ADVANCED PRACTICE NURSES’ SELF-EFFICACY TO TREAT INTIMATE PARTNER VIOLENCE AS RELATED TO PROFESSIONAL, WORKPLACE AND PERSONAL FACTORS

by

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DEDICATION

Over the course of three decades, I have been in awe of the courage and nobility of the many patients and families I have had the privilege to meet. Your quest for a better life that encompasses recovery and joy is what keeps me going. It is my hope that through this present and future work I will be able to contribute to better care for you and for those who follow, and to reduce interpersonal violence in our society so that the load of those who suffer will be lighter, and that more people will find safety.
# TABLE OF CONTENTS

LIST OF FIGURES .......................................................................................................................10

LIST OF TABLES .........................................................................................................................11

ABSTRACT ...................................................................................................................................12

CHAPTER I: INTRODUCTION ........................................................................................................14

Research Questions ......................................................................................................................16

Background and Significance .....................................................................................................17
  IPV and Health-Related Outcomes .........................................................................................17
    Femicide ...............................................................................................................................17
    Immediate and long-term physical illness ..........................................................................17
    IPV-related mental illness .................................................................................................18
    Effects on children of survivors .........................................................................................19
  Screening for IPV .....................................................................................................................20
    Poor detection rates ............................................................................................................20
    Current screening for IPV .................................................................................................20

Philosophical Perspective ........................................................................................................22

Conceptual Framework ............................................................................................................22

Model of Conceptual Framework .............................................................................................23

Professional Factors ................................................................................................................24
  Educational Preparation, Knowledge, and Skills .................................................................24
  Role Expectation ..................................................................................................................25

Workplace Factors ..................................................................................................................25

Personal Factors ......................................................................................................................26
  Vicarious Trauma ..................................................................................................................26
  Resilience .............................................................................................................................27
  Self-Efficacy ..........................................................................................................................28

CHAPTER II: REVIEW OF THE LITERATURE ..............................................................................30

Professional Concerns ............................................................................................................30
  Lack of Knowledge and Preparedness ..................................................................................30
  Unclear Role Delineation ......................................................................................................31
  Improvement in IPV Nursing Education Needed ...............................................................31
  Nurses May Believe in IPV Myths .......................................................................................32
  Under-Recognition of Danger to Victim ...........................................................................33
  Education Improves Screening Practices ...........................................................................33

Workplace Factors ..................................................................................................................34
  Time Constraint/Staffing ......................................................................................................34
  Privacy and Safety for IPV Discussion ...............................................................................34
  Referral Resources ...............................................................................................................35
  Trauma-Informed Screening Cultures Needed with Clinical Pathways ............................35
TABLE OF CONTENTS – Continued

- APN Personal Factors ...............................................................................................................37
- Emotional Stress ....................................................................................................................37
- Vicarious Trauma ..................................................................................................................38
- Personal and Professional Experience with IPV .................................................................39
- Self-Care Linked to Resilience .............................................................................................40
- Summary of Literature Review .............................................................................................40

CHAPTER III: METHODS ........................................................................................................43
- Design ......................................................................................................................................43
- Sample and Setting ..................................................................................................................43
- Inclusion Criteria .....................................................................................................................44
- Exclusion Criteria ....................................................................................................................44
- Human Subjects Protection .....................................................................................................44
- Instruments .............................................................................................................................45
- Professional Factors ...............................................................................................................46
  - IPV Actual Knowledge .........................................................................................................46
  - Role Beliefs ............................................................................................................................47
  - Current (Self-Reported) Practice Behaviors ........................................................................47
- Workplace Factors ..................................................................................................................47
  - Workplace Factors in Treatment of IPV ............................................................................47
- Personal Factors .....................................................................................................................48
  - IPV Experience ....................................................................................................................48
  - Vicarious Trauma ................................................................................................................48
  - Resilience .............................................................................................................................49
  - General Self-Efficacy ............................................................................................................49
- Self-Efficacy to Treat IPV ........................................................................................................50
- Permissions and Pilot Testing .................................................................................................50
- Procedure and Sampling .........................................................................................................51
- Data Analysis ..........................................................................................................................52
- Missing Data ............................................................................................................................53

CHAPTER IV: RESULTS ........................................................................................................54
- Sample .....................................................................................................................................54
  - Sample Size and Deleted Cases ..........................................................................................54
  - Participating Organizations .................................................................................................55
  - Age .......................................................................................................................................55
  - Ethnicity ...............................................................................................................................56
  - Geographic Location .............................................................................................................56
  - Education ..............................................................................................................................56
  - Work Specialty Area .............................................................................................................57
  - Practice Community Type .................................................................................................57
# TABLE OF CONTENTS – Continued

Reliability of the Instruments ...........................................................................................................58
Self-Efficacy to Treat IPV .............................................................................................................58
IPV Knowledge ...............................................................................................................................59
Current Self-Reported Practices ......................................................................................................59
Workplace Factors ...........................................................................................................................60
Vicarious Trauma as Measured by the Secondary Traumatic Stress Scale (STSS) ..................60
Brief Resilience Scale .....................................................................................................................60
New General Self-Efficacy Scale ..................................................................................................61
Summary of Variable Correlations ...............................................................................................62

**Research Questions** ....................................................................................................................63

*Question 1.* What is the Current Status of Professional Factors of APNs (Years of Work Experience, Hours of IPV Education, IPV Actual Knowledge, Role Beliefs, and Self-Reported Practice Behaviors) Relevant to Treatment of IPV Patients? ....63
  Years of work experience. ........................................................................................................63
  Hours of IPV education. ...........................................................................................................63
  IPV actual knowledge. ..............................................................................................................64
  Role beliefs. ..............................................................................................................................64
  Self-efficacy (preparedness) to treat IPV. ................................................................................64
  Self-reported practices. .............................................................................................................64

*Question 2.* What is the Relationship Between APN Professional Factors and APNs’ Self-Efficacy to Treat IPV? ................................................................................................................67

*Question 3.* What are APNs’ Perceptions of IPV-Related Workplace Factors (Workplace Factors Overall, Screening Tools and Protocols, Institutional Support and Community Support)? ..................................................................................68

*Question 4.* What is the Relationship Between APN Perceived Workplace Factors and APNs’ Self-Efficacy to Treat IPV? ..............................................................................................................71

*Question 5.* What is the Current Status of Personal Factors of APNs (Age, Gender, Past Personal Experience of IPV [Personal or Witnessing Violence against a Family Member], Vicarious Trauma, Resilience, and Self-Efficacy) Relevant to Treatment of IPV Patients? ..........................................................................................................71
  Past personal experience of IPV. ............................................................................................72
  Resilience. ...............................................................................................................................72
  Self-efficacy. ............................................................................................................................72

*Question 6.* What is the Relationship Between Personal Factors of APNs (Age, Gender, Past Personal Experience of IPV [Personal or Witnessing Violence Against a Family Member], Vicarious Trauma, Resilience, and Self-Efficacy) and APNs’ Self-Efficacy to Treat IPV? ..................................................................................................................73

*Question 7.* What Combination of Professional, Workplace, and Personal Factors Best Explains the Variance in APNs’ Self-Efficacy to Treat IPV? .................................................................75
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS – Continued</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHAPTER V: DISCUSSION</strong> ........................................................................................................... 78</td>
</tr>
<tr>
<td>Characteristics of the Sample .................................................................................................. 78</td>
</tr>
<tr>
<td>APN Professional Factors ......................................................................................................... 80</td>
</tr>
<tr>
<td>Years of Full-Time Practice, Hours of IPV Education, Role Beliefs, IPV Knowledge, and IPV Self-Reported Practice Behaviors ............................................................................................................. 80</td>
</tr>
<tr>
<td>Years in full-time practice ................................................................................................. 80</td>
</tr>
<tr>
<td>Hours of previous IPV education ...................................................................................... 80</td>
</tr>
<tr>
<td>Role beliefs .......................................................................................................................... 80</td>
</tr>
<tr>
<td>IPV knowledge ..................................................................................................................... 80</td>
</tr>
<tr>
<td>Self-reported practices ....................................................................................................... 81</td>
</tr>
<tr>
<td>Workplace Factors .................................................................................................................... 83</td>
</tr>
<tr>
<td>Personal Factors ....................................................................................................................... 86</td>
</tr>
<tr>
<td>Predictors of Self-Efficacy to Treat IPV .................................................................................. 88</td>
</tr>
<tr>
<td>Strengths and Limitations ......................................................................................................... 89</td>
</tr>
<tr>
<td>Instruments .............................................................................................................................. 90</td>
</tr>
<tr>
<td>Implications for Nursing Practice and Research ...................................................................... 91</td>
</tr>
<tr>
<td>Conclusion ................................................................................................................................ 93</td>
</tr>
<tr>
<td><strong>APPENDIX A: IRB APPROVALS</strong> ............................................................................................ 96</td>
</tr>
<tr>
<td><strong>APPENDIX B: PERMISSIONS FOR INSTRUMENTS</strong> .............................................................. 99</td>
</tr>
<tr>
<td><strong>APPENDIX C: RECRUITMENT EMAIL</strong> .................................................................................. 103</td>
</tr>
<tr>
<td><strong>APPENDIX D: FAMILY VIOLENCE RESOURCE LIST</strong> .......................................................... 105</td>
</tr>
<tr>
<td><strong>REFERENCES</strong> ........................................................................................................................ 106</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

FIGURE 1. APN Professional, Workplace, Personal Factors and Self-Efficacy to Treat IPV....24
FIGURE 2. APNs’ Self-Efficacy to Treat IPV and Professional Factors. .................................89
LIST OF TABLES

TABLE 1.  Measurement of Study Variables. .................................................................45
TABLE 2.  Participating Organizations. ........................................................................55
TABLE 3.  APN Work Specialty Area (N = 479). ..........................................................57
TABLE 4.  Psychometrics on Scales Employed. ............................................................58
TABLE 5.  Bivariate Correlations of Main Study Variables. ..........................................62
TABLE 6.  Hours and Type of Previous IPV Education (N = 494). ..............................64
TABLE 7.  APN IPV Screening Practice Specifics (N = 491). ..........................................65
TABLE 8.  APN Screening Practices for Particular Patient Presentations. .......................65
TABLE 9.  Stepwise Regression of Self-Efficacy to Treat IPV on Professional Factors.....68
TABLE 10. Workplace Factors (WFIT). .......................................................................69
TABLE 11. Workplace Barriers Open-Ended Responses. ..............................................70
TABLE 12. APN Personal Factors. .................................................................................73
TABLE 13.  Forward Stepwise Regression of Self-Efficacy to Treat IPV on Personal Factors (N = 482). .......................................................................................................75
TABLE 14.  Forward Stepwise Regression of Self-Efficacy to Treat IPV (Years of Full-Time Practice, IPV Education, Role Beliefs, IPV Knowledge, and IPV Self-Reported Current Practice Behaviors). .................................................................76
ABSTRACT

Purposes/Aims: The purpose of this study was to determine the professional, workplace and personal factors that significantly relate to advanced practice nurses’ (APNs) self-efficacy to treat intimate partner violence (IPV).

Rationale/Conceptual Basis/Background: IPV affects one in three women in the U.S. and is the leading cause of maternal death during the prenatal and first year post-partum periods. Older women victims suffer earlier death from all causes. IPV is under diagnosed and undertreated based on large surveys of emergency departments and outpatient clinics. APNs are providing health care to large numbers of potential victims, thus they are important as diagnosticians and treating clinicians.

Methods: A national quantitative survey of APNs was performed with the aim of obtaining APNs from diverse specialties, geographic areas, and demographics within the U.S. Participants completed an electronic survey using modifications of standardized questionnaires on professional factors of hours of previous IPV education, IPV knowledge, years in practice, current practices, role belief, and self-efficacy to treat IPV. A new scale was developed to test workplace factors of screening tools and protocols, institutional, and community supports. Personal factors of age, gender, past IPV experience, vicarious trauma (VT), resilience, and general self-efficacy were tested using previously validated tools.

Results: A sample of 494 APNs was obtained. Respondents were demographically representative of U.S. practicing APN population. Findings from this study indicate that APNs’ current self-reported practice behaviors regarding IPV, total hours of IPV education, age in
years, role belief, resilience, absence of VT and IPV knowledge are the most significant contributors to APNs’ self-efficacy to treat IPV.

**Implications:** APNs with strong clinical experience with IPV, more hours of IPV education, older age, belief that it is their role to treat IPV, and greater IPV knowledge, reported the best self-efficacy to treat IPV. Educational institutions should provide more formal and ongoing education in IPV. VT in APNs who treat IPV should be further explored. Health care organizations should provide continuing IPV education and provide work environments that promote the treatment of IPV for APNs to effectively identify and engage in treatment those patients who may be victims.
CHAPTER I: INTRODUCTION

Intimate partner violence is physical, sexual, emotional or psychological abuse that causes injury and/or psychological harm and occurs among those in a current or past dating, cohabiting, or marriage relationship (Stark, 2008). IPV includes non-physical abuse such as economic deprivation, psychological control and stalking. IPV is a prevalent health problem that disproportionately affects women. Previous studies have shown that one in three women in the U.S. report current or lifetime incidence of abuse compared with 20% of men (Black et al., 2011; Dabey, Patel, & Poore, 2010; Kallivayalil, 2010; Sprague et al., 2014). The majority of abused women suffered multiple forms of abuse by an intimate partner (Black et al., 2011). Thirty-eight percent of females reported IPV based on pooled estimates across 37 U.S. studies of patients presenting for medical care in family medicine, and a 40% occurrence was reported for emergency patients (Sprague et al., 2014). When females were asked about lifetime exposure to IPV, that percentage rose to close to 60% in internal medicine, and 73% in addiction recovery specialties (Sprague et al., 2014). These statistics make IPV the most prevalent chronic disease among women.

Victims often present to obtain health care for injuries sustained from abuse, yet those who encounter victims in primary care or emergency settings may overlook the cause of their patients’ injuries. Sprague and colleagues found that screening for IPV in emergency settings occurred only 1.5 to 13% of the time, despite the fact that 44% of women who succumbed to death at the hands of their partners sought medical care for IPV-related injuries in the two years prior to their deaths (Sprague et al., 2012). Homicide was the leading cause of prenatal maternal demise, followed by suicide, in a recent review of U.S. morbidity and mortality reports.
(Palladino, Singh, Campbell, Flynn, & Gold, 2011). The most vulnerable women will often seek medical care for a variety of other reasons while not identifying themselves immediately as victims of IPV (Fanslow & Robinson, 2009). Since abused women report that abusers prevent them from obtaining medical care as one form of abuse, it is imperative that when victims do seek care for abuse that health care professionals (HCPs) identify the cause of the injury (McCloskey et al., 2007). Victims who disclose abuse state that the key factors causing them to shift toward disclosure of abuse include the escalation of danger as well as a trusting relationship with a nurse or physician (Catallo, Jack, Ciliska, & Macmillan, 2013).

Nurses, by virtue of their close proximity to patients, their multiple patient encounters, and their noted ability to develop patient trust and rapport, are often the persons who have the closest contact with IPV victims at a critical time when they are ready to accept help (Catallo et al., 2012). Contact with a nurse may be the single most important determinant in case finding for IPV. However, factors that may support or improve APNs’ ability in earlier detection and patient engagement have not been adequately addressed despite numerous studies identifying common barriers to effective IPV treatment for nurses in general (O’Malley, Kelly, & Cheng, 2013; Robinson, 2010; Sprague et al., 2012). Thus, this study focuses on professional factors, workplace factors, and personal factors of advanced practice nurses (APNs) that may influence APNs’ responses to IPV victims in the clinical setting. Unless a source specifically distinguishes between a nurse and an APN, in this paper the term nurse will be used to refer to any nurse, and the advanced practice nurse will be specified by the term APN.
Research Questions

The conceptual framework provided the context for the following research questions:

1) What is the current status of *professional factors* of APNs (hours of IPV education, years of work experience, IPV actual knowledge, role beliefs, and self-reported practice behaviors) relevant to treatment of IPV patients?

2) What is the *relationship* between APN *professional factors* and APNs’ *self-efficacy to treat IPV*?

3) What are APNs’ perceptions of IPV-related *workplace factors* (workplace factors overall, screening tools and protocols, institutional support, and community support)?

4) What is the relationship between APN perceived *workplace factors* and APNs’ *self-efficacy to treat IPV*?

5) What is the current status of *personal factors* of APNs (age, gender, past personal experience of IPV (personal or witnessing violence against a family member), vicarious trauma, resilience, and self-efficacy) relevant to treatment of IPV patients?

6) What is the relationship between *personal factors* of APNs (age, gender, past personal experience of IPV [victim or witnessing violence against a family member], vicarious trauma, resilience, and self-efficacy) and APNs’ *self-efficacy to treat IPV*?

7) What combination of professional, workplace, and personal factors best explains the variance in APNs’ *self-efficacy to treat IPV*?

The answers to these questions may help both nurse leaders and nurse educators to better prepare APNs to identify and treat IPV as well as inform the development of systems interventions to
prevent APN vicarious trauma and to promote better IPV survivor treatment engagement by APNs.

**Background and Significance**

Several factors support the significance of this area of study. These include health outcomes of IPV, problems in screening for this problem, and the lack of significant progress in improving early detection of IPV.

**IPV and Health-Related Outcomes**

IPV is associated with various and serious health-related outcomes for the victims as well as victims’ family members. Physical and mental health and well-being are affected. The outcomes of trauma from IPV are sometimes similar to and sometimes distinct from outcomes of other trauma. The following sections describe some of the major outcomes according to the latest research.

**Femicide.** Women have twice the likelihood of falling victim to murder by an intimate partner in the U.S. than do men; 75% of women who are murdered in the U.S. die at the hands of a relative (Catalano, Smith, Synder, & Rand, 2009). In 2010, 28.8% of U.S. women reported IPV victimization in the year prior compared with 9.9% of men (Black et al., 2011). Worldwide, more than 38% of female homicide victims die at the hands of an intimate partner. The highest rates of femicide by an intimate partner are in high-income countries where it is estimated at 41-48%, and Southeast Asia where it is estimated at 58-63% (Stockl et al., 2013).

**Immediate and long-term physical illness.** IPV manifests itself over a woman’s life as chronic health conditions and complaints that are often not recognized as caused by abuse at time of treatment. These conditions include low back pain, arthritis, treatment-resistant obesity, and
depression (Humphreys, Cooper, & Miakowski, 2011). Other immediate and chronic health consequences of IPV for women include greater risk of cardiac disorders, headaches, gastrointestinal disorders, seizures, back and chest pain, genitourinary and gynecological problems including pain (Campbell et al., 2002). Victims have a greater risk for chronic pain syndromes and stress-related disorders (Humphreys et al., 2011; Wuest et al., 2010). They suffer poorer perceived health and victims of psychological abuse have an increased risk of alcohol abuse (Lacey, McPherson, Samuel, Powell Sears, & Head, 2013). Women’s health issues related to IPV include lack of control over parity (Gee, Mitra, Wan, Chavkin, & Long, 2009); decreased ability to negotiate condom use (Swan & O’Connell, 2012); fetal loss (Alio, Nana, & Slihu, 2009); and sexually transmitted diseases, including HIV (Campbell, Lucea, Stockman, & Draughon, 2012; Sillito, 2012) and worse HIV outcomes (Schafer et al., 2012). Victims have increased risk of being prescribed addictive drugs (Stene, Dyb, Tverdal, Jacobsen, & Schei, 2012).

