WPV (Table 9).

Table 9

Logistic regression of SRA and NSC on reporting incidents of workplace violence

	b	SE	Wald	df	Sig.	OR	
altruism_score	0.21	0.40	0.26	1	0.61	1.23	
nurseSelfConcept_score	-0.05	0.35	0.02	1	0.90	0.96	
Constant	-0.52	2.43	0.05	1	0.83	0.60	

To further explore the possibility of a relationship between altruism and nurses' self-concept a bivariate correlation was performed. There was a weak, positive correlation between altruism and nurses' self-concept ($r=0.25$, $p=0.010$). A correlation matrix was performed to display continuous variables and the predictor variables including altruism and nurses' self-

concept. Results of the Pearson correlation indicated that there was a significant positive association between nurses' self-concept and age ($r=0.22, p=0.035$), between nurses' self-concept and years as a licensed RN ($r=0.22, p=0.027$), and between nurses' self-concept and years working as a PICU RN ($r=0.26, p= 0.010$). Altruism scores were not correlated with age, years as a licensed RN or with years working as a PICU RN (Table 10).

Table 10

Correlation Matrix of Altruism and NSC with age, years as an RN, years as a PICU

RN

		SRA score	NSC Score	Age	How many years have you been a licensed RN?	How many years have you worked as a PICU staff RN?
altruism_score	Pearson Correlation	1	.25*	0.01	0.02	0.01
	Sig. (2-tailed)		0.01	0.90	0.89	0.89
	N	101	101	96	99	99
nurseSelfConcept_score	Pearson Correlation	.25*	1	.22*	.22*	.26*
	Sig. (2-tailed)	0.01		0.04	0.03	0.01
	N	101	103	96	99	99
What is your age?	Pearson Correlation	0.01	.22*	1	.94**	.83**
	Sig. (2-tailed)	0.90	0.04		0	0
	N	96	96	96	96	96
How many years have you been a licensed RN?	Pearson Correlation	0.02	.22*	.94**	1	.88**
	Sig. (2-tailed)	0.89	0.03	0		0
	N	99	99	96	99	99
How many years have you worked as a PICU staff RN?	Pearson Correlation	0.01	.26*	.83**	.88**	1
	Sig. (2-tailed)	0.89	0.01	0	0	
	N	99	99	96	99	99

Summary

The research questions of this study sought to ascertain the relationship of altruism and nurses' self-concept on PICU nurses' decisions to report incidents of workplace violence. Scale scores for altruism demonstrated a mean score of altruism of 2.93. This score falls between the "Once=2" and "More than Once=3", on the 5-point Likert scale utilized in this instrument. Scale scores for nurses' self-concept were high, with a mean score of 6.92. This score falls

between the “*Mostly True = 6*” and “*True = 7*” on the 8-point Likert scale in the NSCQ instrument.

Relationships between the main study variables and PICU nurses’ decisions to report incidents of WPV were examined using logistic regression. There was no statistically significant relationship demonstrated between altruism or nurses’ self-concept on PICU nurses’ decisions to report incidents of WPV. Although this study did not achieve enough participants for power, the result obtained indicated that additional participants would not have changed the results. An additional correlation was performed to assess for a relationship between altruism and nurses’ self-concept. This correlation revealed a weak positive correlation ($r=0.254$) between nurses’ self-concept and altruism ($p=0.010$).

Additionally, statistically significant findings were found between nurses’ self-concept and age ($p=0.035$), years as a licensed RN ($p= 0.027$) and years working as a PICU RN ($p=0.010$). No statistically significant findings were demonstrated for these variables with altruism.

CHAPTER V

DISCUSSION OF FINDINGS

Introduction

The purpose of this descriptive, correlational research study was to examine the relationships between altruism and nurses' self-concept with PICU nurses' reporting incidents of workplace violence (WPV). This chapter will discuss the research study's findings in relationship to the existing empirical literature and to the Careful Nursing model. Strengths and limitations of this study are discussed.

Background

Healthcare workers face significant risk of experiencing incidents of workplace violence with a four-fold higher risk than within the private sector (OSHA, 2015). Of these incidents, approximately 80% are perpetrated by patients against a healthcare worker (OSHA, 2015) (Figure 1). Incidents of WPV are under-reported and as such the actual incidence is thought to be much higher (American Nurses Association, 2019; Phillips, 2016; Lipscomb & London 2015; OSHA 2015). To date, no studies have been identified that examined PICU nurses' reporting incidents of WPV or the relationship of altruism and nurses' self-concept on PICU nurses reporting incidents of WPV.

Study Sample

Participants were recruited to complete this online electronic survey via several different methods including the following: online invitations to participate in research through national professional societies, professional list-servs, and through electronic professional outreach connections. Each of these methods included the letter of solicitation along with a hyperlink and a quick response (QR) code that participants could choose to utilize to access the research study.

