Influencing Factors Related to Workplace Bullying Among Nurses: A Systematic Review

By

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Abstract

Researchers in the fields of psychology and business have studied workplace bullying since the 1980s, and more recently it has gained attention in the healthcare arena. It is of specific interest to nurses, as nurses are reported to have the highest prevalence rates among health professionals. Moreover, there are numerous consequences to individual well-being, work teams, health organizations, and patient care. Researchers have studied the relationships between influencing factors and exposure to workplace bullying; however, these findings have not yet been systematically reviewed. Therefore, the aim of this thesis is to examine what is known about factors that positively and negatively influence the risk or prevalence of workplace bullying among nurses, and systematically review the findings. Fourteen studies were selected for final inclusion in the review, including both quantitative and qualitative published studies that examined correlations between potential antecedent factors and risk of bullying among formally educated nurses. Quality assessments, data extraction, and analysis were completed for all included studies. Content analysis was conducted using the Theoretical Framework for the Study and Management of Bullying at Work as a baseline. The framework was then adapted to reflect the findings that nurses reported both enabling and inhibiting factors at the individual, social, and organizational levels. Additionally, organizational action in response to bullying behavior was reported as an important enabler of future bullying behavior. The findings of the review provide direction for multidimensional intervention strategies, management training, and policy development. Future research is needed to confirm the results of original studies, explore relationships among factors at various levels, examine antecedents from the perspective of the bully, and confirm or expand the remaining components of the framework for its overall applicability to nursing. More rigorous designs are also needed to study directionality and improve the strength of findings.

Preface

This thesis is the original work of Christine Howell. No part of this thesis has been previously published.

Dedication

This thesis is dedicated to all nurses who have experienced bullying in their place of work. It is my hope that the findings from this thesis contribute to a solution. It is also dedicated to nurse researchers, and nurse leaders, that are working towards ending the practice of bullying in the workplace. Thank-you for your vision, your advocacy, and your commitment to this important issue.

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Chapter 1: Introduction

A Brief History of Workplace Bullying

Workplace bullying was first formally recognized in Scandinavia in the 1980s, (Einarsen, Hoel, Zapf, & Cooper, 2011) originating from Professor Heintz Leymann's research into workplace conflict (Einarsen et al., 2011). Leymann (1996) used the term "mobbing" to describe frequent hostile or unethical behavior directed towards an individual over a long period of time, where the individual is placed in a defenseless position by the continuation of the behavior. Interest in mobbing then began to grow across Nordic countries among researchers, unions, occupational health groups, and media outlets (Einarsen, Hoel, Zapf, & Cooper, 2003b).

It was later acknowledged in the United Kingdom in the early 1990s, through the work of journalist Andrea Adams, who labeled the concept "workplace bullying" (Einarsen et al., 2003b). From there, interest spread to Germany, Australia, and Italy (Einarsen et al., 2011), and today the concept of workplace bulling is internationally recognized.

Problem and Significance Within Nursing

While bullying in the workplace has been researched and documented in the business and psychology literature since the 1980s, more recently it has gained attention in the field of healthcare. Within this growing body of research, evidence has emerged to suggest that, while all health professionals experience bullying, it is most prevalent among nurses (Lewis, 2006b; Quine, 2001; Vessey, Demarco, & DiFazio, 2010). A number of studies have published self-reported exposure rates between 30-50% (Johnson & Rea, 2009; Quine, 2001; Spector, Zhou, & Che, 2014), while other studies have reported exposure rates as high as 96.1% (Griffin, 2004). Subsequently, nurse researchers from Canada, the United Kingdom, the United States of

America, Australia, New Zealand, Pakistan, and Turkey are now focusing efforts on further understanding this complex issue (Johnson, 2009).

Workplace bullying can be broadly defined as a pattern of frequent negative behaviors from one staff member to another, where the targeted individuals cannot defend themselves or stop the behavior (Lutgen-Sandvik, Tracy, & Alberts, 2007). Common bullying behaviors identified in the nursing literature include, but are not limited to, nonverbal innuendo, overt or covert verbal remarks or responses, undermining activities, withholding information, sabotage, infighting, scapegoating, backstabbing/gossiping, failure to respect privacy, breaking confidences, blocked learning opportunities, and high levels of responsibility without appropriate levels of support (Griffin, 2004; McKenna, Smith, Poole, & Coverdale, 2003). While various terms and definitions have been used throughout the nursing literature to describe workplace bullying, a recent analysis concluded that the defining behaviors, and subsequent outcomes, remain consistent across all conceptualizations (Roberts, 2015).

Bullying within nursing has been recognized internationally as a significant problem. Researchers consistently find the consequences to be widespread, with significant negative impact to individual well-being, team functioning, healthcare organizations, and patient care (Griffin, 2004; Loh, Restubog, & Zagenczyk, 2010; McKenna et al., 2003; Quine, 2001; Rosenstein & O'Daniel, 2008; Rowe & Sherlock, 2005; Simons & Mawn, 2010). Individual consequences include poor self-esteem, impaired physical and emotional health, reduced cognitive functioning, increased risk of depression, alcohol abuse, post-traumatic stress disorder, chronic stress, high blood pressure, and increased risk of coronary disease (Lutgen-Sandvik et al., 2007; McKenna et al., 2003; Quine, 2001; Rowe & Sherlock, 2005). Consequences also extend to healthcare organizations with findings of increased sick time and absenteeism (Quine, 2001), decreased employee job satisfaction (Loh et al., 2010; Rowe & Sherlock, 2005), and impaired

workgroup identification (Loh et al., 2010). Furthermore, nurse researchers suggest that the victims of workplace bullying are more likely to leave their current position, or the profession entirely (Griffin, 2004; Quine, 2001; Simons & Mawn, 2010). This becomes costly to organizations, as a 2014 comparative review across the USA, Canada, Australia, and New Zealand, found the average turnover cost to be as high as $48,790 per nurse (Duffield, Roche, Homer, Buchan, & Dimitrelis, 2014).

In addition to the individual and organizational consequences, there are also findings of negative effects on patient safety (McKenna et al., 2003; Rosenstein & O'Daniel, 2008; Rowe & Sherlock, 2005) and patient care (Randle, 2003). While positive, collaborative relationships among nurses are required for quality patient-centered care (Vessey et al., 2010), bullying of nurses in the workplace deteriorates communication and team functioning, putting patient safety at risk.

A number of interventions have been trialed to reduce workplace bullying in nursing; however, many show minimal or no improvement to bullying behaviors and an ability to manage them (Ceravolo, Schwartz, Foltz-Ramos, & Castner, 2012; Chipps & McRury, 2012; Dahlby & Herrick, 2014; Stagg, Sheridan, Jones, & Speroni, 2011). Most published interventions to date have been directed towards front-line nurses, and aim to increase awareness about workplace bullying, educate nurses about communication and conflict-resolution, and teach cognitive rehearsal strategies. Often antecedents and influencing factors, considered during the planning phase, are cited from the business and psychology literature, and are not specific to nursing (Chipps & McRury, 2012; Griffin, 2004). Some authors have suggested that interventions to date have been too narrowly focused, and that little attention has been given to understanding work group and organizational factors that enable and perpetuate bullying behaviors (Hutchinson, 2009; Johnson, 2009). Others have specifically stated the need to better understand the factors

contributing towards workplace bullying of nurses in order to inform prevention strategies and plan intervention initiatives (Farrell, Bobrowski, & Bobrowski, 2006; Johnson, 2009).

Understanding factors that increase the likelihood of, or influence, bullying of nurses in the workplace is necessary for prevention work, and for development of initiatives to decrease workplace bullying of nurses. A number of researchers have hypothesized theories to explain bullying of nurses in the workplace (Johnson, 2009; Vessey et al., 2010), and more recently, studies have been conducted to examine specific factors that increase the likelihood, or influence, of bullying of nurses in the workplace (Demir & Rodwell, 2012; Hutchinson & Hurley, 2013; Katrinli, Atabay, Gunay, & Cangarli, 2010). A systematic review of these findings is necessary to educate stakeholders, inform policy, and plan preventative and intervention measures.

Personal Impetus for Research

My personal interest in healthy work environments has been longstanding. In observing nurses as skilled advocates for the health and well-being of their patients, I have wondered about the impact of nurses' work environments on their own health and well-being. During a leadership practicum for my graduate program, I had the opportunity to discuss health workplaces with the Chief Executive Officer of our nursing regulatory body, who recommended workplace bullying as a possible focus for my thesis work.

Since the commencement of my review of workplace bullying among nurses, I have had the opportunity to discuss this issue with a number of nurse colleagues. Through these discussions it has become apparent to me that each nurse has a story of their own personal experience with workplace bullying, or has witnessed bullying secondhand. This has further emphasized the necessity of better understanding this issue.

Chapter 2: Literature Review

Theoretical Framework for the Study and Management of Bullying at Work

The Theoretical Framework for the Study and Management of Bullying at Work (Einarsen, 2005; Einarsen et al., 2003b, 2011) offers a comprehensive summary of the process of workplace bullying, outlining the key variables to be considered for education, intervention, and research work, and accounting for the interaction between antecedents, behaviors, reactions, and outcomes (Figure 2). Some marked features include: a distinction between inhibiting and enabling influencing factors, an account for the victim's perception, the influence of organizational response, and the interrelationship among antecedents, behaviors, reactions, and outcomes.

While a few models and frameworks of workplace bullying have been proposed in the nursing literature (Johnson, 2011; Trepanier, Fernet, Austin, & Boudrias, in press; Youn, Bernstein, Mihyoung, & Nokes, 2014), the Theoretical Framework for the Study and Management of Bullying at Work (Einarsen, 2005; Einarsen et al., 2003b, 2011) was selected from outside the nursing literature as a baseline for analyzing the findings of the review as it was the most comprehensive, accounting for the interrelationship among inhibiting and enabling antecedent factors, the perception of the victim, and the influence of organizational action. The framework was selected following the data extraction stage of the systematic review. While a limited explanation of the development of the framework exists, and it has not yet been formally tested or widely used, it was developed by a group of recognized experts in the field, and it provides a comprehensive overall explanation of the bullying process.

Rationale for Review

There has been a growing body of research studies on bullying of nurses in the workplace, and more recently, a number of reviews have been published to provide a fuller understanding of

the phenomenon. The literature reviews that have been published often provide a general overview, using broad sets of inclusion criteria, and primarily cite literature from other disciplines to explain antecedents and influencing factors (Johnson, 2009; Vessey et al., 2010). While seminal work from other disciplines is beneficial in understanding influencing factors related to workplace bullying, a review of factors specific to nursing is also necessary, to understand the unique considerations related to the nursing context. More recently, a number of systematic reviews have been published in the nursing literature, with a focus on prevalence of bullying, and interventions to address bullying behaviors. Factors that increase the likelihood of, or influence, bullying of nurses has not yet been reviewed systematically.

In 2009, Johnson published a literature review on bullying of nurses in the workplace, to examine what was known about the scope, consequences, antecedents, and proposed solutions. She provided an overview of five antecedent factors found in the literature from a number of disciplines. These factors included: organizational volatility, leadership styles, organizational hierarchy, oppressed group behavior, and learned behavior. Johnson included 17 relevant nursing articles, and augmented the review with general workplace literature, concluding that more nurse-specific research was needed. Next, Longo (2010) published a general review of the literature on disruptive workplace behaviors among nurses and physicians, to examine possible causes and consequences, and provide recommendations for nursing managers. The review included a variety of literature from medicine, nursing, and healthcare, and did not report a specific methodology. The authors of a 2011 state of the science review, examined intraprofessional bullying, harassment, and horizontal violence (BHHV) towards nurses in acute care settings, and again, primarily used literature from a variety of disciplines to outline explanatory models of BHHV (Vessey et al.). In 2013, Quinlan, Robertson, Miller, and Robertson-Boersma published a

scoping review on interventions to reduce bullying. The review examined eight articles on bullying interventions among both health care staff and public sector staff.

In 2010, Embree and White published a concept analysis of lateral violence in nursing, offering a descriptive review of the various definitions from the literature, and included a brief overview of antecedents. Most recently, Roberts (2015) published a review of three prominent concepts - lateral violence, bullying, and incivility - and concluded that the definitions were similar, with many of the same overlapping components. She highlighted the need for clarification of their overall etiology, as to inform future intervention planning.

To date, a number of systematic reviews have also been published on the topic. However, there are no reviews that focus on factors that increase the likelihood of, or influence, workplace bullying within the nursing population. Furthermore, systematic reviews specific to workplace bullying include nurses only as a limited part of the represented population, and those that focus on a nursing-specific population review several forms of workplace aggression (Edward, Ousey, Warelow, & Lui, 2014; Spector et al., 2014; Stagg & Sheridan, 2010).

In 2014, Hutchinson and Jackson published a systematic review with the aim of examining various forms of hostile clinician behaviors between clinicians, including bullying, and their influence on patient care. In 2014, a systematic review was published on nurses and aggression in the workplace (Edward et al.). The purpose of the review was to identify types of aggression against nurses, evaluate the adverse effects, and evaluate coping methods. The review identified six studies that examined verbal and physical abuse by patients, peers, and other health professionals, towards both nurses and nursing aides. In 2014, Spector et al. published a systematic review summarizing exposure rates of physical and nonphysical violence, bullying, and sexual harassment towards nurses.

Two systematic reviews have also been published on bullying interventions. In 2010, Stagg and Sheridan published a systematic review to understand the effectiveness of bullying and violence prevention programs, with the objective of improving the development of prevention programs for nurses. The ten included studies examined programs designed for registered nurses, other health care workers, business professionals, and school-aged children. In 2009, Rogers-Clark, Pearce, and Cameron published a systematic review that sought to examine the available evidence around successful interventions for managing disruptive clinician behavior in the nursing practice environment. The review assessed a total of 24 articles including quantitative and qualitative studies, as well as expert opinion, and concluded that little research evidence is available, and the findings are not generalizable.

On June 20, 2015 I conducted a search for reviews currently underway in Cochrane and PROSPERO with search terms (Appendix D). One review protocol was submitted in 2012 for a systematic review to examine prevention of bullying in the workplace; however, it is not specific to nursing and includes participants from all private, public, or voluntary workplaces (Gillen, 2012). No other relevant reviews were located.

Despite a growing body of nurse-specific research in the area of workplace bullying, nurse researchers continue to rely primarily on literature from other disciplines as foundational knowledge for understanding influencing factors, and for planning intervention initiatives. This is likely due to the larger body of work that has previously been established on general workplace bullying and bullying among youth. Additional explanations might include power dynamics that prevent exploration of bullying, and possible publication bias. While a number of reviews have been conducted that include the nursing population, none have systematically reviewed factors that increase the likelihood of, or influence, bullying of nurses in the workplace. A systematic review of antecedents and influencing factors, within the nursing context, is necessary to inform

policy development, guide prevention and intervention planning, and further direct nursing research (Embree & White, 2010; Roberts, 2015).

Purpose and Research Question

The purpose of this thesis project is to identify and assess factors that are currently known to increase the likelihood of, or negatively or positively influence, bullying of nurses in the workplace, with consideration of personal, environmental, and organizational factors that influence workplace bullying in nursing. Therefore, the research question that has been developed from the problem and purpose is:

1. From nurses' perspectives, what factors are known to negatively or positively influence nurse-to-nurse bullying behaviors in the workplace?

