November 2018

The Influence of Authentic Leadership on Fourth-Year Nursing Students' Experience of Workplace Bullying and Withdrawal Intentions

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A thesis submitted in partial fulfillment of the requirements for the degree in Doctor of Philosophy

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THE INFLUENCE OF AUTHENTIC LEADERSHIP ON FOURTH-YEAR NURSING
STUDENTS’ EXPERIENCE OF WORKPLACE BULLYING AND WITHDRAWAL
INTENTIONS

(Thesis format: Monograph)

by

Lindsay Anderson

Graduate Program in Nursing

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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Abstract

**Background:** Nursing students are experiencing workplace bullying during clinical placements. Such experiences contribute to a loss of trust and decrease in communication, ultimately affecting patient care. This has resulted in nursing students contemplating leaving the profession. If projections are accurate, Canada will be short 60,000 nurses by the year 2022. With the current nursing shortage crisis and an aging workforce, it is cause for concern when future nurses report intentions to leave the profession.

**Purpose:** The purpose of this study was to investigate the influence of preceptors’ authentic leadership on fourth-year nursing students’ experience of workplace bullying and withdrawal intentions during a final preceptorship. A non-experimental, descriptive, correlational survey research design was used to examine the relationship between major study variables. It was hypothesized that increased authentic leadership of preceptors would increase nursing students’ psychological capital, decrease workplace bullying from preceptors and nurses, increase their professional commitment and decrease withdrawal intentions. Based on the Avolio et al. (2004) theory of authentic leadership and Einersen’s (2009) theory of workplace bullying, the hypothesized model was tested on a sample of \( n = 306 \) fourth-year nursing students from five Southern Ontario universities.

**Results:** Data were analyzed using descriptive and inferential statistics, as well as, observed variable path analysis. While the initial model demonstrated a poor fit with the observed variables \( \chi^2 (df) = 271.80 (9), p < .001, \text{RMSEA} = .31 [.28 - .34], \text{GFI} = .78, \text{NFI} = .38, \text{CFI} = .38 \), the final model \( \chi^2 (df) = 13.03 (5), p = .02, \text{RMSEA} = .07 [.03, .12], \text{GFI} = .99, \text{NFI} = .97, \text{CFI} = .98 \) revealed authentic leadership influenced nursing
students’ withdrawal intentions through two separate pathways. First, increased authentic leadership was related to a decrease in nursing students’ experience of workplace bullying from preceptors and nurses, which decreased their intentions to withdrawal from the nursing profession; and second, increased authentic leadership had a positive effect on nursing students’ psychological capital, which positively influenced their professional commitment and negatively influenced their withdrawal intentions.

**Conclusion:** Study findings contribute to new nursing knowledge by identifying a link between authentic leadership of preceptors and nursing students’ experience of workplace bullying from preceptors and nurses, and intentions to withdrawal from the nursing profession.

**Keywords:** authentic leadership, psychological capital, workplace bullying, professional commitment, withdrawal intentions, nursing students, preceptorship, path analysis.
Dedication

I would like to dedicate this dissertation to my Dad, who always encouraged me to think independently, and taught me about the importance of education. He often said, “your education is the one thing that can never be taken away”. To my Mom, who taught me how to be resilient and to never give up, even in the face of adversity. To my Husband and two beautiful Children, whose love and support encouraged me to keep going through some of the most challenging moments of my life. And finally, to all my family and friends who supported and encouraged me in many different ways so that I could have the time and energy to focus on my education, while finding balance in my life. Thank you.
Acknowledgment

Thank you to my supervisor, Dr. Mary-Anne Andrusyszyn whose constant support, encouragement, wisdom and positive mentorship guided me through this challenging and rewarding journey. I have valued and appreciated your support and advice, not only with my PhD journey, but also with my personal and professional journey.

Thank you also to my committee, Dr. Carol Wong, Dr. Yolanda Babenko-Mould, and the late Dr. Heather Laschinger, for your expertise, guidance, support and time. I could not have made it through the research process, especially data analysis, without your constant advice and direction.

Over the past few years, we have been through some wonderful moments, such as weddings, births, and promotions; but, we have also been through some difficult times and have lost many family members, colleagues and friends. I would like to take this opportunity to acknowledge all our loved ones who are no longer with us here on earth. In particular, Distinguished University Professor Dr. Heather Laschinger, who lost her fight with cancer. Her passion, knowledge and experience with research will be dearly missed. She always expected the best from her students, because she knew (even if they did not), that they were capable of the best. Heather always pushed me to be better, and for that I am exceptionally grateful.

Lastly, I would like to thank all the participants who took the time to learn about and participate in this study. Your input, ideas, and experiences are greatly valued and are vital to our collective understanding of authentic leadership and workplace bullying.
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Chapter I: Introduction and Background and Significance

According to the World Health Organization (WHO) (2010) there is a worldwide phenomenon of violence and bullying in the workplace. For example, workplace bullying is said to have reached epidemic proportions in the United Kingdom (Randall, 2001). This has caused major health concerns, forcing the WHO to give it priority status (Hinchberger, 2009). Additionally, the Ontario Nurses Association (ONA) (2009) states that “workplace violence is a growing concern for nurses” (p. 2). Across the globe, researchers from a variety of disciplines, such as nursing, management and education, have recently begun to research this disturbing social phenomenon (Curtis, Bowen, & Reid, 2007; Hoel, Faragher, & Cooper, 2004; Hutchinson, Wilkes, Jackson, & Vickers, 2010; Laschinger, Grau, Finegan, & Wilk, 2010). In response to such negative social trends, the workplace needs positive leadership.

First described by Avolio, Gardner, Walumbwa, Luthans, and May (2004), authentic leadership is a positive leadership style that has been shown to enhance decision-making, positive emotions and morale within the workforce, and is thought to be the root theory for all positive leadership theories (May, Chan, Hodges, & Avolio, 2003). As well, some practitioners believe it creates environments that positively contribute to the attitudes and behaviors of others (Shirey, 2006). Authentic leadership focuses on building individual strengths, recognizing and correcting weaknesses (Avolio, et al., 2004), and supporting individuals’ psychological states (Avolio & Luthans, 2006).

Authentic leadership has been linked to followers’ psychological capital (Peterson, Walumbwa, Avolio, & Hannah, 2012; Woolley, Caza, & Levy, 2011), which is a higher-order construct including hope, optimism, resilience, and self-efficacy.
Psychological capital has been shown to improve performance (Luthans, Avolio, & Avery, 2007), positive emotions (Avey, Wernsing, & Luthans, 2008), wellbeing (Culbertson, Mills, & Fullagar, 2010), and job stress (Avey, Luthans, & Jensen, 2009), among others. Such positive outcomes may assist individuals to cope with stressful and negative workplaces. Through leader authenticity, individuals’ psychological capital may increase. Recently, there has been increasing interest in authentic leadership, which is thought to be in response to the unique stressors facing today’s organizations and negative social trends (Avolio, et al., 2004; Cooper, Scandura, & Schriesheim, 2005), such as workplace bullying.

Among those organizations, whose employees experience bullying, harassment, violence and/or abuse, the health sector is thought to be at greatest risk (WHO, 2010). Workplace bullying has been linked to numerous negative outcomes for both the individual and the organization. Scholars report bullying in the workplace is associated with increased health problems (Hutchinson et al., 2012; Laschinger, Finegan, Wilk, 2009), emotional exhaustion (Laschinger, et al., 2010), increased prescription drug use (Niedhammer, David, Degioanni, Drummond, & Philip, 2011; Vie, Glaso, & Einarsen, 2011), decreased self-esteem (Randle, 2003a), depression, decreased ability to concentrate (Yildirium, 2009), post-traumatic stress disorder symptomology (Laschinger & Nosko, 2015), and feelings of powerlessness, humiliation, inferiority, anger, and insecurities about professional abilities (Curtis, et al., 2007; Lewis, 2006). Healthcare organizations are both directly and indirectly affected by workplace bullying, as it contributes to poor job satisfaction (Laschinger, Finegan, et al., 2009), reduced productivity (Berry, Sphr, Gillespie, Gaes, & Shafer, 2012), intentions to leave the
organization (Johnson & Rea, 2009; Laschinger, Wong, & Grau, 2012a; Simons, 2008), and strained communication with colleagues and patients (Yildirim, 2009).

According to the College of Nurses of Ontario (CNO) (2009), conflict among nursing colleagues may have an indirect influence on patient care, and workplace bullying may erode nurses’ confidence and compromise their ability to create therapeutic relationships with their clients. Tee, Ozçetin, and Russell-Westhead (2016) found that nursing students, who experienced violence during clinical placements, reported patient care was influenced by negative work environments.

Workplace bullying also affects the profession’s newest members. Berry et al. (2012) found 72.6% of novice nurses experienced bullying and another 14.7% witnessed the event. Equally alarming, nursing students have also reported experiencing bullying during clinical placements. Fifty percent of Australian, and 35.5% of United Kingdom (UK) nursing students reported experiencing workplace bullying during clinical (Birks, et al., 2017). While most research examining nursing students’ experience of bullying is from the UK and Australia, American researchers disclosed 95.6% of senior nursing students experienced bullying during clinical and classroom experiences (Cooper, et al., 2009). Other researchers have found similar disturbing results (Curtis, 2007; Randle, 2003). Such violence contributes to a loss of trust and decrease in communication, ultimately affecting patient care (Clarke, 2009; Fudge, 2006; Randle, 2003; Tee et al., 2016). This has resulted in nursing students contemplating leaving the profession (Curtis, et al., 2007; O’Conner, 2009; Tee et al., 2016). If projections are accurate, Canada will be short 60,000 nurses by the year 2022 (Canadian Nurses Association, 2009). With the
current nursing shortage crisis and an aging workforce, it is cause for concern when future nurses report intentions to leave the profession.

**Background and Significance**

Nursing is facing the worst shortage in 50 years and this shortage is not attributed to a lack of qualified professionals (Glass, 2009); instead, researchers suggest some newly graduated nurses are leaving or contemplating leaving the profession within five years of professional practice (Chachula, Myrick & Yonge, 2015). There is increasing evidence to suggest nursing students are exiting programs before they graduate, and some of those who graduate, choose a career outside of nursing (Ujvarine, et al., 2011). Researchers propose this is because of the stressful work conditions (Glass, 2009). Despite the lack of empirical evidence, the WHO is especially concerned about the alarming trends in nursing shortages (Ujvarine et al., 2011).

To keep up with population growth and attrition, Canada needs to graduate a minimum of 12,000 nursing students per year (CNA, 2009). In 2014, 11,987 entry-to-practice nursing students graduated from Canadian Universities (CASN, 2015). This number has steadily increased over the last 13 years and is approaching the projected 12,000 needed. Despite improvements, there continues to be a global nursing shortage crisis (All-Party Parliamentary Group, 2016; International Council of Nurses, 2006). A Canadian report estimated that the nursing demand, required to keep up with an ageing population, was projected to increase from approximately 64,000 full-year jobs to 142,000 full-year nursing jobs by 2035 (Stonebridge & Hermus, 2017). Examining nursing students’ professional commitment and retention is important and timely, as it will address the current and future nursing shortage projections.
Since those who identify more strongly with a profession are less likely to leave (Wolf & Hoerst, 2007), it is essential for nursing students to develop professional commitment in order to decrease their intent to withdraw from the nursing profession. Meyer, Allen, and Smith (1993) found the occupational commitment of nursing students was related to intentions to remain in the profession, and Clements, Kinman, Leggetter, Teoh, and Guppy (2016) reported nursing students’ commitment was influenced by how they were treated in the clinical environment.

Researchers have discovered that the clinical learning environment strongly influences nursing students’ perceptions of the nursing profession and may predict their intent to choose a career outside of nursing (Last & Fulbrook, 2003; Ujvarine et al., 2011). Clinical learning environments are typically health care settings used for student learning, including hospitals, doctors’ offices, health departments and other health care settings, and are said to be one of the most valuable components of a nursing program (Koontz, Mallory, Burns, & Chapman, 2010). Nursing students enter into these clinical placements throughout the four-year program and learn how to become confident and competent nurses.

Nursing students are required to complete a preceptorship, which is a final clinical placement at the end of the program where nursing students work alongside an experienced nurse and are socialized into the nursing work culture (Myrick, Yonge, Billay, & Luhanga, 2011; Myrick, Yonge, & Billay, 2010). Preceptorship is defined as an “educational relationship in which an experienced and skilled professional provides knowledge, skill, support and encouragement to a nursing student in order to enhance the latter’s understanding of, and level of comfort with, the nursing profession” (Happell,
Preceptorship tends to be short-term and involves contact with an experienced registered nurse (RN) who acts as a role model and builds a supportive one-to-one teaching and learning environment with the student (Billay & Yonge, 2004; Myrick et al., 2010; Myrick & Barrett, 1994). Typically, the preceptor is selected, based on his or her experience, by the head nurse or faculty. Although knowledge and clinical expertise are important, it is equally crucial that the preceptor is a good communicator, honest, and has a genuine concern for the student (Myrick & Barret, 1994).

Preceptors influence students’ perceptions of the values of the nursing profession (Myrick et al., 2010). The relationship between the preceptor and nursing student prepares the student for the “realities of the professional world of nursing” (Yonge, Myrick, & Haase, 2002, p. 84); however, if this relationship is unsuccessful or if conflict occurs, it can lead to students’ cynicism about the profession (Young et al., 2002). Researchers have found that students regularly experience communication and interpersonal conflict with their preceptors (Mamchur & Myrick, 2003), and others have suggested nursing students experience bullying during preceptorships (Clarke, 2009). While research on nursing students’ experiences of bullying during clinical placements has increased, research about bullying during preceptorships is lacking. Preceptorship is one of the most stressful experiences for the nursing student and is thought to be even more stressful than their first year of employment (Yonge et al., 2002). Although the reason is unknown, it is suspected that the work environment in which two strangers meet and work together during potentially difficult situations, is stressful (Young et al., 2002). The preceptor is responsible for providing feedback on and in some cases evaluating
student success and socializing them into the nursing profession (Billay & Yonge, 2004), which may contribute to stressful situations.