Participants that selected the hyperlink or QR code were then able to access the Seton Hall University Qualtrics™ website. This opening online page included the title of the university, the name of the principal investigator and my affiliation with the university, and the letter of solicitation.

An informed consent page was the opening page to the survey when participants opened the link to the survey. The informed consent included the purpose of the study, the anticipated duration the participant required to complete the study (20 minutes), and the instruments used in the study, benefits and risks of participating in the study, and a method to contact the principal investigator. Additionally, the informed consent assured the individual participant that this survey was voluntary and anonymously performed, and all data would be kept confidential. The consent form stated, that there were no forms to sign, and that voluntarily answering the questions of the survey implied consent.

A total of 233 individuals responded to the online survey with 51% being eligible after completing the qualifying questions, yielding a total of 119 participants. However, only 99 participants completed the entire survey. The study participants were more highly educated compared to the 2017 National Nursing Workforce Survey with 76.5% of study participants holding a bachelor's degree compared to 45.2% on a national level. An additional 13.3% of participants held a master's degree whereas the national data reveals only 3.9% of nurses hold a master's degree. Other notable differences include study participants were younger ($M= 35.59$) than the national average ($M= 53.00$) (Smiley, et al., 2017) and a greater portion of participants were female (95.96%) than the national average (90.9%).

However, it is important to note that the average age of nurses working in acute care or critical care settings is younger than the national average with 44.9% being younger than 40

years old, making the findings from this study consistent with national data of nurses working in acute/critical care settings (Budden et al., 2016).

Two qualifying questions were provided at the beginning of the survey. The first question ascertained if the participant had at least one year of experience working in a PICU setting as an RN, “Have you worked as a staff RN in a PICU for at least one year within the US?” A definition of staff nurse was provided within this question. Question two asked the participant, “Have you experienced an incident of workplace violence within the past five years?” A definition of WPV was provided within this question as well. There were 119 individuals that responded yes to the second qualifying question representing 59.5% of the participants having experienced an incident of WPV in the past five years.

This result of approximately 60% of PICU nurses reporting they had experienced an incident of WPV in the past five years is consistent with previously published research findings of nurses in settings other than the PICU. Arnetz et al. (2015) conducted a study to evaluate underreporting of WPV at a large US hospital system. There was a total of 446 employees that participated in the study with 62% of the respondents stating they were the target of violence within the past year. An additional study conducted by Findorff, McGovern, Wall & Gerberich (2005) at a major US health care system demonstrated that 53% of their participants experienced a violent episode within the past year. A subsequent study performed by Arnetz et al. (2018) found nearly 63% of respondents had experienced work-related violence or aggression within the past year. Additionally, in a pediatric study evaluating the experience of WPV among staff in an in-patient pediatric psychiatric unit revealed 63% of staff reported being assaulted by pediatric patients within the previous six-months (Ryan, et al., 2008). It is made clear by the previous studies and supported by the findings of this study that the majority of nurses experience WPV.

PICU nurses experiences of WPV are consistent with those from previous studies outside of the PICU setting.

Research question 1

The first research question asked, “*What is the relationship between altruism and PICU nurses’ decisions to report incidents of WPV?*” To answer this question, Rushton’s Self-Report of Altruism Scale (SRA) scale was used. The SRA consists of 20 statements on a 5-point Likert scale, ranging from *1=Never* to *5= Very Often*. The total score resulting in the likelihood of the participant to engage in altruistic behaviors. The scale’s internal consistency ranged from 0.78-0.87 among five separate sample groups during its initial development (Rushton, Chrisjohn, & Fekken, 1981). There is no other similar reliable and valid self-report scale available to measure altruism (D. Nguyen, Center for Compassion and Altruism Research and Education, Stanford University, personal communication, April 11, 2019).

The findings from this study demonstrated a mean altruism score of 2.93. The statement, “*I have helped push a stranger’s car out of the snow*” revealed no respondents that indicated they often or very often acted in this altruistic behavior. The statement “*I have given a stranger a lift in my car*” also demonstrated no respondents that indicated they performed this altruistic behavior often or very often ($M=1.49$). In fact, 86.87% indicated they had never performed this altruistic behavior. However, some statements had an overwhelming positive response such as 100% of respondents indicating they had donated goods to a charity ($M=4.30$). Overall, no outliers were identified in this study for any question on the SRA instrument. These findings are consistent with previously published research that identified the ambiguity of altruism (Slettmyr et al., 2017). In their study, ICU nurses expressed the ambiguity of altruism as it applied to patients and families as well as to altruism in society. It is possible that acts of altruism differ for

nurses when comparing professional altruism to altruistic behaviors to society at large. Additionally, the decision to act altruistically may be impacted by the risks with which the behavior imposes onto the individual nurse, similar to the altruistic behaviors of donating goods to charity versus giving a ride to a hitchhiker.