Definition of Terms:

Workplace Bullying. A number of terms conceptualizing negative relational behaviors towards nurses in the workplace are found throughout the nursing literature, including: bullying (Lutgen-Sandvik et al., 2007), horizontal violence (Curtis, Bowen, & Reid, 2007), lateral violence (Griffin, 2004), incivility, workplace aggression (Farrell, 2007), hostility, mobbing (Einarsen, Hoel, Zapf, & Cooper, 2003a), harassment, and disruptive behavior (Longo, 2010). Some distinctions have been made between terms, such as horizontal violence referring to negative behaviors between peers, and lateral violence indicating a power differential between nurse manager or leader and a staff nurse. Level of intensity is also used as a distinguishing factor. However, the terminology is often used interchangeably (Vessey et al., 2010), and while authors may choose a specific term to identify the staff relationship or level of intensity, the same behaviors and outcomes are shared across conceptualizations (Roberts, 2015).

The term 'bullying' is used in this thesis, to represent a number of conceptualizations of negative relational behaviors from the literature. Bullying is the most commonly used term, it

provides familiarity to a range of readers, and is often used as a mesh or subject heading in databases. Additionally, of all the terms used, bullying has the most comprehensive definition.

The concept of bullying in the workplace can generally be defined as a pattern of multiple, negative, overt or covert behaviors, occurring frequently over an extended period of time, where victims are unable to defend themselves or stop the abuse (Johnson, 2009; Lutgen-Sandvik et al., 2007). While this definition originates from research outside of nursing, it is supported by both concept analyses, and research within the nursing discipline (Embree & White, 2010; Johnson, 2009). It is important to note that bullying differs from simple conflict, in that simple conflict involves a disagreement or difference of opinion that can be resolved by either party; whereas, bullying is characterized by a power differential (Johnson, 2009). Additionally, it is important to note that while the term "workplace violence" is sometimes used to describe bullying, it most commonly refers to physical violence or threats of intent to harm (Ontario Ministry of Labour, 2015).

For the purpose of this thesis, the definition of bullying provided here is used as general guide, but is not used in its entirety to strictly limit the inclusion and exclusion of studies. Articles selected for the final review, all include a definition that includes negative relational behaviors occurring over an extended period of time, as to differentiate from simple workplace conflict or incivility.

Lastly, in the scoping search, studies were identified that discuss bullying as physical or sexual aggression. However, this review focuses only on relational bullying, involving behaviors that include verbal and nonverbal communication, and emotional abuse.

Nurses and Nursing. The defined population for the review refers to the nurse victims of bullying behaviors. The population examined for this systematic review comprises nurses working in a clinical practice setting that have a formal level of nursing education. For the

purpose of this review, the definition of nurses includes Registered Nurses (RNs), Nurse Practitioners (NPs), Licensed Practical Nurses (LPNs), and BScN and diploma-educated nurses. This also includes newly graduated nurses that have recently entered the workforce, and nurses in supervisory positions, as nurses in leadership roles have been identified as common perpetrators of nurse-to-nurse bullying, and sometimes as victims themselves (Hutchinson, Vickers, Jackson, & Wilkes, 2005; Lewis, 2006a; Quine, 2001). Nursing aides, and health care aides are excluded from the definition. Nursing students and academic faculty members and educators are also excluded, as a separate body of literature exists specific to bullying within academia.

Current evidence affirms that the most common perpetrators of workplace bullying of nurses are nurse co-workers and nurse supervisors (Vessey, Demarco, Gaffney, & Budin, 2009). Therefore, this review assesses studies that examine nurse-to-nurse bullying. For the purpose of this review, strict limitations were not set in regards to the population of those carrying out the bullying behaviors within the workplace as it is not always clearly defined. However, as the focus is primarily on peer bullying, articles that examined bullying perpetrators solely as physicians, other health care staff, and patients were excluded.

Contribution (what am I contributing)

The knowledge generated by this systematic review will provide a more comprehensive understanding of the factors that increase the likelihood of, or influence, bullying of nurses in the workplace, that can be used to educate stakeholders, inform policy, and plan preventative and intervention measures. As workplace bullying of nurses is addressed, the overall goal is to create healthy work environments that support the physical and emotional well-being of nursing staff, foster feelings of safety, develop strong leaders, and empower nurses (Felblinger, 2008). Opportunities to mitigate negative consequences to health care organizations also emerge from a

better understanding of the factors that increase the likelihood of, or influence, bullying of nurses in the workplace.

Assumptions

As a novice researcher, I began my thesis work with an understanding of bullying that was primarily derived from my own life experience and my nursing practice. When setting inclusion criteria, I assumed that all authors describing bullying behaviors taking place over time, are measuring the same distinct concept.

I included only formally educated nurses in my sample population for the review. This is premised on the assumption that formally educated and regulated nurses differ from other classifications of nursing staff in how they might experience workplace bullying and which factors may influence their risk of being bullied. I have also assumed that nurses are able to self-report their own experiences of bullying. Furthermore, I have chosen to focus on articles that examine peer bullying, under the assumption that interdisciplinary bullying or patient-related bullying may have different influencing factors.

One of my goals for this work is to influence intervention work. This is based on the assumption that a synthesized, more comprehensive understanding of factors that influence workplace bullying among nurses is necessary for guiding the development of intervention strategies.

Chapter 3: Methods

Search Strategy

First, I conducted a scoping literature search in June 2015 to provide an understanding of the nature and breadth of the published literature on workplace bullying of nurses. The scoping search was conducted using the following electronic databases: CINAHL, MEDLINE, PsycINFO, SCOPUS, Web of Science, EMBASE, Business Source Complete, and PROQUEST. Databases that publish health-related research were selected, as to identify studies specific to nurses. Business Source Complete was included, as it contains research on general bullying and harassment in the workplace. Finally, the PROQUEST database of theses and dissertations was searched to identify additional research work that may not yet be published. As shown in Table 1, a combination of similar search terms was used to search all databases. The list of terms was selected based on a preliminary review of the literature, and finalized in consultation with two reference librarians to ensure completeness.

I screened the results of the initial scoping search using a set of broad inclusion and exclusion criteria to identify any articles that examined nurse-to-nurse relational workplace bullying behaviors among formally educated nurses. The articles identified from this initial screening were then advanced to the systematic review screening where a narrow set of inclusion and exclusion criteria (Appendix A) was applied. The revised inclusion and exclusion criteria for the systematic review screening were developed from the research question, and guided by the PICOS framework, which considers population, interventions, comparisons, outcomes, and study design. EndNote was used as the reference management system for this thesis work.

Finally, I employed additional strategies to ensure all relevant studies had been located. This included hand-searching reference lists of relevant articles, and current reviews, and searching for additional articles written by experts in the field. Additionally, two prominent

authors and researchers with expertise on workplace bullying towards nurses, were contacted via email to request their feedback regarding the final list of articles for inclusion. They were asked for recommendations of additional articles they would include in the review.

Inclusion Criteria

Based on the title and abstract review, articles were selected for a full-text review if they met the following inclusion criteria (Appendix A): peer-reviewed, published in English language, full text article available in an online database, quantitative or qualitative study, sample of formally educated nurses working as staff of management/leadership in a clinical practice setting, workplace bullying examined as a dependent variable (if quantitative), and measurement of factor(s) believed to influence the occurrence of workplace bullying as independent variable(s) (if quantitative). Studies that examined influencing factors from a manger's perspective as a third party were excluded, due to a high level of subjectivity. Due to the timeframe of the review, grey literature was excluded, as were thesis and dissertation work that was not further published in a peer-reviewed, academic journal.

Screening and Study Selection

The articles from the systematic review search were put through a two-stage screening process (Figure 1). First, I completed a title and abstract review using the inclusion and exclusion criteria developed from the research question. The PICOS framework was also used to guide development of the inclusion and exclusion criteria, with consideration given to populations, interventions or comparators, outcomes, and study designs (Center for Reviews and Dissemination (CRD), 2009).

Next, I conducted a full text screening on the articles identified as potentially relevant from the initial title and abstract screening. The purpose of the full text screening was to ensure inclusion criteria was fully met. During the full text screening, a log was kept to record and

justify exclusion of articles. Common reasons for exclusion included: examined a concept other than bullying (ie. incivility), inadequate definition of workplace bullying, unable to distinguish bullying from other types of violence, lack of definition for the term 'nurses', inclusion of nursing aides, population of nurses not distinguishable in the findings, bullying examined as an independent variable, quantitative study was not a correlational design, study focused on managers perception of bullying causes among staff, study only examined demographic variables, and study examined the act of reporting bullying as the dependent variable. Three articles that met the inclusion criteria were excluded due to the following: they measured both bullying and internal emotional abuse, but did not provide a clear differentiation, negative affect was measured as a state rather than a trait, and while all three studies examined the same factors in a similar population over short time period, they produced contradictory results which were unexplained (Demir & Rodwell, 2012; Rodwell & Demir, 2012; Rodwell, Demir, & Flower, 2013). Articles where full-text was not available through the online database were also excluded.

In addition to screening by the primary researcher, a second reviewer independently screened ten percent of the articles at each screening stage to compare results with the primary researcher. This was done to ensure validity of the screening process. Discrepancies among reviewers were discussed, and consensus was reached to resolve them.

Data Extraction

After the final set of studies for inclusion has been identified, I extracted data from each study and directly entered it into data extraction tables, as shown in Table 4. The template was adapted from thesis work by Keyko (2014). Missing data from the quantitative studies was reported as 'not reported' (NR).

Separate data extraction tables were used for quantitative and qualitative studies; however, they were similar in design to facilitate comparative analysis. All data extraction tables included

general information including the title, author, year, journal, and country where the research was conducted. Additional data extracted from each of the studies included: purpose of the study, study design, theoretical basis for the research, sample description (including sample characteristics and sample size), and the definition of bullying provided.

Additionally, data extraction tables for quantitative studies included: instruments used to measure bullying and/or associated factors, the reliability and validity measures reported, type of statistical analysis conducted, and the results/findings of the study. Data extraction tables for qualitative studies included: method for data collection and analysis, rigour, and findings from the study, in addition to the general study and participant information.

Quality Appraisal

In addition to extracting key data from each article, I conducted quality assessments on each to determine the strength of the evidence, and to provide recommendations for future research (CRD, 2009). Two quality appraisal tools were used to evaluate the studies for the systematic review. The specific tool was selected based on the type of study.

For all correlational studies, a quality appraisal tool was used that was adapted from another systematic review (Cummings, Lee, MacGregor, Davey, Wong, Paul, & Stafford, 2008) and formatted in a thesis dissertation by Keyko (2014) (Appendix B). This tool is designed as a checklist that considers study design, sampling, measurement reliability and validity, outcome measurement, and statistical analysis, and scores each study out of 14 available points. Studies are given an overall rating as low quality (score of 0-4), medium quality (score of 5-9), or high quality (10-14).

Qualitative studies were assessed using the Critical Skills Appraisal Program (CASP) qualitative tool (2010) (Appendix C). This review utilized the tool as formatted by (Keyko, 2014). While there are a number of tools available for quality appraisal of qualitative studies, the

CASP tool is widely used, and comprehensive but not complex, making it a good choice for novice researchers (Hannes, Lockwood, & Pearson, 2010; Masood, Thaliath, Bower, & Newton, 2011). The tool includes ten questions related to rigor, credibility and relevance, and appraisal is based on yes/no responses. Results were reported on each individual component of the tool, rather than a total score given.

The results of the quality appraisals are reported in detail in chapter 4, and can also be found in Tables 2 and 3.

Data Synthesis

Following data extraction and quality appraisals of each included study, I described and analyzed the results in a descriptive and narrative synthesis.

In the descriptive synthesis, the characteristics of the included studies were compared compared to highlight commonalities and differences. This included a synthesis of general study information, participants/sample, study purpose, theoretical/conceptual framework used, conceptualization of bullying, and instruments used to measure bullying and influencing factors. The results of the quality appraisals were also synthesized.

Next, the narrative synthesis was conducted to offer an analysis and interpretation of the evidence. This synthesis primarily focused on the relationships within and between the influencing factors being measured in both the quantitative and qualitative studies. The results of the qualitative studies were also used to expand upon the quantitative findings. The Theoretical Framework for the Study and Management of Bullying at Work (Einarsen et al., 2003, Einarsen et al., 2011, Einarsen, 2005) was used as a baseline for this analysis.

Ethical Considerations

Ethics approval was not required for this thesis project, as it did not involve human subjects.

Procedures to Minimize Bias

Researchers must consider subjectivity based on personal experience, and anticipate opportunities for bias throughout the research process. I was mindful of my own clinical and life experiences that might affect decision-making throughout the process of the review. The proposed methods were outlined in advance of the systematic review, which reduced the risk of introducing bias as the review is being conducted. Committee members suggested changes to the methodology following their review of the proposal; and once this stage was completed, the methods for the review were considered final. Any necessary amendments to the protocol that were identified during the systematic review process, were discussed with my supervisor, and clearly justified and documented (CRD, 2009). All amendments to the protocol have been reported in the methods section of this report.

To reduce bias in the development of the initial search, two reference librarians assisted with defining the search terms. To check the validity of the search method, the reference lists of major reviews and prominent studies were hand-searched to identify potentially relevant studies that were not found through the initial search.

The screening process was identified as a point where potential bias might be introduced by allowing studies to be included or excluded based on preexisting conclusions, or to fit a guiding model or framework. To ensure reliability of the screening methods, a second reviewer screened ten percent of the articles at both screening stages, and the results were compared. Any disagreements led to a second examination of the article by both reviewers, and discussion among reviewers until consensus was reached.

Additionally, my thesis supervisor reviewed the data analysis to assess for any potential bias in how the conclusions were drawn. Bi-weekly meetings were scheduled with my thesis supervisor to review decision-making processes during the working phase of the review. Finally,

multiple articles that reported data from the same study were combined in the descriptive and narrative syntheses, as to prevent overinflation of results and publication bias.

Chapter 4: Results & Analysis

Search Results

A total of 15,327 results were retrieved from searching the databases with the selected search terms. Duplicates were then removed, leaving 7,973 articles remaining. After the initial scoping title and abstract screening, 1,387 remaining articles went on to the systematic review title and abstract screening, with 157 undergoing a full-text review. From the full-text review, a total of 14 manuscripts were selected for inclusion in the systematic review. A summary of the screening process results can be found in Figure 1. Three manuscripts were published from the same quantitative study and therefore are reported as one study in the results and analysis section of this systematic review (Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger, Wong, & Grau, 2012). Likewise, two manuscripts were published from the same qualitative study, and are also reported as a single study in the results section (Hutchinson, Vickers, Jackson, & Wilkes, 2006a; Hutchinson, Vickers, Jackson, & Wilkes, 2006b).

Included Study Designs

In total, the review includes 9 quantitative studies (Blackstock, Harlos, Macleod, & Hardy, 2014; Bortoluzzi, Caporale, & Palese, 2014; Budin, Brewer, Chao, & Kovner, 2013; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger, Grau, Finegan, & Wilk, 2010; Laschinger et al., 2012; Purpora, Blegen, & Stotts, 2012; Quine, 2001; Topa & Moriano, 2013; Yun, Kang, Lee, & Yi, 2014) and 2 qualitative studies (Hutchinson et al., 2006a; Hutchinson et al., 2006b; Walrath, Dang, & Nyberg, 2010). All quantitative studies were nonexperimental, correlational studies.