**IPV-related mental illness.** Post-traumatic-stress disorder (PTSD) and post-traumatic symptoms were related to poorer overall health and higher health care utilization in a recent meta-analytic review (Pacella, Hruska, & Delahanty, 2013). Psychological IPV was the strongest predictor of later PTSD (Pico-Alfonso, 2005). IPV is frequently present in women who develop PTSD and self-harm behaviors (Jaquier, Hellmuth, & Sullivan, 2013). IPV was more frequent in women who suffered from post-partum depression (Janssen et al., 2012). Victimization by psychological violence is highly correlated with postpartum depression independent of physical or sexual abuse (Ludemir et al., 2012). The effects of psychological victimization are under-recognized as a source of significant long-term harm. In one study ($N = 91$), women who
suffered only psychological abuse did not have decreased depressive symptoms in a three-year follow-up after leaving abuse (Blasco-Ros, Sanchez-Lorente, & Martinez, 2010). Importantly, IPV is one of the greatest risk factors for suicide among women throughout the world in both developed and undeveloped countries (Cavanaugh, Messing, Del-Colle, O’Sullivan, & Campbell, 2011; Devries et al., 2011; Ellsberg, Jansen, Heise, Watts, & Garcia-Moreno, 2008; McLaughlin, O'Carroll, & O'Connor, 2012).

Health problems that IPV survivors suffer may be constitutionally somewhat different from those of non-survivors -- medical care in and of itself can add to trauma (Soet, Brack, & DiIorio, 2003). Trauma from medical care has been described in studies in obstetrics and gynecology specifically, since certain aspects of pregnancy, pre-natal, and delivery-related examinations may themselves evoke traumatic stress responses in former or current victims (Soet et al., 2003). While there is not a large body of evidence for other medical examinations, invasive examinations of any sort may be traumatic for these same reasons (Esposito, 2006).

**Effects on children of survivors.** There are profound and lasting effects on children of women who are victims of IPV. Preschool children whose mothers were victims of chronic IPV had significantly higher odds (adjusted odds ratio of 1.66 for boys and 2.21 for girls) of obesity in a population study of 1595 children in a fragile families program (Boynton-Jarrett, Fargnoli, Suglia, Zuckerman, & Wright, 2010). Childhood witnesses of IPV (CWIPV) have worse physical health, poorer school-related functioning including more learning disabilities, difficulty with neurocognitive processing, more internalizing and externalizing behaviors, and a greater risk of later substance abuse as well as perpetration or victimization via IPV than their non-CWIPV counterparts (Holmes, 2013; Lamers-Winkelmann et al., 2012; Perkins & Graham,

Screening for IPV

Poor detection rates. While IPV is prevalent all over the world, there are less than optimal rates of IPV disclosures by patients to health care professionals (Choo et al., 2013; Fanslow & Robinson, 2010; Kelly, 2009). Many factors combine to make the diagnosis of IPV difficult even when the victim presents to medical care facilities for injuries or conditions related to their abuse (Fanslow & Robinson, 2010; Leppäkoski, Astedt-Kurki, & Paavilainen, 2010). This lack of recognition of the cause of injury and illness is troublesome and may lead to long delays in effective care, since escaping continued or escalating abuse are keys to recovery. Remaining in abusive relationships leads to worse outcomes; the duration and severity of abuse is linked to more serious morbidity from co-occurring diseases, more risky health behaviors, as well as increased risk of death from all causes (Baker et al., 2009; Bonomi, Anderson, Nemeth, Rivara, & Buettner, 2013).

Current screening for IPV. Despite calls from leading national and international health organizations for improved universal screening for those women most at risk for IPV victimization, modest, if any, improvements in screening practices in the past ten years have not resulted in improved patient outcomes (Institute of Medicine, 2011; Hegarty et al., 2013). Despite admitting that they regularly see women who may be victims, only 49% of orthopedic surgeons in one study (N =153) were willing to improve their IPV training and assessment skills, and only 8% reported written guidelines for detection or management of IPV (Della Rocca et al.,
Among over three quarters of a million female emergency room visits, IPV was coded only 0.26% of the time, a rate far lower than population estimates. This suggests that among women who sought emergency care for injuries that may have been IPV-related, IPV went undocumented; thus, it is conceivable that IPV was not recognized or treated (Choo et al., 2012).

Recently a few countries have undertaken large scale attempts to improve routine screening for IPV with mixed results. Women were randomized into IPV screened versus IPV unscreened groups with the following findings in one Australian and one U.S study: There was improvement in depressive symptoms for screened groups, but no improvement in quality of life for screened versus unscreened groups one year later (Hegarty et al., 2013; Klevens et al., 2012). Unfortunately, victims found by this screening only received a flyer with a list of IPV resources. IPV screening was found ineffective in a 2013 Cochrane review that concluded universal screening of women did not result in more referrals for care; therefore, the authors did not find evidence to recommend universal screening (Taft et al., 2013). These studies were widely criticized since none followed the victims to assure that they were engaged in effective treatment for IPV; the studies were not designed to capture treatment follow-up. Analysis of this controversy points to the fact that case-finding, and appropriate treatment engagement, not screening alone, are the most salient issues (Fanslow, 2012).

Nurses are the first licensed health care professionals that women encounter when they seek health care for routine prevention or for an illness or injury. Nurses comprise the largest group of healthcare professionals, numbering close to three million in the U.S. alone (Zenzano et al., 2011). APNs are expected to increase in numbers from an estimated 157,000 in 2012, to 244,000 by 2025 (American Association of Nurse Practitioners [AANP], 2014). With the need to
improve access to health care in the U.S., APNs will be at the forefront of bridging the care gap by providing more direct patient diagnosis and care (Auerbach, 2012; Yee, Boukus, Cross, & Samuel, 2013). Thus, APNs caring for patients must correctly diagnose victims who are suffering from IPV, guide them toward treatment resources, and continue to engage them in treatment and recovery services for abuse. It is only upon making this connection between the recognition of abuse and the successful engagement of victims in active treatment that alternative health outcomes are possible.

**Philosophical Perspective**

This study is conducted from a constructivist perspective of the world. I believe that health attainment and response to health threats occur within the context of the interplay between the environment and the individual. This paradigm takes into account the situation of an individual within a time, place, and social context and recognizes that historical, situational, personal, and extra personal forces affect the person’s response to health threats (LaBonté & Robinson, 1996). Within this paradigm, there are multiple realities with local and situation-specific truths wherein, because of a relationship between the actors, a unique reality is created. This worldview fits best with the unitary-transformative perspective that emphasizes recognition of pattern and development of personal knowledge in order to progress as humans in a complex world (Newman, 2014). Thus, persons are much more than the sum of their parts; they are constantly changing because of their interaction with their environments (Fawcett, 2009).

**Conceptual Framework**

The conceptual framework of this study provides a context for identifying, describing and relating the variables that are relevant in addressing the problem. IPV creates for the HCP a
situation of high workload and high emotional demands, both of which are predictors of emotional exhaustion, or feeling drained by work, and can lead to depersonalization, characterized by feelings of insensitivity or numbness toward patients (Jourdain & Chênevert, 2010). The conceptual framework is based upon a literature review, as well as the job-demands resources model (Laschinger, Grau, Finegan & Wilk, 2012), which posits that the work life of a helper is influenced by job demands, job resources, and personal resources that combine to either assist the individual to function well, or alternately, combine to produce burnout and lower work engagement. This model allows for a nuanced look at how workload, job control, supportive professional environments, and psychological capital may influence a nurse’s self-efficacy to treat IPV; those factors will either help or hinder (Laschinger et al., 2012). Nurses, by virtue of the emotionally demanding interactions required during patient care may experience high psychological job demands (Bakker & Demorouti, 2006).

The conceptual framework proposes three broad categories of variables to be studied as they relate to each other and to self-efficacy to treat IPV. These categories were derived from the job demands resources model and from a review of the literature with the goal to discover the processes whereby the APN is able to engage a victim in the discussion of their experience of IPV: 1) Professional Factors; 2) Workplace Factors; and 3) Personal Factors, which refer to characteristics of the nurse that facilitate work in challenging practice situations.

Model of Conceptual Framework

The model of the conceptual framework presents the key variables to be measured in the study. The model also depicts a proposed relationship between professional, work environment, and personal factors and the nurse’s self-efficacy. Thus, nurses’ emotional capacity to engage
possible IPV victims in treatment depends on the resources and other factors in their professional, workplace, and personal arenas. This model is illustrated below in Figure 1.

FIGURE 1. APN Professional, Workplace, Personal Factors and Self-Efficacy to Treat IPV.

**Professional Factors**

**Educational Preparation, Knowledge and Skills**

Nursing students, practicing nurses, and APNs have voiced feeling inadequately prepared to deal with IPV in the clinical setting (Al-Ali & Lazenbatt, 2012; G. Beccaria, L. Beccaria, Dawson, Gorman, & Harris, 2013; Beynon Gutmanis, Tutty, Wathen, & MacMillan, 2012; D’Avolio, 2011; Guillery Benzies, Mannion, & Evans, 2012; Hinderliter, Doughty, Delany, Pitula & Campbell, 2003). Areas where nurses feel inadequately prepared to treat IPV include communication skills (D’Avolio, 2011); screening skills (D’Avolio, 2011; Guillery et al., 2012; Leppäkoski, Astedt-Kurki, & Paavilainen, 2010); documentation (Owen-Smith et al., 2008); and how to refer to treatment should a victim be identified (Ritchie, Nelson, Wills, & Jones, 2009).
Nurses are also unclear about their responsibilities in mandatory reporting requirements to governmental agencies for child and adult protection (Davidov Jack, Frost, & Coben, 2012). Nurses who feel unskilled may detach from victims and pass the care along, thinking that another person will address the IPV (Beccaria et al., 2013; Tower, Rowe, & Wallis, 2012).

**Role Expectation**

Nurses sometimes believe that discussing IPV is outside of their scope of practice, they fear offending patients, and sometimes blame victims and/or endorse the same myths about IPV that are prevalent in their communities (Guillery et al., 2012; Leppäkoski et al., 2010; Rhodes et al., 2011; Robinson, 2010). These myths include the belief that the woman must have provoked the abuse; she was drinking therefore it cannot be abuse; she has a personality issue that causes abuse; abuse is not common; and, if a woman is not meek in behavior, she cannot be an abuse victim (Leppäkoski et al., 2010; Robinson, 2010).

**Workplace Factors**

Lack of clarity about workplace protocols (procedures, charting, reporting, etc.), community protocols, and readily available IPV resources are considered barriers for nurses to identify IPV (Owen-Smith et al., 2008; Ritchie et al., 2009; O’Malley et al., 2013). Lack of time, other pressing work priorities, lack of supervisor and physician support, lack of administrative support, lack of institutional tools such as screening forms, and lack of a private place to interview victims are listed as concerns (Beynon et al., 2012; Colarossi, Breibart & Bettencourt, 2010; Guillery et al., 2012). In one study, providers including APNs felt pressure to see a fixed number of patients per hour since this was an administrative mandate; thus trying to deal with IPV survivors was too time-consuming, and therefore difficult (Sprague et al., 2012).
Workplaces that acknowledge trauma-informed patient care are much more likely to provide the material and clinical support that clinicians need to offer the best care for IPV victims, and are more likely to provide ongoing education and professional support (Handran, 2013; Lee, Kelley, & Noursi, 2013).

**Personal Factors**

**Vicarious Trauma**

Nurses treating IPV victims have reported feelings of sympathy, desire to help, but also horror, emotional distress, and symptoms of secondary traumatic stress (STS) from the experience (Goldblatt, 2009; van der Wath, van Wyk, & van Rensburg, 2013). The need to reject the thought of IPV can occur due to seeing IPV from the viewpoint of abjection, or rejection of something that is completely against one’s sense of a clean and proper self (Bradbury-Jones, 2013). Unfortunately, abjection can lead to distancing from the victim as well as dismissing the victim’s needs from an ethical standpoint (Bradbury-Jones, 2012). STS happens as the nurse tries to help the traumatized person and begins to experience the same symptoms that the victim encounters; this phenomenon has been called both STS and VT (Beck, 2011). The symptoms may include increased negative arousal, intrusive thoughts or images of the patient’s traumatic experiences, difficulty sleeping, blurred boundaries between work and personal life, irritability, depression, anger, dread, and hypervigilance (Beck, 2011). VT disturbs the helper’s sense of self-identity, spirituality, world-view, and frame reference, causing the helper to feel unsuccessful, worthless, trapped, and disillusioned (Beck, 2011). While nurses report these symptoms, VT has not been thoroughly discussed as salient to the treatment and identification of IPV. Countertransference, a well-known term in psychotherapy, has been redefined in this
context to include over-identification with the patient in attempts to meet their needs, a result of which can be that the helper absorbs the trauma of the patient leading to VT (Figley, 1999).

Those who engage empathically with victims of trauma are at risk for VT (Figley, 1999).

**Resilience**

Some nurses transcend their patients’ traumatic experiences and are able to embrace their professional responsibility and overcome difficulties to advocate for IPV victims (Baird, 2013; Brykczynski, Crane, Medina, & Pedraza 2011; Reed, 2009). Nurse midwives in the United Kingdom with more education about IPV, and experience treating victims, reported confidence to help women (Baird, 2013). The same midwives recognized that leaving abuse is a process, and they voiced professional satisfaction because of their role in victim advocacy. This progression toward recovery and a positive method of dealing with obstacles via interprofessional collaborations with other community service providers, and creative solutions within their clinics, improved patient engagement and seemed key to the midwives’ positive outlook (Baird, 2013).

Resilience is a characteristic that provides protection against vulnerability despite threats to mental health and is a crucial trait for nurses to continue their daily work (Tusaie & Dyer, 2004). The mechanisms by which resilience is fostered and maintained include positive and supportive professional relationships, emotional insight, life balance, reflective practice and spirituality (Jackson, Firtko, & Edenborough, 2007). These positive factors allow nurses to be resilient in the face of workplace adversity, and may contribute to nurse work engagement and retention (Hunnibell, Reed, Quinn-Griffen, & Fitzpatrick, 2008; Jackson et al., 2007).
Self-Efficacy

Self-efficacy as an individual trait is a person’s belief in their ability to achieve certain goals and is a key factor in their personal exercise of agency (Bandura, 1989). Self-efficacy operates on the levels of motivation, affect and action (Bandura, 1989). Self-efficacy affects one’s affective processes in the struggle and stress under taxing situations, and affects one’s motivation; those with high self-efficacy believe they can achieve their goals and that their goals have worth (Bandura, 1989). Self-Efficacy to treat IPV is a key outcome variable of interest in this study, but general self-efficacy as a trait will be measured separately as a personal variable, since it is possible that an APN’s overall level of self-efficacy could affect their self-efficacy to treat IPV.

For this study the APN reported self-efficacy to treat IPV is defined as holding belief or confidence in one’s preparedness to deal with IPV when it presents in the clinical situation. APNs with previous experience treating victims are more likely to feel comfortable with addressing the issue and report positive experiences in helping women move toward recovery (Baird, 2013; Brykczynski et al., 2011). In HCPs, including nurses, experience led to more comfort in their professional role in dealing with IPV (Gutmanis, Tutty, Wathen, & MacMillan, 2007). This author proposes that other professional, workplace, and personal factors addressed above may influence self-efficacy to treat IPV.

Professional factors are five key variables: Estimated hours of previous IPV education, years of full-time practice, role beliefs, actual IPV knowledge, and current self-reported practice behaviors as a clinician who must diagnose and treat IPV.
The *workplace factors* refer to three types of resources a nurse has to work with IPV victims. The first is *screening tools and protocols* such as workplace policies mandating universal screening or expectation of screening so that APNs are aware of IPV screening as part of their job, and screening tools in the health record, or a place to document IPV. The second is *institutional support* that includes privacy to screen, time to screen, support staff such as social workers and interpreters, safety, collegial support, and supervision. The third is *community support* that includes referral resources, shelter beds, confidence in child and adult protection agencies, confidence in law enforcement, and confidence in the judicial system for support in IPV matters.

*Personal factors* refer to various demographic variables age, gender, personal experience of IPV as a victim or witnessing of violence directed at a family member, levels of secondary traumatic stress otherwise known as VT, resilience, and trait self-efficacy. Contact with IPV victims, by the nature of their illness, may create a higher risk of VT.
CHAPTER II: REVIEW OF THE LITERATURE

The APN response to IPV is full of complexity due to a multitude of factors that may remain unspoken or poorly defined in the rush of the modern APN-patient encounter. With a myriad of required visit elements, ever-constant time pressure, emphasis on the medical model of task orientation, and uneven, ill-defined, or missing policies and procedures regarding IPV in many workplaces, APNs often must sort out these complexities on their own. APNs have the added burden of their close proximity to patients and the possibility of their own harm, either by perpetrators present in the clinical setting, or via vicarious means as they witness the damage that IPV wreaks on their patients. This literature review presents past research on these various mechanisms that may influence APNs’ response to IPV.

Professional Concerns

Lack of Knowledge and Preparedness

Worldwide, the role of nurses in IPV detection and treatment needs clarification and nurses need further education and clinical practice in IPV. Needs to improve nurses’ educational preparedness to treat IPV via didactic and clinical experience are echoed in studies from multiple countries. While this list is not all inclusive, these studies come from: European countries of Sweden, Norway, and the UK (Leppäkoski et al., 2012; Sundborg, Saleh-Statin, Wandell, & Törnvist, 2012; Trevillion, Howard, Morgan, Feder, Woodall, & Rose); the United States (Colarossi, Breibart, & Betancourt, 2010; DeBoer, R. Kothari, C. Kothari, Koestner, & Rohs, 2013; O’Malley, Keely, & Cheng, 2013; Robinson, 2011); Canada (Guillery et al., 2012; Wathen et al., 2009); 3) South American countries of Ecuador and Brazil (Baig, Ryan, & Rodriguez, 2012; Baraldi, de Almeida, Perdona, Vieira, & Dos Santos, 2013; Viera, dos Santos, & Ford,
African country of Kenya (Maina, 2009); Asian countries of Malaysia, Sri Lanka, and Korea, (Columini, Mayhew, Ali, Shuib, & Watts, 2013; Guruge, 2012; Han, 2008); New Zealand (Richie, 2009), Australia (Beccaria, et al., 2013; Tower, Rowe, & Wallis, 2012); and the Middle Eastern countries of Jordan, Turkey, and Israel (Al-Ali & Lazenbatt, 2012; Aksan & Aksu, 2007; Natan, 2009). Practicing emergency department nurses in Finland report difficulty identifying IPV ‘often’ or ‘now and then’ 50% of the time (Leppäkoski et al., 2010).