A logistic regression was performed to assess for a relationship between altruism and PICU nurses reporting incidents of WPV. A Hosmer and Lemeshow test revealed significance at 0.780 indicating a good fit. In this study, there was no statistically significant findings between altruism and PICU nurses reporting incidents of WPV ($p= 0.608$). Due to this overwhelmingly non-significant result, it was determined that further recruitment of participants would not affect any change on the significance of the results. There was no correlation between altruism scores and age, years as a licensed RN, or years working as a PICU RN. No other studies exist regarding PICU nurses' level of altruism and reporting incidents of WPV.

As an aside, several of the altruism statements may no longer be socially acceptable or may be geared towards a more heterogenous population including both men in women, such as the statements concerning pushing a car out of the snow or related to hitchhiking. These results may be consistent with the fact that 95.96% of the participants in this study were female and as such may not participate in activities such as providing a ride to hitchhikers. There has been a general downward trend of hitchhiking in the US since the publication of the SRA instrument in 1981. There is only one published study regarding hitchhiking in the US, the 1974 California Crimes and Accidents Associated with Hitchhiking. This article noted that although the overall risk for crimes associated with hitchhiking is very low, females were 7-10 times more likely to be victims of crimes associated with hitchhiking than males (Pudinski, 1974).

The Careful Nursing framework includes five dimensions within the therapeutic milieu concept. The therapeutic milieu is described as “more than an environment” (Meehan, 2012). It is a culture that is shaped by interpersonal relationships, and “cooperative attentiveness” to the patient and the physical surroundings which collectively creates a safe space conducive to healing (Meehan, 2012). Within the therapeutic milieu dimension is the concept “nurses care for themselves and one another” which states that nurses must be attentive to their own health and the health of their colleagues. In this manner, it is possible that the participants in this study were less likely to exhibit altruistic behaviors on the SRA which pose potential harm or threat to their own personal health and well-being. This choice of personal safety or caring for oneself would be supported by the Careful Nursing theory.

Research question 2

The second research question asked, “*What is the relationship between nurses’ self-concept and PICU nurses’ decisions to report incidents of WPV?*” The Nurses’ Self-Concept Questionnaire (NSCQ) developed by Cowin (2002) was the instrument used in this study to assess nurses’ self-concept (NSC). The NSCQ instrument consists of 36 statements which uses an 8-point Likert scale ranging from 1=*Definitely false* to 8=*Definitely true*. These 36 items include statements within six subscales including caring, communication, staff relations, leadership, nursing skills, and knowledge and nursing ability. Internal consistency of each subscale is high, ranging from 0.83-0.93. Validity is distinct for each subscale at greater than 0.8 except for communication and staff relations.

The participants in this study had a mean score of 6.92 on the NSC revealing an overall high self-concept among the participants. A logistic regression was performed to assess for a relationship between NSC and PICU nurses reporting incidents of WPV. A Hosmer and

Lemeshow test revealed significance at 0.78 indicating a good fit. In this study, there was no statistically significant findings between NSC and PICU nurses reporting incidents of WPV ($p=0.90$). No other studies exist regarding PICU nurses' level of NSC and reporting incidents of WPV.

There are six subscales on the NSC. The care subscale demonstrated the highest mean ($M=7.23$) and the leadership subscale the lowest mean ($M=6.14$). This is consistent with the previous studies in which care exclusively was the highest scored subscale and leadership the lowest for the experienced nurse respondents (Cowin 2001; Cowin, 2002; Cowin et al., 2006).

Results of the Pearson correlation indicated that there was a significant weak positive correlation between NSC and age ($r=0.22, p=0.035$), between NSC and years as a licensed RN ($r=0.22, p=0.027$), and between NSC and years working as a PICU RN ($r=0.26, p=0.010$). These results are consistent with previous research which noted that more experienced nurses have stronger professional self-concept (Arthur & Thorne, 1998; Cowin 2001; Cowin et al., 2006).

These findings are aligned with the four dimensions of Careful Nursing. The first dimension, therapeutic milieu, includes nurses' care of themselves and others. Care is a primary construct in nursing. Nursing curricula often addresses care and its provision through healthcare. The Guide to the Code of Ethics for Nurses discusses in Provision One how the nurse should practice including acting with compassion and respect towards every individual (Fowler, 2015). It is therefore not surprising that the care subscale in the NSCQ consistently reveals the highest scoring means.