Quality Appraisal

All 11 of the included studies were assessed for quality and rated as moderate or high quality. Therefore, none of the studies were excluded based on the results of the quality assessment.

The strengths of the quantitative studies (n=9) included: (1) seven used probability sampling; (2) in eight studies the sample was drawn from more than one site; (3) reliability of the measurement tools used to assess factors associated with bullying was reported in all, and validity of the measurement tool was reported in eight; (4) eight reported an internal consistency of greater than, or equal to, 0.70 for the scale used to measure bullying prevalence; (5) a theoretical model or framework was used for guidance in six; and seven included an analysis of correlations between variables if multiple factors were studied (see Table 2 for summary of the quality appraisal of the quantitative studies).

Overall, the most frequent weakness assessed across quantitative studies was related to sampling. Authors of only four studies reported a response rate of greater than 60%, and only three justified their sample size in the reporting. Additionally, five did not report on strategies to protect the anonymity of participants. Due to ethical considerations, studies that examine the experience of bullying must be retrospective; therefore, none of the studies used a prospective design. All studies used self-report to measure both independent and dependent variables. Lastly, none of the authors reported on the management of outliers.

Both qualitative studies were assessed as high quality using the CASP quality appraisal tool (see Table 3 for summary of the quality appraisal of the qualitative studies). The single weakness noted in reporting from one study, was a lack of discussion regarding the relationship between the researcher and participants (Hutchinson et al., 2006a; Hutchinson et al., 2006b).

Descriptive Synthesis of Included Study Characteristics

Characteristics of the studies included in the systematic review are synthesized and reported in Table 4.

Author(s), year, journal & country. Laschinger authored the highest number of studies in this systematic review, as first author on two quantitative studies (four manuscripts) (Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012). Hutchinson authored two qualitative manuscripts based on the same study (Hutchinson et al., 2006a; Hutchinson et al., 2006b).

All studies included in the review were published between 2001-2014, with the greatest number of studies published between 2012-2014 (seven studies) (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2012; Purpora et al., 2012; Topa & Moriano, 2013; Yun et al., 2014).

Ten of the included studies were published in nursing journals (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Hutchinson et al., 2006b; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Topa & Moriano, 2013; Walrath et al., 2010; Yun et al., 2014). Two of these studies were also published in a work and organizational psychology journal (Laschinger & Fida, 2014), and a journal focusing on management and organizations (Hutchinson et al., 2006a). The remaining study was published in a health psychology journal (Quine, 2001),

Six of the included studies were conducted in North America, with three in Canada (Blackstock et al., 2014; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012), and three in the United States (Budin et al., 2013; Purpora et al., 2012; Walrath et al., 2010). The study by Hutchinson was conducted in Australia (Hutchinson et al., 2006a; Hutchinson et al., 2006b). The remaining four studies were conducted in the following

countries: the United Kingdom (Quine, 2001), Italy (Bortoluzzi et al., 2014), Spain (Topa & Moriano, 2013), and Korea (Yun et al., 2014).

Participant(s)/sample. The total number of participants across all included studies was 3,657. All study participants were nurses with a diploma-level education or higher, working in direct care, in advanced practice roles, or in a leadership or management position. Researchers from only two of the studies sampled within a single site (Blackstock et al., 2014; Walrath et al., 2010), while the remaining nine studies were conducted across two or more sites (Bortoluzzi et al., 2014; Budin et al., 2013; Hutchinson et al., 2006a; Hutchinson et al., 2006b; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Quine, 2001; Topa & Moriano, 2013; Yun et al., 2014). Researchers from three of the multi-site studies used local registry lists of practicing nurses to sample participants (Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012). Researchers in nine studies examined nurses working in a hospital setting (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Topa & Moriano, 2013; Walrath et al., 2010; Yun et al., 2014). In one of the qualitative studies, participants were sampled from acute and community settings (Hutchinson et al., 2006a; Hutchinson et al., 2006b) and in one quantitative study only nurses working in the community were surveyed (Quine, 2001).

In 7 of the 11 studies, all participants were registered nurses (RNs) (Blackstock et al., 2014; Budin et al., 2013; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Quine, 2001; Walrath et al., 2010). Three of the studies included a mix of diploma and degree nurses (Bortoluzzi et al., 2014; Hutchinson et al., 2006a; Hutchinson et al., 2006b; Yun et al., 2014) with the majority of participants in each

study either holding a baccalaureate degree and/or qualification as a registered nurse. In one study, the participants were a mix of RNs and licensed practical nurses (LPNs), but the authors did not provide further demographic information regarding level of education (Topa & Moriano, 2013).

Most of the participants across studies were female. Authors of 10 of the studies reported female demographics ranging between 77.6 – 95%. Authors of the remaining study reported "mostly" female participants (Budin et al., 2013). None of the studies included a specific age limit in the inclusion/exclusion criteria; however, in three of the studies only new graduate and early career nurses were examined (Budin et al., 2013; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012) with mean age ranges between 27.2 – 28.2 years of age. All other studies included participants within a large range of ages and experience.

Study purpose. Authors of all nine quantitative studies examined relationships between influencing factors and risk of workplace bullying (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Quine, 2001; Topa & Moriano, 2013; Yun et al., 2014). In three of these studies models were also tested to further examine pathways among influencing factors and workplace bullying (Blackstock et al., 2014; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012). While authors of some of the studies also examined outcomes of workplace bullying, those data were not included in this systematic review as it was not the focus of the research question.

In one of the qualitative studies, RNs were asked to describe triggers of workplace bullying (Walrath et al., 2010). The remaining qualitative study was designed to explore nurses'

perceptions of why workplace bullying occurred (Hutchinson et al., 2006a; Hutchinson et al., 2006b).

Theoretical or conceptual framework Authors of 4 of the 11 studies declared a theoretical or conceptual framework as underpinning the study (Blackstock et al., 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Walrath et al., 2010). In five additional studies, a theoretical or conceptual framework for the study was discussed, but the authors did not specifically label it as such (Bortoluzzi et al., 2014; Purpora et al., 2012; Quine, 2001; Topa & Moriano, 2013; Yun et al., 2014). Authors of one study outlined theories of oppression and female aggression, but did not use them as a theoretical foundation for their research (Budin et al., 2013). Instead, they developed a framework for their research from various previous research studies, but did not specify it as such (Budin et al.). Authors from one of the qualitative studies described the conceptualization of workplace bullying, but did not provide a specific theoretical or conceptual framework for the basis of the study (Hutchinson et al., 2006a; Hutchinson et al., 2006b).

Authors of seven of the studies included one or more previously existing theories or models to form the theoretical or conceptual framework that guided the study (Blackstock et al., 2014; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Quine, 2001; Topa & Moriano, 2013; Walrath et al., 2010). These included theories and models related to organizational factors or work environment, leadership styles, and individual beliefs or attributes.

Six of these eight studies were premised on a theory or model that describes how organizational factors, or work environment, influences individuals (Blackstock et al., 2014; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Quine, 2001; Topa & Moriano, 2013; Walrath et al., 2010). Authors of one study cited

Leiter & Maslach's (2004) Areas of Worklife Model (Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2012). One study was guided by Hutchinson's (2010) Australian Model of Workplace Bullying and also referred to Hoel and Salin's (2003) work environment hypothesis (Blackstock et al., 2014). One author cited various research from Scandinavian theories of organizational psychology and occupational stress (Quine, 2001). Laschinger et al. (2010) used Kanter's Theory of Structural Empowerment to guide their study. One study was guided in part by the Effort-Reward Imbalance Model (Topa & Moriano, 2013) and another study was guided by Pearson's (2001) Framework on Workplace Incivility (Walrath et al., 2010).

Authors of one study used a leadership model as a part of their theoretical framework (Laschinger & Fida, 2014; Laschinger et al., 2012). In both manuscripts published from this study, the Authentic Leadership Model (Avolio, Gardner, Walumbwa, Lutan, & May, 2004) was cited, which posits that authentic leaders build trusting work environments through specific behaviors (Laschinger et al., 2012).

Authors of three studies also used individual/group theories to influence their guiding theoretical framework (Laschinger & Grau, 2012; Purpora et al., 2012; Topa & Moriano, 2013). These included Freire's (2003) theory of oppression, Haslam, Reicher, and Levine's (2012) social identity approach, and Luthan, Luthan, and Luthan's (2004) theory of psychological capital. Interestingly, while theories of group oppression are commonplace in nursing literature on workplace bullying, the studies in this systematic review rarely used these theories as a framework to examine influencing factors.

In the two quantitative studies that were not guided by a previously existing theory or model, conceptualizations of workplace bullying and insights from previous research were used to develop the guiding frameworks (Bortoluzzi et al., 2014; Budin et al., 2013). Finally, authors of a number of the studies that did use a previously existing theory or model, also referred to

conceptualizations of workplace bullying and findings from previous research in the development of their theoretical or conceptual framework.

Conceptualization of bullying. As previously discussed, a number of terms throughout the academic literature are synonymous with bullying. Workplace bullying was the most commonly used term, cited in articles from five of the eleven studies (Hutchinson et al., 2006b; Laschinger & Fida, 2014; Quine, 2001; Walrath et al., 2010; Yun et al., 2014). The next most common term was bullying, cited in articles from two studies (Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012). The remaining articles from six studies each used a different term: horizontal bullying, mobbing, horizontal mobbing, horizontal violence, verbal abuse, and disruptive behavior (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Hutchinson et al., 2006a; Purpora et al., 2012; Topa & Moriano, 2013). Authors of the study that used the term verbal abuse also referred to the combined concept of bullying, harassment, and horizontal violence, termed BHHV (Budin et al., 2013).

Specific definitions of bullying varied across studies. Of the three studies that used the term bullying, the conceptualizations of bullying were all derived from the work of Kivimaki, Elovainio, and Vahtera (2000). None of the other studies cited the same author when referencing their conceptualization of bullying. All definitions included one or more of the following terms when describing the bullying behaviors: negative, injurious, offending, harassing, stigmatizing, tormenting, attacking, or harmful. Authors of seven of the quantitative studies provided examples of bullying behavior in their conceptualization, that are consistent with the list of common bullying behaviors consolidated by Griffin (2004) (Bortoluzzi et al., 2014; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Quine, 2001; Topa & Moriano, 2013; Yun et al., 2014). Authors of both of the qualitative studies listed common bullying behaviors in their findings.

Authors of eight studies discuss frequency and duration of behaviors in their definition or conceptualization of workplace bullying (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Hutchinson et al., 2006a; Hutchinson et al., 2006b; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Quine, 2001; Topa & Moriano, 2013; Yun et al., 2014). In the two articles where frequency and duration was not discussed in the definition, the authors provided frequency and duration criteria in how the occurrence of bullying was measured (Laschinger et al., 2012; Purpora et al., 2012). While Walrath et al. (2010) did not discuss frequency or duration of behaviors in their definition; nurses reported in the qualitative findings that the behaviors occurred on a regular basis.

Authors of five studies included a power imbalance between the bully and target in their definition or conceptualization of workplace bullying (Blackstock et al., 2014; Bortoluzzi et al., 2014; Hutchinson et al., 2006a; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Purpora et al., 2012). However, in the remaining studies, a power imbalance can be implied from the prolonged duration of bullying behavior, as the victim could otherwise bring an end to the behaviors. Finally, in four of the studies, definitions of workplace bullying included an element of intentionality or targeting of the individual (Blackstock et al., 2014; Hutchinson et al., 2006a; Hutchinson et al., 2006b; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012).

Instruments to measure bullying. Four different instruments were used to measure bullying in the nine included quantitative studies. Six of the studies used the Negative Acts Questionnaire – Revised (NAQ-R) to measure bullying exposure (Bortoluzzi et al., 2014; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Topa & Moriano, 2013; Yun et al., 2014). The NAQ-R by Einarsen and Hoel (2001) includes 22 negative behaviors used to assessed a victim's experience of

bullying. Participants are asked to indicate how frequently they have experienced each behavior over the past 6 months (1=never to 5=daily). One study used only the work-related subscale of the NAQ-R for part of the study (Laschinger & Fida, 2014). Two of the eight studies used a translated version of the NAQ-R, including a Spanish translation (Topa & Moriano, 2013), and a Korean version (Yun et al., 2014).

The remaining three quantitative studies each used a different instrument to measure bullying. One study used Hutchinson et al.'s (2010) Workplace Bullying Acts Scale, which is a nine-item scale measuring the frequency that bullying behaviors are experienced over the past 12 months (Blackstock et al., 2014). Another study used a shortened version of the Verbal Abuse Scale, which measures the experience of verbal bullying behaviors over the past three months (Budin et al., 2013). The last quantitative study developed a bullying questionnaire using 20 types of bullying behavior from previous research, and based on Rayner & Hoel's (1997) five categories of bullying behavior (Quine, 2001).

Instruments to measure factors associated with bullying. Within the nine quantitative studies 19 different formal instruments were used to measure influencing factors. Eight of the studies used these pre-existing, recognized instruments or scales, while the remaining study (Quine, 2001) included a series of questions related to organizational climate, but did not discuss validity or reliability testing.

Of the 19 instruments used, no instruments were used across studies. Three of the seven studies that used pre-existing tools, used multiple tools to measure influencing factors, while the other four each used only one tool. One study used nine different instruments to measure influencing factors related to both organizational factors and to interpersonal relations (Blackstock et al., 2014). Another study used three instruments to also measure influencing factors related to organizational factors and interpersonal relations (Topa & Moriano, 2013). The

third study used two tools to measure influencing factors related to worklife and psychological capital (Laschinger & Grau, 2012) and the Authentic Leadership Questionnaire (ALQ) (Avolio, Gardner, & Walumbwa, 2007), which measures leadership behaviors, including: transparency, moral/ethical behavior, balanced processing, and self-awareness (Laschinger & Fida, 2014; Laschinger et al., 2012). Of the remaining four quantitative studies that each used one tool to measure influencing factors, one assessed leadership (Bortoluzzi et al., 2014), one assessed individual beliefs (Purpora et al., 2012), one examined work effectiveness (Laschinger et al., 2010), and one examined work environment (Yun et al., 2014).

Analytic techniques from the quantitative studies can be found in Table 4. Seven of the nine quantitative studies reported correlation coefficients (Blackstock et al., 2014; Bortoluzzi et al., 2014; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Purpora et al., 2012; Topa & Moriano, 2013; Yun et al., 2014). Of those seven, five also reported results of regression analysis (hierarchical, logistic, or linear) (Blackstock et al., 2014; Bortoluzzi et al., 2014; Purpora et al., 2012; Topa & Moriano, 2013; Yun et al., 2014) and the remaining two reported results from structural equation modeling (SEM) (Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012). One of the two remaining quantitative studies used pairwise comparisons as an analytical technique (Budin et al., 2013), and the other compared means and standard deviations to demonstrate comparisons between nurses who reported bullying and those who did not (Quine, 2001).

Narrative Synthesis of Results

Thematic analysis was conducted by initially grouping the results from all 11 included studies into thematic categories based on their alignment with the Theoretical Framework for the Study and Management of Bullying at Work (Einarsen, 2005; Einarsen et al., 2003b, 2011)

(Figure 2). The conceptual framework was then adapted to better reflect the wider range of inhibiting and enabling factors found in the nursing research (see Figure 3 for adapted framework). Of note, while qualitative findings often serve to support quantitative results in a systematic review, the qualitative findings in this review both support the quantitative results, and introduce additional factors related to workplace bullying of nurses.

