

## **Walden University ScholarWorks**

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2020

# **Exploring the Effectiveness of the Psychiatric Emergency** Response Team at a Washington State Hospital

Laura Kay Schilling Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations



Part of the Clinical Psychology Commons

# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Laura K. Schilling

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

**Review Committee** 

Dr. Eric Hickey, Committee Chairperson, Psychology Faculty Dr. Scott Gfeller, Committee Member, Psychology Faculty Dr. Lisa Scharff, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost Sue Subocz, Ph.D.

Walden University 2020

#### Abstract

# Exploring the Effectiveness of the Psychiatric Emergency Response Team at a Washington State Hospital

by

Laura K. Schilling

MS, Walden University, 2012 MSW, Walla Walla College, 2006 BA, Washington University, 2004

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Psychology

Walden University
February 2020

#### Abstract

Patient-to-staff assaults have become a barrier to workplace safety at U.S. psychiatric hospitals. Assaults on staff result in loss of productive social service for the mentally ill; increases in labor, industrial, and medical costs from claims; and psychological scars, such as posttraumatic stress disorder, that may never completely heal. The purpose of this quantitative study was to explore the effectiveness of the Psychiatric Emergency Response Team (PERT) at the Washington state hospital in reducing patient assaults on staff. There is very little research to substantiate the effectiveness of the PERT program as a conduit of workplace safety in psychiatric institutional care and none demonstrating that PERT is a useful program at the Washington state hospital. The theoretical approach in the current study for examining how organizations function with cohesiveness under certain organizational equilibrium constraints was Bandura's social learning theory. A quantitative archival analysis design was used to determine relationship between several levels of an independent variable (time) and the dependent variable (number of assaults) via a time-series procedure, the one-way within subjects ANOVA. Results showed that there was an increase in assaults in the 6 months post-PERT implementation compared to the 6 months before but a reduction of work loss. Decreased work loss after assaults could lead to less severe injuries due to the PERT response to incidents. Reducing injuries could lead to positive social change by affecting the psychological and physical well-being of patients and staff. For patients, it could promote healing and recovery as they discharge from the hospital and re-enter society.

# Exploring the Effectiveness of the Psychiatric Emergency Response Team at a Washington State Hospital

by

Laura K. Schilling

MS, Walden University, 2012 MSW, Walla Walla College, 2006 BA, Washington University, 2004

Dissertation Submitted in Partial Fulfillment
of the Requirements of the Degree of
Doctor of Philosophy
Psychology

Walden University
February 2020

### Dedication

This dissertation is dedicated to my daughter, Rilee Mae Schilling. You were there every day along the way.

### Acknowledgments

I want to sincerely thank my chair, Dr. Eric Hickey, for his encouragement and steadfast loyalty to his role in this process. I also want to thank Dr. Scott Gfeller for his attention to detail.

I also want to thank Walden University, as well as the Washington state hospital's IRB, for their support and belief in this study.

### Table of Contents

Chapter 1: Introduction to the Study	1
Background of the Study	2
Problem Statement	2
Purpose of the Study	6
Research Question and Hypotheses	7
Theoretical Framework	8
Nature of the Study	10
Definitions	12
Assumptions	12
Scope and Delimitations	13
Limitations	13
Significance	14
Summary	15
Chapter 2: Literature Review	17
Introduction	17
Literature Search Strategy	18
Theoretical Foundation	19
Literature Review Related to Key Variables and/or Concepts	21
Prison and Police Assaults	21
Assaultive Behaviors	25
Eliminating Past Interventions	28

Instituting New Interventions	29
Summary and Conclusions	31
Chapter 3: Research Method	32
Introduction	32
Research Design and Rationale	32
Methodology	33
Population and Sample	33
Procedures for Data Collection	33
Data Analysis Plan	34
Threats to Validity	36
Ethical Concerns	36
Summary	37
Chapter 4: Results	38
Introduction	38
Data Collection	38
Results	39
Assault Rates/PERT Involvement	41
Summary	42
Chapter 5: Discussion, Recommendations, and Conclusion	43
Introduction	43
Interpretation of the Findings.	43
Limitations of the Study	46

Recommendations	.47
Implications	.47
Conclusion	.48
References	.50
Appendix A: Washington State Data Request Letter	.57
Appendix B: Walden University Institutional Review Board Approval	.58
Appendix C: Letter of Approval From Washington State Behavioral Health	
Administration's Policy Research Analysis Board	.60
Appendix D: Exempt Determination Letter From Washington State Institutional	
Review Board	.64
Appendix E: Washington State Institutional Review Board Agreement	.66
Appendix F: DSHS Risk Class and Rates of Calendar Year 2019	.67

#### Chapter 1: Introduction to the Study

The Psychiatric Emergency Response Team (PERT) is a program that provides a safe, effective, and immediate response to de-escalate psychiatric patients who present with behaviors that could potentially become dangerous (Chang, Grant, Luther & Beck, 2014). PERT was first administered in the Pennsylvania state psychiatric hospital setting in 2014; The hospital's administration introduced it to the Washington state hospital analyzed in this study in 2014. It is critical to study PERT to explore whether and how the program reduces potential patient-to-staff as well as patient-to-patient violence in the psychiatric hospital setting. There is a potential for interventions such as the PERT response team to reduce the number of cases in which patients in psychiatric settings become assaultive (Dickens, Picchioni, & Long, 2013). By using PERT, health care providers can manage potential volatile situations before they occur by responding to emergencies. PERT incorporates validation techniques and assessment of what the patient requires to stabilize his or her mood immediately (Smith, 2008). However, the program's effectiveness is currently unknown, based on my review of the literature.

I used Bandura's social learning theory (Bandura, 1962) as the main theoretical framework to examine how organizations function cohesively under certain organizational equilibria constraints, such as the promotion of a new program in a psychiatric hospital. This theory aims to bridge the relational, multicultural, and social justice competencies of organizational group processing (Crain, 2000). The focus of my research questions was on whether the PERT program shows effectiveness in decreasing assaults when comparing 6 months before PERT to 6 months post-PERT. Specifically, I

sought to determine if there were fewer patient assaults on psychiatric wards when the PERT team intervened to de-escalate the situation and whether a national de-escalation team such as PERT reduces violence on psychiatric wards. I analyzed retroactive archival data from the Washington state hospital using quantitative methodology. Specifically, I examined patient-level archival data expressed as rates of assaults over a 12-month time period, calculating incident rates and confidence intervals before and after implementation of the PERT program. The data were then tested for statistical significance using a one-way within subjects ANOVA (see Field, 2013).

#### **Background of the Study**

Pennsylvania State Hospital leaders spoke to the issues that surrounded their PERT pilot project as a very arduous movement towards change because it disrupted the subculture of the administration, which held to the historical way of deterring patients' assaultive behaviors despite the methods possibly contributing to the hospital's high rate of patient-to-staff assaults (Smith, Davis, et al., 2005). This was seen in Pennsylvania (Smith, Ashbridge, Davis, & Steinmetz, 2015) and is now being seen in the Washington state hospital (Jones, 2015). To change any organizational standard, the organization's Leadership would welcome open discussions about how the existing way of doing things may have to become obsolete so that a better way can be cultivated for the overall success of a program.

#### **Problem Statement**

The general problem is that state psychiatric hospitals continue to experience high incident ratios of patient-to-staff assaults and use seclusion and restraint as the primary

means to deter the issue (Antonius et al., 2010). The specific problem is that there is a lack of knowledge on the effectiveness of a program that aims to de-escalate patients' violent behavior before the use of seclusion and restraint. At the Washington state hospital, PERT is the program that is used to reduce assaults (Becker, 2015). Previous researchers have examined the effectiveness of a multitude of factors in the reduction of patient-to-staff assault and the use of seclusion and restraint (Garlow et al., 2004; Smith, Davis, et al., 2005). Garlow et al. (2004), who studied the use of seclusion and restraint in a psychiatric emergency service setting, suggested a need for further research to better understand the effectiveness of psychiatric emergency response, which provided the rationale for this study.

PERT is a program that provides a safe, effective, and immediate response to deescalate psychiatric patients who present with behaviors that could potentially become dangerous (Scalon, 2010) The program is helpful in crisis situations. Crisis in the context of psychiatric care means a patient who is overly agitated and unresponsive to redirection from staff, a patient who is a harm to him or herself, or a patient who presents an imminent threat of assaulting others or has already been assaultive (Smith, Davis, et al., 2005). PERT focuses on lowering the patient's anxiety before the patient becomes assaultive, which could require restraint and seclusion. Using PERT, hospital staff are able to manage potential volatile situations before they occur by responding swiftly to agitated patients, talking with them through validation techniques while trying to understand what they need to regain a level mood (Smith, Davis, et al., 2005). Staff are trained in de-escalation techniques such as conflict resolution, mediation with patients,

and violence prevention skills to diffuse escalated patients who are unable to cope with their immediate emotive crises (Smith, Davis, et al., 2005). PERT came about after the administration of the Pennsylvania Psychiatric System sought to decrease their patient-to-staff assault rate. After implementing the PERT program, the system showed a decrease in patient-to-staff assaults, as well as fewer patients in restraints and seclusions (Smith, Ashbridge, et al., 2015).

There has been an impetus by psychiatric hospital administrations to become better equipped in handling patient safety and care and to explicitly de-escalate psychiatric patients to avoid patient–patient as well as patient–staff assaults in major psychiatric institutions. This consideration emphasizes a change in the way psychiatric hospitals respond to psychiatric patients who assault their peers and staff. In response to a high risk of assault in its forensic services facility (Jones, 2015), leaders of the Washington state hospital began to seek out programs that could reduce patient assaults. After identifying the PERT program in Pennsylvania's mental health system (Smith, Ashbridge, et al., 2015), hospital leaders began to take steps to get it up and running in their hospital. They began to implement the PERT program in 2014 (Becker, 2014). After several years of operation, leaders of the Washington state hospital have assembled data, but unlike Pennsylvania, they have only examined two variables: the number of seclusions per hour and the number of mechanical restraints per hour in seclusion (Becker, 2015).

I went further by exploring two variables: (a) the independent variable, the length of time before the PERT program intervention and the length of time after PERT

intervention program, and (b) the dependent variable, the number of assaults (see Smith, Davis, et al., 2005). The purpose of this study was to explore the effectiveness of the PERT program at the Washington state hospital in reducing patient assaults on staff. A one-way within subjects ANOVA with an alpha level at .05 was used to determine if the PERT implementation had any effect on the number of patient assaults on staff (see Field, 2013). I obtained approval from the Institutional Review Boards (IRBs) of the Washington state hospital and Walden University to access data for this research study.

Assaults on staff result in loss of work which means loss of productive social service for the mentally ill; increases in labor and industry claims, and medical costs as well as psychological issues, such as posttraumatic stress disorder, that may never completely heal. Insights from this study about the effectiveness of the PERT program could lead to other areas of research concerning the creation of safer environments in psychiatric care facilities (Huckshorn, 2006). Violence in psychiatric hospitals is justification enough for continued research. According to Gabrovec, Erzen, and Lobnikar (2014), violence within psychiatric institutions is a regular occurrence in treatment. Erdos and Hughes (2001) found that, out of the 24,219 incidents reported in a Veteran's Administration facility, more than a third were physical assaults by patients on staff. The unpredictable psychotic behaviors of mentally ill patients who become assaultive and violent to their peers and staff alike create a dangerous environment for all.

For the PERT program to achieve the stated goals of decreasing assaults, extensive training must be implemented. This includes delineating the subcultural

patterns (Nevis, 2013) held strongly by the medical staff, who have been implementing seclusion and restraint for decades as means of reducing violence on the forensic units.