Professional authority is the last of the four practice dimensions in Careful Nursing. This dimension includes the behaviors of responsibility, confidence and visibility (Meehan, 2018). Professional authority is achieved through nursing's intellectual and political influence. These

behaviors require strong leadership skills. The results of this study, consistent with those of previous research studies, indicates leadership demonstrates the lowest mean scores on the NSCQ.

Ancillary Findings

A correlation was performed to assess for the presence of a relationship between altruism and nurses' self-concept. There was no previous research examining this relationship during the initial literature reviews. However, in this study a weak positive correlation was identified between altruism and NSC ($r= 0.254, p=0.010$). Therefore, a subsequent literature search with no time limits, including peer reviewed articles only, and using the terms, “*self-concept*” and “*altruism*” revealed one peer-reviewed article which evaluated self-concept and altruism. Trimakas & Nicolay (1974) evaluated the relationship of self-concept and altruistic behavior among 162 older adult female tenants in a living in a low-income senior housing project that were informed they had won \$100 in a lottery. Participants were randomized to three conditions, a letter with a positive influence condition to encourage the winner to share the money with others, a letter with no-influential verbiage, or a letter with negative influence encouraging the winner to keep all the money offered. As demonstrated in this study's results, Trimakas & Nikolay (1974) also found a positive relationship between altruistic behaviors and self-concept ($F= 9.14, df=2, 154, p<0.01$).

Limitations

The American Association of Critical Care Nurses (AACN) reported in 2018 there were 6,456 RNs that held pediatric critical care certification. However, the total number of RNs working in PICUs in the US is unknown. A convenience sample was consequently obtained for this study. Convenience samples pose the risk that they may be atypical from the population

(Polit & Beck, 2017). Additionally, convenience samples cannot control for biases. For instance, the respondents in this study may have participated in this survey because they were interested in the topic. The Letter of Solicitation was posted on the AACN's participate in research site which likely limited the number of respondents to those that were AACN members. Attempts to reach other potential participants included professional networking through colleagues via an online listserv and through professional organizations.

The overall response rate was low and did not achieve enough participants for power. It was determined that additional participants would not have changed the results. This potentially further contributes to sample bias. Participants were not asked to indicate location within the US and therefore it is unknown if the sample represents all geographic regions. However, all regions are represented on the PICU APN listserv and available to participate on the AACN site.

This study differed from other studies in that participants were asked if they had experienced an incident of WPV in the past five years whereas previously published research discusses incidents that occurred within the previous year. This difference may have resulted in further recall bias. However, given the similarity of the results of both the experience of incidents of WPV and the reporting those incidents, with those of previously published reports, it may be more likely that the statistics remain constant over time. The results from this study in which participants were asked if they experienced an incident of WPV over the past five years demonstrated that the incidence and reporting of WPV remain constant over time.

Finally, the COVID19 pandemic resulted in the need for social distancing and all in-person conferences were cancelled. At the outset of this research study, I was invited to participate at professional conferences and recruit participants in person. Recruitment of participants is often greater with face-to-face efforts (Polit & Beck, 2017) and this was not

possible due to COVID19. Additionally, the COVID19 pandemic placed and continues to place a great deal of stress on the healthcare system, particularly on ICUs. It is possible that potential participants were unable to complete this survey due to the mental and physical toll COVID19 has placed on nurses.

Strengths

There are several notable strengths to this study. The online survey was sent via Qualtrics™ which is able to directly download data into Statistical Package for the Social Sciences (SPSS®) eliminating data entry errors. Despite the small sample size, access was made available throughout the US and a total of 233 individuals attempted to participate in this study.

The SRA and the NSCQ instruments have proven validity and reliability in previous studies. The SRA instrument was found to be reliable in this study (Cronbach's $\alpha = 0.849$) as well as the NSCQ instrument (Cronbach's $\alpha=0.946$). Neither instrument has previously been used with a sample population of PICU nurses. The use of these two instruments in this study provides further evidence of their reliability.

Additionally, this study found a weak positive correlation between altruism and nurses' self-concept. This was an unanticipated finding and upon further investigation only one previously reported finding was published. Further research is required to better understand the relationship between altruism and self-concept.

To date, there are no published data on PICU nurses' reporting incidents of WPV. This study did not find any statistical significance on the relationship of altruism or nurses' self-concept on PICU nurses' reporting incidents of WPV. Nevertheless, this study demonstrated that PICU nurses experience WPV incidents comparably to those of nurses working outside of the PICU and exhibit similar reporting of those incidents. PICU nurses have not previously been

represented in studies evaluating WPV in healthcare settings. These findings strengthen the need for further study of WPV in the PICU setting.