Influencing Factors Related to Workplace Bullying of Nurses. In total, 84 influencing factors were extracted and grouped into three themes: inhibiting factors, enabling factors, and organizational action. Sub-categories were developed using an ecological approach to include individual factors, social factors, and organizational factors within the main themes. Organizational factors were further divided into work and job characteristics, organizational structure and processes, and leadership factors. Additionally, one outlying factor was categorized as a cultural and socioeconomic factor, based on the original framework.

Individual factors were defined as arising from the individual or being characteristic of the individual. Social factors were defined as being facilitated through a formal or informal social interaction within a work team, and also include perception of fair and just treatment within a workgroup. Finally, organizational factors were defined as being related to work or job characteristics, organizational structure and processes, and the leadership/management within the organization. A comprehensive list of all influencing factors sorted into thematic categories and sub-categories can be found in Table 5.

Inhibiting factors. Authors of seven of the nine studies examined influencing factors that were negatively correlated to experience/risk of bullying (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Laschinger & Fida, 2014; Laschinger & Grau, 2012; Laschinger et al., 2010; Laschinger et al., 2012; Topa & Moriano, 2013; Yun et al., 2014). These factors are

categorized as inhibiting factors and are divided into 3 subcategories: individual, social, and organizational.

Individual. Higher levels of psychological capital, comprised of self-efficacy, hope, optimism, and resilience, were found to be negatively correlated with the experience of bullying (Laschinger & Grau, 2012). Through further analysis, the authors concluded that areas of worklife (manageable workload, control, reward, community, fairness, values) mediated this relationship between psychological capital and bullying experience (Laschinger & Grau). In another study, two additional individual factors were found to be negatively correlated with the experience of workplace bullying: community fit – the perception of one's own compatibility with the organization, and sacrifice community – the perception of benefits lost by leaving one's job (Budin et al., 2013).

Social. Budin et al. (2013) found that registered nurses who reported higher levels of workgroup cohesion also reported lower levels of verbal abuse. Topa and Moriano (2013) concluded both group identity and group support to be negatively correlated with workplace bullying, and furthermore, that group support had a larger impact on workplace bullying under conditions of high group identity. In another study, interpersonal relationships - including cooperation, respect, communication, and support – were also found to be negatively correlated with the experience of workplace bullying (Yun et al., 2014). Finally, Laschinger et al. (2010) found that new graduate nurses who reported lower levels of workplace bullying, also reported higher levels of informal power from team building and interdisciplinary networking.

Einarsen et al. (2003) assert that perceptions of justice within a social group must also be included as a social factor related to bullying. Authors of two of the included studies report on factors related to justice in a social context. Budin et al. (2013) found that registered nurses who reported lower levels of verbal abuse perceived higher levels of distributive justice and

procedural justice. Authors of another study also concluded fairness of interpersonal treatment to be negatively correlated to nurses' experience of workplace bullying (Blackstock et al., 2014).

Organizational. Authors of six studies examined inhibiting organizational factors related to work and job characteristics. Authors of four studies looked at nurses' general work life and environment. Laschinger and Grau (2012) examined how nurses' expectation of their job matches the reality of their job in six areas of worklife fit (manageable workload, control, reward, community, fairness, and values) and conclude that new graduate nurses who perceived a good fit in the six areas of worklife, also scored lowest on experience of bullying. This relationship was found to be a directly negatively correlated, and also mediated the relationship between an individual's psychological capital and experience of workplace bullying (Laschinger & Grau). Yun et al. (2014) also found a negative correlation between both the perception of a positive work environment and one's basic work system (interdepartmental collaboration, competent team, learning environment, participation in scheduling, and standardized protocols), and the experience of workplace bullying. In another study, variety within one's job was negatively correlated with the experience of workplace bullying (Budin et al., 2013).

A number of specific work and job characteristics were also correlated with a lower self-rated experience of bullying. In four studies, the authors found perception of higher levels of support (institutional/ organizational, mentor, supervisory) to be correlated with lower experience of workplace bullying (Budin et al., 2013; Laschinger et al., 2010; Laschinger et al., 2012; Yun et al., 2014). In two studies, the authors found that opportunities for educational or career advancement were negatively correlated with the experience of workplace bullying (Budin et al., 2013; Laschinger et al., 2010). In one study, the authors concluded that empowerment, including formal power gained through participation on interdepartmental committees and taskforces, was also negatively correlated with the experience of bullying in the workplace. In addition, a

perceived high level of autonomy was also negatively correlated with workplace bullying (Budin et al., 2013).

Two studies also examined resources and manpower as inhibiting work and job characteristics. Laschinger et al. (2010) concluded that adequate availability of resources, and timely communication of information, were both negatively correlated with workplace bullying. Bortoluzzi et al. (2014) examined the relationship between manpower and workplace bullying, and found that manpower shortage was correlated with a lower risk of workplace bullying. The authors explain this relationship by postulating that the manpower shortage may serve as a protective function and may also be well-managed by a participative leader (Bortoluzzi et al.). They also found that high turnover was not statistically significant in relation to the risk of bullying, but did report limitations to the study that may have affected the results.

Authors of three studies examined the relationship between leadership and bullying. The authors of one study concluded that the practice of authentic leadership by a supervisor, comprised of balanced processing, moral/ethical, self-awareness, and transparency, directly decreases the risk of workplace bullying in new graduate nurses (Laschinger & Fida, 2014; Laschinger et al., 2012). A second study by Bortoluzzi et al. (2014) concluded that empowering leadership – coaching, informing, leading by example, participative decision-making, and showing concern for staff – was negatively correlated with the experience of workplace bullying. While participative decision-making remained a statistically significant factor during regression analysis, the remaining four behaviors were found to be non-statistically significant (Bortoluzzi et al.). Finally, Yun et al. (2014) also examined leadership of the head nurse, with similar components to empowering leadership, and concluded it is negatively correlated to the experience of workplace bullying.

Enabling factors. Authors of six quantitative (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Purpora et al., 2012; Quine, 2001; Topa & Moriano, 2013) and two qualitative studies (Hutchinson et al., 2006a; Hutchinson et al., 2006b; Walrath et al., 2010) examined factors that were positively correlated with higher levels of workplace bullying, or were reported as enabling factors. The factors categorized as enabling factors were again divided into 3 subcategories: individual, social, and organizational.

Individual. Guided by the oppressed group theory, Purpora et al. (2012) examined internalized sexism and minimization of self, and found both to be positively correlated with higher levels of self-reported workplace bullying. Budin et al. (2013) also found that nurses who scored higher on negative affectivity also experienced higher levels of workplace bullying. The authors also concluded that work motivation, the degree to which work is central to the employee's life, was a nonstatistically significant factor in relation to workplace bullying (Budin et al.).

In a qualitative study, Walrath et al. (2010) asked nurses to identify triggers that precipitate disruptive behavior. Individual factors included: fatigue, stress, actual or perceived lack of competency, and personal issues impeding job performance (Walrath et al.). Additionally, personal characteristics that were identified as being correlated to a propensity to bully included: passive aggressiveness, arrogance, aggressiveness, having a "short fuse", and having a "type A personality" (Walrath et al.).

Social. Blackstock et al. (2014) found that certain psychosocial behaviors within workgroups were correlated with bullying. Specifically, that higher levels of emotional neglect, verbal abuse, and workplace incivility perceived among coworkers were positively correlated to higher risk of workplace bullying (Blackstock et al.). This supports the theory of bullying as an evolving process with escalating frequency and intensity (Einarsen, 2005; Walrath et al., 2010).

Blackstock et al. (2014) also concluded that informal organizational alliances were positively correlated with higher levels of workplace bullying. The use of alliances was also described as a key factor in the initiation and perpetuation of bullying in one of the qualitative studies (Hutchinson et al., 2006a; Hutchinson et al., 2006b).

Two of the qualitative studies identified additional social factors that enable bullying. In one of the qualitative studies, normalization of bullying behaviors in the work team was reported as a factor that enabled workplace bullying (Hutchinson et al., 2006b). In another qualitative study, Walrath et al. (2010) reported that the withholding of, or not communicating, information needed to care for patients was viewed as a trigger for workplace bullying. Participants in the study also identified the use of actual or perceived status to control others, as an interpersonal factor related to higher levels of bullying (Walrath et al.).

Organizational. Authors of three quantitative and two qualitative studies examined enabling factors related to organizational structure and processes. In one qualitative study, nurses reported that bullying was hidden within organizational networks (Hutchinson et al., 2006a). Participants in the same qualitative study identified organizational change and restructuring as an enabling factor for workplace bullying (Hutchinson et al.); however, when measured quantitatively in another study, it was found to be nonstatistically significant (Bortoluzzi et al., 2014). It may be important to note that the authors of the quantitative study did report limitations to the study that may have influenced the number of results that were not statistically significant.

Blackstock et al. (2014) concluded that perception of the misuse of organizational processes was positively correlated to workplace bullying. This was also confirmed in another study through the qualitative narratives of nurses who had experienced bullying (Hutchinson et al., 2006a). Organizational constraints (Budin et al., 2013) and chronic, unresolved systems issues (Walrath et al., 2010) were also found to be enabling factors related to workplace bullying.

In seven of the studies, work and job characteristics were indicated as being positively correlated with workplace bullying (Blackstock et al., 2014; Bortoluzzi et al., 2014; Budin et al., 2013; Hutchinson et al., 2006b; Quine, 2001; Topa & Moriano, 2013; Walrath et al., 2010). Five of those studies examined general work life and environment. In one study, Topa and Moriano (2013) found that work stress, defined as an imbalance between effort and reward, maintained a positive association with workplace bullying during regression analysis. In another study, Blackstock et al. (2014) found that the perception of work obstruction was positively correlated with workplace bullying. Budin et al. (2013) examined work family conflict – interference of one's job with family life – and found it to also be positively correlated with an increased report of workplace bullying. Participants of one qualitative study indicated that unit and organizational culture was a trigger for bullying behavior (Walrath et al., 2010), and in another qualitative study, participants identified that hierarchical division of labor was used to favor bullying alliances (Hutchinson et al., 2006b)

Three studies examined specific work and job characteristics as enabling factors. Quine (2001) concluded that nurses with higher levels of self-reported bullying also reported low levels of job control, low participatory decision-making, and greater role ambiguity. High quantitative workloads were positively correlated with higher levels of bullying (Budin et al., 2013; Quine, 2001). Participants in a qualitative study also identified pressure from high census, volume, and patient flow as a trigger for workplace bullying (Walrath et al., 2010). In a simple correlational analysis, Bortoluzzi et al. (2014) found manpower shortage to be positively correlated with higher levels of bullying; however, when controlling for other variables in the regression analysis, they found manpower shortage to be negatively correlated with workplace bullying.

Enabling organizational factors related to leadership were examined in two studies. Participants of one qualitative study identified informal organizational alliances between bullies

and senior leadership, and a lack of accountability and transparency among leadership, as key enabling factors (Hutchinson et al., 2006a). Bortoluzzi et al. (2014) also examined for correlations between replacement of the nurse or general manager, and the experience of bullying, but found the relationship to be nonstatistically significant.

Organizational Action. Organizational action can be defined as an organization's response to bullying behavior. Organizational action indirectly influences bullying behavior, wherein workplace bullying occurs when other influencing factors are met with a lack of organizational inhibitors (Einarsen, 2005). While organizational action can enable or inhibit workplace bullying, only enabling factors were reported in the selected studies.

Blackstock et al. (2014) found that organizational tolerance and reward of bullying was positively correlated with high risk of bullying. This was also echoed in a qualitative study, where participants describe that bullying was not only tolerated, but bullies were often promoted (Hutchinson et al., 2006a; Hutchinson et al., 2006b). Furthermore, participants reported that bullies were protected by management and leadership, and sometimes even by those in charge of investigating the bullying (Hutchinson et al., 2006a; Hutchinson et al., 2006b).

Participants in the qualitative study by Hutchinson et al. all experienced bullying firsthand, and described that when bullying was reported to management, the managers ignored high profile antibullying policies, and instead minimized, trivialized, or denied the behaviors (2006a, 2006b). In addition, victims were blamed and encountered negative consequences themselves for reporting the bullying behavior (Hutchinson et al.; Hutchinson et al.). The participants also recounted that any opposition to the bullies was silenced and removed (Hutchinson et al., 2006a).

Cultural and Socioeconomic Factors. Only one factor was examined that was external to the organization, and could be considered a societal level factor. Budin et al. (2013) identified

that nurses who reported increased workplace bullying, also reported higher levels of non-local job opportunity.

Chapter 5: Discussion

The findings of this review provide an enhanced knowledge base regarding factors that influence workplace bullying of nurses. While several general reviews have been published, a systematic review of this research had not yet been conducted. Therefore, the findings of this systematic review will serve to build upon existing knowledge, and provide valuable insights for educating nurses in leadership positions, creating workplace policies, and developing evidence-informed interventions. Moreover, remaining gaps in the knowledge identified through the review, will provide direction for future research.

The review findings indicate that there are a number of factors at individual, social, organizational levels that may enable or inhibit the occurrence of workplace bullying of nurses. In addition, organizational action in response to bullying behavior, may serve to perpetuate workplace bullying. These findings generally align with the antecedent components of the Theoretical Framework for the Study and Management of Bullying at Work (Einarsen, 2005; Einarsen et al., 2003b, 2011) (Figure 2), yet also provide rationale for adapting the framework to the nursing context through expansion of the components.

Framework Adaptation

Based on the findings of the review, the framework was adapted as the Theoretical Framework for the Study and Management of Nurse Bullying at Work, as shown in Figure 3. While evidence from other disciplines would suggest that changes made within and between the broad antecedent components of the adapted framework might be valid outside of nursing, its applicability to the nursing context is specifically established by the findings of this review. Additionally, it is important to note that the review examined influencing factors only, and additional reviews of the nursing research would be required to confirm the remaining components of the model for their applicability to nursing.

Enabling Factors. In their theoretical framework of bullying at work, Einarsen et al. propose that an individual's propensity to bully may be influenced by individual, social or contextual factors, consequently leading to initial bullying behavior (Einarsen et al., 2003b, 2011). In Einarsen's 2005 version of the framework, propensity to bully is further presented as the primary influencing factor that enables bullying behavior. Based on the findings from the nursing literature, the enabling factors component of the framework was adapted to place less emphasis on an individual's propensity to bully, and instead focus on a variety of enabling factors identified in the nursing research. The adapted framework also includes enabling factors specific to the organization.

While propensity to bully was a key antecedent in the original framework, it was only addressed indirectly in one qualitative study from this review (Walrath et al., 2010). Instead, the overall findings of the review indicate there are a number of enabling factors at the individual, social, and organizational level. Therefore, the adapted framework provides a more comprehensive explanation of enabling factors (see Figure 3). Ironside and Seifert (2003) support a broader understanding of enabling factors, asserting, "Bullying is far too widespread to be the work of a small number of pathologically disturbed individuals who can be removed from the workplace, monitored, or controlled so as to prevent them from bullying" (p. 396). Propensity to bully remains in the adapted framework as an individual factor, but is included as one of many possible enabling factors, as opposed to a primary factor influenced by other enabling factors.

It is also important to note that in the adapted framework, workplace bullying is a dynamic process, therefore one can assume that an occurrence of bullying may not be the result of a single enabling factor, but rather the result of a combination of factors. However, as most of the results were from simple correlational and regression analysis, further research is needed to understand the full scope of relationship among factors.