Unclear Role Delineation

Nurses felt unclear about their professional role when encountering IPV; some felt they could comfort and educate victims, and refer them to further specialized treatment (Bursnell & Prosser, 2010; Goldblatt, 2009). Other studies found that some nurses and nursing students felt that IPV is someone else’s responsibility (Al-Ali & Lazenbatt, 2013; Becarria et al., 2012; Robinson, 2010; Goldblatt, 2009). Only one mixed methods study (Baird, 2013) (N = 58), one qualitative study (Brykczynski et al., 2011) (N =10), and one large quantitative study (Hinderliter et al., 2003) (N = 557), document that APNs were sure that they should intervene in IPV.

Improvement in IPV Nursing Education Needed

Calls to improve the nursing curriculum IPV content began in the mid 1990’s, and continues to this day (Hoff & Ross, 1995; Tufts, Clements & Karlowicz, 2009; Woodtli & Breslin, 2002). Nursing educators acknowledged the need to improve their expertise in IPV; 70% of APNs (N = 557) reported under four hours of formal education on IPV in the only U.S. national study of APNs over a decade ago (Hinderliter et al., 2003). Despite these calls to improve nursing education in the area of IPV, little change to the number of hours devoted to the topic in nursing education have been documented although recently there is an resurgence in
interest about nurses’ preparedness to treat IPV (Tufts et al., 2009; Fiolet, 2013; Wathen et al., 2009).

Hinderliter and colleagues (2003) found formal education in IPV was correlated with APNs’ screening practices; more education equaled more confidence to treat IPV. Low numbers of hours dedicated to IPV professional education was reported again in a more recent large-scale study of 212 Canadian HCP educational institutions that included 155 nursing schools (Wathen et al., 2009). Post graduate nursing schools in that study ($N = 19$) reported that 41% offered IPV education and 43% of those offering IPV education offered a one credit course. Among faculty teaching IPV-related content, only 43% were employed in nursing education full-time. Among undergraduate nursing schools participating in the study, 81% offered some IPV education (Wathen et al., 2009). This group found that barriers to the provision of more IPV education for nurses and physicians included multiple other priorities, lack of funding, political climate, and implied uneven access to content area experts; thus, the IPV content was taught most often as a component of other classes (Wathen et al., 2009).

**Nurses May Believe in IPV Myths**

Nursing students report endorsement of community myths surrounding IPV that include victim-blaming attitudes (Al-Ali & Lazenbatt, 2012; Becarria et al., 2012; Conner et al., 2013). Nurses endorse dismissing IPV as not present if the woman did not have significant injuries, was not meek in demeanor, or that IPV was strictly related to substance abuse and therefore not a health problem (Leppäkoski et al., 2010; Robinson, 2010). In Turkey over 60% of medical personnel, including nurses, endorsed IPV as acceptable behavior under certain circumstances,
and 100% of nurses who suffered abuse personally did not report it to the authorities (Aksan & Aksu, 2007; Selek, Vural & Cakmak, 2012).

**Under-Recognition of Danger to Victim**

When IPV was identified, 69% of patients ($N = 142$) were not given information about safety planning, a critical and immediate need expressed by victims (Morse, Lafleur, Fogarty, Mittal & Cerulli, 2012). Victims report never being asked about IPV despite serious upper body and genital injuries that required medical attention; the victims felt silently blamed for their injuries (Reisenhofer & Seibold, 2013). Half of IPV strangulation survivors who presented for health care were never asked about IPV (Joshi, Thomas & Sorenson, 2012). This low identification of high-risk victims persists despite evidence that safety planning and assessment are critical pieces of IPV screening, and recognition of danger escalation could potentially save lives (Campbell, Glass, Sharps, Laughon & Bloom, 2007).

**Education Improves Screening Practices**

In a large randomized control trial utilizing 24 intervention, and 24 control primary care practices in the UK, systematic training of HCPs on IPV resulted in a significant increase of both the identification of victims and the referral of those victims to IPV-specialized treatment resources (Feder et al., 2011). Previous IPV-specific training increased ability and confidence to identify and treat IPV in nursing students, licensed nurses, midwives, and other HCP students (Al-Ali & Lazenbatt, 2012; Conner, Nouer, Speck, Mackey, & Tipton 2013; Klingbeil, Johnson, Totka, & Doyle, 2009; Wathen et al., 2013).
Workplace Factors

Time Constraint/Staffing

Nurses report that time constraints and multiple conflicting priorities make it difficult to screen possible victims for IPV (Furniss, McCaffrey, Parnell & Rovi, 2007; Sprague et al., 2012). Clinicians identify fear of needing more time than they have to spend with a patient if they initiate the discussion of IPV, and that it would detract from their primary objective of the patient visit (Ramachandran, Covarrubias, Watson, & Decker, 2013). Interestingly, providers who were more educated and skilled in IPV assessment and treatment report fewer problems with work demands as a barrier to screen for IPV than do those who are less educated and less comfortable with the topic (Gutmanis et al., 2007; Sprague et al., 2012).

Lack of back up staffing was mentioned as a barrier to identifying and spending the time to refer victims who need more resources (Colarossi, Brietbart, & Betancourt, 2010). APNs and other HCPs cite a need for administrators to better understand the need for back up staffing when a victim is identified due to time and other resources needed to complete necessary care and referrals (Colarossi et al., 2010). HCPs fear that they will open a Pandora’s Box of concerns if they initiate an IPV discussion, and support staff is not always available to take over if a disclosure occurs (Spangaro et al., 2011).

Privacy and Safety for IPV Discussion

Lack of a private space to interview patients away from family members, the public and possible perpetrators is a frequently noted concern for nurses (Baird, 2013; DeBoer et al., 2013; Furniss et al., 2007; Guillery et al., 2012; Richie et al., 2009). Unfortunately, due to lack of space in patient care areas, frequent use of only curtains to divide patients from each other, and
practices that encourage family participation in care, the large presence of family members in the care setting affords little space for private conversation. Some have suggested that nurses must create space by firmly taking patients to a private area under the guise of vital signs, tests, etc., and to cue patients privately, such as in the women’s rest room with notes and signs, that they should alert the care provider if they need to have a private discussion (Baird, 2013). Clinicians who receive a disclosure of IPV greatly fear for their patient’s safety especially if it is afterhours or on the weekend when few support services are available (D’Avolio, 2011). Nurses fear reprisal from victims’ partners as a barrier to screening (Guillery et al., 2012).

Referral Resources

The availability of onsite resources for immediate referral were identified as important to both improve clinician confidence to deal with disclosures and to improve screening rates and patient engagement (Kirst et al., 2012; O’Campo et al., 2011). The presence of an advocate on the premises was shown to be more effective in reducing IPV and depression in victims over a 24-month period than giving them a written referral card alone (Coker et al., 2010). These onsite personnel provide immediate counseling and referral to outside agencies where comprehensive services are available; the smooth and immediate transition in care is important (O’Campo et al., 2011). Survivors support screening when it is done in a respectful manner and urgent “warm” referrals to care are provided (Lee et al., 2013). A 2013 Cochrane review of IPV screening found that while there is no detriment to screening, the benefit of referral to outside IPV treatment rarely occurs after screening (Taft et al., 2013). Lack of continuous all hours IPV-specific support services to ensure patient safety concerns clinicians (D’Avolio, 2011).
Trauma-Informed Screening Cultures Needed with Clinical Pathways

Organizational culture is also important since a culture that supports and normalizes routine screening improves IPV screening and treatment (O’Campo et al., 2011). Administrative mandates for IPV screening improve disclosures of abuse: 39% of the women who were screened by mandate admitted to IPV victimization in the past year in a large Veteran’s Administration study ($N = 369$) (Iverson et al., 2013). An electronic screening form for documentation was available for use in the medical record in that study (Iverson et al., 2013). Others have also found that administrative directives aimed specifically at improving the identification of IPV on a clinic-wide basis were successful in increasing the discussion of IPV from below 20% of the time to above 70% of the time (Humphreys, Tsoh, Kohn, & Gerbert, 2012). The need for champions in the clinical setting both to rally the staff and to work on policy implementation are recognized as key factors in improving clinician practices in busy clinic settings where high risk patients are seen (Sprague et al., 2013). Health care systems that incorporate a mindset of sensitivity to patients’ traumatic experiences generally provide a more welcoming environment where victims are able to disclose their abuse with safety; that same mindset prevents the infliction of further trauma by the medical system of care (U.S. Department of Health & Human Services [USHHS], 2013).

Electronic support systems such as the availability of electronic screening kiosks in emergency departments or clinics increase IPV disclosures from victims, thus opening the door for clinician discussions with patients (Scribano, Stevens, Marshall, Gleason & Kelleher, 2011; Trautman, McCarthy, Miller, , Campbell & Kelen, 2007). Cuing of clinicians in the medical record also increases screening for IPV (Sprague et al., 2013). Systems must be proactive in
recognition of patterns of health care utilization that are indicative of IPV. Kaiser Permanente demonstrated the use of a predictive model via patient diagnoses and patient contacts with the call center to predict IPV (Bhargava et al., 2011).

While these examples are promising, there is no large-scale implementation of these methods and very slow progress among health care organizations to adopt these measures (Lee et al., 2013). Reinforcement of IPV screening in trauma services only happens in trauma settings if there are specific quality improvement indicators and mandates requiring performance improvement in this area (Sims et al., 2011). In a large study of 570 patients wherein the patient reported IPV, 13% of the time no clinical response such as referral or other intervention was documented (Sutherland, Fontenot, & Fantasia, 2014). Thus there is a need for standardized documentation tools in the electronic health record, as well as safety assessment with care algorithms built into electronic health records, such as exist for other chronic health conditions, that can cue a HCPs toward appropriate intervention and documentation.

**APN Personal Factors**

**Emotional Stress**

Working with those affected by trauma is difficult and causes stress for the HCP. Nurses and primary care providers in Canada conceptualized discussion of IPV with patients as a ‘journey to a different place,’ that had unknown consequences, and required self-awareness and putting aside of their own emotions in order to focus on their patients (Williston & Lafreniere, 2013). Nurses become aware of their want to cure the abuse, but recognize that this is not possible, as IPV is often a chronic illness with a trajectory that is not within their control (Baird,
Thus, letting go of the outcome of a disclosure is an important part of remaining emotionally healthy while caring for IPV victims.

Sources of nurse stress when dealing with IPV can be due to nurses’ relatively low status in health care organization hierarchies, their limited ability to change policies, and limited power to access resources for their patients (Natan, 2010). All of these factors may combine to produce higher stress in nurses. Some states have mandatory reporting laws wherein women victims of IPV are investigated for child abuse, whether or not there is a suspicion of child abuse. Losing their children to child protection agencies (CPS) is reported as the greatest fear of victims and is a reason for non-disclosure of abuse either past or present (Alaggia, Regehr & Denny, 2012; Davidov, Jack, Frost, & Coben, 2012; Hyman, Forte, DuMont, Romans & Cohen, 2009; Lee et al., 2013). Loss of child custody due to IPV victimization is considered by many victims’ advocates as a secondary traumatization that the system inflicts upon victims who can, and do, lose custody to the perpetrator of their abuse (Bemiller, 2008).

Currently IPV experts feel that victims should be able to direct whether or not to inform law enforcement of their abuse since they are usually better able to assess their danger risk and the outcomes of reports to outside agencies (Lee et al., 2013). The exception to this is when children are at imminent risk. Thus nurses may be distressed by the moral dilemma they face in whether or not to press for an IPV disclosure when they suspect abuse is present due to fear of reporting abuse and then having children, who are not endangered, become separated from their mothers without enough cause. Conversely, nurses do not want to allow children to be placed in potential danger by not reporting suspected abuse that could escalate in seriousness.
Vicarious Trauma

Nurses report symptoms of vicarious trauma (VT) because of working with IPV victims (Goldblatt 2009; van der Wath et al., 2013). Boscarino and colleagues (2011) define VT as suffering from the same symptoms that are listed in the Diagnostic and Statistical Manual of Mental Disorders under post-traumatic stress disorder (American Psychiatric Association [APA], 2013). The symptoms include re-experiencing of the survivor’s traumatic events including flashbacks, sleep disturbance and nightmares, painful emotions, intrusive thoughts, increased arousal, anger, irritability, reckless or self-destructive behaviors, difficulty concentrating, feelings of vulnerability, avoidance, negative cognitions, and persistent negative beliefs and emotions that can lead to inability to feel positive emotions (APA, 2013). VT is a result of engagement with victims in an empathic way, and can be a ripe place for transference and countertransference to occur since the helper frequently has a history of personal trauma, which can increase their susceptibility to VT (Boscarino et al., 2011). Thus, VT is a potential occupational hazard of nursing since nurses are often closer to their patients than many other HCPs and often have a history of witnessing trauma due to the nature of nursing work. The risk of VT is greater if the victim is similar to the family of the caregiver (Gates, 2008). Since many APNs are parents, wives, husbands, sisters, brothers, sons, and daughters themselves, IPV strikes close to home.

Personal and Professional Experience with IPV

Nurses and nursing personnel experience the same incidence of personal exposure to IPV as the general population (Bracken, Messing, Campbell, La Flair & Kub, 2010). Personal
exposure to IPV via respondent, friend, or relative’s experience increased nurse (not APN) preparedness to deal with IPV, as did years of experience as a nurse (Gutmanis et al., 2007).

**Self-Care Linked To Resilience**

Critical skills necessary for HCPs to treat victims are self-care and recovery skills (Lawson & Myers, 2011). These skills include detachment from work when not on duty, and recuperating from job-related stress (Sonnetag, Binnewies & Mojza, 2010). Workers in high demand jobs who demonstrate a level of psychological detachment were able to avoid emotional exhaustion better than workers who had less psychological detachment (Sonnetag et al., 2010). Over time, the same study showed that workers with less psychological detachment and high job demands were more prone to psychosomatic complaints and lower work engagement. Nurses who perceive good social support were also less likely to feel burdened by caregiving (Sonnetag et al., 2010).

Good self-care behaviors such as spiritual beliefs, physical activities, formal relaxation activities, peer support groups, spending time with friends, taking vacations, spending time with partner/family, and maintaining a balance between personal and professional life are among those behaviors that are linked to staying well despite high demands in one’s career (Lawson & Myers, 2011).

**Summary of Literature Review**

The above studies point to the critical importance of APNs’ competencies in the identification and treatment of IPV. We must reduce under-diagnosis of the condition by all HCPs, but specifically by APNs. APNs are on the forefront of American health care due to sheer numbers, and their position in serving the most underserved patients (AANP, 2014). There is a
need to improve nursing educational interventions at the undergraduate, postgraduate, graduate, and continuing educational levels, and to document change within educational curricula. There is no argument that all nurses must become better educated and skilled at engaging patients who may suffer from present or past IPV, in order to better understand the effects of violence upon their immediate and long term health. IPV is related to a multitude of acute and chronic health conditions that can affect a survivor’s health, well-being, and survival, as well as the wellness of their children throughout their life trajectory. Thus, the knowledge of past or present IPV can inform anticipatory guidance approaches to patients who have the potential for re-traumatization by standard medical care.

The effects of violence on patients and their health care have not been fully studied. The education of nurses about IPV, and the development of trauma-informed health care systems have lagged behind evidence in the field. Systems issues are one of the greatest impediments to improvement in IPV nursing education and knowledge implementation. The effect of dealing with IPV survivors upon APNs particularly has not been described on a large scale, and multispecialty APN voices on of the effects of IPV on themselves have not been explored as the previous studies of APNs and IPV have primarily been done within women’s health and primary care specialties.

APNs are in a position of potential leadership and influence in moving the trauma-informed care agenda forward. There have been no large population studies of APNs’ specific response to IPV since 2003. There have been no quantitative studies of APNs, specifically targeting their workplace barriers to treating IPV. Additionally, thus far there is no published quantitative study of APNs’ level of VT when addressing IPV, which, this author hypothesizes,
may affect their ability to engage in the treatment of IPV victims. It is likely that APNs who are uncertain of their role, and suffer from untreated VT themselves, will be less able to assume their important role in the identification and engagement of IPV victims.

Thus, it is the purpose of this study to elucidate APNs’ knowledge, beliefs, attitudes, self-efficacy to treat IPV, self-reported practices, personal factors such as VT, and workplace/practice supports and barriers regarding IPV. Parsing out the parts of APNs’ complex practice needs that may influence their response to IPV may help inform nursing education, systems management, and nursing quality of care agendas moving forward. Awareness is the beginning of change.
CHAPTER III: METHODS

The purpose of this study is to describe professional, workplace, and personal factors that shape APNs’ response to IPV, and to describe the relationships among these factors, particularly how they relate to APNs’ self-efficacy to treat IPV. Seven research questions were identified for study (see Chapter 1), to be addressed with the methods outlined in this chapter.

Design

The design of this study is a descriptive, correlational study of currently licensed APNs and midwives. An electronic survey will be used to provide for ease of access and an easier dissemination to potential participants. Three sets of factors will be measured as they may relate to APN response to IPV victims in practice: Professional, Workplace, and Personal Factors.

Sample and Setting

The survey will be distributed to potential participants using email list serves from several APN and midwifery professional organizations in various specialties including but not limited to psychiatry, family practice, pain management, emergency medicine, and women’s health. National nursing advanced practice organizations will be asked if the survey can be distributed to their membership. The plan is to obtain a representative sample of various APN practice settings where survivors may be encountered. Using an online sample size calculator, with a 95% confidence interval, a minimum sample size of 383 participants is needed (http://www.surveysystem.com/sscalc.htm). There are no relevant comparable statistics to quantify the study variables, since Hinderliter and colleagues’ study in 2003; in that study they received responses from 557 nurse practitioners using a postal survey, thus a sample size of 383 is realistic given the ease of dissemination via email.
Inclusion Criteria

Inclusion criteria will include; current practice as an APN or nurse midwife in any U.S. state or territory as a direct care provider or clinical teacher of APNs or midwives who are connected to practice; a master’s degree or higher educational level; reading and writing English; basic computer skills; and access to the Internet since this is an online survey.

Exclusion Criteria

Exclusion criteria will include present ongoing treatment for a serious mental illness (major depression, bipolar disorder, panic disorder, PTSD) that has not been in remission for at least six months. Other exclusion criteria are diagnosis of psychotic disorders and current legal proceedings as a victim of personal IPV. These exclusions are to reduce the probability of producing traumatic stress reactions or a mental health crisis by participation.