Summary

Using Careful Nursing as a theoretical framework, the relationships of altruism and nurses self-concept on PICU nurses' reporting incidents of WPV were examined. No statistically significant relationships were found between altruism and nurses' self-concept on PICU nurses' reporting incidents of WPV. This study demonstrated approximately 60% of the participants experienced an incident of WPV within the past five years. Additionally, 55.6% of the respondents in this study indicated they had not reported the incident of WPV. These findings are consistent with those of previously published reports outside of the PICU setting. These results support the need to continue to investigate the influences on PICU nurses' reporting incidents of WPV.

CHAPTER VI

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

This descriptive, correlational research study was the first to examine the relationships of altruism and nurses' self-concept on pediatric intensive care unit (PICU) nurses' reporting incidents of workplace violence (WPV). Research participants completed an online survey via the Qualtrics™ website. Two instruments were included in the survey, the Self-Report of Altruism Scale (SRA) (Rushton, Chrisjohn, & Fekken, 1981) and the Nurses' Self-Concept Questionnaire (Cowin, 2002). Additional questions on WPV and reporting incidents of WPV along with several demographic questions were included in this research survey.

The purpose of this study was to evaluate the relationship of altruism and nurses' self-concept (NSC) on PICU nurses' reporting incidents of WPV. Careful Nursing, a philosophy and professional practice model, served as the theoretical framework for this study. The Careful Nursing framework includes three philosophical principles, four practice dimensions, and twenty concepts (Meehan, 2012). Included within this model and important in the evaluation of this study was the dimension of the "therapeutic milieu" which discusses the influence of the ability for the nurse to create a healing atmosphere for both the patient and other nursing colleagues. This framework also identifies the importance of professional authority, including professional self-confidence and professional visibility (Meehan, 2012).

Participants were recruited to partake in this online study through a variety of methods including a link to participate in research on the American Association for Critical Care Nurses (ANCC) website, through professional networking, and through a PICU advanced practice nurse

list serv. Participants were directed to the Qualtrics™ website which provided the title of the research study, its affiliation to Seton Hall University, and the letter of solicitation. There was a total of 119 participants who met eligibility criteria for this research study. To meet eligibility requirements, participants must have worked for at least one year as a staff RN in a PICU setting in the US and must have experienced an episode of WPV within the past five years. Although 233 participants initially began the survey, only 119 were eligible. Ultimately, this was not enough to achieve power. Further recruitment of participants was ceased as it was determined this would not have affected a change to the results, given the overwhelming lack of significance.

The majority of participants identified as female (95.96%). There were 7 participants that held an associate's degree (7.14%), with the remaining participants (92.86%) all holding a bachelor's degree or higher. Participants in this study had an average age of 35.59 years which is younger than the national average of RNs in the US although consistent with the average age of acute care/critical care RNs in the US.

Conclusions

Healthcare workers are four times more likely to experience incidents of WPV than those workers within the private industry. Unfortunately, the true rate of WPV is unknown as many of the incidents are unreported. It is likely the true incidence of WPV is even higher (American Nurses Association, 2019; Phillips, 2016; Lipscomb & London, 2015; OSHA, 2015).

Understanding the factors which contribute to reporting or non-reporting may help to further capture the true incidence of WPV in healthcare settings.

A logistic regression was performed to evaluate if there was a relationship between altruism and PICU nurses' reporting incidents of WPV. Results from this study yielded no

statistically significant findings between altruism and PICU nurses' reporting incidents of WPV ($p=0.608$). There was no correlation between altruism scores and age, years as a licensed RN, or years working as an RN in the PICU. Therefore, altruism was not an important factor in PICU nurses' decisions to report incidents of WPV.

To investigate the relationship of NSC on PICU nurses' reporting incidents of WPV a second logistic regression was performed. There was no statistically significant relationship found between NSC and PICU nurses' reporting incidents of WPV ($p=0.1$). There were significant correlations found between NSC and age ($r=0.22$, $p=0.035$), years as a licensed RN ($r=0.22$, $p=0.027$) and years working as an RN in the PICU ($r=0.26$, $p=0.010$). These results support previous research that also demonstrated nurses with more experience have stronger professional self-concept. Within the NSC are six subscales, caring, communication, staff relations, leadership, and general nursing ability. Results from this study found the caring subscale to have the highest mean score ($M=7.23$) and leadership to have the lowest mean score ($M=6.14$). These results are also consistent with previous research among experienced nurses in Australia which has repeatedly demonstrated caring to be the area of highest NSC subscale measure and leadership to be the lowest (Cowin,2001; Cowin 2002; Cowin 2006).

There was no relationship found in this study between NSC and PICU nurses' reporting incidents of WPV. As with previous studies, correlations between NSC and age, and years as a licensed RN were seen. This study also revealed a significant correlation of years working as a PICU RN to also correlate with NSC. It can be concluded from this study, that NSC is not an important factor in PICU nurses' reporting incidents of WPV. This study did strengthen the previous research findings that age, and work experience do correlate to NSC.