Some preliminary evidence provides insight about the effectiveness of the pilot PERT program that began in 2014 at the Washington state hospital. Becker (2015) reported that the total hours patients were in seclusions and restraints in 2013 was 15,807 hours, which is 13,498 more hours in seclusion and restraints than in 2014, after the PERT program had been in place for a year, and noted that the program did not seem to lower assaults. Instead, the number of assaults increased by 147, which is a 47% increase from 2013 to 2014 (Becker, 2015). Injuries increased by 20%, from 231 in 2013 to 271 in 2014 (Becker, 2015). Becker explored the increase in patient-to-patient physical assaults and related injuries at the Washington state hospital as a quality assurance improvement plan. The lack of knowledge on the effectiveness of the PERT program at the Washington state hospital was the gap in research I sought to address in this study. Insight about the efficacy of the PERT program in reducing assaults on staff may help hospital leaders in making decisions that increase safety for patients and staff alike (Becker, 2015).

#### **Purpose of the Study**

The purpose of this retrospective quantitative design study was to explore the effectiveness of the PERT program at the Washington state hospital in reducing patient assaults on staff. I examined 12 months of data from before and after implementation of the program. The data were archival and consisted of 100 patient assault histories within a 12-month period, divided into two parts: (a) 6 months prior to PERT being

implemented, which was the first sample mean, and (b) 6 months after or post-PERT implementation, which was the second sample mean. Effectiveness was defined as fewer patient assaults on staff when the PERT team intervened as opposed to the number of assaults prior to the implementation of the PERT program.

#### **Research Question and Hypotheses**

Intervention is needed in psychiatric settings to reduce patient assaults on staff (Huckshorn, 2006). After securing IRB approval, I obtained patient-level individual archival data from the study hospital's Enterprise Risk Management Office through electronic distribution because this is the most efficient and reliable way to gather data under a deadline (Frankfort, Nachmias & Nachmias, 2008). The time frame for the planned retrospective data collection analysis of the archival data was less than 1 month. Using a sample of 100 records, I compared patient assault data history 6 months before the implementation of PERT (the first sample mean) to the 6 months after the PERT program began (the second sample mean).

In analyzing data, I looked for relationships within these two variables: (a) the independent variable, which was the length of time before the PERT program intervention and the length of time after PERT intervention program, and (b) the dependent variable, which was the number of assaults. This was accomplished by examining the rates of assaults over the 12 months, calculating incident rates and confidence intervals before and after implementation of the PERT program. I then tested the rates at the 0.05 level of statistical significance using a one-way within subjects

ANOVA (Field, 2013). The research question (RQ) and hypotheses for this study were as follows:

RQ: Do the number of assaults on staff by individual patients decrease for 6 months after the hospital has implemented PERT training when compared to the 6 months prior to the implementation of PERT?

 $H_0$ : The number of assaults on staff by individual patients will not change when comparing the 6 months pre-and post PERT implementation.

 $H_A$ : The number of assaults on staff by individual patients will be less in the 6 months after PERT implementation when compared to the 6 months prior to PERT implementation.

#### Theoretical Framework

Research and practice serve as the foundation for a theoretical framework, linking research and theory. The study examined how organizations function with cohesiveness under certain organizational equilibrium constraints, using as the main theoretical framework a Bandura theoretical approach to lend focus to how an organization overcomes issues that affect employees and patients within the organizational structure through social learning theory (Crain, 2000). In the case of a patient assaulting staff in the Washington state hospital, is there a decrease in the number of incidents when the organization responds by utilizing the PERT program (Smith & Ashbridge, 2011), succinctly, by changing the previous ways of responding to assaults into effective ways that build safety for an overall benefit to the Washington state hospital (Donat, 2002b)?

In Bandura principles, it can be predicted that since social modeling is a strong force in guiding ones' behavior (Crain, 2000), the use of a program with an emphasis on social learning would be more effective than the program (or lack thereof) that is currently being used to address patient assaults. When introducing the PERT program, staff must be trained to undertake the task of the program within the organization. The PERT program is considered the whole, and the individuals carrying out the program are identified as the parts that make up the whole (Read et al., 1997). With the introduction of any new program such as PERT, there is an emphasis on how the idea or concepts are connected and how it would change the equilibria of the organizational structure. Therefore, the social learning approach to organization consulting was an applicable framework to incorporate into the study (Crain, 2000) because it centers on changing the homeostasis while identifying where the resistance to the change exists. In this case, positive change could be seen in how employees embrace the PERT training to promote a safe environment for everyone (Knox et al., 2012). This theory aims to bridge the relational, multicultural, and social justice competencies of organizational group processing (Comstock, Hammer, Strentzsch, Cannon, & Parsons, 2008). According to Crain (2000), a focus of the Bandura social learning theory is on optimal change within the interworking of the organizational culture through socialization. In the case of psychiatric hospitals confronting patient assaults, this optimal change would aim to promote safety for patients and staff.

The core tenets of this study center on psychological growth and relational development with the critical notion of mutuality within the group instead of individual

separation (see Comstock et al., 2008). It involves an exploration of safety on the job and how the administration aims to correct deficiencies by utilizing the PERT program as a de-escalation alternative to seclusion and restraint (Smith, Ashbridge, et al., 2015).

There are three levels of theory: ad hoc classifications, taxonomies, and conceptual frameworks. The ad hoc classification for this research was in the form of ad hoc classification requirements identified by organizing the empirical data (Steinert et al., 2010). I used taxonomies to define comparisons among variables in the study, combining the axiom or assumption with the conceptual framework (Frank-Nachmias & Nachmias, 2008). An example from my research would be speaking to the group, patients, and staff benefiting individually from the PERT program to learn the underpinning issues that may promote the program's successful replication (Smith, Ashbridge, et al., 2015). Because I used a quantitative design, I devised the RQ from the null hypothesis, which states the number of assaults on staff by individual patients will not change when comparing the six months pre and post PERT implementation (see Creswell, 2009). Findings from the study may spur other research replicating this study's methodology in other institutions with high rates of patient assaults.

#### **Nature of the Study**

The time frame for the analysis of the retrospective individual archival data was approximately one month; the study looked at the patient assault data for the six months before the PERT intervention, then the data for the following six months after the PERT program began. Based upon the G-Power calculations ( $G^*$  Version 3.1.9.3:), the analysis took place with a sample size of approximately  $100 \ (n=100)$  patient assault incidents

from the Washington state hospital. The study compared two variables: (a) the independent variable, the level of time before the PERT program intervention and level of time after PERT intervention program; and the dependent variable, (b) which is the number of assaults.

Data was collected by utilizing archival data from the Enterprise Risk

Management Office that oversees the Washington state hospital labor and industry

claims. This data was archival data of patient assault histories of 12 months dividing

those 12 months into two parts; 1.) six months prior to PERT being implemented, which

was the first sample mean and; 2.) six months after or post PERT implementation.

Common process of data collection included the following:

- The data for the analysis was from the Washington state hospital through the Department of Social and Health Services Department Enterprise Risk Management Office.
- 2. The data was provided electronically.
- Literature concerning assault reduction after the PERT program has been initiated and was consulted.
- 4. Preliminary reports from Washington's Department of Social and Health Services outlining an executive summary surrounding the pilot program of the Psychiatric Emergency Response Team to reduce assaults at the Washington state hospital was used (Jones, 2016).

#### **Definitions**

Following are the construct definitions used in the study:

Assault: Unwanted physical contact that results in physical injury (Smith, Davis, et al., 2005).

*Effectiveness*: Decrease of patient assaults on staff within the studied time of research (Smith, Davis, et al., 2005).

Psychiatric Emergency Response Team (PERT): A program that provides safe interventions that de-escalate psychiatric patients (Smith, Ashbridge, et al., 2015).

#### **Assumptions**

The approach that was explored was the one-way within subjects ANOVA using microsoft excel to randomly select the sample (n=100) and the IBM SPSS Statistics for Windows Version 24.0. to generate the random sample and test for relationships. Testing was based on a 0.05 level of significance of incidence rates of patient assaults for six months prior to and six months after the intervention of the dependent variable, which is the number of assaults. This approach was used specifically to test the null hypothesis, which states: The number of assaults on staff by individual patients will not change when comparing the six months pre and post PERT implementation. The data was collected appropriately and will accurately be discarded when the study has been completed and presented to share holders.

#### **Scope and Delimitations**

One of the delimitations of this study was the generalizability of the results of effectiveness. Another delimitation was the fact that the sample size was taken from only one portion of the psychiatric hospital, the center of forensic services. Resulting in a small overall sampling.

#### Limitations

Some limitations surrounding this study's data collection focus on the patient-level individual data that was used. Since there is no control for how the Washington state hospital collected the data, any lost data, how the data were coded, and what, if any, was the bias associated with the data collection, these are noted limitations. This one-year retrospective audit of data looked at all assaults during a selected timeframe, comparing the number of assaults six months prior to the implementation of the PERT program with the number of assaults six months after PERT to see if the program is effective. Effectiveness is defined as fewer patient assaults on staff when the PERT team intervenes.

Using data that is not controlled allows for inaccurate reporting of assaults, leaving the data illusory upon analysis. Another limitation came from the Washington state hospital's parameters within their policies and procedures surrounding a study such as this, but it through the process of following state policy (Appendix C) and obtaining exempt determination (Appendix D) the data on the Washington State Hospital was obtained through the Enterprise Risk Management Office on the PERT program.

#### Significance

The result of this study was to show the effectiveness of the PERT program in reducing patient assaults on staff at the Washington state hospital. Results of the analysis will be given to hospital executive leadership for discussion. Utilizing the Bandura social learning theory as the framework seems to bring forth the nexus with research on process change (Nevis, 2013). The social learning principles focus on the awareness of the issue, in this case, patient-to-staff assaults. It focuses on how an organization can unknowingly be reluctant to change the homeostasis that has resulted in poor outcomes. Social learning theory brings forth ideas on how to improve the equilibrium within the organization with the highest degree of acceptance by its employees (Donat, 2002a; Nevis, 2013). When a program such as PERT is initiated, this awareness takes time to register among the organization's professionals, perhaps years. In this case, resistance is not a reason to forego reducing assaults by utilizing an effective program but rather a period of time to when accurate data is collected for review of the program's effectiveness (Donat, 2002b, 2002b; Thomas et al., 2009).

This study aims to show the effectiveness of PERT at the Washington state hospital to de-escalate volatile patients before a potential assault occurs, in turn reducing patient-to-staff assault numbers. Also, by focusing attention on this gap, it is possible to see if more research is needed before declaring the PERT program replicable for the Washington state hospital. The findings could be used by future research and policy decision makers to put in place strategies that may reduce patient-to-staff assaults in other hospitals and mental health agencies (Scalan, 2010; Stewart, Van der Merwe, Bowers,

Simpson, & Jones, 2010). Mental illness is a static social issue, but the assaults that surround mental illness have ebbed and flowed, meaning there is a degree of unpredictability that surrounds the behaviors behind the assaults (Knutzen et al., 2014). Research based on determinate variables that may alter the current assaultive environment for the organization's greater good, or at least give practical application to the PERT program's efficacy through the setting of new boundaries for patients and staff, could be beneficial (Knott, Pleban, Taylor, & Castle, 2007). If this program is effective it enhances the safety of the residents and staff. It might benefit the staff by lowering the stress of the workplace, and improve worker retention. It could also lower the legal risk for the institution, and improve the reputation of such institutions in general leading to social change that could benefit everyone. Knowing about the safety of programs and researching them also brings this issue to public awareness, so even if you find no change there is still a benefit.