Preceptors have the unique leadership opportunity to create an authentic connection between nursing students and experienced nurses. Their leadership role can promote the development of closer professional relationships, thus decreasing conflict and workplace bullying (Earle, Myrick, & Yonge, 2011). Preceptors, who can be considered authentic leaders, have the rare ability to be positive role models to nursing students. Preceptors must be honest, genuine and authentic (Myrick & Barret, 1994), characteristics congruent with the authentic leadership theory. Yet, there are few studies examining leadership styles of preceptors. Giallonardo, Wong, and Iwasiw (2010) found that when new nurse graduates perceived their preceptors to be authentic leaders, their perceptions of job satisfaction and work engagement increased. It is proposed that such outcomes contribute to positive work environments. Positive work environments, guided by authentic leaders, will not only positively affect the nursing workforce and profession, but society and overall healthcare as well.

One mechanism by which authentic leadership can improve the workplace is by building followers’ psychological capital, which has been linked to positive emotions (Avey, et al., 2008), wellbeing (Culbertson, et al., 2010), and reduced intentions to quit (Avey, Luthans, & Youssef, 2010). Researchers found that those who perceived their leaders to be authentic had higher levels of psychological capital (Avolio & Luthans, 2006). Authentic leadership, through psychological capital, may positively build up followers’ strengths, and prepare them for workplace adversities, such as bullying.
With the many challenges of today’s healthcare system, it is imperative nursing students be armed with improved levels of psychological capital to face such challenges upon graduation. It is vital to the future of nursing and healthcare that nursing students have adequate education in a safe environment that builds self-efficacy, creates hope, raises optimism, and strengthens resilience. Through the authentic leadership of preceptors, higher positive psychological states are thought to decrease the experience of workplace bullying, increase professional commitment, and decrease withdrawal intent of senior baccalaureate nursing students.

In summary, while there has been increasing interest in workplace bullying among RNs (Johnson & Rea, 2009; Laschinger, et al., 2010; Yildirim, 2009), there is limited research addressing nursing students’ experiences with bullying during preceptorship. Additionally, no research studies were found that examined how perceived authentic leadership of preceptors increases nursing students’ psychological capital. Furthermore, researchers have yet to investigate the effects of increased psychological capital on nursing students’ experience with workplace bullying, professional commitment, and withdrawal intent. Lastly, despite increasing concerns of nursing student attrition and nursing shortages, few researchers have examined nursing students’ professional commitment, and their withdrawal intentions from the profession.

**Study Purpose**

The purpose of this study was to test a model linking authentic leadership of preceptors with psychological capital, workplace bullying, professional commitment, and withdrawal intentions of fourth-year nursing students from Ontario universities. It was hypothesized that nursing students reporting greater authentic leadership of their
preceptors, would report increased psychological capital, decreased workplace bullying from preceptors and nurses, increased professional commitment, and decreased withdrawal intent.

Knowledge generated from this study may improve the clinical learning environment for nursing students, particularly senior nursing students who are close to graduating and becoming RN’s. This knowledge may positively impact future recruitment and retention of new nurse graduates, thereby addressing the projected nursing shortage, and improving quality of care for current and future generations.
Chapter II: Literature Review and Theoretical Framework

A comprehensive review of the literature is presented in this chapter. First, the search strategy is explicitly discussed, followed by a review of the theoretical and empirical literature of the main study variables. Finally, a summary of the literature, theoretical framework, and research purpose and hypotheses are presented.

Search Strategy

Five electronic databases (CINAHL, Scopus, ProQuest Nursing Journals, PsycInfo, and Dissertations and Theses) were used for this literature review, and included published quantitative and qualitative research studies, as well as non-published research dissertations. Non-published research dissertations were included to address publication bias (Forbes, 2003). Reference lists of published papers were also examined for additional papers that were not found through the wide-ranging search. Moreover, non-research and popular literature was also examined. The search terms were authentic leadership, leadership, psychological capital, self-efficacy, hope, optimism, resilience, nursing, workplace bullying, violence, harassment, vertical and horizontal violence, incivility, professional, occupational and organizational commitment, intentions to withdrawal, nursing students, nursing education, clinical environment, preceptorship, and preceptors. Relevant criteria were developed prior to the search and were directly linked to the research questions. Papers were read and key ideas identified. Data extraction, synthesis, and analysis were completed through a quality assessment on all studies found.

A review of the literature was conducted across a variety of disciplines, such as, nursing, engineering, psychology, business, education, sociology, child development,
organizational behavior, leadership, and applied behavioural sciences. A variety of disciplines were included because there is limited nursing research and non-research literature on authentic leadership, psychological capital, workplace bullying, professional commitment, and withdrawal intent. As well, including a diverse range of disciplines added to the depth and breadth of the literature review. All literature was integrated throughout the review and its significance to nursing and the proposed study explicitly discussed. A review of the theoretical literature is presented on all study variables, followed by a review of the empirical literature. Next, a summary of the key findings from the comprehensive review and the research problem are discussed. Last, the theoretical framework and hypotheses are presented.

Theoretical Review

Relevant theoretical literature is presented in five sections, with ensuing subsections: authentic leadership (authenticity, definition, four components, authentic relationship, and criticisms), psychological capital (hope, optimism, self-efficacy, resilience, and higher-order construct), workplace bullying (associated terms, definition, behaviours, and bullying in nursing education), professional commitment, and withdrawal intent.

Authentic leadership. The concept of authenticity has been around for some time, but authentic leadership theory was developed more recently (Luthans & Avolio, 2003). Since then, numerous scholars from a variety of disciplines, including management, business, education, and nursing have contributed to the development of the authentic leadership theory (Gardner, Cogliser, Davis, & Dickens, 2011). Although nursing literature on authentic leadership is limited, both researchers and practitioners
have identified that leadership (Cummings, et al., 2010; Hutchinson & Hurley, 2012) and more specifically authentic leadership (Shirey, 2006; Wong & Cummings, 2009a) in nursing is urgently needed to address healthcare concerns. For instance, Wong and Cummings (2009a) highlighted the relevance of authentic leadership in the evolution of leadership in nursing practice and research. Therefore, while research on authentic leadership in nursing is increasing, more research is required to contribute to positive workplace environments. The concept of authenticity, definition of authentic leadership, four components of authentic leadership, the authentic relationship, and criticisms of the authentic leadership theory are presented next.

**Authenticity.** At the heart of authentic leadership is the multi-component conceptualization of authenticity (Gardner et al., 2011), which is the ability “to know, accept, and remain true to one’s self” (Avolio et al., 2004, p. 802). Kernis and Goldman (2006) define authenticity as “the unobstructed operation of one’s true or core self in one’s daily enterprise” (p. 294). It includes four concepts; namely:

- [self] awareness (having awareness and motivation to increase one’s own personal characteristics, values, motives, feelings, and cognitions);
- unbiased processing (objectively processing self-relevant information);
- authentic behavior (behaving and acting in accordance with one’s true self and with one’s values, preferences, and needs as opposed to acting falsely to simply please others or to attain rewards or avoid punishment);
- authentic relational orientation (valuing and striving for achieving openness and truthfulness in relationships and is not independent of the other three concepts) (Ilies et al., 2005; Kernis & Goldman, 2006).
Authenticity exists on a continuum and is not static; therefore, a person is described as being more or less authentic, rather than being dichotomously authentic or not authentic (Avolio et al., 2004). Individuals must constantly be working towards authenticity by remaining true to their own values and beliefs, and expressing themselves in a way that is harmonious with their inner thoughts and feelings (Avolio et al., 2004; Avolio et al., 2005).

Through a concept analysis of authenticity, Starr (2008) developed six defining attributes of authenticity based on the literature:

1) Authenticity is a process of self-discovery; 2) This process includes realizing personal potential and acting on that potential; 3) Part of this process is accepting the responsibility for and consequences of life decisions; 4) Suffering may be involved; 5) The culmination of this process is a demonstration of congruency in ideals, values, and actions in relation to self and others; 6) This is a life-long process whose ultimate achievement may not be realized (p. 57).

**Definition.** Drawing from the conceptualization of authenticity, authentic leadership is defined as:

a pattern of leader behaviour that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development (Walumbwa et al., 2008, p. 94).

Although there are earlier definitions for authentic leadership, Walumbwa et al.’s (2008) is the most generally accepted definition (Banks, McCauley, Gardner, & Guler, 2016). It
was selected for this study because it addresses critiques made by others regarding the unclear distinctions between the authentic leadership and psychological capital theories (Gardner et al., 2011; Walumbwa et al., 2008), as earlier definitions included the psychological capital components (Avolio et al., 2004). While other researchers and practitioners have developed related definitions of authentic leadership (George, 2003; Ilies et al., 2003), Walumbwa et al.’s (2008) authentic leadership theory is preferred partly because they included an ethical component (internalized moral perspective), allowing the leader to not only be authentic, but moral as well (May et al., 2003; Wong & Cummings, 2009a). Also, this definition encompasses the four components of authenticity and authentic leadership.

**Four components of authentic leadership.** Informed by Kernis and Goldman’s (2006) four concepts of authenticity, the four central components of authentic leadership theory include *self-awareness, relational transparency, balanced processing,* and *internalized moral perspective* (Walumbwa, et al., 2008). Each of these four components shed light into authentic leader behavior.

*Self-awareness.* Authentic leaders demonstrate an understanding of how they derive and make meaning of the world and how that meaning making process impacts the way they may view themselves overtime (Walumbwa, et al., 2008). Through acting in accordance with their values and beliefs and encouraging diverse viewpoints from others, authentic leaders gain a sense of self-awareness, while building credibility and trust of their followers, allowing them to lead in a way that followers’ identify as authentic (Avolio et al., 2004; May et al., 2003). Trust in the leader is a central component of the authentic leadership theory (Avolio et al., 2004). Authentic leaders are astutely aware of
how they think and act and how such thoughts and actions are perceived by and affect others (Avolio et al., 2004). It is essential for the authentic leader to have self-awareness in order to demonstrate relational transparency.

Relational transparency. Authentic leaders demonstrate relational transparency by presenting their authentic self to others (Walumbwa, et al., 2008). Authentic leaders are “persons who have achieved high levels of authenticity in that they know who they are, what they believe and value, and they act upon those values and beliefs while transparently interacting with others” (Avolio et al., 2004, p. 802). Authentic leaders lead from the front and openly share their own weaknesses and vulnerabilities, while discussing followers’ vulnerabilities and constantly encouraging the growth of followers (Avolio et al., 2004). Additionally, they share important information that is required to make decisions, and accept others’ inputs, allowing followers to more “accurately access the competence and morality of the leader’s actions” (Walumbwa, Wang, Wang, Schaubroeck, & Avolio, 2010, p. 901). Sharing important information and listening to and considering others’ views is also an essential aspect of balanced processing.

Balanced processing. Leaders engage in balanced processing when they objectively analyze all relevant data before coming to a decision (Walumbwa, et al., 2008). Transparently interacting with others implies that authentic leaders are open and honest about their values and beliefs and the decisions they make. Additionally, authentic leaders are open to the values and beliefs of their followers, consider all viewpoints when making decisions (Avolio et al., 2004), and take all individuals into consideration when faced with a moral dilemma (Avolio et al., 2004; May et al., 2003).
Internalized moral perspective. The final component of the authentic leadership theory is internalized moral perspective, which is the internalized and integrated form of self-regulation that is guided by internal moral standards and values and results in expressed decision-making and behaviour that is consistent with these values (Walumbwa, et al., 2008). Others perceive authentic leaders as being hopeful, optimistic, confident, resilient, and high on moral character (Avolio et al., 2004). Leaders not only demonstrate authenticity, but morality, genuineness, reliability, and trustworthiness (May et al., 2003).

Authentic relationship. In authentic leadership theory, the interaction between the leader and follower is termed the authentic relationship (Avolio et al., 2005). Leaders develop their own authenticity by drawing upon their life course, psychological capital, and moral perspective (Avolio & Luthans, 2006). Through increased self-awareness, self-regulation and positive modeling, authentic leaders promote the development of authenticity in followers, resulting in improved wellbeing for both the leader and follower (Avolio & Gardner, 2005). Through this process, leaders build up not only their own psychological capital for improved performance, but also that of their followers (Avolio & Luthans, 2006). Followers become more authentic by the role modeling of their leaders, which in turn eventually creates an authentic organizational culture. Authentic leaders stimulate personal identification among followers; in other words, individuals’ beliefs about their leader become self-defining (Avolio et al., 2004). Authentic leaders model high moral standards, honesty and integrity. A crucial idea in the authentic leadership theory is that leaders will actively and continuously role model for followers, through their high levels of self-awareness, balanced processing, relational
transparency, and authentic behavior (Avolio et al., 2005). Authentic leadership has many mechanisms, such as hope, trust, positive emotions and psychological capital that are central to building long-term relationships between the leader and follower, and mediate outcomes such as organizational behaviors, including withdrawal intentions (Avolio et al., 2004).

**Criticisms.** Some researchers criticized the definition of authentic leadership (Cooper, Scandura, & Schriesheim, 2005; Wong & Cummings, 2009a), as well as measurement and discriminant validity of the construct, relevant construct outcomes, and whether authentic leadership could be learned (Cooper et al., 2005). Over the past few years, researchers have addressed many of these concerns (Gardner et al., 2011). Recently, however, scholars have criticized authentic leadership for making assumptions that leaders will be ethical and moral (Algera & Lips-Wiersma, 2012; Wong & Cummings, 2009a), being too reliant on positive attributes, failing to address inherent weaknesses of the leader and follower (Diddams & Chang, 2012; Ford & Harding, 2011), inadequately addressing inauthenticity (Algera & Lips-Wiersma, 2012; Ford & Harding, 2011), failing to acknowledge the possible negative impacts of authentic leadership such as power imbalances (Ford & Harding, 2011), incongruent values, and one-sided relationships (Algera & Lips-Wiersma, 2012; Wong & Cummings, 2009a), and being a redundant construct (Banks et al., 2016).