A correlation was identified between altruism and NSC ($r=0.254$, $p=0.010$). This was an unexpected finding as there were no research articles that were previously identified to suggest these two concepts would be related. A subsequent search revealed one article that identified a correlation between altruism and self-concept among female older adults (Trimakas & Nikolay, 1974). Further research is necessary to understand the relationship of altruism and self-concept in nurses.

No previous studies have been published which have evaluated the incidence of WPV within the PICU setting. Results from this study indicated that nearly 60% of the participants have experienced an incident of WPV within the past five years. This is highly consistent with studies in adult emergency departments or pediatric in-patient psychiatric settings which also have found approximately 60% of employees have experienced WPV (Arnetz, et al., 2015; Arnetz et al., 2018; Findorff, et al., 2005; Ryan, et al., 2008). Previously published studies evaluated the experience of WPV over the previous year, whereas this study asked participants about their experience with WPV over the past five years. The results from this study are remarkably similar to those of previously reported studies, indicating that the incidence of WPV and nurses' reporting those incidents remains consistent over time. The results of this study demonstrate PICU nurses are experiencing incidents of WPV at similar rates to those of nurses outside of the PICU. Further research within the PICU setting can help to identify any differences or similarities between these settings.

Implications

The results from this study found that PICU nurses are experiencing incidents of WPV at the same rate as nurses in other settings such as the ED and psychiatric units. Results yielded 55.6% of participants in this study did not report the incidence of WPV. This is also consistent

with previous studies in which participants documented incidents of WPV 40-57% of the time (Findorff et al., 2005; Arnetz et al., 2015).

No significant relationships were found between altruism or NSC and PICU nurses reporting incidents of WPV. Significant findings were demonstrated between age, years as an RN and years as a PICU RN with NSC. The subscales within the NSCQ demonstrated consistent findings with previous research of experienced nurses including the subscale of caring having the highest mean score and leadership the lowest.

Overall, the findings of this study revealed PICU nurses demonstrate similar NSC characteristics to experienced nurses in previous studies. Additionally, PICU nurses are experiencing WPV incidents at equal rates as other nurses and report those incidents similarly as well.

This study was conducted during the COVID19 pandemic. In June 2020, The Joint Commission published an online article discussing workplace violence. The article discussed theoretical concerns for an increased risk of WPV for healthcare workers during the pandemic. However, the actual incidence of WPV had significantly dropped during the COVID19 pandemic as of June 2020. This drop in WPV was attributed to the enforcement of strict visitation rules as a result of the pandemic and the need for social distancing. This decrease in WPV persisted even when adjusted for low overall hospital occupancy.

PICU nurses' experience WPV equal to those of nurses in the ED and psychiatric units. No previous research has been published regarding the experience of WPV in the PICU setting. This study demonstrated that neither altruism nor NSC had a relationship on PICU nurses' reporting incidents of WPV. However, this study elucidated that PICU nurses are equally vulnerable to WPV and report incidents similarly to other nurses. The implications of these

findings are important for further research on barriers to reporting WPV, policy development to enhance reporting and methods to improve the overall safety of healthcare workers. The significant decrease in WPV incidents during the COVID19 pandemic suggests visiting hours contribute to the risk of WPV. Further research on visitor restrictions should be investigated.

Recommendations for Nursing Education

The results of this study demonstrated PICU nurses do not report all incidents of WPV. In fact, they are less likely to report the incident than they are to report it. Previous research has demonstrated a multitude of reasons for underreporting including poor reporting mechanisms, a mistrust in the reporting system, fear of retaliation and an acceptance of WPV as a social norm (Lipscomb & London, 2015; OSHA 2015). Teaching opportunities to identify WPV through simulation, beginning at undergraduate level is recommended. As the current research indicates, there is a socialization to accept WPV as the norm. These behaviors should be identified in safe, supportive, educational settings in order to identify these behaviors as being unacceptable and posing risk to the nurse. It is important for educators to provide this information in order to empower future nurses to not accept WPV as “part of the job” as well as to serve as a mechanism to enhance reporting of WPV.

Previous studies and the results from this study, demonstrated nurses’ self-concept is weakest in the area of leadership. Leadership curricula is incorporated in the American Association of Colleges of Nursing Education, Essentials of Baccalaureate Education for Nursing Practice (2008). Development of future nursing leaders is increasingly important in the highly complex healthcare system in the US. However, it is obvious through the results of this study as well as previous research that nurses currently in the workforce also need more leadership training. It is recommended that opportunities for leadership training be included in a

variety of settings including professional conferences, on-line continuing education, mandatory hospital nursing education and yearly competencies.