The very idea of altering an environment in a psychiatric state institution for the safety for both patients and staff seems reasonable (Thomas et al., 2009). It can only contribute to social change if the organization is willing to buy into the process, collect data, and make a conscious effort to focus on areas of weakness as well as strength within the professional practice (Robins, Sauvogeot, Cusack, Suffoletta-Maierle, & Frueh, 2005).

#### **Summary**

Reducing assaults among patients has been a high priority at the Washington state hospital. The hospital is attempting to reduce their patient assaults on staff by utilizing

the Psychiatric Emergency Response Team (PERT) program. Because the program is new at the hospital, this study aims to look at the program's effectiveness in reducing patient assaults (Scanlan, 2010; Stewart et al., 2010). Literature that supports the phenomenon is summarized in chapter 2.

#### Chapter 2: Literature Review

#### Introduction

Patient assaults in psychiatric hospitals create a violent workplace for psychiatrists, psychologists, social workers, nurses, and floor staff. When patients become violent, they have the potential to cause bodily harm to those they target with their assaultive behaviors (Smith, Davis, et al., 2005). The literature on the utilization of PERT suggests that it can be a deterrent of patient assaults towards staff and other patients (Smith & Ashbridge, 2011). PERT is a team of six employees per area at a psychiatric hospital who respond immediately as one unit to de-escalate a patient who is yelling, throwing items, hitting walls, or about to hit another patient or employee (Smith, Ashbridge, et al., 2015). The primary focus of the PERT unit is to respond before an actual assault (Knox et al., 2012). Employees are trained to see the signs that a patient is escalating and call for PERT before someone gets hurt (Chang et al., 2014).

Once PERT members arrives on the unit, they immediately begin to engage the patient with de-escalation techniques to reduce tension in the environment and bring the patient back to a calm mental state (Bennett, Ramakrishna, & Maganty, 2012; Chang et al., 2014). Although patient assaults occur at an alarming rate in psychiatric hospitals across the globe (Erdos & Hughes, 2001; Steinert et al., 2010), the focus in this study was on one primary psychiatric hospital in Washington State and whether the PERT program showed efficacy in reducing assaults (Smith, Davis, et al., 2005). It is crucial to first give a snapshot of what a patient assault looks like in a psychiatric hospital setting, what safety measures can be taken to protect both staff and patients, and what possible

Psychiatric settings are unique in that they have a population that is both mentally ill and has backgrounds in criminality. There is little research on patient-to-staff assaults in psychiatric hospitals because patients in these hospitals are considered a vulnerable population that is protected by the Health Insurance Portability and Accountability Act laws of each state (Wu, Ahn, & Hu, 2012). To give an overall idea of how different this population is compared to those incarcerated within the prison system or those out in the community who offend and encounter police, I review literature showing how health care workers use de-escalation techniques to keep inmate assaults and community assaults on guards and police as low as possible. Before reviewing the literature, I review my literature search strategy and the theoretical foundation for the study.

#### **Literature Search Strategy**

I selected the reviewed literature from the Google Scholar database. The article studies were compiled from peer-reviewed journals such as *Psychiatric Services*, *Community Mental Health Journal*, *American Journal of Psychiatry*, *Social Psychiatry Epidemiology*, *International Journal of Social Psychiatry*, *The British Journal of Psychiatry*, *Journal of the American Academy of Psychiatry and the Law*, *International Journal of Mental Health Nursing*, *Social Psychiatry and Psychiatric Epidemiology*, *British Medical Journal*, *Psychiatric Quarterly*, *Western Journal of Emergency Medicine*, *Journal of Forensic Practice*, *Issues in Mental Health Nursing*, *Journal in Psychiatric Intensive Care*, *Journal of Advanced Nursing*, *Community Mental Health Journal*, and *Psychiatric Rehabilitation Journal*. In the literature review, I discuss psychiatric patient-

to-staff assault, ineffective ways for dealing with the issue of assaults, and interventions to decrease assaults within the Washington state hospital.

#### **Theoretical Foundation**

Research and practice serve as the foundation for a theoretical framework, linking research and theory. In this study, I examined how organizations function with cohesiveness under certain organizational equilibrium constraints. I used as the main theoretical framework Bandura's social learning theory to consider how an organization overcomes issues that affect employees and patients within the organizational structure (Crain, 2000). I wanted to examine whether there was a decrease in the number of incidents when organizational leaders used the PERT program (Smith & Ashbridge, 2011) and whether changing the previous ways of responding to assaults increased overall safety at the Washington state hospital examined in the study (see Donat, 2002b).

Because social modeling is a strong force in guiding one's behavior, according to Bandura (Bandura, 1962), the use of a program with an emphasis on social learning should be more effective in addressing patient assaults than the current program, which does not emphasize the model. When introducing the PERT program, staff must be trained to undertake the task of the program within the organization. The PERT program is considered the whole, and the individuals carrying out the program are identified as the parts that make up the whole (Read et al., 1997). With the introduction of any new program such as PERT, there is an emphasis on how the idea or concepts are connected and how it will change the equilibria of the organizational structure. Therefore, the social learning approach to organization consulting (Crain, 2000) was an applicable framework

to incorporate into the study because it centers on changing the homeostasis while identifying where the resistance to the change exists. It can answer the question: With appropriate data, does it aid in how the organization perceives the social change as a step in the right direction for the entire population the change will serve? In this case, positive change could be seen in how employees embrace the PERT training to promote a safe environment for everyone (see Knox et al., 2012). This theory aims to bridge the relational, multicultural, and social justice competencies of organizational group processing (Comstock et al., 2008). In the case of psychiatric hospitals dealing with patient assaults, this optimal change would aim to promote safety for patients and staff.

The core tenets of this study centered on psychological growth and relational development with the critical notion of mutuality within the group instead of individual separation (Comstock et al., 2008). It involves an exploration of safety on the job and how the administration aims to correct deficiencies by utilizing the PERT program as a de-escalation alternative to seclusion and restraint (Smith, Ashbridge, et al., 2015).

The social learning theoretical approach should lend itself to the impetus that agreement or a consensus in organizational structure can move forward without discord because this theory is based on social learning principles and reward systems. There are three levels of theory: ad hoc classifications, taxonomies, and conceptual frameworks. The ad hoc classification for this research is in the form of ad hoc classification requirements identified by organizing the empirical data (Steinert, Lepping, Bernhardgrutter, Conca, Halting, & Janssen, 2010). The taxonomies were used to define comparisons among variables in the study, combining the axiom or assumption with the

conceptual framework (Frank-Nachmias & Nachmias, 2008). An example from my research would be speaking to the group, patients, and staff benefiting individually from the PERT program to learn the underpinning issues that may promote the program's successful replication (Smith, Ashbridge, et al., 2015). Because this study aims to utilize a quantitative experimental design, the research question stems from a null hypothesis (Creswell, 2009). The focus of this theory's framework is to find effectiveness when utilizing the PERT program within the Washington state hospital so that open discussion can begin towards more research on replication within other institutions that are seeking better outcomes for themselves.

# Literature Review Related to Key Variables and/or Concepts Prison and Police Assaults

Unlike police, who use force as their primary response to assaults (Barak, Farrar & Sutherland, 2015), the psychiatric hospital only considers it one of their options.

Excessive force has been an issue among police. Barak, Farrar, and Sutherland (2015) study this issue in depth, looking primarily at the New York Police Department in 2013.

The New York Police Department was considered the highest stop-and-frisk agency in the county. It was ordered by the Federal District Court to wear cameras to reduce the overuse of police force and to protect police officers from false allegations and the city from liabilities associated with both (Barak, Farrar & Sutherland, 2015). There is no evidence that body-worn cameras increased public confidence in how police responded to 911 calls (Barak, Farrar & Sutherland, 2015).

Moreover, a suspect's response to an encounter with police could precipitate a counter-response by the officer. This response could be gauged by how cooperative the suspect is at the time of the interaction. Barak, Farrer and Sutherland, (2015) categorized the use of force broadly in terms of when an officer should use it leaving it to the discretion of the officer at any given moment. This can lead to several conundrums, one being why one officer uses more force than another for a similar interaction with a subject. The protocol is not detailed and is left entirely subjective. Barak, Farrar and Sutherland also looked at the Rialto Police Department, which defined the use of force as physical force more significant than that of "compliance holds," including the use of pepper spray, mace, a taser, a baton, or a canine bite (Barak, Farrer & Sutherland, 2015).

Educating police officers past high school is a focus of decreasing the use of unnecessary force by police. Paoline and Terrill (2007) looked at the education police officers received before entering the police department. Most officers only needed a high school diploma before joining the academy. These officers were found not to have the same abilities to defuse intense situations without inappropriate application of force to a suspect (Paoline & Terrill, 2007). Different levels of education could determine the levels of force an officer uses in the field when dealing with intense subjects. Paoline and Terrill explored the routine use of coercion vs. inappropriate force in resolving issues on the street and in communities. Force is defined as forceful tactics such as verbal and physical deterrents. It was discovered that police officers with higher education used physical force at the same rate as those police officers with a high school diploma alone. There was no difference in how force was utilized (Paoline & Terrill, 2007). There was,

however, a decrease in how many times physical force was used by police officers with 11 or more years of experience in the field (Paoline & Terrill, 2007).

Within prisons, assaults on older inmates by younger inmates go unreported to avoid being tagged a snitch by the prison milieu (Kerbs & Jolley, 2007). The younger inmates tend to victimize the elderly, adding more violence daily to an already tumultuous scene. In general, older inmates are housed with younger inmates, creating a hierarchical preying mentality (Kerbs & Jolley, 2007). The authors also stated that, the older, weaker inmates are less likely to report assaults (unless they need medical attention) or to defend themselves, making their victimization inevitable. As the aging population grows within America's prison system, it has brought to the forefront concerns of how to keep this population safer (Kerbs & Jolley, 2007). The lack of gerontological training for correctional officers suggests that supervision of the aging population is not adequate, making it easier for young prisoners to victimize the elderly (Kerbs & Jolley, 2007). Kerbs and Jolley asked the elderly prisoners if they needed segregated units from younger inmates. Most elderly inmates said they wanted to be in pods with their age groups to avoid being brutalized. The inmates also added that they thought correctional officers needed more training and that their medical needs were reaching a new level as they aged (Kerbs & Jolley, 2007).

Many correctional officer injuries occur during the restraining of inmates.

According to Konda, Reichard, and Tiesman (2012), assaultive violent acts perpetrated on correctional officers by prisoners result in both fatal and non-fatal injuries.

Correctional officers work in close proximity with prisoners; the facilities are

overpopulated, which has led to overcrowding in some units; and there is inadequate training due to the rapid rate of staff turnover, meaning there are fewer people on staff at any given time on any assigned shift (Konda et al., 2012). Inmates devise shanks out of hairbrushes in attempts to assault staff violently. Although staff training from the American Corrections Association and the American Jails Associate train staff in all the departments with self-defense tactics for personal safety and tactical response during riots or hostage situations, it is not enough when there is such a high turnover of staff. Even though all facilities receive training, the training is not consistent across facilities. There is no study that suggests research to test the effectiveness of facility training (Konda et al., 2012).