Many researchers have challenged the ethical and moral component of authentic leadership. For instance, researchers argue that authentic leadership theory uncritically assumes the leader’s true self will be a moral and ethical one (Algera & Lips-Wiersma, 2012; Wong & Cummings, 2009a), and state that claiming high moral ground is immoral.
in itself (Ford & Harding, 2011). However, May et al. (2003) state that authentic leaders exhibit a moral capacity and are able to effectively put themselves in someone else’s shoes and consider all stakeholder needs before coming to a decision. Authentic leaders are able to recognize moral dilemmas, which are defined as any issue that can harm or benefit others and are able to transparently consider all alternatives to a dilemma while taking others into consideration (May et al., 2003). While the theory implies the authentic leader draws on his or her own values and beliefs to determine what is right and wrong, making the assumption that such values and beliefs will be moral and ethical, authentic leadership also makes clear that the leader will transparently make decisions that are not self-serving and in the best interest of others (May et al., 2003).

Moreover, an internalized moral perspective guides authentic leaders. Although values and beliefs that guide one’s morals may be subjective, authentic leaders, through balanced processing, take all individuals’ values and beliefs into consideration when faced with a moral dilemma (Avolio et al., 2004; May et al., 2003). Therefore, authentic leaders are not only guided by their moral perspective, but by their followers’ moral perspectives as well. Additionally, a person cannot claim to be an authentic leader, rather they must be perceived as an authentic leader; consequently, if followers do not believe the leader has a high moral character, then the leader would not be considered an authentic leader (May et al., 2003).

Diddams and Chang (2012) argue that many researchers examining authentic leadership focus on the strengths of individuals and rarely address the weaknesses; thus, viewing authenticity solely from a positive lens might increase leaders’ defensiveness and decrease their ability to accept blame for failure. Others argue that authentic leaders
are portrayed to be flawless and perfect individuals who have no imperfections and nothing to hide (Ford & Harding, 2001). However, in authentic leadership theory authentic leaders transparently discuss their own weaknesses and vulnerabilities with followers; thereby, acknowledging their own imperfections. Through relational transparency, authentic leaders do in fact have nothing to hide as they transparently interact with others. Additionally, because authentic leadership draws from positive psychology, authentic leaders view mistakes as learning opportunities, and not as opportunities to reprimand followers (Avolio et al., 2004). Despite this, Diddams and Chang (2012) assert that authentic leaders might resist personal internal change, perceiving this as inauthentic. As a result, leaders may hold onto a fixed sense of self to protect their held sense of authenticity, rather than evolving their sense of self. This could lead to leader inauthenticity.

Inauthenticity is thought to be unavoidable, and failing to acknowledge this could result in leaders feeling pressured into hiding their true selves and pretending to be authentic (Algera & Lips-Wiersma, 2012). Drawing from an existentialist perspective, Algera and Lips-Wiersma (2012) argue that viewing authentic leaders as “superior in their ability to triumph over inauthenticity” (p. 123), is an impractical way of viewing the authentic leader, as it does not consider the nature of life that promotes inauthenticity. For example, researchers believe authenticity and organization are intertwined and authentic leaders and followers cannot distinguish between the self and the organization. In this light, it is argued that if authenticity is truly practiced, then the leader will become inauthentic, as their values and beliefs may not be distinguishable from the organizations values and beliefs (Ford & Harding, 2012). Using Jessica Benjamin’s work on object
relations theory, Ford and Harding (2011) argue that followers will sacrifice their own values and internalize the core values and mission of the organization in order to become authentic. Authentic leadership theory argues against a person being authentic or inauthentic, rather, individuals are more or less authentic. Therefore, leaders, through self-awareness, understand that their values and beliefs may change overtime (Avolio et al., 2004; Walumbwa, et al., 2008). Through this meaning-making process, authentic leaders would transparently share their changing values and beliefs with followers, thereby becoming more authentic.

Internalizing the values and beliefs of the organization is thought to be a form of control over employees because authenticity is not distinguished between the self and the organization (Ford & Harding, 2011). In addition to control, it is believed that the terms ‘leader’ and ‘follower’ denote a hierarchical relationship, where one is dominating over the other (Ford & Harding, 2011), causing a power imbalance of leader-follower that may influence the followers’ authenticity or inauthenticity. Furthermore, a person may feel degraded when particular values are imposed (Algera & Lips-Wiersma, 2012). Despite this argument, authentic leadership theory posits that the leader encourages diverse viewpoints from followers and builds a trusting relationship. As well, authentic leaders are aware of how their position and actions impact others, and therefore, would not use their power over them (Avolio et al., 2004; May et al., 2003).

Another criticism of authentic leadership theory is that it assumes leader-follower congruence and inadequately addresses the potential for differences between the leader and followers’ values and beliefs (Algera & Lips-Wiersma, 2012; Wong & Cummings, 2009a). Algera and Lips-Wiersma maintain the goals of authentic individuals will rarely
align and assuming they will is problematic. Unfortunately, authentic leadership theory fails to address how leaders might approach situations where values and beliefs differ (Wong & Cummings, 2009a). Although authentic leadership theory may inadequately explain how to manage a situation where the leader and followers’ values and beliefs are different, the theory clearly explains the authentic leader must objectively analyze all data and consider all individuals before making a decision. Thus, the leader rarely makes decisions based on his or her values alone.

Authentic leadership is also challenged for being a one-sided relationship, as the leader can role model authenticity for the follower but the follower does not role model authenticity for the leader, leaving little room for a reciprocal relationship (Algera & Lips-Wiersma, 2012; Wong & Cummings, 2009a). However, existentialists believe authenticity is inherent in all individuals and is not unique to the leader, suggesting followers can also role model authenticity (Algera & Lips-Wiersma, 2012). Echoing this, May et al. (2003) agree that most people have the “innate potential to become an authentic moral leader” (p. 249). Wong and Cummings (2009a) suggest that for a leader to be empowering, the relationship must be reciprocal where leadership behaviours of the collective are supported, and not just that of the formal leader.

More recently, researchers questioned whether empirical literature examining authentic leadership and transformational leadership was redundant. Using a meta-analysis, Banks et al. (2016) examined the empirical redundancy of authentic leadership. They also examined the validity and importance of each construct. Interestingly, they found both leadership theories had a strong overlap (true-score correlation .72; k = 23, N = 5, 414), suggesting these two theories might not be distinct constructs. Additionally,
they did not find evidence to suggest one leadership theory added incremental validity over the other theory. Moreover, transformational leadership appeared to outperform authentic leadership when predicting attitudinal and performance-related outcomes; however, authentic leadership did outperform transformational leadership when predicting group performance and followers’ organizational citizenship behaviours. Due to the mixed results, the authors agree authentic leadership is a worthy theory and deserves future attention.

In summary, while there are numerous critiques of the authentic leadership theory, authentic leadership remains an important and worthy leadership theory in nursing. Researchers argue that authentic leaders are not necessarily moral and ethical; however, according to the theory, authentic leaders engage in balanced processing and have an internalized moral perspective. Others state that there is too much emphasis on the positives, and not enough attention is placed on weaknesses of leaders and followers. While this may be true, as authentic leadership is rooted in positive psychology, authentic leaders also transparently share their own weaknesses with their followers; as well, they discuss followers’ weaknesses in an attempt to learn from shortcomings. Some researchers maintain that authenticity is difficult to achieve, and inauthenticity is more likely. Yet, authentic leadership theory argues that individuals are not authentic or inauthentic; instead, they are more or less authentic. Another criticism is that there is an unequal distribution of power between the leader and follower. However, the authentic leader recognizes his or her position of power and will not use that power over someone else, as this would prevent the leader from building a trusting relationship, which is central to authentic leadership. Moreover, researchers argue that there is leader-follower
incongruence and this relationship is not reciprocal. Through balanced processing, authentic leaders collaborate with followers in making decisions and take all stakeholders into account, thereby ensuring others’ values and beliefs are considered. Lastly, although researchers found support to suggest authentic leadership and transformational leadership are not distinct constructs, authentic leadership did outperform transformational leadership when predicting followers’ organizational citizenship behaviours and remains an important leadership construct.

**Psychological capital.** The key mediating mechanism through which authentic leadership may influence nursing students’ experience of workplace bullying, professional commitment, and withdrawal intent is psychological capital, including hope, optimism, resilience and self-efficacy. Psychological capital, which has recently emerged from positive psychology and positive organizational behavior, is defined as an individual’s positive psychological state of development and is characterized by:

1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks
2) making a positive attribution (optimism) about succeeding now and in the future
3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed, and
4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success (Luthans, Youssef, et al., 2007, p. 3).
Psychological capital assimilates the four components synergistically, as well as additively (Luthans, Youssef, et al., 2007). In other words, the four components are viewed as one whole; namely, psychological capital, and as the individual components of hope, optimism, self-efficacy and resilience. Luthans, Youssef, et al. explain that synergies not only exist within the individual components, but also “between the capacities that constitute psychological capital as a core construct” (p. 20). Numerous researchers have found psychological capital, as a core construct, predicts outcomes better than the individual factors of efficacy, hope, optimism, and resilience (Jensen & Luthans, 2006; Luthans, Avey, Avolio, Norman, & Combs, 2006; Sweetman, Avey, Luthans, Luthans, 2011). Although psychological capital is a higher-order construct and is best viewed as a whole, as opposed to the sum of its parts, it remains important to understand each factor individually.

Since hope, optimism, resilience, and self-efficacy share similar characteristics, it is important to be explicit when explaining similarities, but also when distinguishing differences among these concepts. As stated previously, psychological capital emerged from positive organizational behavior literature, which has four specific inclusion criteria that a concept must possess in order for it to be considered part of psychological capital. For instance, positive organizational behavior theory posits that psychological capital concepts must be 1) positive and unique, 2) based on theory, research, and valid measures, 3) open to development and change (or state-like compared to fixed, trait-like), and 4) manageable for performance improvement (Avolio & Luthans, 2006). Therefore, hope, optimism, self-efficacy, and resilience would naturally have such criteria in common with one another. Additionally, each concept is a self-directed motivating
mechanism, and the process may have an impact on job performance and desired work attitudes (Youssef & Luthans, 2007).

There are many similarities among psychological capital concepts; however, because they are part of a higher-order construct, they must also have unique differences and demonstrate discriminant validity. With literature support, each of the four constructs, hope, optimism, self-efficacy and resilience, are individually defined and described, and the characteristics that make them similar and unique are explicitly stated. The way in which each construct synergistically fits with the higher-order concept of psychological capital is discussed next.

**Psychological capital-hope.** The hope construct “draws its uniqueness from the equal, additive, and iterative contributions of its agency and pathways components” (Youssef & Luthans, 2007, p. 779). Although hope is commonly thought of as wishful thinking, psychological capital is defined as “a positive motivational state that is based on an interactively derived sense of successful 1) agency (goal-directed energy) and 2) pathways (planning to meet goals)” (Snyder, 2002, p. 250). Even though the agency or motivation of hope is shared with optimism, the pathway component is unique (Luthans, Youssef et al., 2007; Youssef & Luthans, 2007). Pathway thinking begins with individuals considering how they can link their present with their future; essentially, goals will not materialize without the means to achieve them and recognition of new and different pathways. Hopeful people are motivated to move past obstacles, “through their self-determination, energy, and perception of internalized control” (Luthans, Youssef et al., 2007, p. 66), and towards their goals through alternative pathways (Snyder, 2002).
Psychological capital-optimism. Optimism is different from other constructs by the way it conceptualizes positive and negative events. For example, realistic optimism can protect a hopeful person from striving towards unrealistic goals. Optimism is defined as “the tendency to believe that one will generally experience good vs. bad outcomes in life” (Scheier & Carver, 1997, p. 202). Individuals who are optimistic that desired outcomes are possible are able to persevere in the face of adversity (Carver et al, 2010; Scheier & Carver, 1992). An optimistic person attributes specific positive events to “personal, permanent, and pervasive causes and interprets negative events in terms of external, temporary, and situation-specific factors” (Luthans, Youssef et al., 2007, p. 91). This way of viewing events is similar to how a person with high self-efficacy would perceive positive and negative situations. Although there are some similarities between self-efficacy and optimism, there are two primary differences. The first is “the extent to which the sense of personal agency is seen as the critical variable underlying the behavior” (Scheier & Carver, 1992, p. 223). Although personal efficacy is important in achieving goals, most people do not necessarily care how a positive outcome occurred, just that it does occur. The second difference is that self-efficacy is often domain specific, whereas, optimism is more generalized and adopts a broader perspective (Carver, Scheier, & Segerstrom, 2010; Scheier & Carver; Youssef & Luthans, 2007).

Psychological capital-efficacy. Self-efficacy is defined as “one’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998, p. 66, as cited in Luthans, Youssef et al., 2007, p. 38). Traditionally, self-efficacy is described as applying to specific domains or activities.
(Bandura 1995; 1997; Bandura & Adams, 1997); however, “there is increasing recognition that individuals can also have a generalized level of self-efficacy across a common domain of challenges and tasks, such as the workplace” (Luthans, Youssef et al., 2007, p. 34). Parker (1998) conducted a study that examined self-efficacy across a range of tasks in the workplace and found support for a generalized measure of self-efficacy. Psychological capital self-efficacy is described as applying generalized domains, rather than specific domains to the workplace. For instance, feeling confident in presenting information to colleagues (Luthans, Youssef et al., 2007) can be generalized across a number of different work environments.

There are four principle sources of information from which self-efficacy is created: mastery experiences (repeatedly experiencing success in accomplishing a specific task); vicarious experiences (building confidence by observing others’ success); verbal persuasions (receiving positive feedback); and physiological and affective states (emotional states and psychological and physiological well-being) (Bandura, 1997; Luthans, Youssef et al., 2007). According to Bandura (1997) greater efficacy influences how long individuals will persevere in the face of adversity and failures, and how much stress and depression they will experience when coping with negative situations. As previously stated, people with high efficacy face stressful events with confidence and view positive events as caused by efforts and “negative events as due primarily to external circumstances” (Bandura, 1995, p. 25). Psychological capital efficacy is influenced by what other people say, and will affect the individual’s self-evaluation; therefore, those nursing students, who experience bullying in the workplace, might have
their psychological capital efficacy decreased. Nonetheless, a person who has already achieved high efficacy might view a bullying event as an external circumstance.