Inhibiting factors. The adapted framework also expands the range of inhibiting factors that influence bullying behaviors in the workplace. While the original framework cites organizational factors as the sole factors that inhibit workplace bullying, the results of the review indicate that there are a variety of factors at the individual, social, and organizational level that serve a protective or inhibitive role against bullying of nurses. Therefore, the adapted framework reflects this more inclusive understanding of inhibiting factors.

Similar to the interaction among enabling factors, the adapted framework assumes that multiple inhibiting, or protective factors may interact to prevent the occurrence of bullying. Authors of one study found a mediating relationship between two inhibiting factors, whereby areas of worklife mediated the relationship between psychological capital (self-efficacy, hope, optimism, resilience) and bullying experience of nurses (Laschinger & Grau, 2012). However, further research is needed to study the specific interactions among other factors.

Organizational Action. In the original framework, organizational action was considered to only act as an inhibiting factor, as evidenced by the endpoint of the feedback arrow. However, in the review findings, nurses reported factors associated with organizational action to have an enabling influence. Therefore, a secondary feedback arrow is included in the adapted framework to reflect that organizational action may serve an inhibiting or enabling function in the perpetuation of workplace bullying among nurses. In other models and frameworks, the influence of organization action is often under-emphasized or neglected altogether. Yet it is important to understand the influence of organizational action, as a number of researchers assert that solutions to workplace bullying lie in eliminating organizational factors that allow bullying behaviors to thrive (Hutchinson, Vickers, Jackson, & Wilkes, 2006c; Johnson, 2009; Lewis, 2006a).

Chapter 6: Implications

Implications for Nursing Practice

Opportunities exist for all nurses to influence workplace bullying in their practice environments. Creating a positive change in organizational culture, and discouraging bullying behaviors in the workplace, takes the commitment of all individuals within an organization (Longo, 2010). Formally educated nurses are well-positioned to assume informal leadership roles and provide a positive example to other staff. However, to do so, nurses must recognize behaviors associated with workplace bullying, understand influencing factors, and engage in strategies to reduce workplace bullying.

Additionally, nurses are responsible for their own individual influence. While the findings of this review add to the existing evidence that bullying does not occur simply because of individual characteristics that increase risk for the victim or predispose bullying behavior, front-line nurses remain ethically responsible to assess their own individual characteristics, beliefs, and attitudes that may contribute to bullying in the workplace. Specifically, the findings of this review suggest that individual nurses should examine their own negative beliefs, levels of stress, fatigue, and personal issues that may be affecting their interactions with others. Additionally, front-line nurses can work to prevent bullying within their workgroups by fostering timely communication, group support, peer mentorship, and staff recognition.

Implications for Nursing Leadership and Policy-Makers

Nurse Leaders, Managers and Supervisors. The actions of nurses in leadership positions are vital in establishing healthy workplaces and developing a culture of healthy staff relationships (Moore, Leahy, Sublett, & Lanig, 2013). Nurses in leadership positions must advocate for healthy practice environments and organizational supports. They must also lead by example, and ensure their own actions serve to prevent the fostering of bullying behaviors.

In addition, the findings of the review suggest that *how* nurses lead is of specific importance. Three studies indicated that authentic and empowering leadership styles are associated with lower levels of workplace bullying among nurses (Bortoluzzi et al., 2014; Laschinger & Fida, 2014; Laschinger et al., 2012). This provides guidance towards the specific skills and attributes nurse leaders at all levels of the organization should focus on and include in management and leadership training. Furthermore, assessment of these attributes should be considered when hiring into leadership positions, as to promote these leadership styles through modeling of the behaviors.

The review also points to a number of specific indications for nurse managers and supervisors. First, nurse managers can practice primary prevention by fostering community, group support, and relationship-building within the nursing team they oversee, as these have been found to be inhibiting factors. Furthermore, a number of the job characteristics found to influence bullying behaviors can be managed at the unit level, including: supervisor and mentor support, recognition, availability of resources, empowerment, and participatory decision making. Managers should also ensure they are not knowingly taking part in bullying alliances, and should be alert to bullying alliances within their work group (Hutchinson et al., 2010). At the tertiary level, training of managers should include the responsible and effective management of bullying behaviors once staff has reported them (World Health Organization (WHO), 2008).

Intervention Work. Nurses in positions of leadership must engage in opportunities for developing and overseeing evidence-informed intervention strategies to address workplace bullying. The findings of the review provide direction for such intervention work. Most published intervention studies to date have focused on strategies to educate or empower individual nurses (Chipps & McRury, 2012; Embree, Bruner, & White, 2013; Griffin, 2004; Griffin & Clark, 2014; Stagg et al., 2011), and have primarily focused on a single level of intervention. Evaluations of

these interventions have indicated limited success. The findings of the review suggest that multi-level strategies with attention to social and organizational level factors should be considered for future intervention studies. The WHO (2008) concurs that workplace bullying is a multidimensional phenomena that requires a comprehensive approach with strategies addressing individual and job-related factors, work environment, organizational culture, and leadership practices.

Policy Development. Findings from the review support the development of effective, evidence-informed organizational policies to address workplace bullying, as the qualitative researchers found that managers and high-level leadership often tolerate bullying behaviors, and reports of bullying are minimized or ignored. Quantitative researchers suggested that a lack of leadership transparency and accountability is positively correlated with increased bullying. Workplace policies reflect the organization's priorities and expectations, set standards for employee conduct, support accountability, and provide guidance for managers to appropriately and effectively respond to violations.

A number of researchers have specifically called for zero tolerance policies to address bullying in the workplace (Johnson, 2009; Lindy & Schaefer, 2010; Quine, 2001). While the findings of the review indicate that anti-bullying policies are often disregarded, this suggests a necessary change in how policies are designed and enforced. For policies to be effective, there must be clear consequences for the behavior, a plan for enforcement, and strategies for accountability (Johnson, 2009; Lindy & Schaefer, 2010; Quine, 2001). Additionally, workplace policies must include preventative measures, such as promoting wellness, encouraging mentorship, and rewarding strong leadership.

Finally, confidential third party reporting should be considered when developing workplace policy. A shift from internal to third party reporting would prevent reports from being

ignored, provide protection to victims and whistleblowers, and promote organizational accountability.

Implications for Nursing Research

The findings of the review also provide direction for future research. In this review, thirteen of the fourteen quantitative studies were cross sectional, and one used a time lagged analysis design. Most of the results were based on simple correlational analysis. Due to the psychosocial nature of workplace bullying, studies with an experimental design would likely be contraindicated due to ethical considerations. However, to study directionality and point of influence, and improve the strength of current findings, more rigorous design (i.e. time lagged analysis) is consistently needed in future research. Overall, future studies should also endeavor to examine a wider range of factors from various levels in a single study, as to understand the interrelationships among factors.

Additional primary research is also needed to duplicate studies and confirm findings and relationships, as many of the influencing factors were measured by a single study or single group of authors. Primary research should also be conducted to explore additional factors that have been indicated in research studies with broader populations. For example, a number of researchers have proposed that bullying is a learned behavior that is perpetuated through socialization of new staff (Lewis, 2006a; Randle, 2003). However, the authors of the studies in this review did not examine this factor. The influence of organizational structure would also be of interest, as it may impact the formation and perpetuation of bullying alliances and accountability of management and leadership. Additionally, more quantitative research should be considered to explore the influence of organizational action, as most of the findings from this review were from qualitative research. Future research should also consider greater specificity of influencing factors. For example, terms such as ‘work environment’, ‘organizational culture’, and ‘work obstruction’

leave room for a high degree of subjective interpretation, and create difficulty in planning interventions.

All studies in this review examined influencing factors from the perspective of the individual who had experienced bullying in the workplace. Future researchers should consider also investigating influencing factors from the perspective of the bully. While this may present challenges with recruitment, this perspective would provide a more comprehensive understanding of influencing factors. As Lee and Brotheridge (2006) suggests, "Although research has tended to examine the experiences of targets in the bullying process, our understanding of this process may be enhanced if perpetrators were also considered, preferably in a concurrent manner" (p. 353).

Finally, theoretical frameworks can be used to increase validity of findings, and to design interventions that can be more easily replicated (Johnson, 2011). Therefore, additional research is needed to confirm or expand the remaining components of the framework for its applicability to nursing, and to provide a comprehensive framework for policy-makers, leaders, and future researchers.

Limitations

There are a number of limitations that must be considered when applying the findings of this review. All but one quantitative study in the review used cross-sectional design to examine relationships among variables, therefore directionality and causation cannot be confirmed. Due to he nature of cross-sectional designs, temporality is of concern when interpreting and applying results, and further studies using time lagged analysis are needed to confirm findings. Simple correlational and regression analysis is also present challenges in distinguishing antecedents from outcomes.

Minimal overlap across studies regarding the range of influencing factors limits the validity of findings, and further research is recommended to provide further confirmation. Furthermore, the terminology used for various factors was broad and required a degree of subjective interpretation when categorizing factors. The same subjectivity would therefore be required when applying the specific results for intervention purposes.

As all findings were self reported and from the perspective of the victim, consideration must be given to possible bias and overall objectivity of the findings. Additionally, only information included in published articles was used in screening, data extraction, and analysis, so assumptions could not be made about missing information, and all information provided was accepted at face value.

Finally, inclusion criteria required that only studies examining formally educated nurses, such as licensed practical nurses or baccalaureate prepared nurses, be considered for the review. A number of studies lacked detail in defining ‘nurses’ in their sample population. Therefore, studies with relevant findings may have been excluded due to this lack of published information. Furthermore, as the sample population was limited to formally educated nurses, this may also limit the generalizability of findings to other professions.

Chapter 7: Conclusion

Findings from this systematic review confirm a more recent understanding that workplace bullying among nurses is not solely influenced at an individual level, but rather that it is multidimensional. More specifically, both inhibiting and enabling factors are found at the individual, social, and organizational levels. The Theoretical Framework for the Study and Management of Bullying at Work was adapted to reflect this more comprehensive understanding of influencing factors found in the nursing literature, and can be used as a foundation to plan interventions, develop training for management and leadership, and inform policy makers to address bullying among nurses. The findings of the review also provide direction for future research. Studies with more rigorous designs are needed to examine directionality and improve the strength of the findings. Furthermore, additional studies are also needed to confirm the results of original studies, explore relationships among factors at various levels, examine antecedents from the perspective of the bully, and confirm or expand the remaining components of the framework for its overall applicability to nursing.

Table 1

Search Strategy and Search Results

Database/Source	Search Terms	# of Titles and Abstracts
CINAHL	1. "workplace violence" (MH) 2. "violence+" or "aggression+" or "bullying" (MH) 3. "work environment" or "organi#ational culture" or "occupational exposure" or "interprofessional relations" or "intraprofessional relations" (MH) 4. 2 AND 3 5. "horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility 6. verbal* N3 abuse* 7. mobbing or aggressi* or harass* or hostil* 8. threat* N3 behavio#r OR disrupt* N3 behavio#r 9. 5 OR 6 OR 7 OR 8 10. workplace* or employer* or employee* or staff 11. work* N1 (place* or condition* or environment*) 12. organi#ation 13. 10 OR 11 OR 12 14. 9 AND 13 15. 1 OR 4 OR 14 16. nurs* 17. 15 AND 16 18. (("among" or between") N3 (nurs* or staff) N3 (violen* or harass* or abus*)) 19. 17 OR 18	4,113
MEDLINE	1. "workplace violence" 2. "violence+" or "aggression+" or "bullying" (MH) 3. workplace or "organi#ational culture" or "occupational exposure" or "interprofessional relations" (MH) 4. 2 + 3 5. "horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility 6. verbal* N3 abuse* 7. mobbing or aggressi* or harass* or hostil* 8. threat* N3 behavio#r OR disrupt* N3 behavio#r 9. 5 OR 6 OR 7 OR 8 10. workplace* or employer* or employee* or staff 11. work* N1 (place* or condition* or environment*) 12. organi#ation* 13. 10 OR 11 OR 12 14. 9 + 13 15. 1 OR 4 OR 14 16. nurs* 17. 15 + 16 18. (("among" or between") N3 (nurs* or staff) N3 (violen* or harass* or abus*)) 19. 17 OR 18	3,004

Database/Source	Search Terms	# of Titles and Abstracts
PsycINFO	1. Workplace Violence (exp) 2. Violence (exp) 3. Aggressive behavior or aggressiveness or relational aggression or hostility (exp) 4. Bullying (exp) 5. 2 OR 3 OR 4 6. Organizational behavior or organizational change or organizational structure (exp) 7. Occupational exposure (exp) 8. Working conditions or quality of work life (exp) 9. 6 OR 7 OR 8 10. 5 AND 9 11. horizontal violence or vertical violence or lateral violence or bully* or bullie* or incivility (mp) 12. verbal* adj3 abuse* (mp) 13. mobbing or aggressi* or harass* or hostil* (mp) 14. ((threat* adj3 behavio?r) or (disrupt* adj3 behavio?r)) (mp) 15. 11 OR 12 OR 13 OR 14 16. workplace* or employer* or employee* or staff (mp) 17. work* adj1 (place* or condition* or environment*) (mp) 18. organi#ation* (mp) 19. 16 OR 17 OR 18 20. 15 AND 19 21. 1 OR 10 OR 20 22. nurs* (mp) 23. 21 AND 22 24. ((among or between) adj3 (nurs* or staff) adj3 (violen* or harass* or abus*)) (mp) 25. 23 OR 24	1,053
SCOPUS	1. "horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility or mobbing or "verbal aggression" or "relational aggression" or harass* or hostil* or "verbal abuse" or "disruptive behavior" or "threatening behavior" 2. AND nurs* 3. AND "workplace*" or "work environment*" or "work condition*" or "working condition*" or organization* or organisation* or staff	1,499
Web of Science	1. "horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility or mobbing or "verbal aggression" or "relational aggression" or harass* or hostil* or "verbal abuse" or "disruptive behavior" or "threatening behavior" 2. AND nurs* 3. AND "workplace*" or "work environment*" or "work condition*" or "working condition*" or organization* or organisation* or staff	1,448
EMBASE	1. Workplace Violence (exp) 2. Violence (exp) 3. Aggression (exp) 4. Bullying (exp) 5. 2 OR 3 OR 4 6. Organization (exp) 7. Occupational exposure (exp)	3,694

Database/Source	Search Terms	# of Titles and Abstracts
	8. Workplace or Work Environment (exp) 9. 6 OR 7 OR 8 10. 5 AND 9 11. horizontal violence or vertical violence or lateral violence or bully* or bullie* or incivility (mp) 12. verbal* adj3 abuse* (mp) 13. mobbing or aggressi* or harass* or hostil* (mp) 14. ((threat* adj3 behavio?r) or (disrupt* adj3 behavio?r)) (mp) 15. 11 OR 12 OR 13 OR 14 16. workplace* or employer* or employee* or staff (mp) 17. work* adj1 (place* or condition* or environment*) (mp) 18. organi#ation* (mp) 19. 16 OR 17 OR 18 20. 15 AND 19 21. 1 OR 10 OR 20 22. nurs* (mp) 23. 21 AND 22 24. ((among or between) adj3 (nurs* or staff) adj3 (violen* or harass* or abus*)) (mp) 25. 23 OR 24	
PROQUEST	1. "horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility or mobbing or "verbal aggression" or "relational aggression" or harass* or hostil* or "verbal abuse" or "disruptive behavior" or "threatening behavior" 2. AND nurs* 3. AND "workplace*" or "work environment*" or "work condition*" or "working condition*" or organization* or organisation* or staff	179
Business Source Complete	1. "Violence in the workplace" (DE) 2. "Bullying in the workplace" or "Bullying in the workplace – laws and legislation" (DE) 3. 1 OR 2 4. "horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility 5. verbal* N3 abuse* 6. mobbing or aggressi* or harass* or hostil* 7. threat* N3 behavio#r OR disrupt* N3 behavio#r 8. 4 OR 5 OR 6 OR 7 9. workplace* or employer* or employee* or staff 10. work* N1 (place* or condition* or environment*) 11. organi#ation* 12. 9 OR 10 OR 11 13. 8 AND 12 14. 3 OR 13 15. nurs* 16. 14 AND 15 17. (("among" or between") N3 (nurs* or staff) N3 (violen* or harass* or abus*)) 18. 16 OR 17	337