Unlike the prison system and police departments, psychiatric hospitals are illequipped to respond to assault with the same force. Psychiatric patients often are not
responsible for their actions because they are responding to internal stimuli, voices telling
them to hurt someone. Not only are staff in psychiatric units not equipped with a baton, a
mace, or defense tactics, but state laws and policies forbid any hands-on restraint without
a doctor's order (Garlow, Steven, Purselle, & D'orio, 2004). Obtaining a doctor's order
can take time; this is especially concerning when staff are in the heat of the moment with
a violent patient. The PERT program is a front-end systematic attempt to defuse
tumultuous situations before any physical contact on the part of the patient or staff. What
makes my study significant is that is the first study that aims to find the effectiveness of
the PERT program in similar violent settings experienced by police and correctional
officers, but without the same authorized show of force. Psychiatric hospitals are not

permitted by law to use mace, batons, or tactical defense mechanisms as self-defense against violent patients. Instead, psychiatric hospitals must train staff to see the signs of aggression exhibited by patients and intervene with de-escalation techniques before hands-on restraints and seclusions (Smith, Davis, et al., 2005).

#### **Assaultive Behaviors**

The hospitalized mentally ill population is small, but the rate at which they assault tends to be higher than average, and they have proven refractory to interventions (Antonius et al., 2010). Many of these patients in the psychiatric hospital are diagnosed with schizophrenic and schizoaffective disorders, and they tend to be the most violent patients in the psychiatric setting (Donat, 2003). Schizophrenic individuals are a great concern in society given the degree to which they can become a danger to others (Bennet et al., 2012; Chang et al., 2014; Evans, 2012). If the concern of violence lies within society, then it should not be overlooked that a violent person will bring violence with them to the psychiatric hospital (Knutzen et al., 2014). Patients who come into the psychiatric hospital for assaultive behavior out in the community are likely to continue their assaultive behaviors until stabilized on medications (Knutzen et al., 2014; Maguire, Young, & Martin, 2012). These patients can be identified as a subgroup (Antonius et al., 2010) defined as antisocial individuals with a concurrent diagnosis of a major disorder such as schizophrenia. This subgroup makes up a substantial portion of the assaults on psychiatric hospital wards. They tend to come into the system at a young age and then cycle through over and over in and out of the hospital through their lifespans (Bennet, Ramakrishna & Maganty, 2012). Medication seems to stabilize them (Knutzen et al.,

2014), but their initial admission into the psychiatric hospital tends to be characterized by assaultive behaviors that result in staff injuries (Dickens et al., 2013). For example, Antonius et al. (2010) gave a patient's account of his assaultive behaviors, such as kicking a nurse during the administration of medications, compiling numerous types of contraband, and most concerning, making a shank from his toothbrush. This patient would assault his peers on numerous occasions by punching them in the face or head numerous times with a closed fist for no apparent reason. This patient would cheek his medications, making stabilization almost impossible until a court order allowed the psychiatrist to order an intramuscular medication (IM) backup. When an IM is established, then the patient can be administered medication if he or she refuses to take medication orally. While this is not the best course of action, it can be necessary for the safety of the environment. Because assaults are aggressive acts by patients toward others, some measures must be taken to resolve safety concerns (Smith, Ashbridge, et al., 2015). Another containment procedure used to stop violent behavior is the use of seclusion and restraint (Smith, Ashbridge, et al., 2015). Even though the assaultive behavior will cease when the patient calms down, the process of getting the patient in restraints is quite daunting and can result in the patient becoming injured. It takes at least four to five staff working together in tandem to take an assaultive patient to the floor. When the patient is physically restrained, he or she is put in a weighted restraint chair. Once in the chair, the wrists are strapped down to the arms of the chair, the ankles are strapped down to its legs, and then the waist is strapped to the back of the chair, completely immobilizing the patient. The patient can remain in these restraints for a very long time. Once the patient

shows a depth of understanding he or she is willing to discuss his or her actions or take a p.r.n. medication (Scalan, 2010; Smith, Davis, Aidan, Dung, Wolfe, 2008) he or she is released from the restraints. However, this can take several hours. While the patient is in the restraints, staff are on constant watch with 15-minute documented checks. These checks require staff to test each point of restraint to make sure the restraints are not too tight. Once a patient has shown he or she can remain calm, one restraint is loosened from his or her extremities and removed. If the patient remains calm while one restraint has been removed, then another one is removed and so on until the patient is no longer in restraints. While seclusion and restraint of a patient are effective for the most part, they can and usually do result in injury to the patient or the staff (Smith, Ashbridge, et al., 2015). The injuries sustained by staff require at most complete medication attention (Erdos & Hughes, 2001). Injuries sustained range from life-threatening injuries to loss of consciousness, bone fractures, lacerations, and bruising (Erdos & Hughes, 2001). These are just the immediate physical effects of assaults the remnants of the psychological effects are ongoing, including altered sleep patterns, startle response, anxiety, a sense of hopelessness, loss of control, and irritability. Erdos and Hughes (2001) explored the social aspect of the victims of patient assaults. They found that victims developed a high degree of fear towards their patients and an overwhelming fear of strangers, and their coworker relationships became strained. According to Smith, Ashbridge, et al. (2015) the utilization of containment procedures at Pennsylvania state hospitals showed a weak association between the decline of patient assaults in the correlation analyses. Succinctly, containment does not necessarily prevent or reduce the violence in the psychiatric

hospital; rather, it stops the violence from continuing for the moment (Smith, Ashbridge, et al., 2015).

# **Eliminating Past Interventions**

Though widely used, seclusions and restraints have not shown good outcomes in decreasing patient assaults. The National Association of State Mental Health Program Directors issued six core strategies for reducing seclusion and restraints due to the connection described by Khadiva et al. (2004) between reductions and seclusions and increased violence among patients in psychiatric hospitals. The six core strategies aimed at changing the current practices of seclusion and restraint centered on leadership, policy changes, data transparency, clinical alerts, response teams, workforce development, and discontinuing use of the p.r.n. orders (Smith, Ashbridge, et al., 2015). The PERT program emerged in response to the recommendations for these strategies to be used. For the current study, the focus in on how the Psychiatric Emergency Response Team's process has served to decrease seclusions and restraints, which has in turn reduced patient assaults prior to the need for seclusion and restraint and the administration of a non-scheduled p.r.n. medication (Smith, Ashbridge, et al., 2015).

Furthermore, engaging and identifying de-escalation techniques with a response team were seen in the Pennsylvania psychiatric hospitals for the first time as the first and last response to reducing patient assaults (Smith, 2005). An unrelated study out of Europe conducted by Steinert et al. (2010) explored quantitative data on the use of seclusion and restraints in different countries and how they were utilizing initiatives to reduce the practice in psychiatric hospitals. The study surmised that to improve the lives of the

mentally ill, short periods of physical restraint should be used as a last resort. The European Union's Green Paper and the White Paper of the Council of Europe on the protection of the human rights and dignity of the disabled agreed that there needed to be a process to de-escalate violent patients before physical intervention (Steinhart et al., 2010). The verbal response should be made in a calm, gentle fashion, seeking to meet the patient's needs. Seclusion and restraint of the mentally ill is a far-reaching global issue (Steinhart et al., 2010). When a patient seems to be agitated is the time to make the first response, not after the patient has assaulted someone.

When the focus is on de-escalating as a first response, the patient's behavior can be contained before it becomes violent. The PERT program has shown to be useful in the Pennsylvania psychiatric hospital system. Responding in kind with reassurance and validation instead of with physical restraint seems to be the aim of psychiatric care globally (Oster et al., 2015). A study out of Australia looked at physical restraint of patients resulting in patient and staff injury. Because of this global trend towards injuries, Oster et al. (2015) studied the ethical issues surrounding the procedures of restraint in a retrospective study within Utah hospitals in the USA and hospitals in Norway. Much like in Pennsylvania and the Washington state hospital the changes to policy and procedure needed to be explored to reduce the risk of injury to patients and staff alike when restraint and seclusion were not working to reduce violence and injuries (Oster et al., 2015).

#### **Instituting New Interventions**

Garlow et al. (2004) expanded on the concept that an effectively implemented program can reduce violence in the psychiatric hospital setting. Garlow et al. (2004) went

as far as to say that two factors increase the tendencies for patient assaults in the psychiatric hospital setting: first, the incompetent management of problematic behaviors, and second, inadequate monitoring of staff and patients. These factors were ameliorated in Garlow et al.'s (2004) study by implementing a core team much like that of the PERT program to respond to the escalation of patients using the Overt Aggression Scale by Yudofsky, Silver, and Jackson (1986), which was administered to all the patients. Those that posed a risk of aggression based upon the scale were explicitly interacted with on a step-by-step basis. Verbal de-escalation was used first, but because the staff were also retrained on verbal de-escalation, they could engage with the patients in a way that met the needs of the patients before they became agitated. The inadequate monitoring of inappropriate behaviors was remedied by adding cameras to the unit and hiring more staff to sit in front of the monitors during each shift. Utilizing these new tools reduced assaults on the units. By reducing violent behaviors through a response team, the number of seclusions and restraints decreased overall (Garlow et al., 2004).

While other psychiatric hospitals within the United States as well as in other countries have sought to reduce seclusion and restraint, the premise remains that reduction in aggression at the front end, before the need for such measures, is a trending feature of many psychiatric institutions (Huckshorn, 2006). One thought is that reducing seclusion and restraints will lower assaults. According to Huskshorn, it seems to be a two-pronged approach: for a psychiatric hospital to reduce seclusion and restraint, it would have to minimize the assaultive behavior that precedes it. The caveat that remains, however, is the degree to which staff can anticipate aggression before it becomes

assaultive. At times, a patient will assault with what seems like no provocation. This ultimately means that intervention should occur at an earlier stage (Huckshorn, 2006). Huckshorn (2006) went as far as to outline six core strategies for reducing seclusion and restraints. The six core elements focus on leadership toward change; using data to inform the application of the new practice; training the workforce; using tools that prevent the seclusions and restraint of patients; consumer roles in the inpatient settings; and lastly, debriefing techniques.

# **Summary and Conclusions**

In this chapter reviewed literature that was relevant to the theoretical framework surrounding the implementation of a program such as the PERT in the psychiatric setting to reduce assaultive behaviors. Chapter 3 highlights the methodology that was used to complete this study.

#### Chapter 3: Research Method

#### Introduction

I describe the methods used to conduct this study in this chapter. This chapter also contains an overview of the study design and the rationale for using it, information on the methodology including the population and data collection and analysis processes, and discussion of ethical considerations.

# **Research Design and Rationale**

I used a quantitative archival analysis design to clarify the relationship between several levels of an independent variable (time) and the dependent variable (number of assaults) via a time-series procedure: the one-way within subjects ANOVA (Field, 2013). I examined the effectiveness of the PERT program at a Washington state psychiatric hospital in reducing patient-to-staff assaults. I incorporated a descriptive and inferential analysis using Microsoft Excel and imputed the data into the IBM SPSS Statistics for Windows Version 24.0. The two variables examined within this study were (a) the independent variable, the length of time before the PERT program intervention and length of time after PERT intervention program; and (b) the dependent variable, the number of assaults.

I hypothesized that the PERT program would affect the dependent variable, showing a decrease in assaults 6 months after the implementation of the program. To test this hypothesis, I examined the patient-level individual data, expressed as number of assaults over the 12 months. A one-way within subjects ANOVA (Field, 2013) was used

to assess whether there was a reduction in the incidence of assaults following the implementation of PERT with an alpha level set at .05.

# Methodology

# **Population and Sample**

Based upon the G-Power (G\* Version 3.1.9.3) calculations, I expected a sample size of approximately 100 patient assault histories from the Washington state hospital. The benefit of having a calculated sample size is that it maximizes the power of the analysis to discover significance in the most minimal sample (Field, 2013). I used SPSS to randomly select 100 participants from the Washington state hospital data pool for the analysis.