*Psychological capital-resilience.* Historically, resilience was viewed as an extraordinary super power (Masten, 2001); however, researchers have found resilience is not fully dependent on personal characteristics (Gillespie, Chaboyer, & Wallis, 2009) and is strongly correlated with self-efficacy (Gillespie, Chaboyer, Wallis, & Grimbeek, 2007). This suggests that the development of resilience is not an inherited super trait as once believed (Masten, 2001; Grotberg, 2003) and may be influenced by other factors, such as authentic leadership. This is consistent with modern beliefs that resilience can be promoted at any age (Grotberg, 2003) and “at different points in human development” (Luthar, Cicchetti, & Becker, 2000, p. 555).

Resilience is defined as “the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility” (Luthans, Youssef et al., 2007, p. 112). It is important to be clear about the difference between resiliency and resilience. The psychological capital theory appears to use each term interchangeably; however, using both terms interchangeably is cautioned. Resilience is a dynamic developmental process, whereas, resiliency refers to a personality trait (Luthar, et al., 2000). The psychological capital theory clearly states it is interested in *state-like* and not *trait-like* concepts; therefore, researchers are urged to use the term *resilience* as opposed to *resiliency*.

Resilient people are able to bounce back from adversity and “spiral upward, stronger and better than before” (Siebert, 2005, p. 2). Richardson (2002) suggests that when people are not resilient they may resort to “dysfunctional reintegration”, which
occurs when individuals resort to destructive behaviours, such as bullying, to deal with adversity. Building resilience in nursing has “the potential to assist nurses in dealing with the workplace adversity [such as bullying] associated with interpersonal difficulties, resource problems, and other workplace problems” (Jackson, Firtko, & Edenborough, 2007, p. 3). Bullying, however, remains unacceptable and should not be tolerated.

Resilience develops when individuals feel free to make mistakes and can learn from such mistakes, when they are made part of the decision-making process, and when focus is on their strengths rather than weaknesses (Grotberg, 2003). This directly parallels with the authentic leadership theory, as authentic leaders focus on followers’ strengths rather than their weaknesses.

**Higher-order construct of psychological capital.** The individual components of psychological capital intricately fit together to create one higher-order construct. For instance, individuals who are hopeful, that is, they possess the agency and pathways to achieve their goals, are more resilient since they are able to stay motivated as they overcome adversity. Highly efficacious people are confidently able to apply their hope, optimism, and resilience to specific tasks. Furthermore, a resilient individual is more likely to bounce back from adversity and maintain a realistic and flexible optimism (Luthans, Youssef et al., 2007). Therefore, “psychological capital self-efficacy, hope, and resiliency can in turn contribute to an optimistic explanatory style through internalized perceptions of being in control” (Luthans, Youssef et al., 2007, p. 19). It is important to understand that each of these components is viewed to be state-like, rather than trait-like. For example, positive state-like capacities are open to change, compared
to positive traits, which are stable over time and applicable across situations (Luthans & Youssef, 2007; Luthans, Youssef et al., 2007).

**Workplace bullying.** Although workplace bullying has been around indefinitely, researchers only started examining it in the 1990’s (Einarsen, Hoel, Zapf, & Cooper, 2005; Rayner, Hoel, & Cooper, 2002). While some believe bullying is a strategic management strategy to influence others and increase job performance (Ferris, Zinko, Brouer, Buckley, & Harvey, 2007), the majority agrees bullying is a destructive behavior (Hutchinson, Vickers, Jackson, & Wilkes, 2006). Traditionally, bullying within the nursing profession has been directly related to oppression (Freshwater, 2000) and horizontal violence (King-Jones, 2011), and while this has provided important insight into the nature of power related to bullying, it has also restricted such understanding (Hutchinson et al., 2006). Although bullying almost always involves an imbalance of power, it is not unique to nurses or nursing; therefore, researchers examining bullying in nursing should evolve their understanding past the traditional views of oppression. According to Hutchinson et al. (2006) relying on an oppressed group model to describe bullying fails to address downward and upward bullying and bullying from other healthcare workers. Additionally, other terms used to describe bullying, such as horizontal violence, fail to address bullying from managers and subordinates.

**Workplace bullying and associated terms.** There are numerous synonyms used in the literature to describe bullying behaviors in the workplace such as conflict, incivility, workplace harassment, violence, deviance, and horizontal violence. Some authors have explicitly stated they use such terms interchangeably (Curtis et al., 2007), which may have contributed to the ambiguity of bullying in research studies. Incivility, for example,
is a subtler form of aggression and is defined as a “low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect” (Andersson & Pearson, 1999, p. 457). Such behaviours are characteristically rude and discourteous. Incivility may be perceived as more subjective and less obvious than bullying and incivility does not necessarily involve repeated acts.

Horizontal violence, on the other hand, is often used to describe bullying acts involving nurses and nursing students. Horizontal violence is defined as “intergroup conflict [that] is manifested in overt and covert non-physical hostility such as sabotage, infighting, scapegoating, and criticism (Duffy, 1995, p. 5), and is often related to oppressive behavior. Despite its similarities to bullying, horizontal violence draws from an oppression model, whereas, bullying is rooted in power and hierarchy. It is suspected students may experience both subtle and obvious forms of aggression, which bullying encompasses, and such aggression will be the result of perceived or actual power imbalances that may come from all directions. According to Hutchinson, Vickers, Wilkes, and Jackson (2010), violence and aggression are important problems in the nursing profession; however, bullying may be one of the most concerning forms of aggression as it has been linked to nurse retention.

**Definition of bullying.** Randall (2001) states that while there is no agreed definition of bullying, different conceptualizations of bullying yield similar results. Bullying is characterized by repetition and an imbalance of power, where the victim has difficulty in defending him or herself (Cooper et al., 2009; Finne et al., 2011; Hauge, Skogstad et al., 2011; Lutgen-Sandvik, 2008; Vartia, 2001). Others suggest bullying is also characterized by isolation or exclusion, and the victim is threatened by negative
behaviors that may torment, wear down, or frustrate the individual (Kivimaki, Elovainio, & Vahtera, 2000; Laschinger et al., 2010). Dimensions of bullying include emotional abuse (verbal and nonverbal modes of expression), repetition or pattern of aggression, unwelcome and unsolicited behaviours, inappropriate relationship with others, and harm or injury to the victim (Randall, 2001). For this study, the term workplace bullying will be used and is defined as:

...a situation where one or several individuals persistently over a period of time perceive themselves to be on the receiving end of negative actions from one or several persons, in a situation where the target of bullying has difficulty in defending him or herself against these actions (Hoel et al., 2004, p. 371).

**Bullying behaviours.** Based on the description of bullying, examples of workplace bullying include: withholding necessary information that affects one’s work, working above or below one’s level of competence, being ignored, excluded, ridiculed, or teased, gossiping or spreading rumors, and verbal or physical abuse (Einarsen, Hoel, & Notelaers, 2009). Bullying is more than rudeness or incivility and often includes covert acts rather than direct violence. Bullying in nursing takes on three forms: 1) erosion of personal competence and reputation (e.g. gossiping, social exclusion), 2) personal attack (belittling, blaming, and public humiliation), and 3) attack through work roles and tasks (withholding information, and unfair work allocation) (Hutchinson, 2009, p. 148).

**Bullying in nursing education.** Anecdotal reports from researchers suggest there is hostility between nursing staff and nursing students, and educators teach students to “work around” particular nurses (Iwasiw, Andrusyszyn, & Goldenberg, 2009). Iwasiw et al. (2009) further state that by doing nothing, educators allow such experiences to
continue, which inhibit students from learning about the “type of nursing practice and professional behavior that we espouse and expect of them” (p. 1). Although the role of the preceptor has become more challenging through staff shortages, high turnover of staff and patients, heavy workloads, and an ever-changing clinical environment (Yonge & Myrick, 2004), it remains a necessary clinical teaching method that is supported by the literature (Udlis, 2008). Nurses are morally obligated to address workplace bullying experienced by nursing students because they are negatively affected by it, despite the fact they are on the units temporarily (Stevenson, Randle, & Grayling, 2006). Likewise, anecdotal reports and some non-published research studies suggest workplace bullying also affects nursing students’ professional commitment (Clarke, 2009; Curtis et al., 2009).

**Professional commitment.** Occupational commitment is used interchangeably with the terms professional commitment, career commitment, and professionalism (Hackett, Lapierre, & Hausdorf, 2001; Meyer, Allen, & Smith, 1993), and implies the “strength of motivation to work in a chosen career role (Hackett et al., 2001, p. 393). Meyer et al. (1993) developed a three-component model of organizational commitment for which they “presented empirical evidence for a three-dimensional view of occupational commitment” (Blau & Holladay, 2006, p. 692). Organizational and occupational commitment are similar, but organizational commitment is involved with the particular organization and the goals and values associated with that organization (Hackett et al., 2001), whereas occupational commitment is concerned with one’s profession or career.

Meyer et al. (1993) used the term *professional commitment*, compared to *occupational commitment* in a study exploring nurses’ and nursing students’
commitment. The term *professional commitment* is used in the current research because the population of interest is nursing students who are part of the nursing profession. The definition of professional commitment, developed by Meyer and colleagues (1993), is based on three distinct themes: affective (attachment to the profession), normative commitment (obligation to remain in the profession), and continuance commitment (perceived as costs associated with leaving the profession).

Affective commitment is associated with having an attachment to the profession and those who have affective commitment remain in the profession because they *want* to. Normative commitment is related to having an obligation to stay and those with normative commitment stay in the profession because they *ought* to (Meyer et al., 1993; Meyer & Allen, 1984). Lastly, people who have continuance commitment stay in the profession because they *have investments* or “side-bets”, such as time, money, training, and professional ties, that would be lost if they left. Continuance commitment includes both the loss of investments and a lack of other options.

Blau and Holliday (2006) argued that continuance commitment actually consists of two, rather than the proposed one dimension (limited alternatives and accumulated costs). Blau (2003) states that limited alternatives and accumulated costs are two seemingly different dimensions and must be viewed individually. While accumulated costs may make it difficult to change professions, limited alternatives would make it almost impossible. Carson et al.’s (1995) theory of career entrenchment was used to guide the development of accumulated costs and limited alternatives. Carson et al. (1995) developed the career entrenchment construct that includes three dimensions: occupational investment (e.g., time, money, training), emotional costs (e.g., loss of co-
worker friendships, severance of professional ties), and limitedness of occupational alternatives (perceived lack of available options). Blau (2003) suggested that emotional costs and occupational investments are better viewed as one dimension. Both Blau’s (2003) and Meyer et al.’s (1993) multidimensional approaches allow for a more accurate understanding of an individual’s commitment to his or her profession. Despite this, only affective commitment will be used to examine nursing students’ commitment to the profession. Affective commitment has been directly linked to withdrawal intentions (Blau & Holliaday, 2006; Meyer et al., 1993) and focusing only on this dimension contributes to a more manageable study.

**Professional withdrawal intent.** Withdrawal intention is often an extension of professional commitment in the commitment literature. Blau (2000) suggests that leaving one’s profession is more challenging than leaving one’s job. Professional context variables, such as professional commitment, are related to professional withdrawal intent (Blau, 2000). Some believe that a person’s level of professional motivation depends on three factors: 1) professional identity (linking one’s profession to one’s identity); 2) professional insight (extent to which individuals have a realistic view of themselves); and 3) professional resilience (examines a person’s ability to bounce back from professional disruption) (Blau, 1989). These factors can affect individuals’ professional behaviours, such as withdrawal intentions. Therefore, with support from the theoretical literature, it is reasonable to suggest that if nursing students’ professional commitment is decreased as a result of workplace bullying, their intent to withdraw from the profession might be negatively influenced.
Empirical Review

Relevant empirical literature is presented in four sections: *authentic leadership* (authentic leadership and associated antecedents, mediators, and outcomes; authentic leadership and nursing; authentic leadership and preceptors; and authentic leadership and psychological capital), *psychological capital* (psychological capital and nursing practice and education; psychological capital and commitment; and psychological capital and workplace behaviours), *workplace bullying* (related bullying constructs; bullying in the workplace; bullying in the nursing profession; bullying in nursing education; and workplace bullying and commitment), and *professional commitment and withdrawal intent* (professional commitment and nursing students).

**Authentic leadership.** Since 2005, interest in authentic leadership has increased dramatically in both non-nursing and nursing disciplines. Gardner et al. (2011) found the majority of research on authentic leadership has come from management (65%), business (8.9%) and education (8.4%), and the studies were predominantly from the United States (USA) (74.8%), followed by Canada (7.9%). Despite this, out of $n = 203$ researchers, only 16 were from Canada, and even fewer were from the nursing profession (Gardner et al., 2011). The majority of research completed measured authentic leadership using the authentic leadership questionnaire and found strong psychometric support for the 16-item measure (Gardner et al., 2011). Literature on authentic leadership and associated antecedents, mediators, and outcomes is presented next, followed by research studies linking authentic leadership to nurses, preceptors, and psychological capital.

**Authentic leadership and associated antecedents, mediators and outcomes.**
Numerous researchers have focused authentic leadership research on mediators and
outcomes (Peterson et al., 2012; Walumbwa et al. (2010); Wong et al., 2010), while few have concentrated on the antecedents to authentic leadership. Peus, Wesche, Streicher, Braun, and Frey (2012) uniquely examined the antecedents of authentic leadership and found self-knowledge (knowledge about personal values, motives, strengths, and weaknesses) and self-consistency (being consistent with values, beliefs, and actions) were the precursors to business employees perceived authentic leadership of their managers.

Researchers from outside of the nursing profession have linked authentic leadership to creativity (Rego, Sousa, Marques, & Cunha, 2012), psychological capital (Peterson et al., 2012; Rego et al., 2012; Woolley, Caza, & Levy, 2011), well-being, self-esteem (Toor & Ofori, 2009), organizational citizenship behaviours, work engagement (Walumbwa et al., 2010), job performance (Peterson et al., 2012), voice behavior (Hsiung, 2012), positive work climate (Woolley et al., 2011), workplace bullying (Warszewska-Makuch, Bedynska, & Zomierczyk-Zreda, 2015), affective commitment, and extra effort (Peus, et al., 2012). Psychological capital was found to be an antecedent, mediator, and an outcome, which is discussed in more detail below. In a study examining police in the USA, researchers found authentic leadership was positively associated with followers’ positive emotions ($\beta = .26, p < .01$), and positive emotions significantly predicted individual job performance ($\beta = .14, p < .05$) (Peterson et al., 2012).