Human Subjects Protection

This study will undergo review for approval by the Internal Review Board of the University of Arizona. Approval documents and Human Subjects materials will be placed in Appendix A. The study should be in the expedited review category that poses minimal risks to participants per federal guidelines (USHSS, 2009). However, due to the sensitive nature of the subject of IPV, and the fact that APN participants will be queried as to their past exposure to IPV, there is a possibility that this could trigger traumatic stress responses in the participants. Thus, exclusion of those with active mental illness that is not in remission will reduce this chance. Second, a list of national resources (Appendix D) will be made available to participants of mental health and domestic violence community resources should a need arise for emotional support or counseling that is triggered by their participation in completing the questionnaire. This
list contains both urgent and longer-term resources and instructions on how to get immediate help.

**Instruments**

The measures of the variables in this study include some standardized instruments, one new instrument, and one that was formulated by the investigator from items from an existing survey because there was no standardized instrument available to measure the study variables as proposed. As appropriate, analysis of the psychometric properties of all measures will be done.

The table below lists the variables and instruments.

**TABLE 1. Measurement of Study Variables.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Instrument</th>
<th>Question Numbers</th>
<th>Scoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td>KEEPSA-IPV*</td>
<td>Age, gender</td>
<td>Fill-in the blank, M/F</td>
</tr>
<tr>
<td>APN Knowledge</td>
<td>KEEPSA-IPV*</td>
<td>15 total</td>
<td>T/F, multiple choice and Likert 1-5</td>
</tr>
<tr>
<td>APN Role Beliefs</td>
<td>KEEPSA-IPV*</td>
<td>One question</td>
<td>Likert 1-5</td>
</tr>
<tr>
<td>APN Self-Reported Practice Behaviors</td>
<td>KEEPSA-IPV*</td>
<td>19-questions</td>
<td>Likert 1-5</td>
</tr>
<tr>
<td>Self-Efficacy to Treat IPV</td>
<td>KEEPSA-IPV*</td>
<td>11 questions</td>
<td>Multiple choice</td>
</tr>
<tr>
<td>Work Factors in Treatment of IPV</td>
<td>WFIT new scale</td>
<td>15 questions-new</td>
<td>Likert 1-5, one fill in the blank</td>
</tr>
<tr>
<td>Personal IPV Experience</td>
<td>KEEPSA-IPV*</td>
<td>Two questions, personal and family</td>
<td>Y/N</td>
</tr>
<tr>
<td>Vicarious Trauma</td>
<td>Secondary Traumatic Stress Scale&lt;sup&gt;1&lt;/sup&gt;</td>
<td>17 questions-3 subscales for avoidance, intrusion &amp; arousal</td>
<td>Likert 1-5</td>
</tr>
<tr>
<td>Resilience</td>
<td>Brief Resilience Scale&lt;sup&gt;2&lt;/sup&gt;</td>
<td>6 questions</td>
<td>Likert 1-5</td>
</tr>
<tr>
<td>General Self-Efficacy</td>
<td>New General Self-Efficacy Scale&lt;sup&gt;3&lt;/sup&gt;</td>
<td>8 questions</td>
<td>Likert 1-5</td>
</tr>
</tbody>
</table>

<sup>1</sup>Bride et al., 2004; <sup>2</sup>Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008; <sup>3</sup>Chen, Gully, & Eden, 2001, *Modified from PREMIS (Short, Suprenant, & Harris, 2006) and PREMIS-R (Conner, Nour, Mackey, Tipton, & Lloyd, 2011)
**Professional Factors**

Professional factors will be measured using an instrument called *Knowledge, Experience, Efficacy, Personal Factors, and Self-Reported Practices of APNs in IPV (KEEPSA-IPV)* which contains scales to measure IPV knowledge and educational preparation, experience in terms of years of nursing experience as an APN, hours of previous IPV education, and role expectations. Some of the subscales on the *KEEPSA-IPV* have not been tested for reliability and validity, but this will be examined in this study. The *KEEPSA-IPV* survey as it was adapted from *PREMIS* (2006) and *PREMIS-R* (2011) attempts to reduce redundancy and test burden and remove outdated language from earlier tools from which it was adapted.

**IPV Actual Knowledge**

IPV knowledge will be measured by a subscale consisting of 15 questions. It is a new subscale that will be tested for reliability and validity as part of this study. Six of the knowledge questions were previously validated in *PREMIS* (Short et al., 2006), and nine updated questions written by this author are included after complaints that some of the former *PREMIS* questions used outdated language (Conner et al., 2011). The updated knowledge questions more accurately reflect the state of knowledge in IPV as reported by leading experts in a recent National Institutes of Health State of Research in IPV conference (Lee et al., 2013), as well as review of the literature conducted by this and another author (McCall & Carrington, 2014). The new questions ask about known risk factors for IPV, health outcomes of IPV in addition to injury, two mental health questions, one question related to children of abused mothers, and one question about demographics by ethnicity of abused women. This new knowledge scale will be reviewed by two women’s health APNs for face validity.
Role Beliefs

APNs role beliefs regarding IPV will be measured by one question on the KEEPSA-IPV that asks how strongly the APN believes that it is their job to identify and treat IPV when it occurs.

Current (Self-Reported) Practice Behaviors

Self-reported practice behaviors will be measured by 19 items asking about present practices when treating IPV. This slightly modified subscale of the PREMIS (Short et al., 2006) seeks to capture how clinicians behave in the clinical setting when confronting IPV, thus questions center around screening, documentation, education, referral, and safety planning behaviors. It also captures whether or not there are educational materials available for patients in their workplaces. The items in this scale are slightly adapted from the original PREMIS to separate compound questions into simpler questions but not changing content substantively. One choice that was removed was “I am not currently in practice” since non-practice will be an exclusion criteria for this study. The current practice scale asks things such as numbers of victims identified, types of actions offered such as referrals, safety plans, other referrals and educational resources such as mental health law enforcement.

Workplace Factors

Workplace Factors in Treatment of IPV

APNs’ perceived barriers and supports as well as specific professional needs regarding IPV will be measured using the author created tool called Workplace Factors in Treatment of IPV (WFIT). This tool was author constructed using an integrative review of the literature (McCall & Carrington, 2014). The tool was reviewed and pilot tested on a group of 6 RNs with
advanced degrees, most of whom were APNs, to test for face validity and ease of use. This tool has 15 questions on a 1-4 Likert scale. Secondly, it contains one open-ended question asking the respondent to list any other barriers they experience when attempting to treat IPV.

**Personal Factors**

**IPV Experience**

IPV experience will be measured by self-report of personal IPV experience or witnessing violence against a family member (from *PREMIS-R*, Conner et al., 2011), and the respondent’s opinion as to whether or not this experience alters their work with possible survivors of IPV (new questions contained in the *KEEPSA-IPV*).

**Vicarious Trauma**

The APNs’ experience of VT will be assessed using a validated tool called the *Secondary Traumatic Stress Scale (STSS)* (Bride et al., 2004). There are 17 items scored on a Likert 1-5 scale with a minimum score of 17 and a maximum score of 85. For VT, a cut-off of 38 was suggested to indicate the presence of VT (Bride, 2007); those scoring above 38 are deemed to have symptoms of STS or VT. While the *STSS* was developed initially for use with therapists or social workers, it should be applicable to APNs as well since they hear patient accounts of trauma as often, and may witness patient injuries. Secondarily the author of the *STSS* reported to this writer that there are numerous studies ongoing and articles in press that have recently used the scale with some success (personal communication 3/31/14). This scale will be scored with dichotomous response of yes no for VT. Thus, a score of 38 and above will be considered positive for VT.
**Resilience**

A measure of the APNs’ resilience will be assessed using the *Brief Resilience Scale* *(BRS)* (Smith et al., 2008). This six-question scale using a 5-point Likert scale has been used to measure the ability to bounce back from stress, a factor that is important for all HCPs in high stress jobs. Scores range from 6-30 on a 5-point Likert scale. This tool was reviewed against other measures of resilience and was among the top three scales for psychometric quality. Smith reported correlations for the *BRS* with the *Conner-Davidson Resiliency Scale*, of .59 and with the *Ego Resiliency Scale* of .51. With four different samples, the *BRS* performed well with Cronbach’s alphas of .75. The test-retest reproducibility of the scale was .69 in one sample (*N* = 48) and 0.62 in another (*N* = 61) (Windle, Bennett, & Noyes, 2011). This scale was deemed to focus on personal agency, an item that seems important for APNs encountering IPV and could be related to their willingness to engage with IPV victims and/or their personal vulnerability to VT (Windle et al., 2011). This author has received permission to use the *BRS*.

**General Self-Efficacy**

General self-efficacy is a trait characteristic that will be measured using the *New General Self-Efficacy Scale* *(NGSE)*. The *NGSE* has eight questions on a Likert scale of 1-5 (Chen et al., 2001). The *NGSE* has been previously validated with non-clinical populations of college students and managers (Scherbaum, Cohen-Charash, & Kern, 2006) and showed utility in one study of pediatric medical residents (Dandavino, Young, Gosselin, Snell, & Bhanji, 2013). This author has received permission to use *NGSES*. 
Self-Efficacy to Treat IPV

Self-efficacy to treat IPV will be measured by KEEPSA-IPV preparedness subscale. This subscale contains 11 questions about the practitioner’s self-efficacy, or confidence in their own ability to treat IPV in multiple areas. These areas include interviewing victims; responding to disclosures; recognizing symptoms based on history and physical; conducting a safety assessment for victims and their children; helping victims to create a safety plan; documentation of IPV in the chart; making referrals; and fulfilling of state mandated reporting requirements. Ten of the eleven questions were validated with physicians, nurses and health care professional students in the original and revised PREMIS from a subscale called Preparation (Short et al., 2006; Conner et al., 2011). One question about personal emotional self-regulation confidence was added to this new questionnaire subscale. As a whole, the PREMIS tool has been validated numerous times in the U.S. and Europe in both original and modified formats (Conner et al., 2013, Ramsay et al., 2012; Short et al., 2006). Recently PREMIS was validated in a sample of Greek physicians and medical residents in a culturally adapted form (Papadakaki, Prokopiadou, Petridou, Kogenvinas, & Lionis, 2012). In their test of the Preparation scale there was an average score of 68% across the 11 items with high internal consistency $\alpha = .932$ (Papadakaki et al., 2012 & 2013).

Permissions and Pilot Testing

The researcher has obtained all permissions for use of copyrighted measurement instruments (Appendix B). The researcher will put all tools used in the survey into Qualtrics survey software. The instrument will be pilot tested on a small sample of 4-6 nurses with advanced degrees who will not participate in the study. They will be reviewing the tool for ease
of use, test burden, and workability on the web link. Once the survey tool is determined to be acceptable, an email will be sent to the potential participants via professional organization list serves and message boards inviting eligible participants to complete the survey with a link to the survey embedded in the email.

**Procedure and Sampling**

The author’s personal professional contacts with APNs as well as other national advanced practice nursing organizations will be utilized to access the eligible pool of participants via their email list serves, and participants will also be asked to forward the link to colleagues who may be interested in completing the survey. Thus, snowball sampling will be employed, and well as convenience sampling until a nationally representative sample is obtained (Trochim, 2008). Should there be an overwhelming number of responses; participants will be randomly selected from that pool of responses.

Qualtrics survey software used has the ability for the researcher to delete the IP addresses of participants from the data file, which will be done as soon as data collection is complete, so that personal identifying information of each participant will be protected. Demographic information will not reveal personally identifiable information. As with most online surveys, subjects will be advised that clicking on the link to the survey will constitute consent to participate, and acknowledgement that they are aware of exclusion and inclusion criteria, and assume the minimal risks of participation.

No compensation will be offered for participation. However, if participants choose to give their contact information consisting of their name and email address, they may enter a lottery to win a gift certificate to Amazon.com totaling three winners of $100 each. The contact
information questions are on a separate web page to which the lottery participant is redirected so that contact information cannot be linked to individual survey responses. There is a statement on the disclaimer/consent page stating that the benefits to participants are primarily informational as participation may help the participant to clarify their professional role. The survey should not create excessive test burden to participants; it should take less than 30 minutes to complete.

**Data Analysis**

SPSS Version 22 will be used for data analysis with add-on software as dictated by the data. Data will be directly imported from Qualtrics software, as that survey tool is set up to directly import data into SPSS. Descriptive statistics will be computed for scores on the instruments and to describe the sample characteristics of age, gender, practice specialty, total number of hours of IPV training, years in clinical practice, highest degree earned, ethnicity, present geographic location, practice community type, and personal experience with IPV either as a victim or as a witness to family violence. The Kolmogorov-Smirnov test, will be used to test for normal distribution of the data. If the data is not normally distributed, a log transformation of the data will be used.

Psychometric tests (reliability, validity) of the instruments will be done as appropriate. A factor analysis may performed on this adapted version of the PREMIS, the KEEPSA-IPV, tool duplicating procedures used to validate the original tool, and one later adaptation done to improve cultural relevance (Short et al., 2006; Papadakaki, 2012).

For the research questions, Pearson correlations (and any needed non-parametric statistics) and stepwise regression techniques (with variables that have significant bivariate correlations) will be used to examine relationships between specific variables listed in the
research questions, and then to determine what combination of factors best explains the variance in the APNs’ self-efficacy to treat IPV. The level of significance ($p$) of all statistical tests is equal to or less than .05.

**Missing Data**

Missing data will be handled by SPSS standard procedures (IBM, 2011). All available data will be analyzed. The default settings will be used for missing data for correlations, which is a pairwise deletion. Should enough subjects be obtained, and there are individual cases with substantial missing data, particularly in the self-reported practice subscale, those cases will be deleted outright since those who do not answer current practice questions and workplace factors questions may not be in current practice, which was an inclusion criterion.
CHAPTER IV: RESULTS

This chapter will include the results of the survey including a description of the sample: demographics of age, ethnicity, geography, practice specialty, years in practice. Next, the respondents’ professional factors of previous IPV education, years in practice, IPV knowledge, IPV role beliefs, and self-reported practice behaviors relevant to the treatment of IPV will be described. Next, the psychometric tests on the instruments used will be presented. Following will be the APNs’ perceptions of the IPV-workplace factors that affect their ability to treat IPV as well as their scores on tests of vicarious trauma, resilience and self-efficacy. Last, the results of stepwise regression analysis on the factors most likely to affect APNs’ self-efficacy to treat IPV will be described as organized by the seven research questions stated in Chapter III.

Sample

Sample Size and Deleted Cases

Advanced practice nurses ($N = 523$) completed the survey. Each case was examined to see if the practice questions were answered; if those were blank, the respondent was deemed to not be in active practice, and the case was deleted. After deleting cases with substantial missing data (e.g., current practice or workplace factors), the final sample was 494 APNs, with 28 males (5.7%) and 466 females (94.3%). Fifteen respondents left the question about their highest level of education blank, presumably because their degree was not listed; however, if they did not answer the practice questions, their response was deleted from the final sample to eliminate the possibility of non-APNs answering the questionnaire. Thus, a final sample size wherein most of the questions were answered was 494.
Participating Organizations

Nursing organizations, which were either exclusive to advanced practice or had advanced practice nurses as members, participated in the survey \((N = 20)\), including a mix of local, regional, and national chapters of organizations listed. Additionally, individual colleagues and other APNs were invited and likely participated in the survey including those from University of New Mexico, Texas Christian University, United Nurse Practitioners of Washington, Vanderbilt University, the National Black Nurses Association, and the University of Nevada Las Vegas, among others. See Table 2 for a list of the organizations that formally accepted the invitation to participate as a group.

**TABLE 2. Participating Organizations.**

<table>
<thead>
<tr>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Association of Occupational Health Services</td>
</tr>
<tr>
<td>Alaska Nurse Practitioners Association</td>
</tr>
<tr>
<td>American Psychiatric Nurses Association</td>
</tr>
<tr>
<td>Asian American Pacific Islander Nurses Association</td>
</tr>
<tr>
<td>Colorado Society of Advanced Practice Nurses</td>
</tr>
<tr>
<td>Gerontological Advanced Practice Nurses Association</td>
</tr>
<tr>
<td>Low Country Advanced Practices Nurses Association</td>
</tr>
<tr>
<td>Kansas Advanced Practice Registered Nurse Task Force</td>
</tr>
<tr>
<td>Metrolina Association of Nurse Practitioners (North Carolina)</td>
</tr>
<tr>
<td>Mississippi Advanced Practice Council</td>
</tr>
<tr>
<td>National Association of Hispanic Nurses (multiple branches nationally)</td>
</tr>
<tr>
<td>National Association of Nurse Practitioners in Women’s Health</td>
</tr>
<tr>
<td>Nurse Practitioners of New York</td>
</tr>
<tr>
<td>Polk County Advanced Practice Nurses Association (Florida)</td>
</tr>
<tr>
<td>Southern Arizona Advanced Practice Nurse/Nurse Practitioner Society</td>
</tr>
<tr>
<td>Southern Colorado Advanced Practice Nurses Association</td>
</tr>
<tr>
<td>Utah Nurse Practitioners</td>
</tr>
<tr>
<td>Valley Advanced Practice Nurses Association (Rio Grande Valley, TX)</td>
</tr>
</tbody>
</table>

Age

Respondent age range was 24-71 years; the vast majority of respondents were between the ages of 27 and 67. The mean age was 50.48 \((SD = 10.98)\), the mode was 57. Based on the
Health Resources and Services Administration (HRSA) 2012 survey published in 2014, this is in line with the estimates for the average age of practicing APNs in the U.S.

**Ethnicity**

The ethnic makeup of the sample was: White, non-Hispanic 89.6%; Hispanic or Latino 3.4%; Black or identifying as African American or Afro Caribbean 2.5%; American Indian or Alaska Native 0.5%; Asian 2.1%; Native Hawaiian or Pacific Islander 0.5%; Mixed race or other 1.4%. Only two respondents did not answer this question, \( n = 492 \). Again, based on the data known, this seems representative of the U.S. APN population (HRSA, 2014).

**Geographic Location**

The sample was geographically distributed fairly evenly across the United States. Eighteen percent of respondents came from the Northeast and North Atlantic states, 22.2% were from the Midwest, 29.4% were from the South, 25% were from the West, and 0.7% were from the U.S. territories. Practice community location was as follows: urban 41.9%; suburban 38.8%; rural 18.2%; very rural or remote 1.1%. One respondent failed to answer this question, thus \( n = 493 \).