Altruism did not have any statistical significance on PICU nurses' reporting incidence of WPV. However, the concept of altruism is present in nursing education, and is discussed as a professional value in the Guide to the Code of Ethics for Nurses in Provision One (Fowler, 2015). It is also included as a professional value in the 2008 American Association of the Colleges of Nursing, Essentials of Baccalaureate Education for Nursing Practice. Future research should explore the concept of altruism and its potential role on WPV in healthcare. Additional research should be considered to assess if individual items on the SRA instrument remain a socially appropriate measure of altruism. Although, the concept of altruism is taught in nursing education and is a nursing professional value, the concept of pro-social behavior may be a better measure to consider in terms of PICU nurses' reporting incidents of WPV.

Recommendations for Future Nursing Research

PICU nurses represent a minority of ICU nurses in the US and have been unrepresented in studies regarding WPV. However, the results from this study indicated PICU nurses are experiencing WPV at similar rates and reporting similarly as well. Future research should explore the incidence of WPV and subsequent reporting or non-reporting in all areas of nursing practice, including atypical practice settings. Further research is required to better understand the impediments for non-reporting and to develop methods to improve reporting.

This study revealed a correlation between nurses' self-concept and altruism. This is an under-studied area that requires future research to better understand this relationship.

Recommendations for Nursing Practice and Leadership

Future research on nursing practice and leadership will likely result in the most impact on decreasing the incidence of WPV in healthcare settings. Research designed to evaluate methods to diminish the environmental factors known to contribute to WPV including the lack of a safety culture, noise, overcrowding and prolonged wait times is recommended. The COVID19 pandemic has impacted every aspect in our provision of healthcare. The requirement of decreasing visitation due to social distancing has resulted in a decrease in WPV incidents. Therefore, future research evaluating the relationship of nursing practice and the presence of visitors on the incidence of WPV should be further investigated.

Finally, it is imperative that healthcare leaders, professional nursing societies, lawmakers and concerned citizens, should engage in developing local and national policies to increase the protection of our healthcare workers. Future research on the development of a national database may help quantify and elucidate the scope of the problem. The American Nurses Association and other nursing leaders need to engage with politicians and lawmakers to increase the protection of our nurses and other healthcare workers. The Careful Nursing framework highlights the importance of nurses caring for oneself and one's colleagues. Nurses' voices must be empowered to be heard when advocating for their own safety as much as when advocating for the safety of their patients.

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APPENDICES

Appendix A

Workplace Violence Experience Questions

This section of the survey asks about your experience of violence and aggression at work.

In this survey, “violence” includes acts or threats of physical or verbal aggression. “Workplace violence consists of physically and psychologically damaging actions that occur in the workplace or while on duty.” The ANA further describes WPV by providing examples from OSHA 2015, to include, “direct physical assaults (with or without weapons), written or verbal threats, physical or verbal harassment, and homicide”

1. Have you ever been a target of violence or aggression at work during the past five years?
 - a. Yes
 - b. No

2. Have you ever reported an incident of workplace violence via your hospital system at your place of work during the past five years?
 - a. Yes
 - b. No

Appendix B

Demographics Questions

1. What is your age?
2. What is your self-identified gender?
3. How many years have you been a licensed RN?
4. How many years have you worked as a PICU staff RN?
5. What is your highest level of education?

Appendix C

IRB Informed Consent



Dear Pediatric Intensive Care Unit Nurse:

Minnette Markus-Rodden RN, MSN, CPNP-AC is a PhD student at Seton Hall University, College of Nursing. In order to meet the degree requirements for the PhD, she is conducting a study that will assess the relationship of altruism and nurses' self-concept on decisions to report incidents of workplace violence.

Purpose: The purpose of this study is to identify the relationship of altruism and nurses' self-concept with reporting incidents of workplace violence by Pediatric Intensive Care Unit nurses.

Duration: It is anticipated that each participant will spend approximately twenty minutes answering the survey questions via an on-line link. Participants will only take the survey one time.

Procedures: Enclosed in this email is a link that once clicked will direct you to a survey assessment site called Qualtrics. Upon arriving to the site, you will start the survey questionnaire.

Instruments: The instruments used as part of this study include the Self-Report of Altruism (SRA) Scale, the Nurses' Self-Concept Questionnaire (NSCQ), questions regarding the experience of workplace violence and a demographics questionnaire. The SRA Scale was developed in order to assess if individuals possess traits of altruism, such as consistently being

more generous, helpful and kind than others. The SRA consists of 20 items, each measured on a 5-point rating scale indicating the frequency of engagement in altruistic behaviors. Example item: *“I have given money to a charity”*. The NSCQ is the only instrument designed which specifically measures multi-dimensionality of professional self-concept among nurses using a Likert scale of 1=Definitely false to 8= Definitely true. Multi-dimensionality within the NSCQ includes the specific dimensions of caring, communication, staff relationships, leadership, nursing skills and knowledge and nursing ability. Example item: *“ I am proud to be a nurse”* . There are three questions related to the experience of workplace violence. Two of these questions are yes/no questions and one is an open-ended question allowing the participant to provide a description of the incident. Example item: *“Have you ever been the target of workplace violence during the past 5 years?”* The last questionnaire asks general demographic data and information about your experience as a nurse. Example item: *“How many years have you worked as a Registered Nurse within a Pediatric Intensive Care Unit?”*. After you have completed the survey questions you will receive a prompt to submit your responses and complete the entire survey.