Database/Source	Search Terms	# of Titles and Abstracts
COCHRANE	"horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility or mobbing or harass* or hostil* or "disruptive behavior"	No relevant articles
PROSPERO	"horizontal violence" or "vertical violence" or "lateral violence" or bully* or bullie* or incivility or mobbing or harass* or hostil* or "disruptive behavior"	No relevant articles
Reference list review		0
Contacting experts		0
Total abstracts and titles: 15,327 Total abstracts and titles reviewed minus duplicates: 7,973 First selection of studies (after scoping title and abstract review): 1,387 Second selection of studies – for full-text review (after systematic title and abstract review): 187 Final selection of manuscripts/studies (after full text review): 14		

Table 2

Quality Assessment Summary of Correlational Studies

Influencing Factors Related to Workplace Bullying Among Nurses: A Systematic Review Quality Assessment and Validity Tool for Correlational Studies*		
Design:	No	Yes
1. Was the study prospective?	9	0
2. Was probability sampling used?	2	7
Sample:		
1. Was the sample size justified?	6	3
2. Was the sample drawn from more than one site?	1	8
3. Was anonymity protected?	5	4
4. Response rate more than 60%?	5	4
Measurement:		
Factors Associated with Bullying (IVs): (assess for IVs correlated with DVs only)		
1. Was the factor measured reliably?	0	9
2. Was the factor measured using a valid instrument?	1	8
Bullying (DV):		
1. Are the effects observed rather than self-reported? (2 points)	9	0
2. Did the scale used for measuring bullying as an outcome have an internal consistency ≥ 0.70?	1	8
3. Was a theoretical model/framework used for guidance?	3	6
Statistical Analysis:		
1. If multiple factors were studied, are correlations analyzed?	2	7
2. Are outliers managed?	9	0
Overall Study Validity Rating: (0-4=LOW; 5-9=MED; 10-14=HIGH)	**Total range: 6-9 (medium quality)**	

Note. Adapted from Cummings et al. (2008)

Table 3

Quality Assessment Summary of Qualitative Study

CASP Qualitative Criteria*			
1. Was there a clear statement of the aims of the research?	**No** 0	**Yes** 2	**Explanation of answer:**
2. Is a qualitative methodology appropriate?	0	2	
3. Was the research design appropriate to address the aims of the research?	0	2	
4. Was the recruitment strategy appropriate to the aims of the research?	0	2	
5. Were the data collected in a way that addressed the research issue?	0	2	
6. Has the relationship between the researcher and participants been adequately considered?	1	1	
7. Have the ethical issues been taken into consideration?	0	2	
8. Was the data analysis sufficiently rigorous?	0	2	
9. Is there a clear statement of findings?	0	2	
10. How valuable is the research?			

Note. Adapted from: Critical Appraisal Skills Programme (CASP) (2010).

Table 4

Characteristics of Included Studies

Quantitative-Correlational Studies

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
1. Blackstock et al. (2014). Journal of Nursing Management. Canada	To examine the impact of organizational factors on bullying among peers and its effect on turnover intentions among Canadian registered nurses (RNs) and to determine if the basic findings of a model of bullying (Hutchinson et al., 2010) derived in Australian nursing work environments a can be generalized to a different country and a more specialized group: RNs	477 staff RNs invited to participate (excluding nurse managers or student nurses) from a western Canadian hospital. Response rate = 22% Final n=103 **Demographics:** Reported-yes Examined/analyzed=no	Horizontal Bullying (Einarsen et al., 2009)	Australian model of bullying (Hutchinson et al., 2010) Work Environment Hypothesis (Hoel & Salin, 2003)	Workplace Bullying Acts Scale (Hutchinson et al., 2010) *Reliability:* α=0.78 *Validity:* Correlational testing for construct validity Sample size insufficient for confirmatory factor analysis Bullying Level: Mean=1.33 SD=0.41	Misuse of Organizational Processes/Procedures Scale (Hutchinson et al., 2010) Informal Organizational Alliances Scale (Hutchinson et al., 2010) Organizational Tolerance and Reward of Bullying Scale (Hutchinson et al., 2010) Fairness of Interpersonal Treatment (Donovan et al., 1998) Organizational Support (Lynch et al., 1999) Verbal Abuse (Harlos and Axelrod, 2005) Work Obstruction (Harlos and Axelrod, 2005)	α=0.85 NR α=0.92 NR α=0.94 NR α=0.89 NR α=0.89 NR α=0.81 NR α=0.66 NR	Correlational coefficients Hierarchal Regression Analysis

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
						Emotional Neglect (Harlos and Axelrod, 2005) Workplace Incivility (Cortina et al., 2001)	α=0.88 NR α=0.89 NR	
2. Bortoluzzi et al. (2014). Journal of Nursing Management. Italy	To evaluate the impact of an empowering leadership style on the risk of mobbing behavior among nurses on working teams and to evaluate the contribution of other organizational and individual related mobbing predictors	238 diploma and degree nurses from three different public hospitals in north of Italy. Nurses must be working in a staff group for more than 12 months without interruption. All eligible nurses asked to participate. Response rate = 73.5% Final n=175 **Demographics:** Reported-yes Examined/analyzed= yes	Mobbing (Einarsen et al., 2003; Leyman, 1990)	Theoretical framework and conceptualization of mobbing (Einarsen et al., 2003; Leyman, 1990)	NAQ-R Negative Acts Questionnaire Revised (Einarsen & Hoel, 2001) *Reliability:* α=0.91 *Validity:* NR – documented elsewhere Bullying Level: 34% 'at risk' n=59	Empowering Leadership Questionnaire (Arnold et al., 2000) <u>Subscales:</u> Leading by Example Participative decision-making Coaching Informing Showing Concern/interacting	 α=0.91 NR α=0.90 NR α=0.94 NR α=0.92 NR α=0.93 NR	Descriptive statistics Pearson's correlations Bivariate analysis (chi square, t-tests) Logistic regression analysis
3. Budin et al. (2013). Journal of Nursing Scholarship. USA	To examine relationships between verbal abuse from nurse colleagues and demographic characteristics, work attributes, and work	Random sample of Registered Nurses (RNs) from 51 randomly selected metropolitan areas and 9 rural counties in 34 states and District of Columbia. Response rate = 76%	Verbal Abuse (Manderino & Berkey, 1997) BHHV – bullying, harassment, and	Oppressed Group Theory (Roberts, 1983) Women's Aggression (Jack, 1999) Framework from variety of	Verbal Abuse Scale – shortened version (Manderino & Banton, 1994) *Reliability:* α=0.86	Additional scales measuring: • Intent to stay • Organizational commitment • Job satisfaction • Search behavior • Job variety • Autonomy • Supervisory	*Reliability:* NR – documented elsewhere *Validity:* NR – documented elsewhere	Descriptive statistics Multiple pairwise comparisons (Fisher's Exact tests and Bonferroni

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
	attitudes of early career registered nurses (RNs)	Final n=1407 **Demographics:** Reported-yes Examined/analyzed= yes	horizontal violence (Vessey et al., 2010)	previous research	*Validity:* NR – documented elsewhere Bullying Level: High level =5%	support • Mentor support • Workgroup cohesion • Distributive justice • Promotional opportunities • Procedural justice • Collegial RN-MD relations • Work-family conflict • Negative affectivity • Work motivations • Quantitative workload • Organizational restraints • Local and non-local job opportunities • Community fit • Community sacrifice (Brewer et al., 2009; Brewer et al., 2012; Kovner et al., 2007; Kovner et al., 2009)		correlations)
4. Laschinger et al. (2010). Journal of Advanced Nursing. Canada	To test a model linking new graduate nurses' perceptions of structural empowerment	Sample of 1400 nurses (RN diploma, BScN, MN) drawn from registry list of practicing nurses in Ontario. Those with less than three years	Bullying (Kivimaki et al., 2000)	Kanter's Theory of Structural Empowerment (Kanter, 1993)	NAQ-R Negative Acts Questionnaire Revised (Einarsen and Hoel, 2001)	Conditions for Work Effectiveness Questionnaire-II (CWEQ-II) (Laschinger et al., 2000)	α=0.88 Scale previously validated	Descriptive statistics Correlation coefficients Structural

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
	to their experiences of workplace bullying and burnout in Canadian hospital work settings using Kanter's work empowerment theory	experience eligible. Response rate = 39% Final n=415 **Demographics:** Reported-yes Examined/analyzed= no			*Reliability:* α=0.92 *Validity:* NR - documented elsewhere Bullying Level: Mean=1.63 SD=0.57 (33% of sample)	Subscales: • Opportunity • Information • Support • Resources • Formal Power • Informal Power	α=0.80 α=0.87 α=0.84 α=0.77 α=0.74 α=0.67	equation modeling Fit criteria: Chi square, Chi squared/ degrees of freedom ratio, comparative fit index, incremental fit index, root mean square error of approximation
5a. Laschinger & Grau (2012). International Journal of Nursing Studies. Canada	To test a model derived from Leiter and Maslach's (2004) Six Areas of Worklife Model linking workplace factors and a personal dispositional factor to new graduates mental and physical health in their first year of practice.	Original sample of registered nurses (RNs) with less than two years of experience drawn from the College of Nurses of Ontario's registry – used for larger study. Subset of 165 nurses with 1-12 months experience used for current study. Response rate = NR Final n=165 **Demographics:** Reported-yes Examined/analyzed= no	Bullying (Kivimaki et al., 2000)	Leiter and Maslach's (2004) Six Areas of Worklife Model Psychological Capital (Luthans et al., 2004)	NAQ-R Negative Acts Questionnaire Revised (Einarsen and Hoel, 2001) *Reliability:* α=0.92 *Validity:* NR - documented elsewhere Bullying Level: Mean=1.57 SD=0.62 (26.4% of sample)	Psychological Capital Questionnaire (PCQ) (Luthans et al., 2007) Areas of Worklife Scale (AWS) (Leiter and Maslach, 2004)	α=0.90 NR α=0.86 NR	Descriptive statistics Correlation coefficients Structural equation modeling Fit criteria: Chi square, Chi squared/ degrees of freedom ratio, comparative fit index, incremental fit index, root mean square error of approximation

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
5b. Laschinger et al. (2012). International Journal of Nursing Studies. Canada	To test a model linking new graduate nurses' perceptions of their immediate supervisor's authentic leadership behaviors to their experiences of workplace bullying and burnout in Canadian hospital work settings, and ultimately to job satisfaction and turnover intentions	A sample of 907 new graduate nurses (BScN) with less than two years experience working in acute care hospitals across Ontario drawn from the registry list of practicing nurses in Ontario. All eligible nurses asked to participate. Response rate = 38% Final n=342 **Demographics:** Reported-yes Examined/analyzed= no	Bullying (Kivimaki et al., 2000)	Authentic Leadership Model (Avolio et al., 2004) Workplace Bullying (Einarsen et al., 1998) Leiter & Maslach's (2004) Burnout Model	NAQ-R Negative Acts Questionnaire Revised (Einarsen and Hoel, 2001) *Reliability:* α=0.92 *Validity:* Confirmatory factor analysis and construct validity Bullying Level: Mean=1.57 SD=0.55 (29.2% of sample)	Authentic Leadership Questionnaire (ALQ) (Avolio et al., 2007) Subscales: • Transparency • Moral/Ethical • Balanced Processing • Self-awareness	α=0.95 Confirmatory factor analysis α=0.83 α=0.84 α=0.81 α=0.93	Descriptive statistics Correlation coefficients Structural equation modeling Fit criteria: Chi square, Chi squared/ degrees of freedom ratio, comparative fit index, incremental fit index, root mean square error of approximation
5c. Laschinger & Fida (2014). European Journal of Work and Organizational Psychology. Canada	To examine the process by which authentic leadership influences new graduate nurses' experiences of bullying and burnout (emotional exhaustion and cynicism) over a 1-year timeframe in Canadian healthcare settings.	A sample of 907 new graduate nurses (BScN) with less than two years experience working in acute care hospitals across Ontario drawn from the registry list of practicing nurses in Ontario. All eligible nurses asked to participate T1 Response rate = 37.7% Final n=342 T2 Response rate= 59.9%	Workplace Bullying (Hauge, Skogstad, & Einarsen, 2009)	Authentic Leadership Model (Avolio et al., 2004)	Negative Acts Questionnaire Revised (NAQ-R) Work-related bullying subscale (Einarsen and Hoel, 2001) *Reliability:* α=0.80 *Validity:* ND Bullying Level (T1/T2): Mean=1.87	Authentic Leadership Questionnaire (ALQ) (Avolio et al., 2007) Subscales: • Transparency • Moral/Ethical • Balanced Processing • Self-awareness	α=0.94 Reported elsewhere α=0.79 α=0.81 α=0.81 α=0.93	Descriptive statistics Correlation coefficients Structural equation modeling Fit criteria: Chi square, Chi squared/ degrees of freedom ratio, comparative fit index, root mean square error of

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
		n=205 **Demographics:** Reported-yes Examined/analyzed= no			/1.48 SD=0.72/ 0.59			approximation
6. Purpora et al. (2012). Journal of Professional Nursing. USA	To describe the incidence of horizontal violence (HV) among hospital staff RNs and test for an association between their beliefs consistent with an oppressed self ("minimization of self") and HV, and an oppressed group ("internalized sexism") and HV.	Random sample of registered nurses (RNs) actively licensed by the California Board of Registered Nursing Response rate = 18.8% Final n=175 **Demographics:** Reported-yes Examined/analyzed= yes	Horizontal Violence (Blanton et al., 1998)	Oppression Theory (Freire, 1970-2003) Horizontal Violence and Quality and Safety of Patient Care Model (Purpora, 2010)	NAQ-R Negative Acts Questionnaire Revised (Einarsen et al. 2009) *Reliability:* α=0.92 *Validity:* NR – documented elsewhere Bullying Level: n=37 (21%)	Nurses Workplace Scale (NWS) (DeMarco et al., 2008) 2 subgroups: • Minimization of self (oppressed self) • Internalized sexism (oppressed group)	α=0.79 NR – documented elsewhere α=0.87 NR – documented elsewhere	Descriptive statistics Pearson's correlations Hierarchical multiple regression
7. Quine (2001). Journal of Health Psychology. UK	To determine the prevalence of bullying, to examine the association between bullying and occupational health outcomes, and to investigate	All staff from NHS Trust in south-east of England invited to participate. Participants discussed in study were Qualified Nurses (community health nurses). Response rate = 70% Final n=396	Workplace Bullying (Lyons et al., 1995)	Rayner and Hoel's (1997) five categories of bullying behavior Organizational psychology (Einarsen et al., 1994; Einarsen & Skogstad, 1996;	Questionnaire with 20 types of bullying behavior taken from the literature representing each of Rayner and Hoel's (1997) five categories	Additional scales measuring perceptions of organizational climate: • Workload • Role ambiguity • Participation in decision-making • Job control	NR	Means and standard deviations were used to compare responses of participants who experienced bullying behaviors