**Education**

By far the largest group responding were those with master’s degrees in nursing at 80.2%, with various doctoral degrees occurring in descending frequencies, DNP (11.9%), PhD (6.1%), DNSc (0.8%), EdD (0.6%) and other doctorate (0.4%); \( n = 479 \), missing responses 2.6%. In 2012, nationally, 86% of NPs held a master’s degree, 5% held a doctoral degree, and 3% held a graduate degree in a non-nursing field (HRSA, 2012). This sample while close to the national demographics had a few more APNs with doctoral degrees.
**Work Specialty Area**

The greatest numbers of respondents were from the practice specialty of women’s health, followed by family practice, psychiatry, geriatrics, other, internal medicine, emergency medicine and acute care, pediatrics, pain management, addictions, occupational health, and orthopedics (Table 3). The author contacted APN practice groups both from specialties and from organizations across the nation that had APNs from all practice areas, but the most enthusiastic interest in participation came from the specialties of women’s health, geriatrics, and psychiatry, which may account for the distribution of the APN specialty areas among subjects.

**TABLE 3. **APN Work Specialty Area (n = 479).

<table>
<thead>
<tr>
<th>Specialty</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women’s Health</td>
<td>38.7</td>
</tr>
<tr>
<td>Family Practice</td>
<td>14.6</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>13.2</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>13.0</td>
</tr>
<tr>
<td>Other</td>
<td>9.2</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>5.3</td>
</tr>
<tr>
<td>Emergency Medicine and Acute Care</td>
<td>2.2</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>1.2</td>
</tr>
<tr>
<td>Pain Management</td>
<td>1.2</td>
</tr>
<tr>
<td>Addictions</td>
<td>0.6</td>
</tr>
<tr>
<td>Occupational Health</td>
<td>0.4</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>0.2</td>
</tr>
</tbody>
</table>

**Practice Community Type**

Respondents were broadly from various types of communities: urban 42.2%; suburban 38.3%; rural 18.3%, and very rural or remote 1.2%, n = 493.
Reliability of the Instruments

The seven study instruments attained acceptable reliability as estimated by Cronbach’s alpha (Zeller & Carmines, 1980) in terms of internal consistency and inter-item correlations.

Each instrument is described below. The reliability estimates are summarized in Table 4.

TABLE 4. Psychometrics on Scales Employed.

<table>
<thead>
<tr>
<th>Instrument or Subscale</th>
<th>Scale Cronbach’s $\alpha$</th>
<th>Item-Total Correlation Range</th>
<th>$N$</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy to Treat IPV</td>
<td>0.939</td>
<td>0.493-0.818</td>
<td>480</td>
<td>11</td>
</tr>
<tr>
<td>IPV Knowledge</td>
<td>0.767</td>
<td>-0.002-0.417</td>
<td>491</td>
<td>31</td>
</tr>
<tr>
<td>Current Practice (self-reported)</td>
<td>0.916</td>
<td>0.156-0.878</td>
<td>474</td>
<td>19</td>
</tr>
<tr>
<td>Workplace Factors</td>
<td>0.910</td>
<td>0.416-0.706</td>
<td>467</td>
<td>15</td>
</tr>
<tr>
<td>Secondary Traumatic Stress Scale Sum</td>
<td>0.949</td>
<td>0.557-0.786</td>
<td>475</td>
<td>17</td>
</tr>
<tr>
<td>STS intrusion subscale</td>
<td>0.772</td>
<td>0.484-0.666</td>
<td>480</td>
<td>4</td>
</tr>
<tr>
<td>STS arousal subscale</td>
<td>0.880</td>
<td>0.574-0.716</td>
<td>478</td>
<td>6</td>
</tr>
<tr>
<td>STS avoidance subscale</td>
<td>0.896</td>
<td>0.630-0.796</td>
<td>479</td>
<td>7</td>
</tr>
<tr>
<td>Brief Resilience</td>
<td>0.862</td>
<td>0.601-0.691</td>
<td>487</td>
<td>6</td>
</tr>
<tr>
<td>New General Self-Efficacy</td>
<td>0.936</td>
<td>0.629-0.734</td>
<td>491</td>
<td>8</td>
</tr>
</tbody>
</table>

Self-Efficacy to Treat IPV

This subscale of the KEEPSA-IPV was comprised of 11 of the 24 questions that were from PREMIS (Short et al., 2006). The total 11-item scale reliability had a Cronbach’s alpha of .939. The eleven questions that were included in this abbreviated scale had very good item-total scale correlations corrected item total correlations ranging from .493 to .818 with only two items scoring below .726. Two of the three lowest scoring questions pertained to state reporting requirements, “How confident are you that you can fulfil state requirements for elder abuse?” and “How confident are you that you can handle your emotions when treating IPV?” The corrected item total correlations for those two items were .612 and .493 respectively.
IPV Knowledge

This subscale of the KEEPSA-IPV contained 15 questions with 31 items (some questions had multiple correct answers) that were partly drawn from the much longer PREMIS (Short et al., 2006). A number of questions from the original PREMIS were omitted in an attempt to reduce test burden. Omitted questions included those pertaining to victim characteristics, those related to transtheoretical change theory, and several others that had outdated wording. Of the 15 questions included in this scale: five were from the original PREMIS without change; two questions were similar but changed by updates in language, simplicity, and scope; and five new questions were added that focused primarily on mental health and chronic disease manifestations of abuse as well as epidemiology. The overall scale Cronbach standardized alpha was .776. The lowest inter-item correlations were in the newly written questions that were related to epidemiology and mental health. The questions with lowest inter-item correlations included: 1) psychological abuse is a greater risk factor for post-traumatic stress disorder than is physical or sexual abuse (-.011); 2) in the U.S. mixed-race individuals are the most likely ethnic group to be IPV victims (-.002); and 3) pregnancy is a protective factor against IPV (.045); and 4) women who experience IPV are more likely to have depression (.74).

Current Self-Reported Practices

This subscale of the KEEPSA-IPV has 19 items and was adapted (shortened) from the original PREMIS (Short et al., 2006) from the original scale called Practice Issues, which had 13 questions that contained up to 22 parts each, totaling 56 individual items to consider. The abbreviated scale retained the basic categories, with fewer choices and shortened responses by collapsing responses (e.g., referral services were placed into categories such that local DV/IPV
hotline, battered women’s program or shelter, battered women’s support group, and national DV hotline became “specific services for victims”), this was done to reduce test burden. The scoring methodology done on the original PREMIS (Short et al., 2006) was maintained with sum scores being used for questions 7.8-7.19. The item-total correlations ranged from .156 -.878 with an overall scale reliability of .916, n = 474.

Workplace Factors

This 15-item scale, WFIT, was developed by this author after an integrative review of the literature on nurses’ response to intimate partner violence found the likely contributory factors to either ability or inability to deal with IPV effectively in clinical practice (McCall & Carrington, 2014). The 15 questions were taken from the factors that were most often reported as barriers to practice in the integrative review. Two advanced practice WHNPs and several nurses with advanced or terminal degrees reviewed the tool for face validity. The overall scale had a Cronbach’s alpha of .910; item-total correlations ranged from .416-.745, n = 484. The three subscales had a Cronbach’s alpha of .76.

Vicarious Trauma as Measured by the Secondary Traumatic Stress Scale (STSS)

The overall Cronbach’s alpha on these 17 items was .949. The four-item intrusion subscale Cronbach’s alpha was .760; for the seven-item avoidance subscale the Cronbach’s alpha was .892; and for the 6-item arousal sub-scale, the Cronbach’s alpha was .949. Inter-item correlations ranged from .557-.786, n = 475.

Brief Resilience Scale

The overall Cronbach’s alpha of the six-item scale was .862, with inter-item total correlations that ranged from .601-.691, n = 487.
New General Self-Efficacy Scale

Cronbach’s alpha for the entire eight-question scale was .936; inter-item correlation range was .688-.801, n = 491.

Summary of Variable Correlations

The summary of all of the individual variables’ correlations to each other are presented below in Table 5. Note there are many variables independently correlated with each other that did not enter into final stepwise regression models. In addition, bivariate correlations were examined for possible interaction variables between personal variables with the professional variables in predicting the dependent variable. Overall, the magnitudes of the relationships were quite low and so were not considered as interaction variables for the final model. Analyses were done to confirm that assumptions underlying the multiple stepwise regressions were met: normal distribution of scores on the instruments, linearity, homoscedasticity, and lack of multicollinearity of the predictors. None of the assumptions were violated.
# TABLE 5. Bivariate Correlations of Main Study Variables

<table>
<thead>
<tr>
<th></th>
<th>IPV Educ.</th>
<th>IPV Personal</th>
<th>Witness Family Violence</th>
<th>Yrs. Pract.</th>
<th>Role Belief</th>
<th>Current Practice</th>
<th>WFIT</th>
<th>IPV Know</th>
<th>VT</th>
<th>Res</th>
<th>GSE</th>
<th>SE to Treat IPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age in years</td>
<td>.114**</td>
<td>-.105**</td>
<td>-.083*</td>
<td>.630**</td>
<td>.102*</td>
<td>.001</td>
<td>.104*</td>
<td>.003</td>
<td>-.044</td>
<td>.047</td>
<td>-.051</td>
<td>.257**</td>
</tr>
<tr>
<td>Hrs. of IPV Education</td>
<td>1</td>
<td>-.080*</td>
<td>-.149**</td>
<td>.060</td>
<td>.109**</td>
<td>.224**</td>
<td>-.008</td>
<td>.158**</td>
<td>-.041</td>
<td>.110**</td>
<td>.114**</td>
<td>.649**</td>
</tr>
<tr>
<td>IPV Personal Experiences</td>
<td>-.080*</td>
<td>1</td>
<td>.244**</td>
<td>-.040</td>
<td>.046</td>
<td>-.088*</td>
<td>-.009</td>
<td>-.013</td>
<td>-.061</td>
<td>.062</td>
<td>-.002</td>
<td>-.108**</td>
</tr>
<tr>
<td>Witnessed Family Violence</td>
<td>-.149**</td>
<td>.244**</td>
<td>1</td>
<td>.031</td>
<td>-.079*</td>
<td>-.033</td>
<td>.002</td>
<td>-.057</td>
<td>-.035</td>
<td>.006</td>
<td>-.094*</td>
<td>-.174**</td>
</tr>
<tr>
<td>Yrs. of Practice</td>
<td>.060</td>
<td>-.040</td>
<td>.031</td>
<td>1</td>
<td>.058</td>
<td>.031</td>
<td>.033</td>
<td>.038</td>
<td>-.052</td>
<td>.025</td>
<td>.008</td>
<td>.215**</td>
</tr>
<tr>
<td>Role Belief</td>
<td>.109**</td>
<td>.046</td>
<td>-.079*</td>
<td>.058</td>
<td>1</td>
<td>.018</td>
<td>.012</td>
<td>.080*</td>
<td>-.042</td>
<td>.122**</td>
<td>.098*</td>
<td>.202**</td>
</tr>
<tr>
<td>Current Practices</td>
<td>.224**</td>
<td>-.088*</td>
<td>-.033</td>
<td>.031</td>
<td>.018</td>
<td>1</td>
<td>-.050</td>
<td>.068</td>
<td>.048</td>
<td>.124**</td>
<td>.005</td>
<td>.236**</td>
</tr>
<tr>
<td>Workplace factors</td>
<td>-.008</td>
<td>-.009</td>
<td>.002</td>
<td>.033</td>
<td>.012</td>
<td>-.050</td>
<td>1</td>
<td>-.080*</td>
<td>.146**</td>
<td>-.096*</td>
<td>.011</td>
<td>-.009</td>
</tr>
<tr>
<td>WFIT mean score</td>
<td>.158**</td>
<td>-.013</td>
<td>-.057</td>
<td>.038</td>
<td>.080*</td>
<td>.068</td>
<td>-.080*</td>
<td>1</td>
<td>-.077*</td>
<td>.096*</td>
<td>.033</td>
<td>.175**</td>
</tr>
<tr>
<td>IPV Knowledge</td>
<td>.041</td>
<td>-.061</td>
<td>-.035</td>
<td>-.052</td>
<td>-.042</td>
<td>.048</td>
<td>.146**</td>
<td>-.077*</td>
<td>1</td>
<td>-.302**</td>
<td>-.236**</td>
<td>-.108**</td>
</tr>
<tr>
<td>Vicarious Trauma (VT)</td>
<td>.110**</td>
<td>.062</td>
<td>.006</td>
<td>.025</td>
<td>.122**</td>
<td>.124**</td>
<td>-.096*</td>
<td>.096*</td>
<td>-.302**</td>
<td>1</td>
<td>.343**</td>
<td>.248**</td>
</tr>
<tr>
<td>Resilience (Res)</td>
<td>.114**</td>
<td>-.002</td>
<td>-.094*</td>
<td>.008</td>
<td>.098*</td>
<td>.005</td>
<td>.011</td>
<td>.033</td>
<td>-.236**</td>
<td>.343**</td>
<td>1</td>
<td>.210**</td>
</tr>
</tbody>
</table>

** p < 0.01, * p < 0.05
Research Questions

Question 1. What is the Current Status of Professional Factors of APNs (Years of Work Experience, Hours of IPV Education, IPV Actual Knowledge, Role Beliefs, and Self-Reported Practice Behaviors) Relevant to the Treatment of IPV Patients?

Years of work experience. Years of work experience as an APN ranged from 0 to 45 years, mean 12.94, $SD = 0.967$ ($n = 492$). Four-hundred ninety-two of the 494 subjects responded to this question. The modal years of experience was two years, with 32 of the respondents selecting that answer, however, 398 respondents claimed work experience of 25 or more years. The occurrence of those claiming zero years of work experience is likely because the survey went out in early summer right after many new MSN and DNP graduates would have graduated from their programs and were on university and professional organizational list serves that participated in the survey.

Hours of IPV education. This variable was defined by hours of past IPV education. Among respondents, 13.2% reported no previous IPV education; 35.6% reported less than four hours; 23.5% reported 5-10 hours; and 27.7% reported greater than 10 hours. Thus, the average number of hours of IPV education experienced by this sample of APNs was between 4 and 10 hours. Table 6 describes specific types of education reported.
TABLE 6. Hours and Type of Previous IPV Education (N = 494).

<table>
<thead>
<tr>
<th>Type of IPV Education</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read Protocol</td>
<td>34.0</td>
</tr>
<tr>
<td>Watched a video</td>
<td>28.1</td>
</tr>
<tr>
<td>Attended a lecture or talk</td>
<td>51.6</td>
</tr>
<tr>
<td>Attended skills-based training or workshop</td>
<td>17.8</td>
</tr>
<tr>
<td>Formal classroom training in nursing or other</td>
<td>51.2</td>
</tr>
<tr>
<td>Clinical training</td>
<td>26.1</td>
</tr>
<tr>
<td>Graduate school training</td>
<td>40.3</td>
</tr>
<tr>
<td>Continuing medical education training</td>
<td>36.8</td>
</tr>
<tr>
<td>In depth training more than 4 hours</td>
<td>15.6</td>
</tr>
<tr>
<td>No training on IPV</td>
<td>13.2</td>
</tr>
<tr>
<td>Less than four hours IPV education</td>
<td>35.6</td>
</tr>
<tr>
<td>5-10 hours of IPV education</td>
<td>23.5</td>
</tr>
<tr>
<td>Greater than 10 hours IPV education</td>
<td>27.7</td>
</tr>
</tbody>
</table>

**IPV actual knowledge.** On this scale, there were a total of four multiple-choice, and eleven true or false questions. There were 32 points possible. The mean sum score was 27.77 (86% of questions correctly answered), with a $SD$ of 3.021, with a range from 12-32 points.

**Role beliefs.** This question asked on a scale of 1-5 how strongly the APN agreed that it was their responsibility to identify and treat IPV if it was the underlying cause of illness or injury. The mean score was 4.49 with a $SD$ of 0.715, $n = 491$. Overwhelmingly APNs believed that it was their responsibility to identify and treat IPV.

**Self-efficacy (preparedness) to treat IPV.** The mean score on this scale was 2.709 out of a possible range of one to four, $SD = 0.777$ or ~68% on each item, $n = 480$.

**Self-reported practices.** The current practice sum score was 34.961 out of a possible 44, $SD = 19.817$ or 79.46% on the total scale, $n = 474$.

**Screening practices** of the APNs in this survey varied widely. Of the 474 APNs who answered this question completely, 20.6% do not currently screen for IPV. Those who did not identify a victim in the past six months were 40.6%. This distribution of screening behaviors was
skewed to the left with fewer victims being identified in the past six months, and fewer rather than greater numbers of patients being asked about IPV. When asked if they screen for IPV when seeing patients with injuries or other conditions that are considered by experts to be conditions that occur among the abused, the distributions became mostly normal. Nevertheless, the numbers of potential victims asked about abuse remained low, with means in the low to mid 2s out of a possible score of 5, if all potential victims were screened. Tables 7 and 8 show screening practices among specific populations of patients.

**TABLE 7. APN IPV Screening Practice Specifics (n = 474).**

<table>
<thead>
<tr>
<th>Situation</th>
<th>% who screen for IPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not currently screen for IPV</td>
<td>20.6</td>
</tr>
<tr>
<td>All new patients</td>
<td>37.7</td>
</tr>
<tr>
<td>All new female patients</td>
<td>16.6</td>
</tr>
<tr>
<td>All patients with abuse indicators on H &amp; P</td>
<td>40.1</td>
</tr>
<tr>
<td>All patients at annual exam</td>
<td>30.8</td>
</tr>
<tr>
<td>Certain patient categories</td>
<td>8.7</td>
</tr>
<tr>
<td>Mothers of pediatric patients</td>
<td>1.8</td>
</tr>
<tr>
<td>Mothers of pediatric patients who show signs of witnessing IPV</td>
<td>4.7</td>
</tr>
<tr>
<td>All patients periodically</td>
<td>27.7</td>
</tr>
</tbody>
</table>

**TABLE 8. APN Screening Practices for Particular Patient Presentations.**

<table>
<thead>
<tr>
<th>Situation</th>
<th>Never</th>
<th>Rarely</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical injury</td>
<td>18.8</td>
<td>21.8</td>
<td>33.1</td>
<td>26.3</td>
</tr>
<tr>
<td>Chronic pain, GI disorders, migraines or other stress-related disorders</td>
<td>23.5</td>
<td>32.1</td>
<td>20.1</td>
<td>14.3</td>
</tr>
<tr>
<td>Depression, anxiety, substance abuse</td>
<td>21.2</td>
<td>25.9</td>
<td>32.7</td>
<td>20.2</td>
</tr>
<tr>
<td>STDs, unintended pregnancy, GU problems</td>
<td>28.2</td>
<td>24.3</td>
<td>29.9</td>
<td>17.5</td>
</tr>
</tbody>
</table>

(\% who screen for IPV)

When there is physical injury, 18% of respondents never screen for IPV, while 26.3% always screen for IPV in that situation. When stress related conditions such as chronic pain, GI disorders and migraines are present 21.2% of APNs never screen for IPV, whereas 14.3% of
APNs always screen for IPV. If a patient is depressed, has anxiety or substance abuse, 21.2% of APNs never screened for IPV, and 20.2% always screen. When encountering sexually transmitted diseases, unintended pregnancy, or genitourinary illness, 28.2% of APNs never screen for IPV, and 17.5% always screen. The remaining APNs either rarely or often screen in those situations, thus for those listed conditions that are considered to be high risk situations for IPV only about half of APNs routinely screen for the condition. The mean number of new IPV victims that the APNs estimated to have discovered in the past six months was 2.84, the median was 1, the mode was 0, and the SD was 8.251.