Walumbwa et al. (2010) reported followers’ level of identification with the supervisor and feelings of empowerment mediated the relationship between authentic leadership and organizational citizenship behaviours ($\beta = 0.20, p < 0.01$), and work engagement ($\beta = 0.26, p < 0.01$). Organizational citizenship behaviours are categorized as conscientiousness, sportsmanship, courtesy and altruism, whereby individuals
displaying these behaviours are willing to go the extra mile for their organization (Walumbwa et al., 2010; Wong et al., 2010). Voice behavior, which is conceptualized by some as organizational citizenship behaviours (Wong et al., 2010), is the act of speaking up and was found to be related to authentic leadership through the mediating effects of positive mood (Hsiung, 2012). Trust was found to be a common mediator between authentic leadership and various outcomes, including voice behavior (Wong et al., 2010; Wong & Cumming, 2009b) and organizational identification (Ceri-Booms, 2010) in nursing and non-nursing literature.

**Authentic leadership and nursing.** In 2009a, Wong and Cummings examined the relevance of authentic leadership to the advancement of nursing leadership and research and found there were no published studies on authentic leadership in healthcare. Since then, publications on authentic leadership in nursing have proliferated (Adil & Kamal, 2016; Bamford, Wong, Laschinger, 2012; Fallatah & Laschinger, 2016; Giallonardo, et al., 2010; Laschinger, Wong, & Grau, 2012a; Laschinger, Wong, & Grau, 2012b; Wong, et al., 2010; Wong & Cummings, 2009b; Wong & Laschinger, 2013; Wong & Giallonardo, 2013). Many of the studies conducted on authentic leadership in nursing examined the relationship between nurse managers and nurses (Bamford et al., 2012; Wong, et al., 2010; Wong and Cummings, 2009b; Wong & Laschinger, 2013), new graduate nurses (Boamah, Read, & Laschinger, 2016; Fallatah & Laschinger, 2016; Giallonardo et al., 2010; Laschinger et al., 2012a; Laschinger, et al., 2012b), and more recently nursing students (Dever et al., 2015). Researchers examined authentic leadership in relation to job satisfaction (Boamah et al., 2016; Fallatah & Laschinger, 2016; Wong & Laschinger, 2013), empowerment (Boamah et al., Wong & Laschinger, 2016;
adverse patient outcomes (Wong & Giallonardo, 2013); patient care quality (Boamah et al., 2016), burnout (Boamah et al., 2016), areas of worklife on work engagement (Bamford, Wong, & Laschinger, 2013), and bullying (Laschinger et al., 2012b). Generally, researchers found nurses reported a moderate level of authentic leadership of their managers ranging from $M = 2.31, SD = 0.79$ (Fallatah & Laschinger, 2016) to $M = 2.64, SD = 0.86$ (Boamah et al., 2016).

Using a secondary analysis of the *Leadership Practices Inventory* data that captured authentic leadership concepts, Wong and Cummings (2009b) found that supportive authentic leader behavior and trust in management were necessary for staff to be willing to speak up and offer ideas that benefit the workplace and patient care. Wong et al., (2010) conducted a cross-sectional study aimed at testing a model linking authentic leadership with staff nurses’ trust in their manager, work engagement, voice behavior, and perceived unit care quality. The study sample included 280 randomly sampled registered nurses (RNs) working in acute care hospitals. Using authentic leadership as the theoretical framework and Structural Equation Modeling (SEM) for their analysis, they found authentic leadership significantly and positively influenced staff nurses’ trust in their manager and work engagement. Trust in manager and work engagement were found to mediate the relationship between authentic leadership and voice behavior and perceived unit care quality. Similarly, Wong and Giallonardo (2013) found nurses who perceived their managers to have high levels of authentic leadership also reported greater trust in the leader and lower quantities of adverse patient outcomes. Wong et al. suggested exploring other mediators between authentic leadership and work outcomes, such as positive psychological capital.
In a secondary analysis of new graduate nurses \((n = 342)\) and experienced nurses \((n = 273)\), Laschinger et al. (2012a) examined perceived authentic leadership of managers and structural empowerment. Although authentic leadership was positively related to empowerment in both groups of nurses, only results from new nurse graduates are reported here, as it is believed that results from new nurse graduates align more closely with fourth-year nursing students. Laschinger et al. not only found that authentic leadership was related to the empowerment of new nurse graduates \((\beta = 0.402, p < 0.001)\), but they also reported authentic leadership had a small negative effect on cynicism, which was stronger for new graduates than experienced nurses \((\beta = -0.125, p < 0.001)\). Similarly, Laschinger, Wong, and Grau (2013) found support for a model linking authentic leadership and structural empowerment to emotional exhaustion and cynicism of new nurse graduates \((X^2 = 17.52, df = 2, p < 0.001, CFI = 0.97, IFI = 0.97, RMSEA = 0.11)\). In a related study, researchers also found authentic leadership had a positive and significant effect on structural empowerment. This relationship was found to decrease short-staffing and work-life interference, which was inversely related to nurse burnout, lower job satisfaction, and decreased patient care quality (Boamah et al., 2016).

Laschinger et al. (2012b) conducted a cross-sectional study linking authentic leadership of supervisors to new graduate nurses’ \((n = 342)\) experience of workplace bullying. Although the overall rate of bullying among new graduate nurses was low, researchers found 29.2% of nurses experienced bullying. Authentic leadership was significantly correlated with workplace bullying \((r = -.37)\), which may indicate a direct relationship between authentic leadership and workplace bullying experienced by senior nursing students. Laschinger et al. (2012b) also reported that job satisfaction and job
turnover intent were significantly correlated with bullying, providing support to the claim that workplace bullying may increase nursing students’ intent to withdraw from the profession.

Researchers also explored the relationship between new nurse graduates’ experiences of workplace mistreatment (incivility and bullying), authentic leadership, structural empowerment, work life fit, and psychological capital through a secondary analysis (Read & Laschinger, 2013). They found new nurse graduates ($n = 342$) reported low levels of supervisor and co-worker incivility respectively ($M = 1.33, SD = 0.56; M = 1.64, SD = 0.75$), and bullying ($M = 1.57, SD = 0.55$). Perceived authentic leadership of supervisors was moderate ($M = 2.47, SD = 0.86$) and significantly correlated with co-worker incivility ($r = -0.24$), supervisor incivility ($r = -0.32$) and bullying ($r = -0.35$). Additionally, new nurse graduates reported high levels of psychological capital ($M = 5.06, SD = 0.73$), which was inversely related to supervisor incivility ($r = -0.17$), co-worker incivility ($r = -0.19$) and bullying ($r = -0.21$). Read and Laschinger found that bullying was more strongly associated with many of the negative outcomes in the study. They concluded that the absence of an authentic leader may perpetuate the incidence of bullying and incivility in the workplace; while, increased psychological capital may promote a protective effect that reduces the negative impact of workplace mistreatment.

**Authentic leadership and preceptors.** Although recent studies have linked authentic leadership of managers to new nurse graduates, only one study was found that linked authentic leadership of preceptors to new nurse graduates (Giallonardo et al., 2010). Although the current study is concerned with nursing students, literature on new nurse graduates is relevant to studies examining fourth-year nursing students, as there are
many similarities between the two groups. For instance, nursing students in their final practicum are months away from graduating and becoming new nurses. As well, both groups are relative novices in the profession and each is working on developing professional skills, knowledge and abilities.

To date, no studies were found that linked authentic leadership of preceptors to nursing students, despite the reasonable connection between new nurse graduates and fourth-year nursing students. Some researchers have discussed the importance of authentic leadership theory in relation to nursing students’ experiences with bullying (Chachula, et al., 2015; Yokoyama, et al., 2016); however, no research studies have been found that directly linked authentic leadership with nursing students’ experiences of bullying. Dever et al. (2015) measured nursing students’ perceptions of their own authentic leadership through the Authentic Leadership Self-Assessment Questionnaire, but did not find statistically significant results. The researchers attributed this to nursing students not having formal nurse leader experience.

Giallonardo et al. (2010) investigated the relationship between new nurse graduates ($n = 170$) who worked in an acute care setting, and their preceptors’ authentic leadership. They identified that these new nurses perceived their preceptors to be authentic leaders ($M = 3.05, SD = 0.62$) and this contributed to the graduates’ work engagement, and job satisfaction. Giallonardo et al. (2010) found that new nurse graduates’ perceptions of preceptor authentic leadership were positively related to their work engagement ($r = .21, p < .01$) and dedication ($r = .20, p < .01$). Furthermore, there were positive strong correlations found between authentic leadership and nurse-nurse interaction ($r = .41, p < .01$). New nurse graduates who perceived their preceptors to be
authentic leaders were more satisfied and engaged in their work. Lastly, it was found that the quality of the authentic leader was more important than the time spent with the leader. These are important findings for the current study, as they demonstrate that perceived authentic leadership of preceptors may have a positive effect on nursing students, and this can be accomplished in a short period.

While some researchers have linked preceptorship for new nurse graduates to authentic leadership (Gillonardo et al., 2010), others have acknowledged that nursing students’ preceptors have the opportunity to create authentic connections between the preceptee and other health care staff, which may allow for closer working relationships (Myrick et al., 2011; Myrick et al., 2010). Using a grounded theory approach, Myrick et al. (2010) explored the process used by preceptors to nurture practical wisdom and aimed to understand its relevance within the contextual reality of preceptorship. Similar to authentic leadership, practical wisdom is the ability to preserve and enhance the well-being of others (Myrick et al., 2011). Myrick et al. (2010) found that engaging in authentic nursing practice was intrinsic to the nurturing of practical wisdom in the preceptorship experience. This was reflected in the “preceptor or student’s genuine commitment to the role of nurse, being true to that role, and in their persistence in promoting the wellbeing and enhancement of the patient, notwithstanding the particular context or circumstance” (Myrick et al., 2010, p. 84).

Engaging in authentic nursing practice as a process of nurturing practical wisdom was reflected by the dynamic of the preceptor-student interaction. This included affirming the student role and realizing student potential, which were found to be intrinsic to the preceptor student interaction. “In affirming the student role, the preceptors
consistently displayed willingness to: facilitate the learning experience, provide support, establish trust, encourage professional development, instill confidence, and foster mutual respect” (Myrick et al., 2010, p. 85). Such attributes align directly with that of the authentic leader who continuously attempts to build trust, confidence, professional development, and mutual respect with their followers (Avolio et al., 2004).

**Authentic leadership and psychological capital.** Until recently, psychological capital was either used primarily as an antecedent to authentic leadership (Jensen & Luthans, 2006) or as an outcome, partially mediated by positive work climate (Woolley et al., 2011). Some researchers examined authentic leadership and psychological capital as independent variables (Adil & Kamal, 2016; Clapp-Smith et al., 2009). For example, authentic leadership and psychological capital were both used as the independent variable where trust in management mediated the relationship between psychological capital and performance, and trust partially mediated the relationship between authentic leadership and performance (Clapp-Smith et al., 2009).

Jensen and Luthans (2006) examined how the psychological capital (hope, resilience and optimism) of 76 business leaders was linked to their authentic leadership. To measure psychological capital, they used individual instruments for each construct, and then combined the scores of the state optimism, resilience and hope to create the measure of psychological capital. They found a significant positive relationship between the leader’s authentic leadership and their optimism ($r = .23, p < .05$), resiliency ($r = .38, p < .01$) and hope ($r = .47, p < .01$). The results of this study suggest that there is a link between leaders’ authentic leadership and psychological capital.
Although the authors used psychological capital as an antecedent to authentic leadership, Luthans, Youssef and Avolio (2007) suggest that the relationship between the two theories is reciprocal; thus, authentic leadership might also influence the components of psychological capital. Therefore, it is reasonable to infer that authentic leadership may also influence followers’ psychological capital. More recently, researchers have found support to suggest psychological capital might also be an outcome of authentic leadership. For instance, Woolley et al. (2011) found that although positive work climate partially mediated the relationship between perceived authentic leadership of managers and adult employees’ psychological capital, there was also a direct significant correlation between authentic leadership and psychological capital ($r = .43, p < .05$).

Peterson et al.’s (2012) study, which examined a USA Military organization, also supported the link between authentic leadership and psychological capital. Authentic leadership was found to positively predict psychological capital ($\beta = .62, p < .01$) and psychological capital predicted performance ($\beta = .18, p < .05$), fully mediating the relationship between authentic leadership and performance (Peterson et al., 2012). Additionally, they found support for the distinction between authentic leadership and psychological capital. Similarly, authentic leadership was found to correlate with psychological capital ($r = 0.65, p < .001$) in a study examining commerce employees ($n = 201$) working in Portugal (Rego et al., 2012). The authors found authentic leadership predicted employees’ creativity both directly and indirectly and psychological capital mediated the relationship between authentic leadership and creativity.

Lastly, Malik and Dhar (2015) predicted psychological capital would mediate the relationship between perceived authentic leadership of supervisors ($n = 163$) and the extra
role behavior of nurse employees \((n = 520)\). They also evaluated how autonomy would moderate the relationship between psychological capital and extra role behavior. They found support to suggest authentic leadership has a direct \((B = 0.1482, t = 6.9389, p < .001)\) and indirect \((\text{SOBEL } z = 6.6072, p < .001)\) effect on extra role behavior through the mediating influence of psychological capital, and autonomy moderated the relationship between psychological capital and extra role behavior. Such studies provide support for the hypotheses in this study; that is, psychological capital will mediate the relationship between authentic leadership and workplace bullying.