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
	whether support at work could moderate the effects of bullying	**Demographics:** Reported-yes Examined/analyzed= no		Vartia, 1996; Zapf, Knorz, & Kulla, 1996) Occupational Stress (Payne, 1979)	of bullying behavior *Reliability:* NR *Validity:* NR Bullying Level: Mean=3.1 SD=3.3			versus those who did not
8. Topa & Moriano (2013). Nursing Outlook. Spain	To explore the relationship between work stress, group support, and group identity with horizontal mobbing (HM). To examine the possible interaction of group support and group identity in the explanation of HM.	Sample of 388 RNs and LPNs drawn from 2 large hospitals in Madrid and Navarre, Spain. Response rate = NR Final n=388 **Demographics:** Reported-yes Examined/analyzed= yes	Horizontal Mobbing (Bowling & Beehr, 2006)	Effort-Reward Imbalance (ERI) Model (Siegrist, 1996) Social Identity Approach (Haslam et al., 2012)	Negative Acts Questionnaire (NAQ) - Spanish translation (Einarsen & Raknes, 1997) *Reliability:* α=0.85 *Validity:* Reported elsewhere Bullying Level: Mean=1.51 SD=0.59	ERI Scale - Spanish version (Fernandez-Lopez et al., 2006) Social Support Scale (Self et al., 2005) – reduced four-item version Mael and Ashford's (1992) Group Identity scale - Spanish translation – reduced five-item version	α=0.80 NR α=0.92 NR α=0.92 NR	Descriptive statistics Pearson's correlations Linear regression analysis
9. Yun et al. (2014). Asian Nursing Research. Korea	To investigate the work environment and the extent of bullying in ICU nurses, investigate the differences in	Sample of 170 ICU nurses (diploma, bachelors, and master degrees) drawn from 5 hospitals in Seoul and Busan, Korea Participants must be staff nurses (not head	Workplace Bullying (Center for American Nurses, 2008)	Some discussion about oppression and social learning theories in the discussion section.	Negative Acts Questionnaire Revised (NAQ-R) – Korean translation (Einarsen et al., 2009; Nam	Korean Nursing Work Environment (NWE) Scale (Park, 2012)	α=0.93 Validated elsewhere	Descriptive statistics Pearson's correlations Multiple regression

Author(s)/Year Journal/Country	Purpose	Participants/ Sample	Bullying	Theoretical/ Conceptual Framework	Measure of Bullying/ Instrument	Other Measures/ Instruments	Reliability/ Validity	Analysis
	the work environment and bullying in accordance to the characteristics of ICU nurses, and investigate the relationship between the work environment and bullying in ICU nurses.	or charge nurses), hold full-time permanent positions, and not be involved in the employee orientation period. All eligible nurses asked to participate Response rate = 88% Final n=134 **Demographics:** Reported-yes Examined/analyzed= yes			et al., 2010) *Reliability:* α=0.95 *Validity:* Construct validity verified elsewhere Bullying Level: Mean=2.03 SD=0.71 (22.4% of sample)			analysis

Note. Reliability alpha coefficient reported is based on the current study
Note. 5a,b,c are published from a single study
NR=not reported

Qualitative Studies

Author(s)/ Year/Journal/ Country	Purpose	Participants/Sample	Bullying	Theoretical/ Framework	Data Collection	Rigour	Analysis	Findings
10a. Hutchinson et al. (2006a). Journal of Management and Organization. Australia	To explore nurses' experiences of being bullied, as well as their beliefs, meanings, and perceptions about bullying, and why it took place.	Purposive sampling 26 nurses with educational backgrounds from diploma to MSc. Most had extensive work experience, while three were recent graduates. All had personal experience with bullying. Setting: Employed in hospital nursing, midwifery, community health & mental health within two Australian health organizations.	Workplace Bullying (Yamada, 2000; Einarsen, 1999)	Not directly identified Discuss the 'network approach' to understanding behavior within organizations	In-depth, semi-structured interviews 40-100 minutes in length	Audit trail Code notes and memos Journaling Theoretical notes	• NVivo Software • Codes attached to words and phrases, then clustered into categories and sub-categories, followed by emergence of themes. • Sociogram used to plot relationships of repeated interactions	• Bullying alliances • Protection from leadership /management • Managers/leaders as boundary spanners for bullies • Organizational restructuring • Institutional processes as a facade • Lack of accountability/transparency
10b. Hutchinson et al. (2006b). Contemporary Nurse. Australia	To explore nurses' experiences of being bullied, as well as their beliefs, meanings and perceptions about bullying, and why it took place.	Purposive sampling 26 nurses: 24 RNs & 2 Enrolled nurses. Most had extensive work experience, while three were recent graduates. All had personal experience with bullying. Setting: Employed in hospital nursing, midwifery, community health & mental health within two Australian health organizations: one	Workplace Bullying Author defined	"Critical Interpretive" approach (Deetz & Kersten, 1983)	40-100 min Interviews Recorded in entirety and transcribed verbatim	Audit trail Code notes and memos Journaling	• Nvivo Software • Constant comparative method (Lincoln and Guba, 1985) • Triple-reflexivity • Development of thematic understanding from categories, coded text, memos, and reflective journal	• Bullying alliances • Protection from leadership /management

Author(s)/ Year/Journal/ Country	Purpose	Participants/Sample	Bullying	Theoretical/ Framework	Data Collection	Rigour	Analysis	Findings
		urban and one rural.						
11. Walrath, et al. (2010). Journal of Nursing Care Quality. USA	To gain an understanding of how RNs describe disruptive clinician behavior, including triggers, and its impact based on their observed and actual experiences on the front lines of patient care delivery.	Purposive sample 96 registered nurses, including staff nurses, advanced practice nurses, and nurse managers/leaders. Varied levels of education (BScN = 44.7%, Master's or PhD = 41.7%, associate degree = 4.2%) Setting: Acute care hospital within an academic medical center, with Magnet recognition, in Northeastern United States (but participants from all practice settings)	Disruptive Behavior (American Medical Association, AMA, 2000)	Framework of Workplace Incivility (Pearson, Anderson, & Wegner, 2001)	Ten, 90-minute focus groups Audio recorded Semi-structured interview questions based on conceptual framework.	Sessions transcribed verbatim and validated for accuracy against original recordings. Two researchers independently assigned codes and compared. Full research team reviewed codes, and synthesized into categories.	• Nudist6 software for data management • Deductive and inductive analysis • Codes derived from literature as well as new codes identified in transcripts • Achieved consensus on codes through comparison and discussion • Broad categories synthesized into themes and organized by 4 primary concepts from conceptual framework	• Personal characteristics • Lack of competency • Fatigue • Stress • Personal issues impeding job performance • Use of actual or perceived status to control others • Lack of information communicated to care for patient • Pressure from high census, volume, patient flow • Unit/organizational culture • Chronic, unresolved system issues

Note. 10a, b are published from a single study

Table 5

Influencing Factors Related to Nurse-to-Nurse Bullying

Influencing Factors:	Significant Positive	Significant Negative	Not Significant	Qualitative
A. Inhibiting Factors				
1. Individual				
• Community fit (perception of compatibility within organization)			Budin et al. (2013)	
• Psychological capital (self-efficacy, hope, optimism, resilience)		Laschinger & Grau (2012)* (Mediated by areas of worklife)		
• Sacrifice community (perception of benefits lost by leaving job)			Budin et al. (2013)	
2. Social				
• Distributive justice		Budin et al. (2013)		
• Fairness of interpersonal treatment		Blackstock et al. (2014)		
• Group identity		Topa & Moriano (2013)*		
• Group support		Topa & Moriano (2013)*		
• Informal power (team building, interdisciplinary networking)		Laschinger et al. (2010)		
• Interpersonal relationships		Yun et al. (2013)		
• Procedural justice		Budin et al. (2013)		
• Workgroup cohesion		Budin et al. (2013)		
3a. Organizational: Work & Job Characteristics				
General Work Life & Environment:				
• Areas of worklife (manageable workload, control, reward, community, fairness, values)		Laschinger & Grau (2012)*		
• Positive basic work system		Yun et al. (2013)		
• Positive work Environment		Yun et al. (2013)*		
• Variety within job		Budin et al. (2013)		

Influencing Factors:	Significant Positive	Significant Negative	Not Significant	Qualitative
Support:				
• Institutional support		Yun et al. (2013)		
• Mentor support		Budin et al. (2013)		
• Organizational support		Blackstock et al. (2014)		
• Supervisory support		Budin et al. (2013)		
• Support (recognition and encourage autonomy)		Laschinger et al. (2010)		
Opportunity:				
• Opportunity		Laschinger et al. (2010)		
• Promotional opportunities		Budin et al. (2013)		
Resources & Manpower:				
• High manpower turnover			Bortoluzzi et al. (2014)	
• Information (communicated in a timely manner)		Laschinger et al. (2010)		
• Manpower shortage		Bortoluzzi et al. (2014)*		
• Resources available		Laschinger et al. (2010)		
Empowerment & Autonomy:				
• Formal power (interdepartmental committees and taskforces)		Laschinger et al. (2010)		
• High level of autonomy		Budin et al. (2013)		
• Total empowerment		Laschinger et al. (2010)*		
3b. Organizational: Leadership				
• *Authentic leadership*		Laschinger et al. (2012)*, Laschinger & Fida (2014)**		
• *Authentic leadership:* Balanced processing		Laschinger et al. (2012)		
• *Authentic leadership:* Moral/ethical		Laschinger et al. (2012)		
• *Authentic leadership:* Self-awareness		Laschinger et al. (2012)		
• *Authentic leadership:* Transparency		Laschinger et al. (2012)		
• *Empowering leadership*: Coaching		Bortoluzzi et al. (2014)		
• *Empowering leadership*: Informing		Bortoluzzi et al. (2014)		
• *Empowering leadership*: Leading by example		Bortoluzzi et al. (2014)		

Influencing Factors:	Significant Positive	Significant Negative	Not Significant	Qualitative
• *Empowering leadership*: Participative decision-making		Bortoluzzi et al. (2014)*		
• *Empowering leadership*: Showing concern/ interacting		Bortoluzzi et al. (2014)		
• Leadership of head nurse		Yun et al. (2013)		
B. Enabling Factors:				
1a. Individual				
• Fatigue				Walrath et al. (2010)
• Internalized sexism	Purpora et al. (2012)*			
• Lack of competency (actual or perceived)				Walrath et al. (2010)
• Minimization of self	Purpora et al. (2012)*			
• Negative Affectivity	Budin et al. (2013)			
• Personal issues impeding job performance				Walrath et al. (2010)
• Stress				Walrath et al. (2010)
• Work motivation (work is central to employee's life)			Budin et al. (2013)	
1b. Individual – Propensity to Bully				
• Personal characteristics (passive aggressive, arrogant, "short-fused", aggressive, "type A personality")				Walrath et al. (2010)
2. Social				
• Emotional neglect	Blackstock et al. (2014)			
• Informal organizational alliances	Blackstock et al. (2014)*			Hutchinson et al. (2006a, 2006b)
• Normalization of bullying behaviors in work team				Hutchinson et al. (2006b)
• Use of actual or perceived status to control others				Walrath et al. (2010)
• Verbal abuse	Blackstock et al. (2014)			
• Withholding or not communicating information needed to care for patients				Walrath et al. (2010)
• Workplace incivility	Blackstock et al. (2014)			

Influencing Factors:	Significant Positive	Significant Negative	Not Significant	Qualitative
3a. Organizational: Organizational Structure & Processes				
• Bullying hidden within organizational networks				Hutchinson et al. (2006a)
• Chronic, unresolved systems issues				Walrath et al. (2010)
• Misuse of organizational processes	Blackstock et al. (2014)*			Hutchinson et al. (2006a)
• Organizational constraints	Budin et al. (2013)			
• Organizational change/ restructuring			Bortoluzzi et al. (2014)	Hutchinson et al. (2006a)
3b. Organizational: Work & Job Characteristics				
General Work Life and Environment				
• Hierarchical division of labor favoring bullying alliances				Hutchinson et al. (2006b)
• Unit/organizational culture				Walrath et al. (2010)
• Work family conflict (job interferes with family life)	Budin et al. (2013)			
• Work obstruction	Blackstock et al. (2014)			
• Work stress (imbalance between effort and reward)	Topa & Moriano (2013)*			
Empowerment & Autonomy				
• Greater role ambiguity	Quine (2001)			
• Low level of job control	Quine (2001)			
• Low participatory decision making	Quine (2001)			
Demands & Manpower				
• High quantitative workloads	Budin et al. (2013), Quine (2001)			
• Manpower shortage	Bortoluzzi et al. (2014)			
• Pressure from high census, volume, patient flow				Walrath et al. (2010)
3c. Organizational: Leadership				
• Informal organizational alliances between bullies and senior leadership (to sustain and protect bullying)				Hutchinson et al. (2006a)

Influencing Factors:	Significant Positive	Significant Negative	Not Significant	Qualitative
• Lack of accountability/ transparency				Hutchinson et al. (2006a)
• Replacement of nurse/ general manager in past 12 months			Bortoluzzi et al. (2014)	
4. Societal				
• Local job opportunity			Budin et al. (2013)	
• Non-local job opportunity	Budin et al. (2013)			
C. Organizational Action				
1. Enabling				
• Behaviors minimized, denied, trivialized				Hutchinson et al. (2006a, 2006b)
• Blaming victims				Hutchinson et al. (2006a, 2006b)
• Bullying opposition silenced/removed				Hutchinson et al. (2006a)
• Ignoring high profile anti-bullying policies				Hutchinson et al. (2006a)
• Investigators protecting bullies				Hutchinson et al. (2006a)
• Negative consequences to victims for reporting bullying behavior				Hutchinson et al. (2006a)
• Organizational tolerance and reward of bullying	Blackstock et al. (2014)			Hutchinson et al. (2006a, 2006b)
• Protection of bullies by leadership/ management				Hutchinson et al. (2006a, 2006b)

Note. All results that are not otherwise marked are based on correlational analysis or t-tests. * indicates that results were determined by stronger statistical analysis (multiple regression, hierarchical regression, logistic regression, structural equation modeling). ** indicates that results were determined by time lagged analysis. If broad factors contained sub-categories that were reported individually and/or as a whole, the broad factor term is italicized