Documentation of victims’ statements in their chart was done by nearly half of APNs. When discovering victims, close to 90% of APNs performed safety assessments for the victims. About 70% of the APNs performed safety assessments for victims’ children. APNs reported helping a patient develop a safety plan at least 94% of the time. Over 30% contacted authorities if they are mandated reporters. Few APNs do body maps or photograph injuries.

Educational brochures or materials were not available in the workplaces of close to 29% of APNs. About 24% stated that educational materials were available but not well displayed. Over 4% of APNs thought materials were well displayed but not accessed by patients. Close to 29% stated that the materials were well displayed and well accessed by patients. Nearly 14% did not know if there were educational materials available in their workplace. When APNs were asked if they give written IPV educational information to patients: 31% of APNs stated that they ‘almost always’ give patients written educational materials about IPV to patients; 39% stated they do so when it is ‘safe for the patient’; 10.1% stated they provide the materials ‘only upon
request’; 16.2% do not provide materials due to inadequate resources in the community; and 3.8% do not provide written materials because they felt they were ‘not useful in general.’

**Question 2. What is the Relationship Between APN Professional Factors and APNs’ Self-Efficacy to Treat IPV?**

The bivariate correlations among the variables were examined first (for details see Table 5). *Years of full-time practice* as an APN was significantly related to age in years $r = .643$, and self-efficacy to treat IPV, ($r = .215$). The professional factor of *Number of Hours of IPV Education* was significantly related to the age in years ($r = .114$), APN role belief (.109), current practice sum score ($r = .224$), IPV knowledge ($r = .158$), resilience ($r = .110$), general self-efficacy ($r = .114$) and self-efficacy to treat IPV ($r = .649$) as measured by the IPV preparedness scale; see master correlation table for values. *Number of Hours of IPV Education* was significantly negatively correlated with personal experience of IPV ($r = -.080$) and witnessing family violence ($r = -.149$). *IPV knowledge* of APNs, as measured by the IPV knowledge scale sum score, was significantly correlated with self-efficacy to treat IPV as measured by the IPV preparedness scale ($r = .648, n = 491, p < .001$). APNs’ *role belief* that it was their role to identify and treat IPV was also significantly related to self-efficacy to treat IPV ($r = .203, n = 491, p < .001$). Current *self-reported practice by APNs* as measured by their current practice sum score was significantly negatively correlated with personal experience of IPV at a very low weight ($r = .008$), and also negatively correlated at a low weight workplace factors mean score ($r = .50$). Current practice was significantly positively correlated with self-efficacy to treat IPV ($r = .648, n = 491, p < .001$).
Significant variables were entered simultaneously into a stepwise multiple regression equation to predict Self-Efficacy to Treat IPV. The model summary, shown in Table 9, combining the factors listed in order of greatest to least weight, showed that estimated total hours of IPV education, years in full-time practice, APN role belief, and IPV actual knowledge sum score combined were significantly correlated with self-efficacy to treat IPV, $r = .688$, $R^2 = .473$, $p < .001$. These factors accounted for almost 47% of the variance in the sample. The Durbin-Watson of 1.974 of this model shows that there is a lack of autocorrelation of the residuals. The variance inflation factors (VIF) for this model ranged from 1.024 to 1.522 showing that multi-collinearity is not a problem for this model. Thus, the estimated total hours of IPV education, current practice sum score, APN role belief, and years of APN practice variables are not correlated with each other, and therefore would not cause inflated standard errors.

**TABLE 9. Stepwise Regression of Self-Efficacy to Treat IPV on Professional Factors.**

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.184</td>
<td>.282</td>
<td>.653</td>
<td></td>
<td>.514</td>
</tr>
<tr>
<td>Hours of IPV education</td>
<td>.476</td>
<td>.026</td>
<td>.617</td>
<td>18.388</td>
<td>.000</td>
</tr>
<tr>
<td>IPV knowledge sum score</td>
<td>.016</td>
<td>.009</td>
<td>.063</td>
<td>1.880</td>
<td>.061</td>
</tr>
<tr>
<td>Years of full-time practice</td>
<td>.014</td>
<td>.003</td>
<td>.169</td>
<td>5.124</td>
<td>.000</td>
</tr>
<tr>
<td>APN role belief</td>
<td>.134</td>
<td>.037</td>
<td>.122</td>
<td>3.657</td>
<td>.000</td>
</tr>
</tbody>
</table>

$F (4, 486) = 108.969$, $R = .688$, $R^2 = .473$, $p < .001$.

**Question 3. What are APNs’ Perceptions of IPV-Related Workplace Factors (Workplace Factors Overall, Screening Tools and Protocols, Institutional Support, and Community Support)?**

The workplace factors scale in IPV treatment (*WFIT*) consists of 15 questions on a 5-point Likert scale asking the APN whether or not they have certain supports present in the workplace. The mean score on each item was 2.30 out of 5, with 5 being the highest level of
support. Table 10 summarizes the workplace factors that APNs reported. More than 65% of APNs reported they did not have privacy to screen for IPV. Over half of APNs did not have clear IPV protocols in their workplace, and about half did not have a specific place in the chart to document IPV screening results. Less than half of APNs had good institutional support on that subscale (privacy to screen, time to screen, support staff such as social workers and interpreters, safety, collegial support, and supervision), and half had good community support on that subscale.

**TABLE 10. Workplace Factors (WFIT).**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Not at all</th>
<th>A little</th>
<th>A moderate amount</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy to screen</td>
<td>52.4</td>
<td>15.1</td>
<td>12.0</td>
<td>20.5</td>
</tr>
<tr>
<td>Clear Protocols</td>
<td>29.2</td>
<td>20.9</td>
<td>22.8</td>
<td>27.1</td>
</tr>
<tr>
<td>Specific place to chart screening</td>
<td>40.5</td>
<td>16.6</td>
<td>18.7</td>
<td>24.1</td>
</tr>
<tr>
<td>Support to take extra time</td>
<td>29.7</td>
<td>21.4</td>
<td>26.2</td>
<td>22.7</td>
</tr>
<tr>
<td>Good referral resources</td>
<td>22.5</td>
<td>25.5</td>
<td>27.9</td>
<td>24.2</td>
</tr>
<tr>
<td>Available shelter beds</td>
<td>24.4</td>
<td>25.2</td>
<td>27.5</td>
<td>22.9</td>
</tr>
<tr>
<td>Interpreter services</td>
<td>32.6</td>
<td>25.9</td>
<td>19.5</td>
<td>22.0</td>
</tr>
<tr>
<td>Social workers or case workers</td>
<td>29.6</td>
<td>21.9</td>
<td>19.6</td>
<td>29.0</td>
</tr>
<tr>
<td>Safety for myself</td>
<td>52.9</td>
<td>16.0</td>
<td>13.8</td>
<td>17.3</td>
</tr>
<tr>
<td>Collegial support</td>
<td>42.8</td>
<td>19.7</td>
<td>16.8</td>
<td>20.8</td>
</tr>
<tr>
<td>Supervision for emotional issues</td>
<td>35.4</td>
<td>27.8</td>
<td>21.5</td>
<td>15.4</td>
</tr>
<tr>
<td>Confidence in Child Protective Services</td>
<td>26.3</td>
<td>27.7</td>
<td>31.7</td>
<td>14.3</td>
</tr>
<tr>
<td>Confidence in law enforcement</td>
<td>28.4</td>
<td>29.8</td>
<td>30.3</td>
<td>11.6</td>
</tr>
<tr>
<td>Confidence in the judicial system</td>
<td>25.2</td>
<td>32.5</td>
<td>32.1</td>
<td>10.3</td>
</tr>
<tr>
<td>Overall good support</td>
<td>24.1</td>
<td>32.8</td>
<td>27.0</td>
<td>16.1</td>
</tr>
</tbody>
</table>

% of APNs (n = 467)

One fill-in-the-blank question asked participants to express any other barriers they perceive that were not on the questionnaire. This question was answered by approximately 20% of the respondents. There were 23 responses naming patient reluctance, denial, and fear as main barriers; however, these were not considered workplace barriers. The remaining 80 responses were considered workplace factors and they are listed below in Table 11. These barriers were in line with previous reports. The most frequent responses were lack of time and a workplace
culture that accepted abuse and was not poised to change screening practices or the status quo.

Included among the comments, the reason that the APNs do not screen at their workplace was that their physician employers like “clean cases” and do not “want drama” (McCall, 2014).


<table>
<thead>
<tr>
<th>Barriers Open-Ended Responses</th>
<th>Number of APNs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time constraints</td>
<td>9</td>
</tr>
<tr>
<td>Cultural acceptance of abuse</td>
<td>6</td>
</tr>
<tr>
<td>Screening not done at workplace by design</td>
<td>6</td>
</tr>
<tr>
<td>APN lack of knowledge (2 did not know local resources)</td>
<td>5</td>
</tr>
<tr>
<td>Lack of awareness, willingness of coworkers</td>
<td>5</td>
</tr>
<tr>
<td>Cultural acceptance of abuse (local issues including religious)</td>
<td>5</td>
</tr>
<tr>
<td>Lack of privacy</td>
<td>4</td>
</tr>
<tr>
<td>General lack of resources</td>
<td>4</td>
</tr>
<tr>
<td>Stigma about discussing IPV at work</td>
<td>3</td>
</tr>
<tr>
<td>Lack of collegial support</td>
<td>3</td>
</tr>
<tr>
<td>Lack of financial resources for victims</td>
<td>3</td>
</tr>
<tr>
<td>Restraining orders not enforced</td>
<td>2</td>
</tr>
<tr>
<td>Other staff lack of knowledge</td>
<td>2</td>
</tr>
<tr>
<td>Poor Adult Protection agency response</td>
<td>2</td>
</tr>
<tr>
<td>Lack of resources due to rural location</td>
<td>2</td>
</tr>
<tr>
<td>Job description role</td>
<td>2</td>
</tr>
<tr>
<td>Practice in the patient’s home</td>
<td>2</td>
</tr>
<tr>
<td>No place to chart</td>
<td>1</td>
</tr>
<tr>
<td>Lack of supportive laws for non-elderly adults</td>
<td>1</td>
</tr>
<tr>
<td>Bias about male victims by shelters</td>
<td>1</td>
</tr>
<tr>
<td>Language, no interpreters</td>
<td>1</td>
</tr>
<tr>
<td>Rural location where most people are blood related</td>
<td>1</td>
</tr>
<tr>
<td>Generational poverty</td>
<td>1</td>
</tr>
<tr>
<td>Scheduling does not promote developing patient relationships</td>
<td>1</td>
</tr>
<tr>
<td>Limited resources for undocumented women</td>
<td>1</td>
</tr>
<tr>
<td>No transportation</td>
<td>1</td>
</tr>
<tr>
<td>Verbal/emotional abuse hard to deal with</td>
<td>1</td>
</tr>
</tbody>
</table>

Subscales of the WFIT were created based on similarity of items. Screening tools and protocols were analyzed together as a mean score on a scale of 1-4, which explains whether there are screening protocols in place and a designated place to chart IPV screening findings. The same methodology was done for the other two subscales of Institutional support (privacy to screen, time to screen, support staff social workers and interpreters, safety, collegial support, and
supervision), Community Support (referral resources, shelter beds, confidence in CPS, confidence in law enforcement, and confidence in the judicial system for support in IPV matters). The overall scale was also analyzed separately.

**Question 4. What is the Relationship Between APN Perceived Workplace Factors and APNs’ Self-Efficacy to Treat IPV?**

The overall WFIT scale mean score of 2.2984, \( SD = 0.739, n = 467 \) (calculated per item on a 1-4 Likert scale) was not significantly correlated with self-efficacy to treat IPV. The bivariate correlations among the variables were examined next, based on the subscales in the WFIT described above.

The Screening tools and protocol subscale score was negatively correlated with Self-Efficacy to Treat IVP \( (r = -0.161, n = 467, p < .001) \). The VIF was 1.385. Institutional support as measured by subscale described above were not significantly correlated with Self-Efficacy to Treat IVP, nor was the community supports subscale significantly correlated with self-efficacy to treat IPV. In summary, only the screening tools and protocols subscale was significantly negatively correlated with self-efficacy to treat IPV \( (r = -0.161, p < .001) \). None of the other subscales on WFIT were significantly correlated with self-efficacy to treat IPV.

**Question 5. Why is the Current Status of Personal Factors of APNs (Age, Gender, Past Personal Experience of IPV [Personal or Witnessing Violence Against a Family Member], Vicarious Trauma, Resilience, and Self-Efficacy) Relevant to Treatment of IPV Patients?**

Gender statistics are reported above in the Sample section. The mean age of respondents was just over 50 years old and the gender was largely female.
Past personal experience of IPV. All 494 subjects answered the question about personal experience of IPV or witnessing violence directed at a family member. Those who claimed a lifetime experience of IPV personally were 38.5% of the respondents; 40.3% claimed that they witnessed violence against a family member. These figures are very slightly higher than reported in the U.S. population, however, it is known that IPV is underreported by victims.

On the measurement used to assess VT the STSS, the sample showed a mean cumulative score of 26.84, SD 10.37, n = 474, and possible range of 17-85, and actual range of 17-85, which means that the majority of the nurses did not suffer VT. Bride (2007) set the cut off score for evidence of STS at 38 from a maximum score of 85. There were 61, or 12.76% of subjects with a score at 38 or above. Of those, 14, or 2.93% scored above 50, and one scored 85, the latter score of which denotes significant clinical symptoms of VT.

Resilience. The mean score on the Brief Resilience Scale was 3.81 out of 5 on each of the six items, SD = .688, n = 487, with a range of 1 to 5. The data were relatively normally distributed. This score on the BRS signifies a population with generally above average resilience, showing a level of resilience in the sample that is similar if not a little higher than those scores found in the instrument validation with managers and college students (Smith, Epstein, Ortiz, Christopher, & Tooley, 2013).

Self-efficacy. Self-efficacy was measured by the eight-question 5-point Likert New General Self-Efficacy Scale (NGSE). The mean score of this sample was 4.24, SD = 0.550, n = 491, with a range of one to five on each question on this validated scale (Scherbaum et al., 2006). This mean score on each item was higher than that found in a recent study of pediatric medical residents, who had sum scores of the eight items of 30.48 (Dandavino et al., 2013); if divided by
8 that would mean individual item scores of 3.81. The APNs scored slightly higher than tested populations of college students and managers who had means of 4.14 - 4.16 (Chen et al., 2001). Thus, it seems that this sample of APNs had relatively high self-efficacy beliefs when compared with other non-clinical populations. Table 12 below summarizes the APN personal factors.

**TABLE 12. APN Personal Factors.**

<table>
<thead>
<tr>
<th></th>
<th>Mean OR%</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>50.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>94.3% female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPV self</td>
<td>38.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPV witnessed</td>
<td>40.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vicarious trauma</td>
<td>26.84</td>
<td>10.37</td>
<td>487</td>
</tr>
<tr>
<td>Resilience</td>
<td>3.81</td>
<td>.688</td>
<td>491</td>
</tr>
<tr>
<td>General Self-efficacy</td>
<td>4.24</td>
<td>.550</td>
<td></td>
</tr>
</tbody>
</table>

**Question 6. What is the Relationship Between Personal Factors of APNs (Age, Gender, Past Personal Experience of IPV [Personal or Witnessing Violence Against a Family Member], Vicarious Trauma, Resilience, and Self-Efficacy) and APNs’ Self-Efficacy to Treat IPV?**

Bivariate correlations among the personal factors were examined first (Table 5). Gender was not significantly correlated with resilience ($r = .036, p = .457$) or general self-efficacy ($r = -.005, p = .200$). Gender was significantly correlated with the personal past experience of IPV $r = .144, p = .001, n = 482$, and witnessing violence toward a family member, $r = .244, p = .001, n = 482$. Females were more likely to have had these experiences than males. Resilience and general self-efficacy were significantly correlated with each other $r = .339, p < .001, n = 482$. VT was significantly negatively correlated with general self-efficacy $r = -.236, p < .001, n = 482$. Each of the subscales of the STSS of intrusion ($r = -.247, p < .001, n = 482$), avoidance ($r = -.286, p < .001, n = 482$), and arousal ($r = .310, p < .001, n = 482$) were independently significantly
negatively correlated with self-efficacy. VT was also significantly negatively correlated with
resilience $r = -0.302$, $p < .001$, $n = 482$.

Relationships between the personal factors and APN self-efficacy to treat IPV were examined next. Age in years was significantly and positively correlated with self-efficacy to treat IPV $r = .256$, $p < .001$, $n = 482$. Older APNs had higher self-efficacy. Gender was not related to self-efficacy to treat IPV. Past personal experience of IPV was significantly negatively correlated with self-efficacy to treat IPV $r = -0.104$, $p = .011$, $n = 482$. Witnessing a family member being maltreated by was significantly negatively correlated with self-efficacy to treat IPV $r = -0.181$, $p < .001$, $n = 482$. Vicarious trauma as measured by the STSS total score was negatively and significantly correlated with self-efficacy to treat IPV, $r = -0.108$, $n = 482$, $p = 0.009$. The avoidance subscale of the STSS was significantly negatively correlated with self-efficacy to treat IPV, $r = -0.109$, $n = 482$, $p = .008$. The STSS arousal subscale was also significantly negatively correlated with self-efficacy to treat IPV, $r = -0.119$, $n = 482$, $p = .004$.

Resilience was positively correlated with self-efficacy to treat IPV, $r = .250$, $n = 482$, $p < .001$.

General self-efficacy was positively but significantly correlated with self-efficacy to treat IPV, $r = 0.217$, $n = 482$, $p < .001$.

All of the personal variables were entered simultaneously into the stepwise multiple regression analysis. The seven personal variables that entered into the stepwise regression model are listed in order of greatest to least weight. These independent variables were statistically significant predictors of self-efficacy to treat IPV -- age, resilience, general self-efficacy, witnessing violence directed at a family member, gender, personal experience of IPV, and
presence of vicarious trauma. The raw and stepwise regression coefficients of the predictors together with correlations with self-efficacy to treat IPV are shown in Table 11. The prediction model was statistically significant, $F(7, 474) = 14.433, p < .001$, and accounted for approximately 17% of the variance in self-efficacy to treat IPV ($R^2 = .176, \text{Adjusted } R^2 = .164$).

The Durbin-Watson score of 1.668 shows that there is a lack of autocorrelation of the residuals, thus multicollinearity is not a worry. Age received the strongest weight followed by resilience, then general self-efficacy. Being a witness to family violence was negatively correlated with self-efficacy to treat IPV, but with a relatively low weight.