#### **Procedures for Data Collection**

The Enterprise Risk Management Office that oversees the labor and industry claims at the Washington state hospital provided me with archival data. These archival data are retrospective data on patients assault histories for a 12-month time period, which were divided into two parts: the 6 months before the implementation of the PERT program and the 6 months after the implementation of the PERT program. No identifiable patient information was used in this study. After obtaining IRB approval from both Walden University and Washington State, I was able to collect patient-level retrospective data through electronic distribution. This was the most efficient and reliable way to glean

information in a time line with a deadline (Frankfort-Nachmias & Nachmias, 2008). The process for data collection included the following steps:

- I obtained the data for the analysis from the Enterprise Risk Management
   Office that oversees labor and industry claims for the Washington state
   hospital.
- 2. I reviewed literature concerning assault reduction after the PERT program.
- 3. I used preliminary reports from the Washington State Department of Social and Health Services. The reports contained an executive summary of the PERT pilot program to reduce assaults at the Washington state hospital (Jones, 2016).

# **Data Analysis Plan**

Assaults on psychiatric facility staff have caused severe head injuries as well as other lifelong medical issues. The role of PERT is to de-escalate patients in hostile situations with restraint and seclusion as a last resort (Smith, Ashbridge, et al., 2015). Questions remain as to whether PERT is effective at the Washington state hospital as there were no data on which to make any conclusions before this study was conducted. I used an archival data analysis design using a one-way within subjects ANOVA (Field, 2013) to assess whether there was a significant reduction in the incidence of assault following the implementation of PERT (see Campbell & Stanley, 1963). The RQ and hypotheses for my study were as follows:

RQ: Do the number of assaults on staff by individual patients decrease for 6 months after the hospital has implemented PERT training when compared to the 6 months prior to the implementation of PERT?

 $H_0$ : The number of assaults on staff by individual patients will not change when comparing the 6 months pre- and post-PERT implementation.

 $H_A$ : The number of assaults on staff by individual patients will be less in the 6 months after PERT implementation when compared to the 6 months prior to PERT implementation.

To test the hypotheses, I analyzed the results of a one-way within subjects ANOVA with an alpha level of .05. The time series for the dependent variable was the total number of assaults in the 6 months prior to PERT implementation and the total number of assaults in the 6 months after implementation of PERT. A within subjects ANOVA was the best form of analysis to compare following variables: (a) the independent variable, the length of time before the PERT program intervention and length of time after PERT intervention program, and (b) the dependent variable, the number of assaults (see Smith et al., 2005). These variables were chosen in an effort to determine the effectiveness of the PERT program in reducing patient assaults within a 12-month period.

I used the one-way within subjects ANOVA approach to test the significance of incidence rates for 6 months prior to and 6 months after the intervention of the dependent variable (number of assaults). This approach was used specifically to test the null hypothesis, which was the following: The number of assaults on staff by individual

patients will not change when comparing the 6 months pre- and post-PERT implementation. To reduce the potential for error, I imported the data into Excel for cleaning, followed by SPSS for the statistical procedures. Data cleaning was performed to remove incomplete records and records with missing data points.

#### Threats to Validity

The methodology of this quantitative design remained reliable (see Campbell & Stanley, 1963). To counter bias, I used archival data. One weakness of archival data sets is that some potential confounders can go unmeasured (Field, 2013). To mitigate threats to validity (Campbell & Stanley, 1963), I drew the sample size from within a 12-month period that included 6 months before PERT was initiated and 6 months after. I have access to the archival data until completion of the SPSS analysis and for 3 months thereafter. I am keeping the data securely stored and will purge records once the final dissertation has been approved.

#### **Ethical Concerns**

The data did not contain any patient identifiable information. All the Washington state hospital assault cases remained anonymous, the researcher only looked at the number of assaults per patient numbering patients with numeric symbols not names, from approximately one to one-hundred respectfully. Before proceeding with this study, there was approval from the Walden University IRB and the Washington state IRB. The IRB-approved patient-level individual archival patient data from the Washington state hospital through the Department of Social and Health Services Department Enterprise Risk Management Office was used appropriately. The data was collected appropriately and

will accurately be discarded when the study has been completed. Through careful consideration, the collected data reflected minimal bias.

# **Summary**

Results of the analysis are recorded in Chapter 4. The study imported patient-level individual archival data from the Enterprise Risk Management Office on the Washington state hospital into Excel to reduce error before using IBM SPSS for Windows Version 24.0 to run the descriptive and inferential analysis of the findings.

## Chapter 4: Results

#### Introduction

The purpose of this retrospective quantitative design study was to explore the effectiveness of the PERT program at the Washington state hospital in reducing patient assaults on staff. To this end, I examined 12 months of data from before and after implementation of the program. The archival data consisted of 100 patient assault histories within a 12-month period divided into two parts: (a) 6 months prior to PERT being implemented, which was the first sample mean, and (b) 6 months after or post-PERT implementation, which was the second sample mean. I sought to answer the following RQ: Do the number of assaults on staff by individual patients decrease for 6 months after the hospital has implemented PERT training when compared to the 6 months prior to the implementation of PERT? The results of this study showed that there was a significant increase in assaults at the Washington state hospital after the implementation of the PERT program. However, there was a decrease in labor and industry claims lending way to a decrease in work time loss. The chapter is a summary of the results and finings of this study using the aforementioned analyses.

#### **Data Collection**

I used PERT secondary data to complete this study. Approval to perform this study and to collect the data from the data sources, the Washington state hospital, was granted by Walden University's IRB (see Appendix B). When both IRB approvals were completed, I began the data collection process, which took approximately 1 month. The data collection processes presented in Chapter 3 were followed.

#### Results

I comparatively examined the effectiveness of the PERT during the 12-month time period of August 1, 2013, to August 31, 2014, using data obtained from the Enterprise Risk Management Office. This office holds all data for labor and industry claims resulting from patient care in state mental hospitals in Washington State. The two variables examined within this study were (a) the independent variable, the length of time before the PERT program intervention and length of time after PERT intervention program, and (b) the dependent variable, the number of assaults.

I used descriptive statistics to summarize the following data: (a) the number of patient to staff assaults from August 1, 2013, through January 31, 2014, (b) the number of patient to staff assaults from March 1, 2014, through August 31, 2014, and (c) the days of work lost per assault period resulting in less work loss per assault. Although this finding of less work loss per assault after the implementation of PERT is not related specifically to the study's research question, however, it is worth noting as a post hoc because it lends way to further research on labor and industry claims and how PERT hypothetically could be a factor in reducing those numbers over the long-term fiscal year.

The number of assaults that occurred from August 1, 2013, through January 31, 2014, before the implementation of PERT, was 19. Of the staff involved in the 19 assaults, 11 (57%) claimed labor and industry compensation, and eight did not receive compensation due to returning to work within three days from the incident. The total days for all incident workday loss prior to the implantation of PERT was 2,237. After the implementation of PERT there was an increase in patient-to-staff assaults. The assaults

totaled 26. Of these 26 assaults, 16 (61%) staff members claimed labor and industry compensation. The total days for all incident workday loss after the implementation of PERT was 1,017.

It is worth noting that while the assault number increased after PERT's implementation, this could be due to factors associated with human error, overcompensation, or lack of initial acceptance of a new program. The work loss days decreased from an average day's loss of 203.4 prior to PERT to 39.11, a lowering that could increase productivity and continuity of patient care. Over time, this decrease in work loss days could decrease incidents of assaults because of the structure and consistency of PERT's response to escalated patients before and assault has occurred. More longitudinal research is needed to assess this hypothesis.

I ran a one-way within subjects ANOVA, which showed that there was no significant difference in the number of assaults during the pre- and post phases of PERT implementation F(1, 44) = 1.09, p = .302. The results of the PERT program showing effectiveness in reducing patient-to-staff assaults were non-significant and did not lead to rejection of the null hypothesis, which states that the number of assaults on staff by individual patients will not change when comparing 6 months pre- and post-PERT implementation. Instead, the results showed an increase in patient assaults on staff post PERT implementation. There were 19 assaults during the pre-PERT time period (August 1, 2013-January 31, 2014) compared to 26 assaults during the post-PERT time period (March 1, 2014-August 31, 2014), for a total of 45 assaults.

Further analysis of the Enterprise Risk Management Office data subsequently showed that during the time-period of March 2014 through August 2014 while the PERT program was being implemented there was a decrease in labor and industry claims and work loss. These findings suggested that despite the increase of assaults during this time the magnitude of the injurious incidents had lessened in severity. There were 2,237 claims during the pre-PERT time period (August 1, 2013-January 31, 2014) compared to 1,017 claims during the post-PERT time period (March 1, 2014-August 31, 2014), for a total of 3,254 claims.

These findings could suggest that whether the psychological or psychological outcomes of the assaults on staff were prominent the injurious magnitude lessened when PERT intervened as evidenced by less time loss by staff. More research is needed to fully understand this outcome. There could be a link between staff feeling more confident that PERT would be involved with the escalated patient leading to quicker interventions to de-escalation before the patient's behaviors became more overt and violent.

#### **Assault Rates/PERT Involvement**

Psychologically avoiding a patient who is escalating can create an environment where there is an unmet need. If the staff are unresponsive to de-escalate quickly the patient's mood may continue to escalate resulting in a heightened state of agitation, increasing the injurious outcome. PERT showed an increase in assaults but less severity in assaults than previously recorded during the six months prior to PERT's implementation. This could lend itself towards a more immediate response to reduce the potential for assault by intervening quicker when a patient begins to escalate at the onset

rather than responding when the patient's emotive behavior is at its highest point. More research is needed in this area to further substantiate these findings.

#### **Summary**

Descriptive statistics were used to summarize the year of data that was divided into two segments to accommodate the independent variables. The two variables examined were (a) the independent variable, the level of time before the PERT program intervention and level of time after PERT intervention program; and the dependent variable, (b) which is the number of assaults.

The analysis of comparing pre-PERT to post-PERT patient to staff assaults was not significant and failed to reject the null hypothesis, which means that the number of assaults on staff by individual patients did not change when comparing to six months pre and post PERT implementation. Although the results show an increase in patient assaults on staff post PERT implementation, this increase is also not statistically significant. Chapter five provides discussion about key findings, recommendations for future research and social change implications.

#### Chapter 5: Discussion, Recommendations, and Conclusion

#### Introduction

The purpose of this study was to explore the effectiveness of the PERT program at the Washington state hospital in reducing patient assaults on staff. To this end, I examined 12 months of data from before and after implementation of the program were examined. These data were archival and consisted of 100 patient assault histories within a 12-month period. The 12 months of data were divided into two parts: (a) 6 months prior to PERT being implemented, which was the first sample mean, and (b) 6 months after or post-PERT implementation, which was the second sample mean. Although this research along with earlier research (Becker, 2015) has shown an increase in assaults during the time that PERT was first implemented, the findings of this study also showed a decrease in work time loss along with that increase of assaults.

#### **Interpretation of the Findings**

Previous research out of Pennsylvania (Smith, 2015) revealed that PERT was successful in reducing patient seclusion and restraints. Preliminary evidence from the Washington state hospital (Jones, 2016) speaks to the pilot PERT program that began in 2014 at the Center for Forensic Services. Becker (2015) reported that the total hours patients were in seclusion and restraints in 2013 was 15,807 hours, which is 13,498 more hours in seclusion and restraints than in 2014, after the PERT program had been in place for a year, and it did not seem to lower assaults. Instead, the number of assaults increased by 147, which is a 47% increase from 2013 to 2014. Injuries increased by 20%, from 231 in 2013 to 271 in 2014 (Becker, 2015). Becker explored the increase in patient-to-patient

physical assaults and related injuries at the Washington state hospital as part of a quality assurance improvement plan. The lack of knowledge on the effectiveness of the PERT program at the Washington state hospital was the gap in the research that inspired this study.