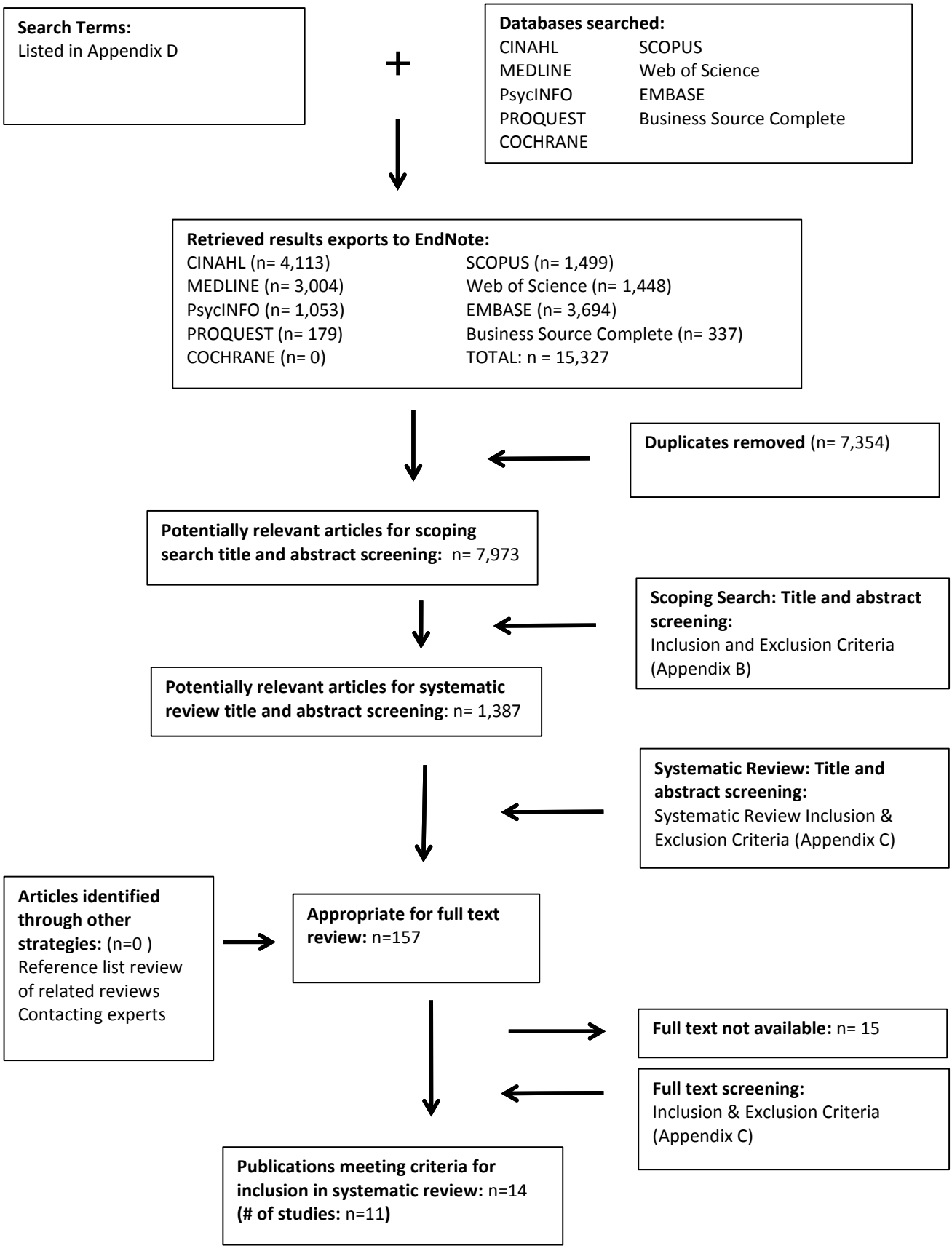

Figure 1. Systematic Review Search Strategy

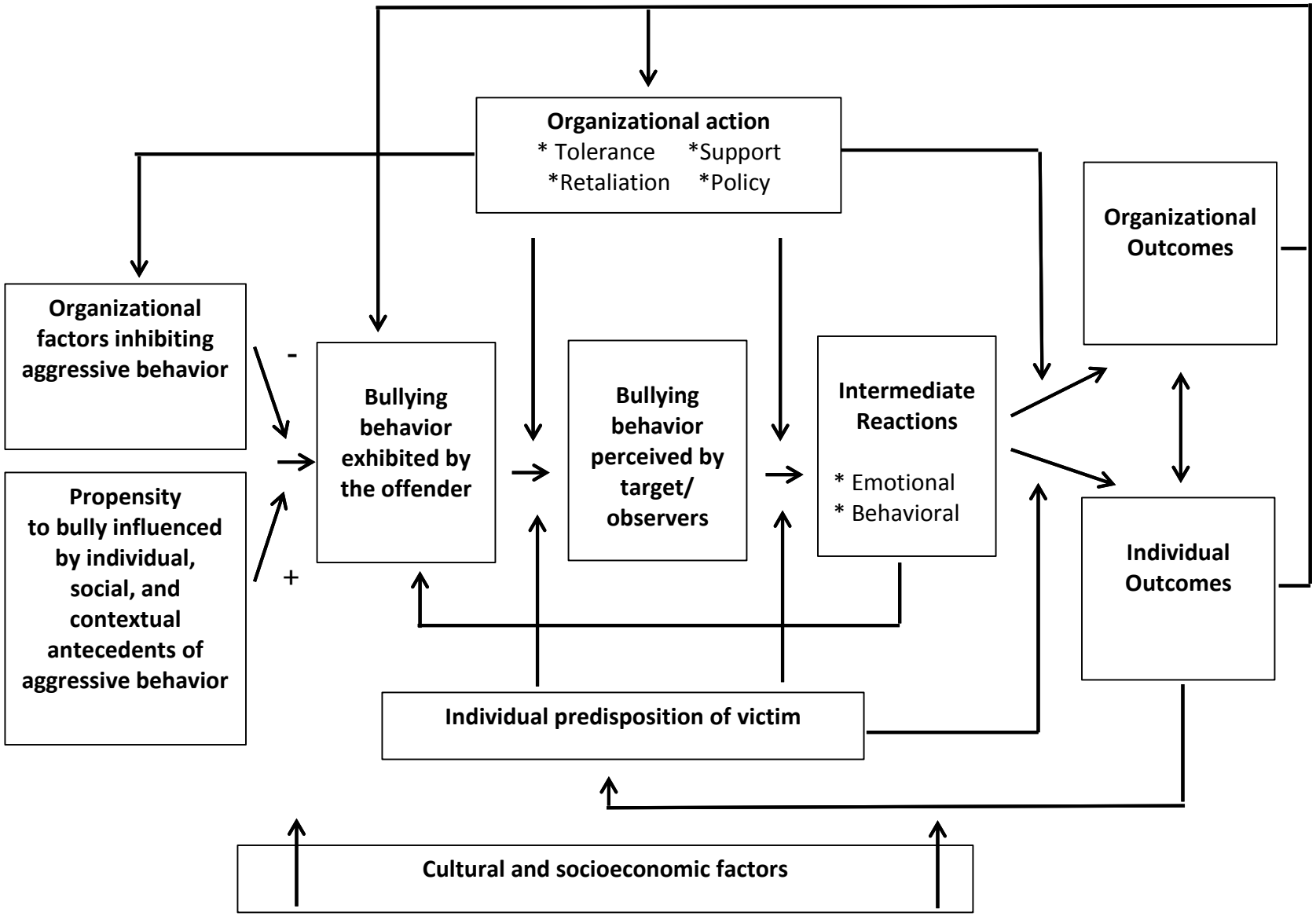

Figure 2. The Theoretical Framework for the Study and Management of Bullying at Work (Einarsen, 2005; Einarsen, Hoel, Zapf, & Cooper, 2003b, 2011)

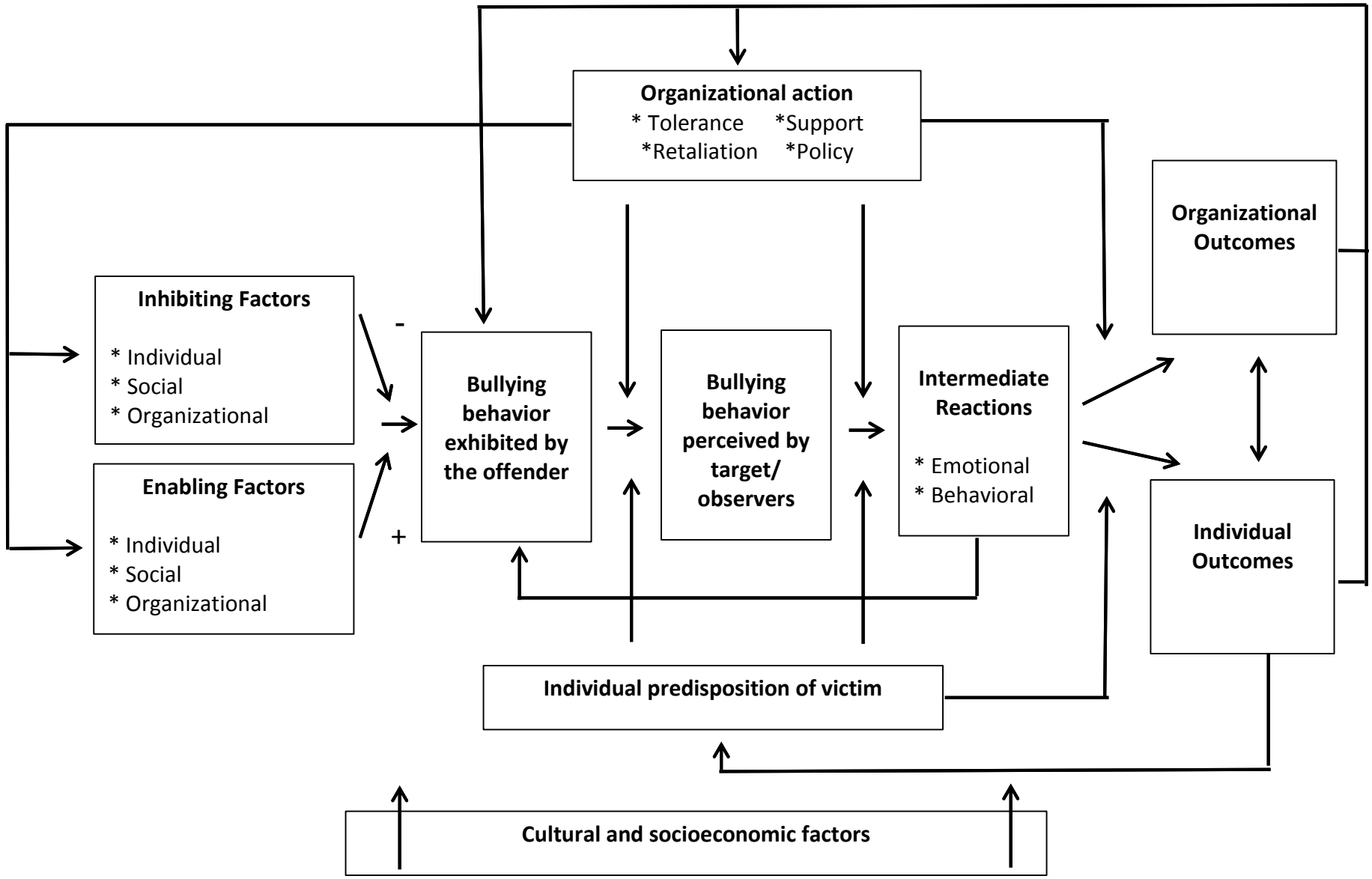

Figure 3. Adapted Theoretical Framework for the Study and Management of Bullying of Nurses at Work (Einarsen, 2005; Einarsen et al., 2003b, 2011)

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Appendix A

Systematic Review Inclusion and Exclusion Criteria

PICOS Elements*	Inclusion Criteria	Exclusion Criteria
Population	• Articles that consider bullying of nurses as victims • Studies with mixed populations, including nurses, will only be included if the sample of nurses is distinguishable • May include nurse managers or nurses in manager roles • Articles that discuss peer bullying	• Articles that discuss bullying behaviors towards clients, patients, other health professionals, but not nurses • Findings/results related to nurses are not distinguishable • Articles that discuss bullying of nurses primarily by patients, physicians, or other health professionals
	• Nurses as participants in the study • Nurses with formal education – diploma, degree, etc.	• Training or education of nurses not specified • Other classifications of "nurses" (including, but not limited to, nursing aides, health care aides) • Nurses working in academic settings and/or education • Nursing students • Studies where the target population of nurses are not participants
Interventions/ Comparators	• Studies examining the relationship between workplace bullying of nurses and any factors that are correlated and/or increase the likelihood of, or influence, it's presence • Studies that examine factors that enable bullying of nurses in the workplace.	
Outcomes	• Articles that examine or measure bullying of nurses in the context of verbal or non-verbal relational behaviors	• Articles that only examine or measure bullying of nurses in the context of physical or sexual abuse, or where the bullying is primarily racially-motivated
	• Studies where bullying towards nurses is examined and measured as an outcome	• Bullying is only mentioned in other sections of the study (ie. introduction, discussion, implications), and not specifically examined or measured in the study • Studies examining the relationship between workplace bullying of nurses and any factors that are correlated and/or increase the likelihood of, or influence, it's presence, where bullying is only the independent variable
Study Design	• Peer-reviewed research studies (quantitative and qualitative) • Published in English with full text available • Published in any time period	• Full text not available • English full text not available • Dissertations and theses excluded • Grey literature excluded • No publication dates excluded

*Adapted from Keyko (2014)
*PICOS elements adapted from: Center for Reviews and Dissemination (CRD) (2009)

Appendix B

Quality Assessment Tool for Correlational Studies

Influencing Factors Related to Workplace Bullying Among Nurses: A Systematic Review Quality Assessment and Validity Tool for Correlational Studies*		
Study: **First Author:** **Publication Date:** **Journal:**		
Design:	No	Yes
3. Was the study prospective?	☐	☐
4. Was probability sampling used?	☐	☐
Sample:		
5. Was the sample size justified?	☐	☐
6. Was the sample drawn from more than one site?	☐	☐
7. Was anonymity protected?	☐	☐
8. Response rate more than 60%?	☐	☐
Measurement: Factors Associated with Bullying (IVs): (assess for IVs correlated with DVs only)		
3. Was the factor measured reliably?	☐	☐
4. Was the factor measured using a valid instrument?	☐	☐
Bullying (DV):		
4. Are the effects observed rather than self-reported? (2 points)	☐	☐
5. Did the scale used for measuring bullying as an outcome have an internal consistency ≥ 0.70?	☐	☐
6. Was a theoretical model/framework used for guidance?	☐	☐
Statistical Analysis:		
3. If multiple factors were studied, are correlations analyzed?	☐	☐
4. Are outliers managed?	☐	☐
Overall Study Validity Rating: (0-4=LOW; 5-9=MED; 10-14=HIGH)	**Total: _____** **LO MED HIGH**	

*Adapted from Cummings et al. (2008)

Appendix C

Quality Assessment Tool for Qualitative Studies

CASP Qualitative Criteria*	**Study:** **First Author:** **Publication Date:** **Journal:**		
1. Was there a clear statement of the aims of the research?	**No** ☐	**Yes** ☐	**Explanation of answer:**
2. Is a qualitative methodology appropriate?	☐	☐	
3. Was the research design appropriate to address the aims of the research?	☐	☐	
4. Was the recruitment strategy appropriate to the aims of the research?	☐	☐	
5. Were the data collected in a way that addressed the research issue?	☐	☐	
6. Has the relationship between the researcher and participants been adequately considered?	☐	☐	
7. Have the ethical issues been taken into consideration?	☐	☐	
8. Was the data analysis sufficiently rigorous?	☐	☐	
9. Is there a clear statement of findings?	☐	☐	
10. How valuable is the research?	☐	☐	

* Adapted from: Critical Appraisal Skills Programme (CASP) (2010)