Voluntary Participation: Participation in this study is completely voluntary and declining to participate involves no penalty or loss of benefits. Participation in this study is not required and you can choose to withdraw at any time prior to completing the online survey. If you decide not to participate in the study or if you begin to answer the survey and then decide to not continue, you may stop completing the study questionnaires at any time and your decision to stop participation will remain anonymous.

Anonymity: Your participation will be anonymous, and the survey data will be anonymous to the researcher. At no time will the researcher be able to link the individual survey results to the individual completing the survey.

Confidentiality and Record Keeping: Data will be stored on two encrypted USB memory sticks and maintained and accessible only by the principal investigator, Minnette Markus-Rodden, in a locked cabinet for the duration of the study. Only the researcher and the dissertation chairperson will have access to the data. Following completion of the study and upon graduation from Seton Hall University, the two encrypted USB memory sticks will be stored for a period of at least three years in a locked cabinet located in a locked office in the dissertation committee chairperson's office.

Benefits and Risks of the Study: There are no known direct benefits from participation in this study. Potential benefits of participation include knowledge that results obtained from this survey may influence nursing education, clinical practice, and policies which serve to benefit Pediatric Intensive Care Unit nurses. Knowledge garnered from this study may help to implement methods that can protect healthcare workers in the US from workplace violence assaults.

Although participation in the survey should be as complete as possible, please know that if at any time you are uncomfortable answering any particular question, you may choose not to answer the question and you may, at any point, stop completing the online survey without penalty. This study poses minimal risk; however, due to the nature of some of the questions being related to experience of workplace violence it is possible some participants may wish to discuss this topic with a mental health professional. Therefore, participants experiencing mental health concerns after completing the survey will be directed to contact the US Department of Health and Human

Services, Substance Abuse and Mental Health Services Administration via phone at 1-800-662-HELP or via the web at <https://www.samhsa.gov/find-help/national-helpline>.

There is no payment or remuneration for participating in this study.

Please note, there is no consent form for you to sign. If you voluntarily decide to take this survey, it is implied that you consent to participate in this study. No personal information will be obtained to further ensure your anonymity.

Contact Information: If you have any questions or possible concerns about participation in this research study please feel free to contact the Principal Investigator, Minnette Markus-Rodden, RN, MSN, CPNP-AC or the Principal Investigator's Dissertation Committee Chairperson, Dr. Judith Lothian RN, PhD, FAAN at (973) 761-9273. If you have any questions regarding your rights as a research subject in this study, you should contact the Institutional Review Board Office Director, Michael LaFontaine EdD., Associate Professor, Seton Hall University at IRB@shu.edu or (973)-313-6314.

Thank you for participating in my research study.

Minnette Markus-Rodden RN,MSN, CPNP-AC

Doctoral Student, PhD in Nursing Program

Seton Hall University, College of Nursing

400 South Orange Avenue

South Orange, NJ 07028

Appendix D

IRB Approved Informed Consent



July 13, 2020

Minnette Markus-Rodden

Re: Study ID# 2020-119

Dear Ms. Markus-Rodden,

The Research Ethics Committee of the Seton Hall University Institutional Review Board reviewed and approved your research proposal entitled, ““Altruism and Self-Concept in Pediatric ICU Nurses: Is There is a Relationship with Reports of Workplace Violence?”” as resubmitted. This memo serves as official notice of the aforementioned study’s approval as exempt. If your study included an informed consent form, letter of solicitation or flyer, a stamped copy is included for your use.

The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol, informed consent form or study team must be reviewed and approved by the IRB prior to their implementation.

You will receive a communication from the Institutional Review Board at least 1 month prior to your expiration date requesting that you submit an Annual Progress Report to keep the study active, or a Final Review of Human Subjects Research form to close the study. In all future correspondence with the Institutional Review Board, please reference the ID# listed above.

Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink that reads "Mara Podvey".

Mara C. Podvey, PhD, OTR
Associate Professor
Co-Chair, Institutional Review Board

Office of the Institutional Review Board

Presidents Hall · 400 South Orange Avenue · South Orange, New Jersey 07079 · Tel: 973.275.4654 · Fax 973.275.2978 · www.shu.edu

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