Evidence of the ability of PERT to reduce seclusion and restraints (Smith, Ashbridge, et al, 2015) in Pennsylvania, as well as at the Washington state hospital, may spur social change related to how health care professionals intercede on behalf of patients and staff for a safer environment to promote recovery in mental illness. A tool such as PERT can be used to respond to incidents in a nonintrusive manner. During the first year of PERT at the Washington state hospital, there was an increase of assaults, but a decrease in restraint and seclusion and a 3.19% decrease in work time loss with less severity in the injuries that did occur. A one-way within subjects ANOVA was run which showed that there was not significant difference in the number of assaults during the preand post-phases of PERT implementation F(1, 44) = 1.09, p = .302. The results of the PERT program showing effectiveness in reducing patient to staff assaults was not significant and failed to support rejecting the null hypothesis, which states that the number of assaults on staff by individual patients will not change when comparing 6 months pre- and post- PERT implementation. Though the results of the raw data appear to show an increase in patient assaults on staff post PERT implementation, this increase is also not significant. The patient-to-staff did not significantly decrease or increase.

With that said there was also significant difference in how much work loss occurred due to patient-to-staff assaults after PERT had been implemented. The analysis

indicated that there was not a significant difference in the number of assaults in the time pre- and post-PERT implementation; however a post-hoc analysis of the available data indicated that there was a decline in the number work days lost after PERT was implemented. This means that the degree of severity decreased per assault which allowed staff back to work sooner than prior to the implementation of PERT. This may be due to the advanced training received by PERT team which promoted the social theoretic framework of Bandura (Bandura, 1962) through modeling the appropriate steps to take when de-escalating a patient prior to the assault occurring.

With the introduction of any new program such as PERT, there is an emphasis on how the idea or concepts are connected and how it would change the equilibria of the organizational structure. Therefore, as stated previously in Chapter 2, the social learning approach to organization consulting was an applicable framework to incorporate into the study (Crain, 2000) because it centers on changing the homeostasis while identifying where the resistance to the change exists. In this case, positive change could be seen in how employees embrace the PERT training to promote a safe environment for everyone (Knox et al., 2012). This theory aims to bridge the relational, multicultural, and social justice competencies of organizational group processing (Comstock et al., 2008).

According to Crain (2000), the Bandura social learning theory strives towards optimal change within the interworking of the organizational culture through socialization. In the case of psychiatric hospitals dealing with patient assaults, this optimal change would aim to promote safety for patients and staff while ameliorating healing and recovery within the treatment programming. A new finding from this study was a probable reduction in

the severity of the assaults, which resulted in less work time loss that also showed a decrease in labor and industry claim payout over the fiscal year. In conclusion, this study brought to light new areas for research by subsequently aligning research with best practice outcomes from programs like PERT to reduce violence in psychiatric institutions. A longitudinal study on PERT responses and ways to replicate PERT are possibilities for future research.

#### **Limitations of the Study**

One of the limitations to this study is that the sample size within the timeframe studied was small. Another limitation was the use of secondary data on injuries instead of firsthand data from the PERT program itself on their actual responses to patient incidents on Center for Forensic Service (CFS) wards, some minor assaults may have gone unreported. There was little or no information kept by the PERT program to this factor reported to the Enterprise Risk Management Office. This study opened the door for much more to be studied on the speculation about the severity of the assaults based upon work time loss from an assault found in the post hoc. Further study could consist of a mixed methods study on PERT, with quantitative data regarding seclusion and restraints as well as assaults on staff, combined with a qualitative survey of staff responses to PERT interventions as well as feedback in survey form from patients. There was also a limit in terms of cause and effect conclusions due to not having the luxury of a comparison group to use as a control. An experimental design such as a mixed methods would have given more strength to the post hoc found in the possible decrease in severity of injuries to staff and if any of these changes were a result of the PERT program versus any other factors.

#### Recommendations

This study opened the door for more research. An experimental design such as a mixed methods would have given more strength to the post hoc found in the possible decrease in severity of injuries to staff and if any of these changes were a result of the PERT program versus any other factors. One recommendation centers around the aptitude levels of the current staff hired as floor staff. Meaning, perhaps more consideration could be put towards cultivating college degree requirements of staff prior to their employment. Could this standard be improved by working with local colleges in producing a certification specific to psychiatric care that included PERT training as part of its process. Typically, floor staff are staff that are hired to merely intervene, in the reactive sense when de-escalating a potential serious incident. When a patient crupts, it is the floor staff that are on the scene to intervene first. Staff hired within this discipline tend to be hired under the lowest educational criteria. They are the lowest paid and have the least amount of training in the mental health field resulting in inadequate standards in care for patients.

#### **Implications**

When looking at social change it is important to consider the levels of benefit in the research. This research benefits staff due to the possibility of reduced injury, it also benefits patients because it lessens disruption on the ward which promotes healing and recovery which empowers patients as they discharge from the hospital and re-enter society. Reducing injuries or lessening the degree of the injurious nature of incidents can have far reaching effects on psychological and physical well-being for patients and staff.

Despite the limitations to this study, a conversation on social change continues. Patient to staff assault data, when analyzed in conjunction with labor and industry claim tallies have suggested that PERT can be a tool that lessens the degree of severity in injuries that are inflicted on staff by patients. Although eliminating patient to staff assaults entirely remains the goal, there are areas to build on to reach that goal for a safer workplace in psychiatric institutions. Reducing the severity of the assaults by utilizing PERT reduces the amount the state of Washington pays out in labor and industry claims, thus resulting in possible advantages not only for the staff but also for society in general. These claims are formulated under coding system and are identified under that system as risk class code 7200 (Appendix F).

The 2019 calendar year distinguished the 7200-risk class description for Washington State as: State Government: MH Hospital w/SPH Covers positions providing direct patient care at state mental hospitals only (i.e. mental health technicians, psychiatric child care counselors, RN's LPN's and physicians, psychiatrists and psychology associates). Under this risk class code Washington State Department of Social and Health Services pays out \$3.7638 per worker hour in labor and industry insurance. This is calculated at an industry rate divided by DSHS rate and paid out as a variance. It should also be noted that this rate is larger than that of Washington State law enforcement officers.

#### Conclusion

This study adds to the growing research on PERT and its effectiveness in reducing seclusion and restraints, patient to staff assaults, and lowered labor and industry

claims. This study showed that PERT's effectiveness did show a difference in the post hoc in how much work time was lost after a patient to staff assault has occurred. Reduced work loss may have stemmed from less severe injuries because PERT engaged with deescalation techniques at the onset of the incident on the ward. Increasing standards in hiring practices may contribute to higher quality care. Higher educated, highly trained floor staff require higher pay which could balance out many areas of the treatment process including the exuberate costs of labor and industry claims that result from patient to staff assaults. For instance, employees who are competent are less reactive because the care for patients is proactively engaging prior to explosive situations. This allows the milieu to remain calm, promoting the well-being of the patient's environment so they can move through treatment and recovery therapeutically. This study adds to the growing literature of the PERT program that continues to ameliorate patient psychiatric treatment by improving the trajectory of patient care for the mentally ill while considering how society can promote the safety of staff who care for this vulnerable population.

#### References

- Antonius, D., Fuchs, L., Herbert, F., Kwon, J., Fried, J., Burton, P. R. S., . . . Malaspina, D. (2010). Psychiatric assessment of aggressive patients: A violent attack on a resident. *Psychiatry*, *167*(3), 253–259
- Bandura, A. (1962). Social learning through imitation. In M.R. Jones (Ed.), *Nebraska symposium on motivation*. Lincoln: University of Nebraska Press.
- Barak, A., Farrer, W., & Sutherland, A. (2015). The effect of police body-worn cameras on the use of force and citizens' complaints against the police: A randomized controlled trial. *Journal of Quantitative Criminology, New York, 31*(3), 509–535. doi:10.1007/s10940-014-9236-3
- Becker, T. M. (2015). *Notes for the Department of Quality Management: Research,*evaluation, and data analysis. Unpublished notes, Washington State Department of Social and Health Services, Olympia, WA.
- Bennett, R., Ramakrishna, V., & Maganty, D. (2012). Management of disturbed behavior in a psychiatric intensive care unit: Views of staff on options for intervention.

  \*\*Journal of Psychiatric Intensive Care, 7(2), 85–89.\*\*

  doi:10.1017/S1742646410000257
- Campbell, D. T., & Stanley, J. C. (1963). Experimental and pre-experimental designs for research. In American Education Research Association (Eds.), Threats to validity of research design (pp. 23–71). Chicago, IL: Rand-McNally & Company.
- Chang, N. A., Grant, P. M., Luther, L, & Beck, A. T. (2014). Effects of a recovery-oriented cognitive therapy training program on inpatient staff attitudes and

- incidents of seclusion and restraint. *Community Mental Health Journal*, 50(4), 415–421. doi:10.1007/s10597-013-9675-6
- Comstock, D. L., Hammer, T. R., Strentzsch, J., Cannon, K., Parsons, J., & Salazar, G., II. (2008). Relational-cultural theory: A framework for bridging relational, multicultural, and social justice competencies. *Journal of Counseling & Development*, 86(3), 279–287. doi:10.1002/j.1556-6678.2008.tb00510.x
- Crain, W. (2000). Bandura's social learning theory. In N. Roberts, J. Gilliand, & A. Castro (Eds.), *Theories of development: Concepts and application* (4th ed., pp. 193-212). Upper Saddle River, NJ, Prentice Hall.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage.
- Curie, C. G. (2005). SAMHSA's commitment to eliminating the use of seclusion and restraint. *Psychiatric Services*, *56*(9), 1139–1140
- Dickens, G., Picchioni, M., & Long, C. (2013). Aggression in specialist secure and forensic inpatient mental health care: Incidence across care pathways. *Journal of Forensic Practice*, *15*(3), 206–217. doi:10.1108/JFP-09-2012-0017
- Diehr, P., Yanez, D., Ash, A., Hornbrook, M., & Lin, D. Y. (1999). Methods for analyzing health care utilization and costs. *Annual Review of Public Health*, 20, 125–144. doi:10.1146/annurev.publhealth.20.1.125
- Donat, D. C. (2002a). Employing behavioral methods to improve the context of care in a public psychiatric hospital: Reducing hospital reliance on seclusion/restraint and

- psychotropic prn medication. *Cognitive and Behavioral Practice*, *9*, 28–37. doi:10.10116/S1077-7229(02)80036-0
- Donat, D. C. (2002b). Impact of improved staffing on seclusion/restraint reliance in public psychiatric hospital. *Psychiatric Rehabilitation Journal*, *25*, 413–416
- Donat, D. C. (2003). An analysis of successful efforts to reduce the use of seclusion and restraint at a public psychiatric hospital. *Psychiatric Services*, *54*(8), 1119–1123
- Erdos, B. Z., & Hughes, D. H. (2001). Emergency psychiatry: A review of assaults by patients against staff at the psychiatric emergency center. *Psychiatric News*, 52(9), 1175–1177
- Evans, R. E., & Petter, S. (2012). Identifying mitigating and challenging beliefs in dealing with threatening patients: An analysis of experiences of clinicians working in psychiatric intensive care unit. *Journal of Psychiatric Intensive Care*, 8(2), 113–119. doi:10.1017/S1742646411000318
- Faul, F., Erdefelder, E., Buchner, A., & Albert-Georg, L. (2009). Statistical power analysis using G\*Power 3.1. *Behavior Research Methods*, 41(4), 1149–1160. doi:10.3758/BRM.41.4.1149
- Field, A. (2013). Discovering Statistics Using IBM SPSS Statistics (4<sup>th</sup> ed.). Los Angeles: Sage.
- Frankfort-Nachmaias, C. & Nachmias, D. (2008). Research methods in the social sciences. New York: Worth Publishers.