**Psychological capital.** Although psychological capital is a fairly new concept, there have been numerous studies examining this higher-order construct with workplace related issues. Like workplace bullying, psychological capital is related to outcomes for both the individual and the organization. For instance, psychological capital has been linked with individuals’ positive emotions (Avey, et al., 2008), well-being (Culbertson, Mills, & Fullagar, 2010), trust (Clapp-Smith, Vogelgesang, & Avey, 2009), cynicism (Avey et al., 2010), deviant behaviours (Norman, Avey, Nimnicht, & Pigeon, 2010), and job stress (Avey, Luthans, & Jensen, 2009).

Psychological capital also directly influences the organization. For example, psychological capital is related to authentic leadership (Jensen & Luthans, 2006), performance (Gooty, Gavin, Johnson, Frazier, & Snow, 2009; Luthans, Avolio et al., 2007; Sweetman, Avey, Luthans, & Luthans, 2011), job satisfaction (Luthans Avolio et al., 2007), organizational citizenship behavior directed towards the individual and organization (Avey et al., 2010; Gooty et al., 2009; Norman et al., 2010), and intentions to quit (Avey, et al., 2010; Avey et al., 2009). Psychological capital has also been related
to nursing commitment (Luthans & Jensen, 2005) and turnover intentions (Laschinger, et al., 2012b). Additionally, the overall measure of psychological capital has been shown to yield stronger results than the individual components of hope, optimism, resilience, and self-efficacy (Jensen & Luthans, 2006; Luthans, Avey, Avolio, Norman, & Combs, 2006; Sweetman, et al., 2011). The 24-item Psychological Capital Questionnaire was most often used by researchers to measure psychological capital (Boamah & Laschinger; Liao & Liu, 2016; Stam, Laschinger, Regan, & Wong, 2015). In the following section, psychological capital will be related to nursing practice and education, commitment, and workplace behaviours.

**Psychological capital and nursing practice and education.** Historically, few nursing scholars had linked psychological capital to nurses or nursing students; however, in the last five years, nursing research examining psychological capital has increased. A secondary analysis of a longitudinal study was used to measure new nurse graduates’ perceptions of structural empowerment, psychological capital, and work engagement (Boamah & Laschinger, 2015). New nurses reported high levels of psychological capital ($M = 5.16, SD = 0.67$) and empowerment ($M = 13.03, SD = 2.42$). The lowest rated dimension of the psychological capital construct and the empowerment construct were efficacy and support respectively. While interesting, this is not surprising given participants’ inexperience and recent reports of bullying in the workplace. Researchers found “workplace empowerment and psychological capital accounted for a significant amount of the variance in new nurse graduates’ perception of work engagement ($R^2 = 0.38, df = 1, p < 0.05$)” (Boamah & Laschinger, 2015, p. 270). Similarly, Stam et al. (2015) explored the influence of new nurse graduates’ psychological capital and access to
structural resources, such as empowerment, on their job satisfaction. They found each of the independent variables were significant predictors of job satisfaction, thus psychological capital contributed to improved job satisfaction.

While literature examining nursing students’ psychological capital remains scarce, a few studies have emerged. For instance, scholars from China examined the impact of structural empowerment and psychological capital on nursing students’ (n = 286) competence (Liao & Liu, 2016). These researchers found nursing students reported med-high levels of competence, empowerment and psychological capital, where resilience was rated as the lowest dimension. This contrasts with findings from a sample of new nurse graduates where efficacy was rated as the lowest dimension of psychological capital (Boamah & Laschinger, 2015). Similar to previous studies, structural empowerment was significantly and positively correlated with psychological capital (r = 0.45, p < 0.01) (Liao & Liu, 2016). Woo and Park (2017) conducted a cross-sectional descriptive survey study on a sample of nursing students (n = 312) in South Korea and found psychological capital and nursing professional values were positively related to specialty satisfaction. According to the researchers, specialty satisfaction “involves evaluation of their academic majors with respect to professional standards (Woo & Park, 2017, p. 24).

Liu, Zhao, Tian, Zou, and Li (2015) sought to examine the mediating effect of psychological capital on negative life events and school adjustment among a sample of Chinese vocational nursing students from three public vocational high schools. Students’ ages ranged from 14-22 years old (M = 17.14). Negative life events were defined as “events that can lead to maladjustment and disturbances that most likely to result in
readjustment-requiring changes in one’s daily life (Liu et al., 2015, p. 754). They reported psychological capital positively related to interpersonal relationship adaptation, learning adaptation, campus life adaptation, career adaptation, emotional adaptation, self-adaptation and degree of satisfaction (school adjustment), and negatively related to negative life events. Furthermore, they found the relationship between negative life events and school adjustment was partially mediated by psychological capital.

**Psychological capital and commitment.** Despite limited research on psychological capital within the nursing literature, researchers from outside the nursing profession have linked psychological capital to nurses’ professional commitment. Luthans and Jensen (2005) conducted a study that aimed to test the relationship between psychological capital and various measures of commitment of registered and licensed practical nurses ($n = 71$) in a 200 bed healthcare facility. They used optimism, hope and self-efficacy as the constructs of psychological capital; however, there was no mention of resilience. Different instruments, including the generalized Self-Efficacy scale ($\alpha = .89$), Life Orientation Test ($\alpha = .80$) and Hope Questionnaire ($\alpha = .82$), were used to measure the concepts. Each score was then compiled for the three factors (each receiving equal weight) to create the “bundle” measure of psychological capital ($\alpha = .89$). They collected two dependent measures related to organizational commitment (the level of commitment to the goals, values and mission of the organization, and a self-report measure of the nurses’ “intention to stay”). *Intentions to stay* was measured on an adapted 3-item scale. Nurses’ psychological capital and their commitment to the organization ($r = 0.38, p < .001$) and intention to remain with the organization ($r = .45, p < .001$) was positively correlated (Luthans & Jensen, 2005).
In a similar study, hope and optimism were found to be related to organizational commitment (Youssef & Luthans, 2007). Luthans and Jensen (2010) state that, based on their findings, “recognizing and supporting the positive psychological capital of nurses may enhance retention efforts and help build stronger healthcare organizations” (p. 309).

Data from this study provide preliminary support that there is a link between nurses’ psychological capital and their self-reported intentions to remain with the organization.

Within the nursing literature, Laschinger and Grau (2012) linked psychological capital of new nurse graduates to turnover intent and found the higher order construct of psychological capital was positively related to higher intentions to leave the current job. Despite these findings, researchers from other disciplines have found psychological capital is positively related nurses’ commitment and intentions to remain in the profession (Luthans & Jensen, 2005), and negatively related to intentions to quit (Avey et al., 2010). Other researchers have also linked psychological capital to turnover intentions of RNs. Yim, Seo, Cho, and Kim (2017) found psychological capital mediated the relationship between occupational stress and turnover intentions in a sample of South Korean nurses (n = 447) using the Psychological Capital Questionnaire (PCQ). Brunetto, Rodwell, Shacklock, Farr-Wharton and Demir (2016) also used the PCQ to examine the impact of Australian nurses’ (n = 242) psychological capital and organizational resources on intentions to quit. After modifications, they reported a good fitting model (X^2/df = 0.885, SRMR = .025, RMSEA = .000, and CFI = 1.0).

Nursing researchers from China found support linking psychological capital (using the PCQ) to job burnout through the mediating effect of commitment among a sample of n = 473 RNs (Peng et al., 2013). They found a strong effect between
psychological capital and commitment ($\beta = .73, p < .001$) and support for their modified hypothesized model, $X^2 (26, N = 473) = 94.68, p < .001$, RMSEA = .054, SRMR = .073, CFI = .966. Such findings support the idea advanced in this current study, that is, increased psychological capital of nursing students may also increase their professional commitment through the mediating effect of healthy workplace environments.

**Psychological capital and workplace behaviours.** Literature on psychological capital and workplace bullying is scarce. Norman, Avey et al. (2010) examined 199 working adults, from a variety of organizations (general services, education, finance, manufacturing, marketing, and social work) in the USA, and studied the relationship between positive psychological capital and organizational identity on employee deviance and organizational citizenship behaviours. Deviant behavior is similar to workplace bullying, and includes behaviours such as, spreading negative rumors, harassing coworkers, and sabotaging the work of other employees. Norman, Avey et al. (2010) proposed, “that an employee’s level of positive psychological capital is related to the likelihood that the employee will engage in organizational citizenship behaviours” (p. 383). Psychological capital was measured using a revised 12-item PCQ. To reduce common method variance bias, data were collected online at two different time points. Survey 1 included demographic information, the psychological capital questionnaire, and the organizational identification measure. Survey 2 consisted of organizational citizenship behaviours and a counterproductive workplace behaviors scale. Participants with higher psychological capital reported engaging in more organizational citizenship behaviours directed at the organization. Those who also identified highly with their organization reported a higher frequency of organizational citizenship behaviours
directed at the organization, suggesting a reciprocal relationship. It was found that those who had higher psychological capital reported engaging in fewer deviant behaviors (Norman, Avey et al., 2010). This may provide support to the claim that psychological capital decreases workplace bullying and increases professional commitment.

Avey et al. (2010) hypothesized that psychological capital “will be negatively related to organizational cynicism” (p. 439). Employees ($n = 336$) from a variety of organizations and jobs participated in this study. The 24-item PCQ was used and was found to have an overall internal reliability of .95. They conducted online data collection that was divided into two sessions separated by 7-14 days to reduce common method bias. Time 1 consisted of the demographics and independent variables, and Time 2 included the dependent variables. Psychological capital was negatively related to cynicism ($r = -.44, p < .01$) and intentions to quit ($r = -.42, p < .01$) (Avey et al., 2010). They also found that psychological capital was positively related to both organizational citizenship behavior directed towards the individual ($r = .40, p < .01$) and the organization ($r = .58, p < .01$), and was negatively related to counterproductive work behaviours ($r = -.50, p < .01$). These findings support an earlier study in which the relationship between working adults’ psychological capital, stress and intentions to quit was examined, and where psychological capital was found to be high when job stress was low. Also, as psychological capital increased, intentions to quit and job search behaviours decreased (Avey et al., 2009).

In 2004, Cassidy, McLaughlin, and McDowell published the first research paper examining the role of psychological capital and social support on workplace bullying on a sample of United Kingdom (UK) employees ($n = 2068$) from a variety of organizations.
Through the Negative Acts Questionnaire-Revised (NAQ-R) ($\alpha = .85$) and PCQ ($\alpha = .87$), and SEM techniques, they found that psychological capital and social support mediated the relationship between workplace bullying and ill- and well-being, and good model fit was observed ($X^2 (27, N = 2068) = 108.33, p < .001; CFI = .98, RMSEA = .06$).

More recently, Laschinger and Grau (2012) investigated a model linking six areas of worklife, experiences of bullying and burnout, and psychological capital to a sample of new nurse graduates (n = 165) mental and physical health. Similar to other studies, the PCQ and NAQ-R were used to measure psychological capital and workplace bullying respectively. The researchers identified psychological capital was positively related to nurses’ perceived person job-fit, which was negatively related to experiences of workplace bullying and emotional exhaustion and influenced nurses physical and mental health. Low levels of bullying were found for new nurse graduates with less than one-year experience ($M = 1.57, SD = .62$); however, they reported 26.4% of the nurses were bullied. Thirty-nine percent of nurses’ experienced burnout, and the majority experienced high levels of emotional exhaustion ($M = 2.82, SD = 1.64$). Although the initial model demonstrated acceptable fit, modifications were made; the final model demonstrated a good fit between the observed data and hypothesized model ($X^2 = 17.94, df = 11, CFI = .99, IFI = .99, RMSEA = .06$).

Laschinger and Nosko (2015) uniquely studied the relationship between 1140 Canadian acute care hospital nurses’ (n = 631 experienced and n = 244 new nurse graduates) experience of workplace bullying and Post-Traumatic Stress Disorder (PTSD) symptomology and examined the role of psychological capital as a protective factor; however, they did not find evidence to support the mediating effect of psychological
capital between workplace bullying and PTSD symptomology. Nevertheless, workplace bullying and psychological capital were found to be independently related to PTSD symptomology, suggesting that as workplace bullying increased PTSD symptomology increased, and as psychological capital increased PTSD symptomology decreased.

Similar to other studies, the researchers found both experienced and new nurse graduates reported low levels of bullying ($M = .55, SD = .68; M = .55, SD = .71$), as well as, PTSD symptomology ($M = .24, SD = .32; M = .22, SD = .34$), and high levels of psychological capital ($M = 4.30, SD = .32$ (sic); $M = 4.55, SD = .60$). Workplace bullying was also found to be inversely related to experienced and new nurse graduates’ psychological capital, and positively related to PTSD symptomology.

**Workplace bullying.** Researchers from a variety of disciplines, including but not limited to business, education, psychology and nursing, have been examining workplace bullying for over 25 years (Einarsen, Hoel, Zapf, & Cooper, 2005; Rayner, Hoel, & Cooper, 2002). Since the 1990’s, research on bullying and workplace bullying has grown in popularity both in nursing and non-nursing literature. Although bullying is the focus for the current research work, literature on related terms such as incivility, harassment, and violence are important in gaining an in-depth understanding of the bullying construct. Such terms are often used interchangeably and have many similar attributes, such as overt and covert aggression. Therefore, literature on these related terms from disciplines outside of nursing, nursing, and nursing education will be discussed. Then a discussion on bullying in the workplace, bullying in the nursing profession, bullying in nursing education, and workplace bullying and commitment will follow.
Related bullying constructs. Literature on incivility and deviant behaviours from outside the nursing discipline were primarily from psychology and human resources. Researchers have identified that employees and students are experiencing and witnessing incivility from their peers and persons of authority (Caza & Cortina, 2007; Cortina & Magley, 2009; Porath & Erez, 2009; Reio & Ghosh, 2009). For instance, Cortina and Magley (2009) reported that 75% of university employees, 54% of attorneys, and 71% of court employees experienced at least one uncivil event; however, participants did not feel threatened, rather, they felt frustrated, annoyed and offended. This suggests incivility might not be as harmful as other types of aggression. Experiencing or witnessing incivility has been related to social isolation and rejection, belongingness (Caza & Cortina, 2007), negative affect, low degree of establishing relationships (Reio & Ghodh, 2009) and decreased performance and creativity (Porath & Erez, 2009).