**TABLE 13.** Forward Stepwise Regression of Self-Efficacy to Treat IPV on Personal Factors ($n = 482$).

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.168</td>
<td>.509</td>
<td></td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td>Resilience</td>
<td>.215</td>
<td>.053</td>
<td>.187</td>
<td>4.072</td>
<td>.001</td>
</tr>
<tr>
<td>IPV witness</td>
<td>-.215</td>
<td>.070</td>
<td>-.134</td>
<td>-3.835</td>
<td>.002</td>
</tr>
<tr>
<td>Gender</td>
<td>.215</td>
<td>.145</td>
<td>.063</td>
<td>1.497</td>
<td>.049</td>
</tr>
<tr>
<td>Age</td>
<td>.017</td>
<td>.003</td>
<td>.236</td>
<td>5.598</td>
<td>.001</td>
</tr>
<tr>
<td>Vicarious trauma</td>
<td>-.013</td>
<td>.061</td>
<td>-.009</td>
<td>-.207</td>
<td>.836</td>
</tr>
<tr>
<td>IPV personal</td>
<td>-.083</td>
<td>.071</td>
<td>.052</td>
<td>-1.176</td>
<td>.240</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.217</td>
<td>.065</td>
<td>.152</td>
<td>3.349</td>
<td>.001</td>
</tr>
</tbody>
</table>

$F(7, 474) = 14.433, p < .001, R^2 = .176, \text{Adjusted } R^2 = .164$

**Question 7. What Combination of Professional, Workplace, and Personal Factors Best Explains the Variance in APNs’ Self-Efficacy to Treat IPV?**

Because there was no theoretical basis for identifying certain factors as more important than others in their relationship with APN self-efficacy to treat IPV, and because select factors from within each group of factors (professional, workplace, personal) were significantly related to the dependent variable the following method was chosen for question 7. All factors that were significantly related to self-efficacy to treat IPV were entered simultaneously into the stepwise
multiple regression analysis to determine the final model. The results showed that five variables were significant predictors of APN self-efficacy to treat IPV. Listed in order of greatest to least weight contribution to the model the variables were: 1) Current Practice sum score total, $\beta = .382$; 2) Hours of IPV Education, $\beta = .363$; 3) Age in Years $\beta = .120$; 4) Role Belief, $\beta = .084$; 5) Resilience, $\beta = .082$; 6) Vicarious Trauma, $\beta = -.073$; 7) General Self-Efficacy, $\beta = .067$; 8) Workplace screening tools and protocols, $\beta = -.062$; and 9) IPV Knowledge, $\beta = .036$. These nine variables were chosen by SPSS in a stepwise regression analysis as the best predictors of self-efficacy to treat IPV. The multiple stepwise regression model was statistically significant $F(12,461) = 58.268$, $p < .001$, and accounted for approximately 59% of the variance of self-efficacy ($R^2 = .603$, Adjusted $R^2 = .592$) to treat IPV. Durbin-Watson score was 2.006 showing a lack of multicollinearity. The raw and stepwise regression coefficients of the 9 predictors together with correlations with self-efficacy to treat IPV are shown in Table 14.

TABLE 14. Forward Stepwise Regression of Self-Efficacy to Treat IPV (Years of Full-Time Practice, Hours of IPV Education, Role Beliefs, IPV Knowledge, and IPV Self-Reported Current Practice Behaviors).

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE-B</th>
<th>$\beta$</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.477</td>
<td>.390</td>
<td>1.22</td>
<td>.222</td>
<td></td>
</tr>
<tr>
<td>Current Practice sum score total</td>
<td>.015</td>
<td>.002</td>
<td>.382</td>
<td>2.78</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Hours of IPV Education</td>
<td>.283</td>
<td>.029</td>
<td>.363</td>
<td>9.86</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Age in Years</td>
<td>.009</td>
<td>.003</td>
<td>.120</td>
<td>3.08</td>
<td>.002</td>
</tr>
<tr>
<td>Role Belief</td>
<td>.091</td>
<td>.003</td>
<td>.102</td>
<td>3.28</td>
<td>.001</td>
</tr>
<tr>
<td>Resilience</td>
<td>.095</td>
<td>.038</td>
<td>.082</td>
<td>2.48</td>
<td>.013</td>
</tr>
<tr>
<td>Vicarious Trauma</td>
<td>-.101</td>
<td>.044</td>
<td>-.073</td>
<td>-2.29</td>
<td>.022</td>
</tr>
<tr>
<td>General Self-Efficacy</td>
<td>.096</td>
<td>.046</td>
<td>.067</td>
<td>2.07</td>
<td>.038</td>
</tr>
<tr>
<td>Screening Tools &amp; Protocols</td>
<td>-.046</td>
<td>.022</td>
<td>-.062</td>
<td>-2.07</td>
<td>.038</td>
</tr>
<tr>
<td>IPV knowledge</td>
<td>.009</td>
<td>.008</td>
<td>.036</td>
<td>1.15</td>
<td>.001</td>
</tr>
</tbody>
</table>

$F (12,461) = 58.268$, $p < .001$, $R^2 = .603$, Adjusted $R^2 = .592$

APNs that responded to the survey and provided mostly complete data numbered 494 and were generally representative of the U.S. APN population in age, gender, education, work
experience and location of practice. The instruments used in the study had good reliability with this sample. The research questions addressed professional, workplace, and personal factors that potentially relate to self-efficacy to treat IPV. The results showed that multiple factors related to Self-Efficacy to Treat IPV in bivariate correlations. The stepwise regression analysis, which included all significant factors that best estimated self-efficacy to treat IPV in order of weight were current self-reported practice behaviors, total hours of IPV education, age in years, role belief, resilience, vicarious trauma, screening tools and protocols, and IPV actual knowledge. Only VT and screening tools and protocols were negatively correlated with self-efficacy to treat IPV.
CHAPTER V: DISCUSSION

Discussion of study findings and conclusions drawn from this study will be presented in this chapter. Characteristics of the sample, major study findings, final model for best predictors of APNs’ self-efficacy to treat IPV, study limitations, and implications for nursing practice and future research will be discussed.

Characteristics of the Sample

The sample taking part in this study was generally characteristic of the APN population presently practicing in the U.S., though a few years older at 50.48 years as opposed to the national average of 48 years (HRSA, 2012). However, the greatest numbers of APNs in the country are those 55-59 years of age, comprising 18%, and those 60 years of age and older, comprising 16% of the workforce (HRSA, 2012). Women’s health APNs were somewhat overrepresented in this survey at 38.7% of this sample when compared with their percentage of the total APN population in the U.S. Nationally, 73.3% of NPs practice in primary care, internal medicine, surgery, pediatrics, or gerontology (HRSA, 2012). However, it is unclear what the methodology was for determining primary care in the HRSA statistics; many consider women’s health to be primary care, since often women in child bearing years only receive care from their women’s health practitioner. More of the NPs in this survey (100%) held a graduate degree compared with the national survey at 94% (HRSA, 2012).

This sample had slightly fewer males at 5.7% than the national average reported in the HRSA study of 7%. White non-Hispanics comprised a slightly larger proportion of the study sample at 89.6% compared to the HRSA report of 86% nationally. Hispanics were slightly better represented in this sample at 3.4% compared with the HRSA report of 3%. Blacks were
underrepresented in this sample at 2.5% compared with the HRSA report of 5%. Overall, this sample was deemed to be generally representative of the U.S. population of APNs, although psychiatric APNs were overrepresented at 13.2% of the sample compared with 5.6% in the HRSA study. This could be partly due to this writer’s connection to the American Psychiatric Nurses Association, a group with a strong online vehicle with which to distribute member research surveys. Other explanations are that more psychiatric mental health and women’s health nurse practitioners would have interest in this study due to the effects on their respective populations.

Participants were from a broad geographic area generally representative of the population of the United States. According to the U.S. 2010 census data (U.S. Census Bureau, n.d.), 79% of the U.S. population lives in urban or urban cluster areas, and 21% live in rural areas. Just over 80% of this sample came from urban or urban cluster areas, 18.2% came from rural areas, and 1.1% came from remote areas. This sample was a good representation of the urban-rural mix of the country. Regarding specific location of the respondents, there was a higher proportion of respondents coming from the South than is reflected in 2010 population maps, and a lower proportion of respondents from the northeast and mid-Atlantic states than are reflected in 2010 census figures (Mackun & Wilson, 2011). Overall, the sample achieved seems generally representative of the APN population in the U.S.

The only other comparable study was done by Hinderliter and colleagues, who published in 2003 from data collected in 1999. They had larger and slightly less White (90.9%) sample with a preponderance of women’s health practitioners (85.3%), and a shorter mean practice time
of 8.4 years, \( N = 557 \). The distribution from geographic areas of the U.S. was not reported, but the community size from which the sample was derived was similar to that of this study.

**APN Professional Factors**

**Years of Full-Time Practice, Hours of IPV Education, Role Beliefs, IPV Knowledge, and IPV Self-Reported Practice Behaviors**

**Years in full-time practice.** While the mean number of *years of full-time practice* in this sample was 12.94, as listed in the description of the sample, nearly 81%, or 398 of the 482 APNs who answered this question, had between 5 and 25 years of work experience as an APN. Overall, this was a highly experienced group of APNs. This sample had more work experience than that in Hinderliter’s (2003) study in which APNs had a mean of 8.4 years of practice experience and a range of 1 to 29 years.

**Hours of previous IPV education.** In Hinderliter’s (2003) study NPs claimed an average of one to four hours of IPV education, thus it would seem that the average number of *hours of IPV education* received by APNs, reported at between 5 and 10 hours in this study, has increased only incrementally.

**Role beliefs.** APNs in this study reported findings similar to Hinderliter’s (2003) study in which they believed strongly that it was their *role to identify and treat IPV*. Hinderliter’s question about role was essentially the same as the one in this study and measured how strongly the APN felt it was their responsibility to identify and treat IPV.

**IPV knowledge.** The APNs in the study had a generally high level of *IPV knowledge* as evidenced by mean scores of 27.7 out of a possible 32 points, or 86% of the questions answered correctly on the IPV knowledge subscale of the *KEEPSA-IPV*. This knowledge score was higher
than that found in a Greek physician and resident group, after an IPV educational intervention, of 66% of knowledge questions answered correctly using a culturally adapted form of PREMIS (Papadakaki et al., 2013). However, that study was based on a small sample of 25 physicians and residents. No other studies have measured APN IPV knowledge on a large scale.

**Self-reported practices.** Smaller numbers of APNs in this study had identified a victim in the past six months, likely due at least in part to the fact that over 20% of respondents do not screen for IPV; 37.7% reported screening all new patients. This is fairly close to Hinderliter’s (2003) study wherein 40.5% reported asking all women about violence in their homes. The number of APNs who universally screen for IPV has not increased in the intervening decade from Hinderliter’s study to this current study, however one must remember that Hinderliter’s study was comprised entirely of women’s health practitioners which may have made screening more prevalent in that sample. A number of patient conditions that should have triggered screening for IPV did not cause APNs in this study to ask about IPV. APNs reported that they never or rarely screen for IPV when patients present with chronic pain, GI troubles, migraine, gastrointestinal problems, depression, or anxiety; all of those conditions have been linked to IPV in population studies of internal medicine and psychiatric patients. Close to 40% of APNs never or rarely screen for IPV when their patient has physical injuries, and more than half of APNs surveyed never or rarely screen for IPV when there were sexually transmitted diseases, unintended pregnancy, or genitourinary problems, all found to have links to IPV. It must be noted that many of the APNs stated that their workplaces were not screening-friendly.

These figures of 37.7% of APNs screening for IPV universally are substantially better than the figures reported in recent surveys of emergency departments and medical practices, but
such screening practices are still not adequate to begin IPV discussions with potential victims. The mean number of new victims that the APNs reported to have identified in the past six months (new disclosure of ongoing abuse, new acute abuse, or new disclosure of past abuse) was 2.84, SD, 8.25, sum of victims identified 1373. The mode was zero. In Hinderliter’s 2003 study 56% of NPs reported identifying 1-4 victims in the past year, 16% reported identifying 5-10 cases, however these were all women’s health APNs. It is unclear as to the true numbers being identified since less than half of the APNs participating in this survey had workplaces that did screening.

APNs reported documentation of patient statements about IPV half of the time, but equal to that number were APNs who did not have a place in the chart to document IPV. While this seems low, it is substantially better than the 5% documented in a recent study (Sutherland et al., 2013). However, the weakness of the data in the current study is that it is self-reported (Schwarz & Oyserman, 2001), whereas Sutherland and colleagues (2013) conducted chart review. Documentation difficulties in the case of the APNs treating IPV in this study may be related to having no designated place in the chart to record IPV, since half of this sample noted in the WFIT that they did not have clear protocols at their workplace. Most of the APNs performed safety assessments for victims they identified; a slightly smaller number of APNs did safety assessments for victims’ children. Most of the APNs helped victims to develop safety plans; this is critical since safety plans are considered among the most important things to do when treating victims (Jack et al., 2012). No other study to my knowledge has evaluated the safety planning that APNs perform with their IPV survivors.
The action-oriented responses toward IPV discovery in this study were therefore excellent since in a recent large review of 2000 medical records in a family planning clinic, only 5% of clinicians studied ($N = 570$) documented an action oriented response (Sutherland et al., 2014). These results indicate that APNs reported a level of practice in keeping with what is considered a good standard of care for victims or potential victims with the exception of screening behaviors, which were not in keeping with current practice recommendations. Likely causes for this discrepancy will be discussed in the next section.

The *self-reported current practice sum score* was the second most heavily weighted factor, after *hours of IPV education*, that affects self-efficacy to treat IPV in the final model, and was followed by *years of full-time practice* and *role belief*. This may infer that APNs who screen and treat IPV more become more proficient over time, and that if one is in practice longer, one may become more proficient, which would seem to follow common sense, and is in keeping with the novice to expert model (Benner, 1982).

Hinderliter and colleagues (2003) found no correlation between the number of IPV cases identified in the past year and years in practice. She found a positive correlation between the number of hours of IPV education and the number of cases identified in the past year ($r = .30$, $p < .01$, $n = 407$) (Hinderliter et al., 2003). This study also found a no significant correlation between years in full-time practice and IPV sum score ($r = .222$, $p = .206$, $n = 491$); while not the same, it is the closest measure of a behavioral construct in this study to Hinderliter’s measure.

**Workplace Factors**

Only the *screening tools and protocols subscale* of this tool showed a statistically significant correlation to self-efficacy to treat IPV. This was a negative correlation of a low
magnitude. The reason for a negative correlation of having screening tools and protocols and self-efficacy to treat IPV was not discovered. However, some hypotheses might be that having protocols without other supports such as time to screen, privacy to screen, and referral resources would be frustrating and unhelpful; and training on how to do screening with the protocols might be unclear. A secondary analysis of this data matching the specific subscale scores with self-efficacy to treat IPV could be illuminating. Nevertheless, while not directly correlated in this study to self-efficacy to treat IPV, it is possible that the workplace factors could affect APNs’ attitudes or subsequent behaviors while treating patients, since only about half of respondents felt that their overall level of support in treating IPV was good. Looking at individual items on the scale, only about half of the respondents felt they had enough workplace support in the form of personnel support, community resources, and administrative resources. Unfortunately, the respondents were not asked directly if workplace factors changed their attitudes or behaviors. This could have given more insight into connections between the workplace factors and APNs’ experiences when encountering possible victims.

The open-ended questions, while lower in numbers, gave an impression of victim characteristics as a great barrier—victims were afraid to disclose abuse or refused help. While this was not what was asked it is significant that 23 APNs wrote about this anyway. Among those victim characteristics were also victim disability—two APNs cited victims’ physical or cognitive limitations in fleeing abuse. Abuse of the cognitively impaired elderly and physically disabled are definite areas of concern that need more research.

The other most often named concerns were lack of time and a work culture wherein treating IPV was not welcomed. There was frustration voiced about living in rural communities
where community IPV resources were not available and women were trapped in multigenerational familial abuse and poverty, which played a strong role in the inability of the APN to engage victims in treatment. Based upon the write-in responses, some APNs felt that only abuse with physical signs could be addressed. This author also received personal emails from participants who noted that this survey made them reconsider how they screen for IPV and question why IPV screening was not routinely done in their workplaces. This factor of a no-screening culture may also have affected APNs’ engagement in treating IPV, since over 60% of respondents did not feel they had more than ‘a little’ collegial support regarding issues surrounding IPV. These workplace open-ended answers, while smaller in number, could be construed as subtle factors that may accumulate to affect the APNs’ behavior. Previous studies have documented the need for a champion when attempting to institute staff behavior change.

Written educational materials for patients were often not available; this information was collected on the self-reported practice behaviors scale. However, availability of educational materials is more accurately a workplace support that should have been incorporated into the WFIT scale. Close to 29% of APNs did not have IPV patient educational materials in the workplace, thus it is possible that APNs who did not screen for IPV did not do so also due to lack of ability to provide useful patient solutions if an IPV victim was discovered. One APN did cite this as a specific barrier to screening in his/her workplace. The fact that 14% of APNs stated that they did not know if there were educational materials at their workplace leads one to believe with the above information that their workplaces do not have cultures that promote IPV screening; this leaves one to surmise that the cultures of these workplaces are not screening friendly. This reinforces recommendations from an implementation paper that emphasizes the
need of clinic champions for IPV screening if the procedure is to become commonplace and accepted (M. Cruz, P. Cruz, Weirich, McGorty, & McColgan, 2013).

**Personal Factors**

The personal factors that entered into the final model all had lower weights but were age in years, resilience, and VT. VT was negatively correlated with self-efficacy to treat IPV with a very low weight. **Older age** was the most heavily weighted personal factor that correlated with self-efficacy to treat IPV in this sample, which was older, but representative of APNs nationally. Since older age often coincides with longer time in practice, this makes sense. The other personal factor of **resilience** that was positively correlated with self-efficacy to treat IPV seems logical since individuals with resilience in other studies are more likely to take on difficult situations with an expectation of success in those endeavors (Bandura, 1993; Chen et al., 2001). Gillespie (2007) found a significant correlation \( r = .643 \ p < .01 \) between self-efficacy and resilience in a large \( N = 692 \) sample of operating room nurses; a similar correlation was found in this study \( r = .343, \ p < .001 \), though at a slightly lesser magnitude.