- Gabrovec, B., Erzen, I., & Lobnikar, B. (2014). The prevalence and the nature of violence directed at the medical staff in psychiatric health care in Slovenia.

  Health MED, 8(2), 228–235
- Garlow, S. J., Steven, J. D., Purselle, D., & D'orio, B. M. (2004). Reduction of episodes of seclusion and restraint in a psychiatric emergency service. *Psychiatry Online*, 5(55), 581–583, doi: 10.1176/appi.ps.55.5.581
- Huckshorn, K. A. (2006). A snapshot of six core strategies from the reduction of s/r.

  Report from the National Association of State Mental Health Program Directors,

  Department of Social and Health Services
- Jones, S. (2016). Notes from The Interim evaluation of the six core strategies for reducing seclusion and restraint use at the Washington state hospital. the Washington state hospital, Department of Social and Health Services, Lakewood, Washington
- Kerbs, J. J., & Jolley, J. M. (2007). Inmate on inmate victimization among older male prisoners. *Crime & Delinquency*, 53(2), 187–218. doi:10.1177/0011128706294119
- Khadiva, A. N., Patel, R. C., Atkinson, A. R., & Levine, J. M. (2004). Associations between seclusion and restraint and patient-related violence. *Psychiatric Services*, 55, 1311–1312
- Knot, J. C., Pleban, A., Taylor, D., & Castle, D. (2007). Management of mental health patients attending Victorian emergency departments. *Australian and New Zealand Journal of Psychiatry*, 41, 148–155

- Knox, D. K., & Holloman, G. H. (2012). Use of avoidance of seclusion and restraint:
  Consensus statement of the American Association of Emergency Psychiatry
  project BETA seclusion and restraint workgroup. Western Journal of Emergency
  Medicine, 13(1), 35–40. https://doi.org/10.5811//westjem.2011.9.6867
- Knutzen M., Bjorkly, S., Eidhammer, G., Lorentzen, S., Mjosund, N. H., Opjordsmoen, S., . . . Friis, S. (2014). Characteristics of patients frequently subjected to pharmacological and mechanical restraint: a register study of three Norwegian acute psychiatric wards. *Psychiatric Research*, 215, 127–133. https://doi.org/10.1016/j.psychres.2013.10.024
- Konda,S., Reichard, A., & Tiesman, H., (2012). Occupational injuries among U.S. correctional officers, 1999–2008. *Journal of Safety Research*, *43*(3), 181–186. https://doi.org/10.1016/j.jsr.2012.06.002
- Maguire, T., Young, R., & Martin, T. (2012). Seclusion and reduction in a forensic mental health setting. *Journal of Psychiatric and Mental Health Nursing*, 19, 97–106
- Oster, C., Gerace, A., Thomson, D., & Muir-Cochrane, E. (2015). Seclusion and restraint use in adult inpatient mental health care: An Australian perspective. *Collegian*, 23(2), 183–190. doi: 10.1016/j.colegn.2015.03.006
- Paoline, E. A., & Terrill, W. (2007). Police education, experience, and the use of force. *Criminal Justice and Behavior*, 34(2), 179–196
- Read, S. J., Vanman, E. J., & Miller, L. C. (1997). Connectionism, parallel constraining satisfaction processes, and gestalt principles: (Re) introducing cognitive dynamics

- to social psychology. *Personality and Social Psychology Review, 1*(1), 26–53. doi:10.1207/s15327957pspr0101 3
- Robins, C. S., Sauvogeot, J. A., Cusack, K. J., Suffoletta-Maierle, S., & Frueh, B. C.(2005). Consumers' perceptions of negative experiences and "sanctuary harm" in psychiatric settings. *Psychiatric Services*, *56*, 1134–1138
- Scalan, J. N. (2010). Interventions to reduce the use of seclusion and restraint in inpatient psychiatric settings: What we know so far. A review of the literature.

  \*International Journal of Social Psychiatry, 56, 412–423
- Smith, G. M., Ashbridge, D. M., Davis, H., & Steinmetz, B. S. (2015). Correlation between reduction of seclusion and restraint and assaults by patients in Pennsylvania's state hospital. *Psychiatric Services*, 66(3), 303–309
- Smith, G. M., Davis, R. H., Aidan, A., Dung, T. P., & Wolfe, K. L. (2008). Psychiatric use of unscheduled medications in the Pennsylvania state hospital system: Effects of discontinuing the use of the p.r.n. orders. *Community Mental Health Journal*, 44(2), 261–27. doi:10.1007/s10597-008-9126-y
- Smith, G. M., Davis, R. H., Bixier, E. O., Hung-Mo, L., Altenor, A., Altenor, R., Hardentstine, B. D., & Kopchick, G. A. (2005). Pennsylvania state hospital system's seclusions and restraint reduction program. *Psychiatric Services*, *56*(9), 1115–1122
- Steinert, T., Lepping, P., Bernhardgrutter, R., Conca, A., Halting, T., & Janssen, W. (2010). Incidence of seclusion and restraint in psychiatric hospitals: A literature

- review and survey of international trends. *Social Psychiatric Epidemiology, 45*(8), 889–897. doi:10.1007/s00127-009-0132-3
- Stewart, D., Van der Merwe, M., Bowers, L., Simpson, A., & Jones, J. (2010). A review of interventions to reduce mechanical restraint and seclusion among adult psychiatric inpatients. *Issues in Mental Health Nursing*, *31*, 413–424. doi:10.3109/01612840903484113
- Thomas, S. D. M., Daffern, M., Martin, T., Ogloff, J. R. P., Thomson, L. D. G., & Ferguson, M. (2009). Factors associated with seclusion in statewide forensic psychiatric service in Australia over a 2-year period. *International Journal of Mental Health Nursing, 18*, 2–9. https://doi.org/10.1111/j.1447-0349.2008.00567.x
- Wu, R., Ahn, G.J., & Hu. H. (2012). "Towards HIPAA- compliant healthcare systems," in *Proceedings. of the 2<sup>nd</sup> ACM SIGHIT International Health Informatics*Symposium, 593-602
- Yudofsky, S. C., Silver J. M., Jackson W., Endicott, J., & Williams, D. (1986). The overt aggression scale for the objective rating of verbal and physical aggression.

  \*American Journal of Psychiatry, 143, 35–39.\*

  http://dx.doi.org/10.1176/ajp.143.1.35

December 6, 2019

Sally Irish Enterprise Risk Office Management 9601 Steilacoom Blvd, SW Tacoma, WA 98498

RE: Request to Release/Receive Data

Dear, Ms. Irish,

Thank you for your decision to approve the use of Washington's data in the fulfilling of my capstone project. You will recall through previous correspondence that I am a doctoral student at Walden University. For my dissertation, I have chosen to do research on *The Effectiveness of The Psychiatric Emergency Response Team at a Washington State Hospital*.

Since my last communication with your office, my university's IRB has approved this study. My approval number for your records is #12-06-19-0245797. Please accept this correspondence as my formal request for the release of data.

Please don't hesitate to contact me by phone at [redacted] or at my office at [redacted]. My university email is [redacted].

Respectfully,

Laura Schilling, MSW, MS Doctoral Candidate/Clinical Psychology Walden University

# Appendix B: Walden University Institutional Review Board Approval

From: IRB <irb@mail.waldenu.edu> Sent: Friday, December 6, 2019 9:32 AM

To: Laura Schilling < laura.schilling@waldenu.edu>

Cc: IRB <irb@mail.waldenu.edu>; Eric W. Hickey <eric.hickey2@mail.waldenu.edu>

Subject: IRB Materials Approved

Dear Ms. Schilling,

This email is to notify you that the Institutional Review Board (IRB) confirms that your study entitled, "Exploring the Effectiveness of the Psychiatric Emergency Response Team at a Washington State Hospital," meets Walden University's ethical standards. Our records indicate that the site's IRB agreed to serve as the IRB of record for this data collection. Since this study will serve as a Walden doctoral capstone, the Walden IRB will oversee your capstone data analysis and results reporting. The IRB approval number for this study is 12-06-19-0245797.

This confirmation is contingent upon your adherence to the exact procedures described in the final version of the documents that have been submitted toIRB@mail.waldenu.edu as of this date. This includes maintaining your current status with the university and the oversight relationship is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, this is suspended.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB materials, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the Documents & FAQs section of the Walden web site:http://academicguides.waldenu.edu/researchcenter/orec\_

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:

http://www.surveymonkey.com/s.aspx?sm=qHBJzkJMUx43pZegKlmdiQ 3d 3d

# Congratulations!

Bryn Saunders Research Ethics Support Specialist Office of Research Ethics and Compliance

Walden University 100 Washington Ave. S, Suite 900 Minneapolis, MN 55401

Information about the Walden University Institutional Review Board, including instructions for application, may be found at this

link: http://academicguides.waldenu.edu/researchcenter/orec

# Appendix C: Letter of Approval From Washington State Behavioral Health

# Administration's Policy Research Analysis Board

Department of Social & Health Services  Transforming lives	Behavioral Health Administration Policy	
POLICY 1.8	RESEARCH	
Effective Date: May 15, 2019	Approved by:  Sean Murphy Assistant Secretary Behavional Health Administration	
Sunset Review Date: May 2022	Approved by:  POW CWS CONTROL OF THE PROVINCE	

**Authorizing Source:** 

RCW 43.20A.050

45 CFS 46, Basic HHS Policy for Protection of Human

Research Subjects

WAC 388-04-070 Human research review guidelines

RCW 42.48, Release of Records for Research

References:

OFMHS Manual of Operations,

DSHS Policy 12.06 Research Misconduct

#### Purpose

To define the Behavioral Health Administration's (BHA) administrative process for proposing and conducting research and program evaluation projects

#### Scope

This policy applies to all Behavioral Health Administration (BHA) employees conducting research.

#### Definitions:

**BHA** Research Analysis Board (RAB): A Panel that is comprised of the DSHS Chief Medical Officer, Director of Hospital Operations, and a Quality Representative.

#### Principal Investigator:

Person who is the designated lead of the research or program evaluation project.

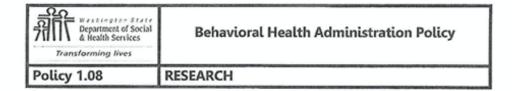
#### Research:

A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.

**BHA Policy Manual** 

Page 1 of 3

5/19



#### **Policy Requirements:**

- A. The Behavioral Health Administration (BHA) support research to analyze and improve services and standard of care for behavioral health services in the State of Washington.
- B. Research projects will protect patient/resident rights and work in conjunction with patient/resident's treatment teams. A patient/resident may refuse to participate at any time. Refusing or discontinuing participation will not impact access to care.
- C. All BHA research projects will be reviewed through a two-step process. Step one: The BHA Research Analysis Board (RAB) completes a review to determine if the Principal Investigator may submit an application to the Washington State Institutional Review Board (WSIRB).
- D. The RAB shares their decision and a short synopsis of the project with the:
  - Assistant Secretary;
  - 2. Facility CEO or Director, and
  - 3. The Principal Investigator who submitted the request.
- E. Step two: The Principle Investigator submits a proposal to the WSIRB for review and approval or denial of the project.
- F. The Principal Investigator is responsible to notify the RAB of the WSIRB approval or denial of the project.
- G. The Principal Investigator will route manuscript, presentation, or other potentially publically available document to the DSHS Chief Medical Officer and Assistant Secretary for review prior to submitting to a journal, conference proceeding, or other public dissemination.
- H. Each facility/department is required to develop procedures for research and program evaluation project processes.