Bunk, Karabin, and Lear (2011) conducted a study examining the reasons why full-time employees from education, healthcare, and technology engaged in interpersonal deviant behaviours. Interpersonal deviance is described as harming individuals within one’s organization, and might include ignoring and playing a mean prank on someone. The authors found perpetrators engaged in interpersonal deviance because of power and retaliation; others had “no reason” (Bunk et al., 2011, p. 76). Retaliation might suggest bullies are also victims of abuse in the workplace.

While non-nursing researchers found higher levels of incivility among employees, nurse scholars found incivility was low among new nurse graduates and nurses. Laschinger, Finegan, and Wilk, (2009) examined the relationship between supportive practice environments, civility and empowerment on a sample of new nurse graduates,
and found nurses reported low levels of incivility, yet had high levels of emotional exhaustion. In a related study examining nurses’ \( n = 612 \) experiences of workplace incivility, Laschinger, Leiter et al. (2009) reported that levels of incivility were low and emotional exhaustion was high; however, they also noted that job satisfaction was high and organizational commitment was moderate. Despite this, perceptions of empowerment, incivility, and cynicism were significantly related to decreased job satisfaction, decreased organizational commitment, and increased turnover intentions (Laschinger, Leiter et al., 2009). Researchers studying violence in nursing found that perpetrators were often patients and visitors; however, one fifth of emotional abuse was from nursing co-workers (Roche, Diers, Duffield, & Catling-Paull, 2009). Additionally, Anderson and Parish (2003) conducted a study of workplace violence among Hispanic nurses and found participants experienced the most significant violence in medical units.

Although the clinical area was not specified, nursing students were also found to experience incivility during clinical placements. The highest rate of incivility experienced by nursing students occurred in the classroom (60\%, \( n = 91 \)), followed by clinical placements (50\%, \( n = 76 \)) (Marchiondo, Marchiondo, & Lasiter, 2010). Using a qualitative study design, Anthony and Yastik (2011) found three themes when nursing students discussed their experience of incivility during clinical placement. The three themes were: exclusionary, where students felt ‘in the way’ and the nurses did not accept students as part of their responsibility; hostility or rudeness, where students recognized this as a possible personal problem, but it made them question wanting to be a nurse; and dismissive, where nurses walked away from students, not acknowledging them. This anecdotal report supports the quantitative findings that nursing students’ experience
incivility in the clinical setting and that it may be influencing their professional commitment. Students shared that they did not report the incivility and either “put up with it” or spoke to a friend (Marchiondo et al., 2010). The incivility made them feel anxious, nervous and depressed.

The majority of nursing scholars examined nursing students’ experience with horizontal violence in clinical placements and found nursing students are experiencing violence (Curtis, et al., 2007; Federizo, 2009; Longo, 2007). Horizontal violence has been linked to nursing students’ commitment, patient care, and feelings of humiliation, powerlessness, and being invisible (Curtis et al., 2009; Federizo, 2009; Longo, 2007). Many nursing students do not report such violence, suggesting rates of violence are higher than reported (Longo, 2007). Curtis et al. (2007) asked second and third year nursing students (n = 152) to complete a series of open-ended questions relating to their experiences with horizontal violence. The terms horizontal violence, workplace bullying, and workplace harassment were used interchangeably (Curtis et al., 2007). More than half of the students (57%, n = 86) reported that they experienced and or witnessed horizontal violence and five major themes among those who had experienced horizontal violence were evident; “humiliation and lack of respect, powerlessness and becoming invisible, the hierarchical nature of horizontal violence, coping strategies, and future employment choices” (p. 159). Despite their findings, the authors did not distinguish between experiencing and witnessing violence, and the different clinical areas in which student learning occurred was not explicitly discussed. Furthermore, the theoretical framework to guide the study was not evident.
Similarly, Longo (2007) found senior baccalaureate nursing students (n = 47) reported being put down by a staff nurse (53%), humiliated (40%), aware of sarcastic remarks about them (32%), and talked about behind their backs (26%). Federizo’s (2009) master’s thesis examined first (n = 41) and fourth (n = 40) year nursing students’ perceptions of horizontal violence using a mixed methods study and Orlando’s deliberative nursing process. Sixty-nine percent of nursing students’ experienced horizontal violence during classroom and clinical placements; however, fourth-year nursing students were more likely to experience horizontal violence during clinical practice (Federizo, 2009). Nursing students stated that they would not work on a unit where they experienced horizontal violence; suggesting, violence may influence recruitment efforts of organizations. Students also shared that despite the violence they experienced during clinical, they still intended on becoming a nurse because they needed the money (Federizo, 2009). This latter finding suggests that nursing students’ accumulated cost commitment may have been influenced.

Other scholars examined nursing students’ experience with abuse (Celik & Bayraktar, 2004), verbal abuse (Ferns & Meerabeau, 2009), organizational aggression (Jackson, et al., 2011), and violence (Tee, Ozcetin, Russell-Westhead, 2016). Alarmingly, 100% of Turkish nursing students from all education years reported experiencing verbal abuse during their classroom and clinical placements (Celik & Bayraktar, 2004). This included being yelled or shouted at, displaying nasty, rude, and hostile behaviours, and being belittled or humiliated (Celik & Bayraktar, 2004). Of these, 41.3% of behaviours were from faculty and 33.8% from nurses. Additionally,
similar to Federizo’s (2009) study, third and fourth-year nursing students were more likely to experience abuse in the workplace (Celik & Bayraktar, 2004).

Budden, Birks, Cant, Bagley, and Park (2017), and Tee et al. (2016) both used an instrument adapted from Hewett (2010) to measure nursing students’ experience of workplace violence. This instrument includes intimidation, bullying or verbal abuse, non-physical violence, and reporting and management of workplace violence. Budden et al. (2017), surveyed 888 Australian nursing students from each year of the bachelor degree or nursing midwifery double degree program. Fifty percent of students reported experiencing bullying or harassment, and of those 50.2% said the experience negatively affected their ability to work with others and left them considering leaving the nursing profession. Interestingly, they found bullying/harassment rates increased as students progressed through the program. Bullying/harassment was more likely in the hospital setting compared to community or aged care settings and 25% of students said the perpetrator was a preceptor or mentor. Similarly, Tee et al. (2016) reported 42.18% of UK nursing students, from all years of the program, reported being bullied or harassed during clinical, and such experiences made them contemplate leaving the nursing profession (19.8%). Equally concerning, 12.3% of students reported patient care was negatively affected by workplace violence. Like many other researchers, Tee et al. found only one in five nursing students reported bullying or harassment, and 10.8% said no action was taken after the incident was reported.

**Bullying in the workplace.** A majority of researchers studying bullying in workplaces examined the negative effects of bullying on working adults’ psychological and physiological health, using quantitative (Bunk, et al., 2011; Finne, Knardahl, & Lau,
2011; Hoel et al., 2004; Lallukka, Rahkonen, & Lahelma, 2011; Lewis, 2004; Mikkelsen & Einarsen, 2002; Vartia, 2001; Vie, Glaso, & Einarsen, 2011) and case study (Lovell & Lee, 2011) research designs. For instance, researchers have identified that workplace bullying is related to mental distress (Finne et al., 2011), depression, cardiovascular disease, (Kivimaki, et al., 2003), and increased use of sleep inducing drugs (Vartia, 2001). Niedhammer, David, Degioanni, Drummond, and Philip (2011) found workplace bullying was strongly associated with psychotropic drug use in a sample of general working adults in France.

Hoel et al. (2004) examined the impact of bullying in telecommunications, education, and prison service workplaces and found those who experienced bullying had significantly worse health than those who were not bullied. Similarly, Ortega, Christensen, Hogh, Rugulies, and Borg (2011) reported that employees working in the health care sector who were bullied had a significantly higher risk of long-term sickness absence. Even more disturbing, numerous scholars found a link between bullying and post-traumatic stress disorder (PTSD) (Hoel et al., 2004; Mikkelsen & Einarsen, 2002; Nielsen, Mikkelsen, & Einarsen, 2008).

Mikkelsen and Einarsen (2008) examined nurses, trade union members, schoolteachers, and pedagogues who were self-selected victims of bullying, and found 76% of the victims exhibited symptoms indicating PTSD. They found a significant positive relationship between the level of bullying measured by the negative acts questionnaire and the severity of reported PTSD (Pearson $r = .34$, $p < .01$). Furthermore, 54% of those who had reported that the bullying event occurred more than 5 years ago, were still exhibiting PTSD symptoms. Equally concerning, those who were bullied had
similar PTSD symptoms to those of other trauma groups (Mikkelsen & Einarsen, 2008). Moreover, in a sample of hospital employees, researchers reported workplace bullying was associated with an increase in the sickness absenteeism. Such findings are concerning and significant given that nurses and nursing students are experiencing bullying. If bullying in nursing continues to exist then our future nurses are at risk of long-term mental and physical health problems, ultimately impacting the future health of society and the nursing profession.

**Bullying in the nursing profession.** Research on workplace bullying within healthcare, and more specifically the nursing profession, has been gaining momentum over the past decade. Numerous nursing scholars have conducted quantitative and qualitative studies examining new nurse graduates’ (Berry, et al., 2012; Laschinger et al., 2010), immigrant nurses’ (Hogh, Gomes, Giver, & Rugulies, 2011), experienced nurses’ (Hutchinson, Vickers, Wilkes, & Jackson, 2009; Johnson & Rea, 2009; Yokoyama et al., 2016), and healthcare workers’ (Ortega, Christensen, Hogh, Rugulies, & Borg, 2011) experience of bullying. Perpetrators of bullying often included staff nurses, nurses in leadership positions, and physicians (Berry et al., 2012; Johnson & Rea, 2009). Yokoyama et al. (2016) identified that nurses who were unmarried, held a bachelor’s degree (or higher) and had fewer years of experience in nursing and the current workplace, were more likely to be bullied. Workplace bullying is related to burnout (Laschinger et al., 2010), decreased productivity, poor communication with colleagues and patients (Yildirim, 2009), intentions to leave a current job or profession (Johnson & Rea, 2009), long-term sickness absence (Ortega et al., 2011), and PTSD symptomology (Laschinger & Nosko, 2015).
Negative outcomes of bullying are concerning given the rates of bullying reported in nursing research around the world. For instance, Yokoyama et al. (2016) found 18.5% of Japanese nurses experienced bullying. Using the NAQ-R, Berry et al. (2012) found 21.3% of novice nurses experienced bullying daily, compared to 72.6% who experienced bullying within the past month. Comparatively, Laschinger et al. (2010) reported 33% of new nurse graduates were bullied at work and this was associated with emotional exhaustion ($r = .53, p < .01$) and cynicism ($r = .53, p < .01$). Cynicism had had a direct negative effect on personal efficacy ($B = -.27$), while bullying had a modest effect on efficacy ($B = -.17$). Additionally, bullying through its effect on burnout can influence efficacy. This suggests that workplace bullying may have an effect on nursing students’ self-efficacy. However, if nursing students perceive their leader to be authentic, then it is realistic to suggest nursing students’ self-efficacy would increase despite adversity because of the influence of authentic leadership on psychological capital. According to Yokoyama et al. (2016), authentic leadership might also have a direct effect on nurses’ experiences of workplace bullying.

Hutchinson, et al. (2010) examined nurses who experienced bullying through a three-phase mixed methods study. Through participant interviews, they identified a typology of bullying behaviours, including personal attack, erosion of professional identity, and attack through work roles and tasks (Hutchinson et al., 2010). Participants’ reported feeling ignored, leading to feelings of isolation, which was felt to have a greater impact on the participants than more overt forms of bullying. Bullying in the workplace also impacts nurses’ intent to remain in their current job or the nursing profession. Johnson and Rea (2009) reported those who were bullied were twice as likely to report
intentions to leave their current position, and three times more likely to report intention to leave the nursing profession.

Similarly, Chachula, et al. (2015) used grounded theory to explore the psychosocial process involved in the decisions of Canadian new nurse graduates who left nursing within the first five years. They identified four main categories from their core theme of *Letting go*; namely, 1. Navigating constraints of the health care system and workplace; 2. Negotiating social relationships, hierarchies and troublesome behaviours; 3. Facing fears, traumas and challenges; and 4. Weighing competing rewards and tensions, respectively *fanning the flame and dampening the spirit* (Chachula et al., 2015, p. 914). Only results related to the current research are discussed. Participants recalled being bullied as a student nurse and shared that this experience continued into their first years of practice. Participants further reflected on their student experiences and compared “exiting the nursing profession to the experience of student clinical rotations, as a time of peak emotional pressure and anxiety” (p. 916). The researchers reported that “overly critical feedback contributes to the resignation of novice practitioners” (p. 916), and further communicated that effective mentorship might promote confidence and proficiency, as well as acquisition of knowledge and role identity. One participant shared, “I didn’t have any support, and I would say that [my] work environment was actually a toxic work environment…it was very negative…if I had more support…I probably would have stayed” (p. 916).

The current study sheds a unique perspective of bullying in the workplace from the individual’s perspective. Additionally, it also lends support to the idea that bullying might influence professional commitment and intent to withdraw from the nursing
profession. Given that nursing students are working in the same environment as RNs, it is reasonable to suggest nursing students are also experiencing bullying, and such experiences may be having a negative impact on their professional commitment and withdrawal intentions.

**Bullying in nursing education.** Recently there has been a plethora of researchers studying nursing students’ reports of bullying during clinical placements. Despite this and the link between new nurse graduates and bullying, few researchers have explored bullying during preceptorship. Researchers examining nursing students’ experiences of workplace bullying have predominately used mixed methods (Birks, Budden, Russell-Westhead, Sinem, & Tee, 2017; Foster, Mackie, & Barnett, 2004; Randle, 2001; 2003) and descriptive quantitative research designs (Begley & White, 2003; Clarke, 2009; Cooper, et al., 2009; Ferns & Meerabeau, 2009; Hoel, Giga, & Davidson, 2007). Most studies are from the UK, Europe, and Australia. Nursing scholars have identified patient safety and care is at risk due to bullying among nurses and between nurses and nursing students (Clarke, 2009; Randle, 2003; Tee et al., 2016). Clarke (2009) found a significant but weak relationship between nursing students’ perception of ability to care for their clients and actual bullying behaviours experienced ($r = -.082, p < .037$). This is supported by Tee et al.’s (2016) finding that, according to nursing students, patient care was negatively affected by workplace violence.