Though not in the final model, **witnessing IPV** was significantly negatively correlated with **self-efficacy to treat IPV** with a low weight, possibly because those who witness IPV may have negative psychological effects creating avoidance of the issue depending on one’s personality, and level of recovery. **Avoidance** in this study was independently negatively correlated with self-efficacy to treat IPV at a statistically significant level. It is possible that in this study APNs with IPV personal experience also experienced VT which was weakly negatively correlated with **self-efficacy to treat IPV** in this study.
While presence of VT was negatively correlated with self-efficacy to treat IPV in this study, it was with a very low weight, and relatively few in this sample had VT. The overall level of VT in this sample was under 13%, far lower than seen in an integrative review of nurses and VT, which showed rates of 25-33% (Beck, 2011). One reason that personal factors did not account for much of the variance in self-efficacy to treat IPV could be because of this low incidence of VT in this sample. A secondary analysis of the data looking at those with VT, compared with those without VT is needed to further explain how VT affects APN self-efficacy to treat IPV or their practice behaviors. Even among the deleted cases there could be some cause for further data analysis, since it could be possible that those with VT would not be in practice, and therefore were deleted from the sample, in part, due to VT. Since VT and all of the subscale symptoms of arousal, intrusion, and avoidance were negatively correlated with self-efficacy and resilience in this sample, it makes sense that those who did suffer from VT would be less likely to be self-efficacious in treating IPV due to lower overall self-efficacy. This reinforces a need for a secondary analysis of the data looking more closely at those subjects with VT.

A recent integrative review of resilience in nurses found that strategies of cognitive reframing, toughing up, emotional toughness, detachment and reconnecting with family and friends, may help to alleviate distress and improve psychological resilience (Hart, Brannan, & De Chesnay, 2014). It is logical that those with greater resilience would also have higher self-efficacy to deal with emotionally difficult situations such as posed by IPV. This sample of APNs had high levels of both self-efficacy and resilience.
Predictors of Self-Efficacy to Treat IPV

It is no surprise that *self-reported current practices* (practice sum score, which included onsite patient education materials) was the most heavily weighted predictor in self-efficacy to treat IPV, followed by *total hours of IPV education*, then *age in years, role belief, resilience, IPV actual knowledge*, and negatively correlated with the lowest weight was *vicarious trauma*. This finding is congruent with results of all previous studies that indicate HCPs who are more experienced with IPV care perform better, and that more IPV education is related to better performance (Baird, 2013; Hinderliter et al., 2003; Wathen et al., 2009). Recent studies of medical students demonstrated that IPV education that is reinforced over time has better effects and improves skills and retention (Buranosky, Hess, McNeil, Aiken & Chang, 2012). Thus, for educators and administrators of health care organizations, the results of this study reinforces the need for more continuing education for APNs on IPV, more clinical practice, as well as more IPV education across the years of formal APN education. HCPs’ skills build over time from novice to expert, and this was confirmed by this study by the *years in full-time practice* and *practice behaviors* as related to self-efficacy to treat IPV. Thus, more emphasis on integrating IPV education over the course of APN educational programs, as well as via ongoing continuing education on IPV with clinical scenarios and practice is recommended. Professional factors by far outweighed personal factors in APNs’ self-efficacy to treat IPV in this study. The final model of the results is pictured in Figure 2 with beta weights next to the factor.
Strengths and Limitations

The strength of this study is that it is the first large-scale study of APNs’ responses to IPV in the past 15 years, and it adds to APN population knowledge concerning IPV. This study supports the data that Hinderliter and colleagues published in 2003, and documents that there has been little change in the main professional contributors to APNs effectively identifying and treating IPV. It is also the first study that attempted to explore the APN personal factors of vicarious trauma, resilience, and general self-efficacy as it relates to treatment of IPV. It is also the first study to ask APNs about their personal experiences of IPV victimization or witnessing...
of IPV in family members on a large scale. While this study cannot claim to show causality, it was an attempt to describe relationships among the variables (Polit & Beck, 2012).

Another strength is that the sample achieved is fairly representative of the demographics of the U.S. APN population. This was the first large scale study that this author is aware of that queried APNs specifically on resilience, self-efficacy, and their experiences of vicarious trauma, using previously validated tools that have at least some normative data with other non-clinical populations. However, there were limited numbers of minority participants, who may have different experiences. Nevertheless, these data could become part of a larger body of knowledge that examines these constructs in other related studies.

One limitation is that the data were collected over a period of approximately six weeks from July to August 2014 and only capture the experiences of those respondents at that one period of time, but it was a practical study due to that cross-sectional design. Another limitation was the use of self-reported data, a method that has been described as having many risks as well as benefits.

**Instruments**

The instruments used in the study had strong internal consistency overall. The most recent similar study, using a population of 318 nursing students, 52 of whom were DNP or PhD graduate students, found very similar reliabilities of their versions of the study measures (Conner et al., 2011). Another study done in Greece with general practitioners and medical residents had similar if not slightly worse reliabilities than this study’s modified and original instruments. Several instruments were designed or modified by the author. However, the new and modified instruments developed by the investigator had no normative scores for nurse practitioners.
Another weakness is that the new instrument, the *WFIT*, could have been more explicit in wording and more specific to better capture workplace factor’s effects on APNs’ attitudes and behaviors. Comments from respondents indicated that the *WFIT* could be revised for greater clarity and specificity; though the initial group who reviewed the survey had not made those same comments, this author agrees with the respondents that some of the questions could be more clearly stated. Several of the newest questions on the *KEEPSA-IPV* knowledge scale did not test as well as the others, and those questions were primarily mental health and new epidemiologic data that are not yet likely widely dispersed. Overall, these weaknesses in measurement were addressed by interpreting the findings with caution.

**Implications for Nursing Practice and Research**

Results from this study indicate that APNs do not appear to routinely screen for IPV with any greater frequency than they did nearly 15 years ago. The total number of hours of IPV education APNs receive has increased only incrementally over that time. As previously stated by multiple others, a greater amount of IPV educational opportunities must be offered in formal and continuing education of APNs, and most experts agree that clinical experience is important (Wathen et al., 2009). By the responses to the IPV knowledge questions and the large effect that previous hours of IPV education had upon the outcome variable, one can surmise that further education of APNs on IPV topics should contain updated information. This should contain education about non-injury presentations of abuse, such as mental health symptoms and other stress-related physical illnesses, as well as ways to communicate with victims in a manner that makes disclosure of IPV more acceptable. Future experimental designs should examine actual chart data before and after IPV educational or systems interventions. Qualitative studies would
be useful to determine latent variables that exist within the context of APNs decisions about how to approach IPV, as well as systems factors that influence APNs’ final behavior.

Health systems where APNs practice must adopt cultures wherein screening for IPV is routine and desirable. Bandura (2001) writes about a combined perspective of human agency that includes intentionality, forethought, self-reactiveness (the ability to shape courses of action and cause their execution), and self-reflectiveness. This seems a good model for both APNs and health care systems to consider since changes in HCPs’ behaviors occur within systems of care. The collective agency for aggressive treatment of IPV in health care systems must be improved in order to improve APNs’ ability to identify and treat IPV. This study revealed that clinics must improve the availability of IPV patient educational materials so that all victims have access to more information. Confirming results from previous studies, administrators must become more aware of staffing needs and the time that it takes to address this important health topic. Time spent with earlier identification of IPV and prompt entry into treatment will pay off in better long-term health outcomes and reduced human suffering as well as reduced health care costs due to chronic illness. From multiple studies, screening alone will not improve health outcomes for victims, but without detection of the condition, treatment for IPV cannot begin. Small improvements listed above could work to strengthen rather than undermine APNs’ abilities to identify and treat IPV. APNs must be encouraged and coached to become clinic champions and leaders in efforts to improve IPV identification and treatment, and must mentor new nurses and other APNs to become IPV screening and treatment engagement champions.

While the majority of APNs surveyed did not have clinical vicarious trauma, a small number did, thus a secondary analysis of this data may reveal new information about the
behaviors of APNs and their self-efficacy to treat IPV. Since many have written about loss of nurses and other health care professionals to burnout, and IPV treatment is by definition a high stress area of care, the connections between vicarious trauma, burnout, and their prevention in APNs, particularly in those who deal with the aftermath of violence, must be explored in greater depth. A secondary analysis of the cases that were discarded due to lack of current practice could also prove illuminating, since it would be of interest to see if those cases deleted for lack of current practice were also suffering from VT. A secondary analysis of demographic factors such as size of communities and ethnicities might also reveal new information about how APNs in various community types deal with IPV. From write-in responses to the WFIT, extra barriers and social issues exist in rural communities, similar to previous research findings. Difficulties such as fear and lack of ability to escape abuse are compounded for rural residents who have fewer resources due to location, and this, in turn, affects those who care for them. More qualitative research is imperative for such vulnerable community systems. Another secondary analysis by subspecialty is also needed as APNS from various specialties of care could have different experiences.

**Conclusion**

Findings from this study indicate that APNs’ self-reported current practice behaviors regarding IPV, total hours of IPV education, age in years, role belief, resilience, absence of vicarious trauma, and IPV knowledge were the most significant contributors to APNs’ self-efficacy to treat IPV in this study. There is need for improvements in education on IPV for APNs and their victim screening behaviors, as well as for continued research into this serious clinical problem. Systems where APNs work must offer more resources and cultures wherein IPV
diagnosis and treatment is a standard of care. APNs who suffer from vicarious trauma from witnessing abuse either personally or professionally had lower scores on resilience and self-efficacy measures in this study. Further exploration into resilience, self-efficacy, and vicarious trauma among APNs is indicated to improve their career functioning as well as their ability to engage their patients in treatment for IPV. Because IPV occurs within a larger community system, multi-level systems improvements are needed to assist APNs to become stronger clinicians and to assume roles as leaders to address this important health topic.
APPENDIX A:

IRB APPROVALS
Disclaimer Relationships between Advanced Practice Nurses’ Professional, Workplace, and Personal Factors and Self-Efficacy to Treat Intimate Partner Violence

Purpose of the Study:

The purpose of the study is to collect preliminary information about advanced practice nurses (APNs) professional, work place and personal factors and their self-efficacy to treat intimate partner violence (IPV).

What will Occur

This is a survey containing the following topics as they relate to you and IPV: education, knowledge, confidence, and practices; work environment; experience of stress and trauma; resilience; and self-efficacy. The total time to complete the entire survey is about 30 minutes. While you do not have to complete the survey all in one sitting, please try to complete the survey within two week as after that time your answers will be submitted and your survey will be closed.

Benefits of this Study:

There are no direct benefits to you. However, you may benefit from having your voice heard, as well as to help you clarify your own approach IPV professionally.

Risks or Discomforts:

This survey poses minimal risks to participants. However in order to minimize risks to you, should you be under legal proceedings for a personal IPV case, under current treatment for stress disorders associated with IPV, or treatment for a major mental illness that that has not been in remission for at least 6 months, we ask that you do not participate. In order to minimize the already small risk to others there is a list of IPV and mental health resources at the end of the survey.

Confidentiality:

Your responses will be kept confidential. Only the investigators will be able to see your responses and no personally identifying information such as IP addresses will be attached to your survey.

Compensation:

You will have an opportunity to enter a raffle to win one of three $100 gift certificates, for which we will need your name and email address but it is NOT attached to the results of your survey. Participation in the research study is not required to enter the raffle. Entries are limited to one entry per person - subjects under age 18 must have written consent from a parent or lawful guardian, and participation in the raffle is void where prohibited by law. Decision to Quit at any Time:

Version 06/06/2014
Your participation in this study is voluntary. This means that you are able to withdraw at any point during this study. If you have already started the survey and do not wish to continue, then you may leave the website. If you choose not to participate in the survey, you will not be removed from the listserv. For questions about your rights as a participant in this study, or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Subjects Protection Program at 520-626-6721 or online at http://ocr.arizona.edu/hbpp. You may also contact the Principal Investigator Marla McCall at marlam@email.arizona.edu

How the Findings will be used:

The findings from this research project will be used for scholarly purposes only. The results from the study will be presented as part of the requirements for a PhD in Nursing, and may be published in a scholarly journal or presented at a professional research conference.

Consent:

By clicking the “I agree” button and proceeding to the survey, I provide my consent to participate in the study.
APPENDIX B:

PERMISSIONS FOR INSTRUMENTS
PREMIS can be used for non-commercial purposes as stated by authors in their instructions and toolkit. Multiple persons have adapted the tool and I have informed those whose materials I am using as well as cited them (Short et al., 2006, Conner et al., 2011 & 2013).

**Secondary Traumatic Stress Scale**

Hello Dr. Bride,

I am a PhD candidate and nursing student hoping to use your STS in my upcoming doctoral dissertation study of nurses from this reference:


May I have your permission?

Sincerely,

Marla McCall, MSN, APRN-BC
Psychiatric Nurse Practitioner
PhD Candidate
mobile 916-770-0267 (PST)

Hi Marla

I am happy to grant you permission to use the STSS in your dissertation. Let me know if you have any questions as you proceed.

Best,

Brian

Brian E. Bride, Ph.D., MSW, MPH
Professor & Ph.D. Program Director
School of Social Work
The University of Georgia
425 Tucker Hall
Athens, Georgia 30602
(706) 542-5425

Editor-in-Chief, *Traumatology*
Fellow, Owens Institute for Behavioral Research
On Apr 13, 2014, at 6:19 PM, Marla McCall <marlam@email.arizona.edu> wrote:

> Hi Jennifer,
> 
> I am also a PhD Candidate, at the Univ. of AZ. I tried to contact Dr. Bruce Smith a few weeks ago in order to obtain formal permission to use the Brief Resilience Scale since he was the first author. You are the last author and also a candidate so you may understand my urgency to obtain this since our grad college requires a written permission. Do you know who I can contact to get this?
> 
> Sincere thanks,
> 
> Marla McCall, MSN, APRN-BC
> Psychiatric Nurse Practitioner
> PhD Candidate, Univ. of Arizona
> Mobile: 916-770-0267

On Sun, Apr 13, 2014 at 4:37 PM, Jennifer Bernard <jfawnb@gmail.com> wrote:
Hello Maria,

Dr. Smith is the originator of the scale and would need to be the person to grant you permission to use the scale. I have copied him on this email. I know he has had a really busy semester. I would just encourage you to try him again. Good luck in your study!

Jen

Jennifer F. Bernard, M.S.
Doctoral Candidate Clinical Psychology
University of New Mexico

On Apr 13, 2014, at 6:19 PM, Marla McCall <marlam@email.arizona.edu> wrote:

> Hi Jennifer,
> 
> I am also a PhD Candidate, at the Univ. of AZ. I tried to contact Dr. Bruce Smith a few weeks ago in order to obtain formal permission to use the Brief Resilience Scale since he was the first author. You are the last author and also a candidate so you may understand my urgency to obtain this since our grad college requires a written permission. Do you know who I can contact to get this?
> 
> Sincere thanks,
> 
> Marla McCall, MSN, APRN-BC
> Psychiatric Nurse Practitioner
> PhD Candidate, Univ. of Arizona
> Mobile: 916-770-0267
April 15, 2014

Hi Marla,

Thanks for your interest in the Brief Resilience Scale. You are welcome to use it free of charge and for as much as you like. I have attached the original validation article, a copy of the scale as it usually appears in questionnaires, a chapter with suggested cut-offs for high and low resilience, and an article on the predictors of resilience. Please let me know what you find when you can. I wish you the best in your research.

Kind Regards.

Bruce

New General Self-Efficacy Scale
APPENDIX C:

RECRUITMENT EMAIL
RECRUITMENT EMAIL

Dear Advanced Practice Nursing Colleague,

I am a fellow advanced practice nurse and I am conducting a research study on the professional, workplace and personal factors that may affect an advanced practice nurse (APN) who cares for patients who may be experiencing intimate partner violence (IPV). An Institutional Review Board responsible for human subject research at The University of Arizona reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

I would very much appreciate your participation in my survey to obtain some information about your experiences and background on this important health topic. This survey, while not offering immediate benefits to you, may help you to clarify your role in IPV treatment as well as help to inform both educational and practice institutions about what APNs need to more effectively treat victims. You will be given a chance to participate in a drawing for one of three $100 gift cards for Amazon if that is legal in your state or territory of residence. Participation in the research study is not required to enter the raffle. Entries are limited to one entry per person; subjects under age 18 must have written consent from a parent or lawful guardian, and participation in the raffle is void where prohibited by law.

Since this is a survey of APNs, we ask that you complete this survey only if you are a currently practicing APN or midwife with at least a master’s degree.

https://uarizona.co1.qualtrics.com/SE/?SID=SV_4ILGtYKFuWShVMp

Sincerely,

Marla McCall, MSN, APRN-BC
Psychiatric Nurse Practitioner
PhD Candidate
College of Nursing
University of Arizona
Email: marlam@email.arizona.edu
Mobile: 916-770-0267

Attachments: Family Violence Resource List
APPENDIX D:

FAMILY VIOLENCE RESOURCE LIST
SUPPORT AND TREATMENT RESOURCES

This is a list of resources that you may access should you want more information about family violence and/or treatment.

If you are in immediate danger call 911

**NATIONAL DOMESTIC VIOLENCE HOTLINE** use this if you need urgent help but are not in immediate danger  
800-799-SAFE (7233) / www.thehotline.org

**NATIONAL SEXUAL ASSAULT HOTLINE**  
800-656-HOPE (4673) / chat at online.rainn.org / www.rainn.org

**LOVEISRESPECT: TEEN DATING VIOLENCE HOTLINE**  
866-331-9474 / text ‘loveis’ to 22522 / chat at www.loveisrespect.org

**1 IN 6: RESOURCES FOR MALE SURVIVORS OF CHILDHOOD SEXUAL ABUSE**  
www.1in6.org / Online Support Line at 1in6.org/men/get-help

**SAFE HELPLINE: SEXUAL ASSAULT SUPPORT FOR THE DEPARTMENT OF DEFENSE (DOD) COMMUNITY**  
877-995-5247 / Online Helpline at safehelpline.org/about-dod-safe-helpline

Nomore.org A web community comprised of U.S. corporate sponsors who are working toward ending domestic violence and sexual assault

Prevent Connect http://www.preventconnect.org this is a national online project dedicated to the primary prevention of sexual assault and domestic violence

**NATIONAL NETWORK TO END DOMESTIC VIOLENCE**  
http://nnedv.org/resources/coalitions.html Links at this website for state specific local resources

Other resources for mental health help are:

National Alliance on Mental Illness http://nami.org

Many employers have Employee Assistance Programs and usually you can obtain six visits free of charge if your condition was as a result of exposure to trauma at work. These are confidential and will not affect your employment status. You may also contact your insurance carrier, your local mental health department or the internet to find persons who treat family violence.
REFERENCES


Handran, J. (2013). *Trauma-informed organizational culture: The prevention, reduction and treatment of compassion fatigue.* (PhD), Colorado State University, Fort Collins, CO. Retrieved from http://digitool.library.colostate.edu///exlibris/dtl/d3_1/apache_media/L2V4bGlicmlzlzL2R0bC9kM18xL2FwYWNoZV9tZWRpYS8yMDc1Mzc=.pdf


of the American College of Surgeons, 212(5), 867-872. 
doi:10.1016/j.jamcollsurg.2011.01.003


doi:http://dx.doi.org/10.1016/j.amepre.2010.10.023