#### Procedure:

Proposals for research are submitted to the DSHS Chief Medical Officer through email.

From: Waiblinger, Brian (DSHS/OOS) <bri>sprian.waiblinger@dshs.wa.gov>

Sent: Friday, October 25, 2019 9:58 AM

To: Schilling, Laura (DSHS/FSCRP) <SCHILLK@dshs.wa.gov>; Niemann, Tana (DSHS/ERMO) <niematl@dshs.wa.gov>; Irish, Sally (DSHS/ERMO) <irishsl@dshs.wa.gov>

Cc: Eric W. Hickey <eric.hickey2@mail.waldenu.edu>; Tim M. Lionetti <timothy.lionetti@mail.waldenu.edu>; Scott M.

Gfeller <scott.gfeller@mail.waldenu.edu>; Conway, Steve <steve.conway@leg.wa.gov>

Subject: RE: WSIRB Invoice Attached - Study: Exploring the Effectiveness of the Psychiatric Emergency Response Team at a Washington State Hospital

Good morning. Certainly. Once you have confirmed, we can confirm support to BHA leadership. Please let us know if you don't decide to take Dr. Zolnikov's offer.

BRIAN WAIBLINGER / CHIEF MEDICAL OFFICER / Office of the Secretary

Washington State Department of Social and Health Services

(O) 360-902-7799 / (C) 360-480-9405 / brian.waiblinger@dshs.wa.gov

Pronouns: He/Him/His

Transforming Lives

CONFIDENTIALITY NOTICE: This e-mail communication and any attachments may contain confidential and privileged information for the use of the designated recipients named above. The designated recipients are prohibited from re-disclosing this information to any other party without authorization and are required to destroy the information after its stated need has been fulfilled. If you are not the intended recipient, you are hereby notified that you have received this communication in error and that any review, disclosure, dissemination, distribution or copying of it or its contents is prohibited by federal or state law. If you have received this communication in error, please notify me immediately by telephone at 360-902-7799, and destroy all copies of this communication and any attachments.

From: Schilling, Laura (DSHS/FSCRP) < SCHILLK@dshs.wa.gov>

Sent: Friday, October 25, 2019 9:34 AM

To: Niemann, Tana (DSHS/ERMO) < niematl@dshs.wa.gov >; Irish, Sally (DSHS/ERMO) < irishsl@dshs.wa.gov >

Cc: Waiblinger, Brian (DSHS/OOS) <a href="mailto:chickey2@mail.waldenu.edu">brian.waiblinger@dshs.wa.gov</a>; Eric W. Hickey <a href="mailto:chickey2@mail.waldenu.edu">chickey2@mail.waldenu.edu</a>;

Tim M. Lionetti <<u>timothy.lionetti@mail.waldenu.edu</u>>; Scott M. Gfeller <<u>scott.gfeller@mail.waldenu.edu</u>>; Conway, Steve <<u>steve.conway@leg.wa.gov</u>>

Subject: RE: WSIRB Invoice Attached - Study: Exploring the Effectiveness of the Psychiatric Emergency Response Team at a Washington State Hospital

Good Morning,

I just wanted to touch base to see if at some point you were still interested in connecting.

Dr. Zolnikov approached me Wednesday of this week, offering up his Exempt Determination. I will have to run this by my constituents and have a phone conference scheduled for 10/30/19 seeking University approval. I have added them in my 'cc'. In the meanwhile, I would like to add that I am seeking endorsement from Senator Conway on how we can begin conversations surrounding positive outcomes for the State of Washington surrounding our findings.

I look forward to our collaboration.

Respectfully,

LAURA SCHILLING, MS, MSW, MHP, PhDc | Psychology Associate | Office of Forensic Mental Health Services

Ft. Steilacoom Competency Restoration Program | Behavioral Health Administration

Washington State Department of Social and Health Services

o: 253-761-3360 | schillk@dshs.wa.gov

Transforming Lives

CONFIDENTIALITY NOTICE: This email and/or attachments may contain information belonging to the sender and which is protected under law. The information is intended for the use of the individual or entity named above. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this email is strictly prohibited. If you have received this transmission in error, please notify me immediately.

## Appendix D: Exempt Determination Letter From Washington State Institutional Review

#### Board



# STATE OF WASHINGTON DEPARTMENT OF SOCIAL AND HEALTH SERVICES

WASHINGTON STATE INSTITUTIONAL REVIEW BOARD P.O. Box 45205 ●Olympia, Washington 98504-5205●360.902.8075●wsirb@dshs.wa.gov

March 13, 2019

Bryan Zolnikov, Psychologist Behavioral Health (DSHS) PO Box 45330 Olympia, WA 98504

Re: Exempt Determination 2019-029: Outcomes from the implementation of a

psychiatric emergency response team.

Dear Dr. Zolnikov:

Washington State Institutional Review Board (WSIRB) has reviewed your Exempt Determination Request for the activity identified above. This opinion is based on federal regulation 45 CFR 46 and associated guidance and the Washington State Agency Policy on Protection of Human Research Subjects, Chapter IV.

WSIRB has determined that the project meets the criteria delineated in 45 CFR 46.104(d)(4), because it includes secondary research for which consent is not required, and the use of identifiable private information or identifiable biospecimens that have been or will be collected for some other 'primary' or 'initial' activity. Specifically, this project analyzes retrospective records that have been collected for some other activity: seclusion, restraint, staff injury, and assault data which will come from the Quality Management (QM) department at Western State Hospital. The goal of the project is to determine whether any significant changes in incidents of seclusion, restraint, injury, and assault occurred after the implementation of a psychiatric emergency response team at WSH. The PI has regular access to this data as part of their duties, and support for the project from Ken Taylor has been documented. The PI will only record data in aggregate form and there will be no attempt to contact or re-identify subjects.

Therefore, your proposed activity does not require further review by WSIRB. Please promptly inform the WSIRB if this activity will be changed in any manner that might affect this determination.

This determination applies specifically for the above-named researcher. This determination can apply to multiple sites, but it does not apply to any institution that has an institutional policy of requiring an entity other than WSIRB (such as an internal IRB) to make exemption determinations. WSIRB cannot provide an exemption that overrides the jurisdiction of a local IRB or other institutional mechanism for determining exemptions. You are responsible for ensuring that each site to which this exemption applies can and will accept WSIRB's exemption decision.

Sincerely,

Kristin Fleischer, Ph.D. Washington State Institutional Review Board

cc: Washington State Institutional Review Board



#### STATE OF WASHINGTON DEPARTMENT OF SOCIAL AND HEALTH SERVICES

Behavioral Health Administration Office of Forensic Mental Health Services PO Box 45330, Olympia, WA 98504-5330

October 31, 2019

RE: Statement of Agreement Regarding

The purpose of this agreement is to specify the parameters of Laura Schilling's role in the study titled, "Outcomes from the implementation of a psychiatric emergency response team." This study was determined to meet exempt criteria under 45 CFR 46.104(d)(4) by the Washington State Institutional Review Board (please see accompanying letter). The following parameters are agreed upon by the Principal Investigator, Bryan Zolnikov, Ph.D., and Laura Schilling, M.S., M.S.W.:

- 1. Laura Schilling agrees to adhere to the specifications within the proposed study including analyzing retrospective de-identified data of either seclusion, restraint, injury, and/or assault generated from Western State Hospital (WSH) for no more than one year prior to and one year after implementation of the Psychiatric Emergency Response Team (PERT).
- 2. Laura Schilling agrees to adhere to all of the laws and regulations applicable to this study. The laws and regulations can be found on the Washington State Institutional Review Board's website at this address: https://www.dshs.wa.gov/ffa/human-research-review-section/laws-regulations
- Bryan Zolnikov agrees to Laura Schilling utilizing portions of data from this study. Given that this study intends to report on possible changes in the rates of seclusion, restraint, injury, and assault, there is likely to be overlap in a portion of the data that Laura Schilling plans to analyze according to her proposal titled, "Exploring the Effectiveness of the Psychiatric Emergency Response Team at the Washington State Hospital" given that her proposal plans to examine assault rates within six months pre and post-implementation of PERT at WSH. However, there are differences in the length of time and methodology of data analyses between Laura Schilling's proposal and this study.
- 4. Laura Schilling will utilize the data in agreement #3 for her study and have all rights to that data as the Principal Investigator of her study under her University's Institutional Review Board. However, the data for her study will be part of the larger data set utilized by this study.

5. There is no actual or implied authority over Laura Schilling's study by the Principal Investigator of this study, Bryan Zolnikov unless there is a breach of any agreement herein.

Bryan Zolnikov, Ph.D.

**Quality Assurance Manager** 

Láura Schilling, M.S., M.S.V

Psychology Associate

# Appendix F: DSHS Risk Class and Rates of Calendar Year 2019

# Enterprise Risk Management Office

#### DSHS Risk Classes and Rates for Calendar Year 2019:

Class Code	Class Code Description	Employer Pays Per Worker Hour	<u>Employee</u> Pays per Worker Hour
4902	State Govt: Clerical/Admin Office: Covers workers in an office environment who perform all their work there (i.e. most IT positions, fiscal analysts, office assistants and secretaries)	\$0.3289	\$0.09880
5300	State Govt: Admin Field Staff Covers workers in an office environment who must travel to perform their job duties (i.e. Administrators, auditors, DD case resource managers, JRA community counselors, Social Service Specialists)	\$0.3237	\$0.09820
5307	State Govt: NOC Covers workers not covered by another risk classification and performing "hands on" work or manual labor (i.e. mechanics, carpenters, laundry workers, custodians, grounds keeper, truck driver, cook, food service worker).	\$1.5452	\$0.28325
5307-01	State Govt: Juv Rehab Custody Covers workers at JRA institutions and community facilities (i.e. juvenile rehab residential counselor, juvenile rehab security guard and juvenile rehab program manager ONLY AT A JRA INSTITUTION OR COMMUNITY FACILITY).	\$1.5452	\$0.28325
6901	Volunteers	\$0.0616	\$0.00000
7103	State Govt: Law Enforcement Officers Covers residential rehabilitation counselors and security guards at SCC, Cascade Cottage (Maple Lane), and Ft. Stilicoom MH Restoration ONLY.	\$2.0130	\$0.33925
7200	State Govt: MH Hospital w/ SPH Covers positions providing direct patient care at STATE MENTAL HOSPITALS ONLY (i.e. mental health technicians, psychiatric child care counselors, RN's LPN's and physicians, psychiatrists and psychology associates).	\$3.7638	\$0.58145
7201	State Govt: Healthcare Employees Covers patient, resident or health care personnel not at a mental hospital (i.e. attendant counselors and managers, adult training specialists, LPNs, psychologists, dentists and hygienists).	\$3.3736	\$0.57105
7204	Preferred Workers This risk class is used when DSHS hires a preferred worker. ERMO claim staff involvement is needed to timely complete the documentation L&I requires in order to use this risk classification.	\$0.1120	\$0.05600