Researchers have also found workplace bullying is related to nursing students’ feelings of powerlessness, belittlement, humiliation, embarrassment, shock, anxiety, stress, anger, a shattered self-confidence, low self-esteem, and being ignored and unwelcome (Foster et al., 2004; Hoel et al., 2007; Randle, 2001; 2003). Despite
researchers’ findings on the psychological and psychological health implication of bullying, scholars examining nursing students’ experience of bullying have not focused their attention on the negative health outcomes. However, it is sensible to suggest that nursing students experience the same health implications as workers and nurses, such as PTSD (Laschinger & Nosko, 2015).

Nursing students appear to encounter similar types of bullying behaviours as nurses and other professionals. For example, researchers have found nursing students are experiencing swearing, inappropriate, nasty, rude or hostile behaviours, belittlement, humiliation, isolation, and intimidation (Cooper et al., 2009; Foster et al., 2004; Hoel et al., 2007). Foster et al. (2004) reported that 70% of nursing students experienced ignoring or excluding behaviours, 60% encountered intimidation, and 55% were belittled.

In a non-experimental descriptive study, USA researchers Cooper et al. (2009), reported 95.6% (n = 636) associate and baccalaureate degree nursing students, in their final year encountered bullying during their clinical and classroom experiences; however, the researchers did not distinguish between clinical and classroom experiences and did not reveal who the perpetrators were. Comparatively, Clarke (2009) reported 88.72% (n = 598) of nursing students experienced at least one act of bullying; however, since bullying is defined as repeated acts, it is not clear if what students experienced could be defined as bullying. More recently, Birks et al. (2017) reported 50.1% of Australian and 35.5% of UK nursing students reported bullying, which had a noteworthy negative effect, as evidenced by one student’s comment, “I feel as a student nurse, it happens all the time and sometimes it makes you feel so worthless and has a massive impact on my self-confidence” (p. 16). Similarly, 90% (n = 36) of nursing students from all years of the
program reported experiencing bullying during their clinical placement, and the primary perpetrator was a staff nurse (Foster et al., 2004). This is congruent with other researchers, who also reported perpetrators were often nurses, followed by peers, clinical instructors, and preceptors (Clarke, 2009; Cooper et al., 2009; Randle, 2001; 2003). Although preceptors were not reported as being the most frequently reported source of bullying, Cooper et al. (2009) found that fourth-year nursing students’ experienced bullying from their preceptor.

Researchers exploring nursing students’ experiences of bullying reported a core category of *power over* (Foster et al., 2004; Hoel et al., 2007; Randle, 2001). Randle (2001) reported that this core category included nurses exercising their power over patients and students. In a related study, many students reported being treated poorly by other nurses, not feeling safe to ask questions, and witnessing nurses using their power to bully patients (Randle, 2003a). Students who were initially upset that bullying existed between nurses and patients, nurses and students, and among other nurses, had “begun to use their own power in the hierarchy of health care, often at the expense of patients” (Randle, 2003a, p. 398) by the end of the program. This supports some who suggest bullying in the workplace is a learned behavior (Lewis, 2006). Moreover, Randle (2003b) also found that students knew what kind of nurse they wanted to be, but felt powerless to initiate change.

Similarly, Ferns et al. (2009) found nursing students felt powerless when they experienced bullying, which resulted in failure to report the incident. Reporting was also a central theme in the literature. Numerous researchers found nursing students were reluctant to report bullying (Clarke, 2009; Cooper et al. 2009). For instance, Cooper et
al. (2009) reported 34.9% of those bullied did nothing. Hoel et al. (2007) acknowledged students’ unwillingness to report bullying and suggested it was because students feared not being in control of their emotions, feeling shameful, or others not believing them. Others found students did not report bullying because they were concerned nothing would be done and were fearful of a poor evaluation (Clarke, 2009).

Ferns et al. (2009) conducted a descriptive quantitative survey study to explore the reporting behaviors of third-year diploma and degree nursing students (n = 114) who had experienced verbal abuse during a clinical rotation. The authors describe verbal abuse as one tactic used in bullying and make this explicit; yet, they use the terms bullying, violence, conflict, and abuse interchangeably. Forty-four percent of nursing students reported verbal abuse, and of those 37.3% did not report the incident. The authors examined abuse from all sources, including nurses, patients, other staff, and visitors. When the perpetrator was healthcare staff, 80% of nursing students did not report the incident, compared to only 20% when the perpetrators were patients or visitors. Participants shared that they were reluctant to report abuse from healthcare staff because of the departmental culture and because of the lack of support or power within the nursing hierarchy. Although the sample size was small, they found that the majority of bullying occurred in adult nursing, compared to mental health, learning disabilities, and pediatric units. Similarly, Birks et al. (2017) reported bullying was more likely to occur in hospital settings with the primary perpetrators being RNs, preceptors or mentors, nurse managers, and health care assistants. One student stated the bullying commenced after she had reported “a complaint to an appropriate staff member at the university, who then passed on [the] remarks…to [her] mentor” (Birks et al., 2017, p. 17).
Reporting, or lack thereof, by nursing students may be influenced by their fear of being victimized, or by their lack of coping skills and professional resources. Birks et al. (2017) found only 28.5% \((n = 217)\) of Australian and 19.4% \((n = 109)\) of UK nursing students reported bullying behaviours and reported the majority failed to report the incident because a fear of being victimized or a belief that nothing would be done. One student was told if she reported the incident the perpetrator would “deny it happened and [she] would fail [her] placement…” (p.19). According to Randle (2003) nursing students lack the personal and professional resources to challenge the bullying behaviours and as a result they assimilate similar behaviours. Cooper et al., (2009) found 3.2% \((n = 21)\) of nursing students who experienced bullying also began to adopt similar behaviours. They also found 9% \((n = 60)\) of nursing students engaged in unhealthy behaviours to cope with the bullying. In contrast to this, Clarke (2009) found students used self-blame \((r = .30, p < .001)\), disengagement \((r = .30, p < .001)\), venting \((r = .27, p < .001)\), and self-distraction \((r = .27, p < .001)\) to cope. Although the percentage of nursing students who ineffectively coped with bullying was low, it is concerning that some students resorted to adopting bullying behaviours, self-blame, and disengagement when faced with adversity.

Researchers concluded that, “nursing students have ineffective means of coping with violent behaviours that are a threat to personal status and professional development” (Cooper et al., 2009, p. 221). Moreover, students also became “harder and more resilient” when they encountered bullying (Hoel et al., 2007); however, the authors stated this was a negative reaction and may contribute to the reproduction of bullying. Such findings support Richardson’s (2002) theory that suggests when people are not resilient, in that they do not bounce back from adversity, they may resort to destructive behaviours.
to deal with adversity. Additionally, students’ confidence levels were influenced by evidence of mutual respect and positive regard amongst staff nurses (Papastavrou, Lambrinou, Tsangari, Saarikoski, & Leino-Lilpi, 2009). It is suspected that students who have developed high levels of psychological capital through the authentic leadership of their preceptor, might have better coping mechanisms to deal with workplace adversity, such as bullying. Despite this, no studies were found that directly linked authentic leadership or psychological capital to nursing students’ experiences of bullying.

While there have been numerous studies done on nursing students’ experience with workplace bullying during clinical experiences, few researchers have examined this during preceptorship. Mamchur and Myrick (2003) chose an exploratory research design to examine conflict during preceptorship because there was little knowledge about this important topic. Although they explored conflict, and not bullying, this is an important study to consider as conflict and bullying may be closely linked. As well, there have been no studies to date that have explicitly explored nursing students’ experience of bullying during a preceptored practice placement. Given the importance of this transitional time and the fact that new nurse graduates are experiencing bullying, research in this area is critically needed.

Using a modified simultaneous quantitative/qualitative triangulated method, Mamchur and Myrick (2003) invited students who were in their final clinical experience \( (n = 110) \) and preceptors \( (n = 124) \) from Education, Family medicine, Nursing and Social Work to participate. According to the researchers, conflict may positively or negatively influence the preceptor-preceptee relationship. Conflict that is not appropriately addressed may contribute to negative experiences for both the preceptor and nursing
student (Mamchur & Myrick, 2003). Conflict was experienced by 28.4% of participants. Next to education, nursing students experienced the most amount of conflict. Interestingly, of those who reported conflict, 50% of students reported it occurred frequently or almost always felt conflict with the preceptor, where, only 16% of preceptors felt this way (Mamchur & Myrick, 2003). This might suggest that preceptors are not aware of how their actions shape students’ experience of preceptorship. Although Birks et al. (2017) examined bullying among students in all years of the baccalaureate nursing program, they identified a significant difference by year \( X^2 (4, n = 833) = 64.487, p < .001 \], with those in the final year of the program experiencing the highest rate of bullying behaviours. This provides preliminary support that nursing students in their final year of nursing might be experiencing the greatest amount of bullying.

**Workplace bullying and commitment.** No published research studies on bullying in nursing education examined or found a link between commitment to the profession and bullying. However, a link was evident in Clarke’s (2009) non-published research thesis. A concerning 94.3% of nursing students who were bullied considered leaving the profession. Students who had a higher total mean bullying score \( (M = 29.21, SD = 23.86) \) were more likely to report intentions to leave the profession than those who had a lower total mean bullying score \( (M = 13.11, SD = 15.05, p < .001) \). Therefore, those who perceived themselves to have experienced more bullying were more likely to have intentions to leave the profession than those who perceived themselves to have been bullied less.

Similarly, Federizo’s (2009) thesis work found 69% \( (n = 56) \) of nursing students who experienced horizontal violence reported it would affect their employment and/or
career choice. Such findings are supported by anecdotal reports of nursing students who have experienced horizontal violence, which is similar to bullying. Ninety percent of Australian nursing students \((n = 77)\) who experienced or witnessed horizontal violence stated it would impact their career and/or employment choices (Curtis et al., 2007). Moreover, researchers examining nursing students’ experience with abuse found that 57.7% of students who experienced verbal abuse reported that they thought about leaving the profession (Celik & Bayraktar, 2004). Similarly, researchers have identified nursing students who report being bullied or harassed also report thoughts about leaving the nursing profession (Birks et al., 2017; Budden et al., 2017; Tee et al., 2016). These findings are consistent with other researchers who have found nurses report intentions to leave after experiencing bullying or abuse in the workplace (Johnson & Rea, 2009; Laschinger et al., 2009). Despite such findings, few researchers have explored commitment, and how this relates to withdrawal intentions, with a sample of senior baccalaureate nursing students who experienced bullying during preceptorship.

**Professional commitment and withdrawal intent.** Withdrawal intention is often an extension of professional commitment in the commitment literature; therefore, literature on professional commitment and withdrawal intent are reviewed together. Researchers studying commitment have found that commitment is linked with intentions to stay in the profession (Meyer et al., 1993), and job satisfaction (Cetin, 2006; Lu, Chang, Wu, 2007; Lu, While, & Barriball, 2007). Normative commitment plays an important role in nurse retention (Gambino, 2010) and is positively associated with reported importance of working for an organization that was committed to social values (Simola, 2011). Researchers discovered that job or work stress was related to lower
commitment (Klassen & Chiu, 2011; Lu et al., 2007). For example, Klassen and Chiu (2011) examined 439 practicing and 379 pre-service (student) teachers to explore their occupational commitment and intention to quit their occupation. They found that higher reports of job stress resulted in lower occupational commitment. Those with higher self-efficacy for instructional strategies had higher levels of occupational commitment. This suggests that self-efficacy, a component of psychological capital, may increase one’s professional commitment, thereby decreasing withdrawal intent. McCormack, et al. (2009) also examined a sample of school teachers in China, and found that affective commitment partially mediated the relationship between workplace bullying and intentions to leave.

Blau and Holladay (2006) conducted a study on a sample of 202 medical technologists from the years 1999-2002. They used the 24-item Occupational Commitment scale and a 3-item measure to examine professional withdrawal intentions. Affective commitment had a stronger negative relationship to professional withdrawal intentions ($r = -.46$), compared to normative commitment ($r = -.30$), accumulated costs ($r = -.22$), and limited alternatives ($r = -.18$). They found support for an overall measure of a four-dimensional occupational commitment scale. In a similar study, Blau (2000) identified that career commitment demonstrated a significant negative relationship to career withdrawal cognitions ($r = -.33, p < .01$), and career withdrawal cognitions were related to employee turnover ($r = .38, p < .01$). Hackett, Lapierre, and Hausdorf (2001) also found that occupational commitment was directly and indirectly related to withdrawal intentions.
**Professional commitment and nursing students.** Wolf and Hoerst (2007) aimed to measure professional commitment of a sample of RN-BSN \( (n = 26) \) and full-time \( (n = 207) \) and part-time \( (n = 96) \) basic baccalaureate degree students. Comparative descriptive and repeat cross-sectional designs were used to compare the differences of professional commitment at the beginning and end of the nursing program. The Health Care Professional Attitude Inventory (HCPAI) was used to measure professional commitment. The HCPAI measured attitudes towards six factors of professionalism, which include consumer control, indifference to credentialism, superordinate purpose, critical attitudes, impatience with rate of social change, and compassion for the needs of the client/public. They also used Corwin’s Nursing Role Conception Scale (CNRCS). This scale includes three subscales: bureaucratic role conception, professional role conception, and service role conception.

Wolf and Hoerst (2007) found professional commitment did not differ between each of the three cohorts of nursing students. They also found that professional commitment scores decreased on the posttest, suggesting that as students progressed through the program, their professional commitment to the nursing profession decreased. This contradicts Ujvarine et al. (2011) who suggested as nursing students progress through the program their [continuance] commitment would increase. They found a weak relationship between the HVPAI and CNRCS and suggested the construct validity of each instrument needs to be further reviewed in future studies. Wolf and Hoerst concluded that the appropriateness of using the HCPAI instrument to measure professional commitment should be questioned. Therefore, it is not clear if such findings examined professional commitment or professional socialization.
Neither the HCPAI nor CNRCS scales appeared to measure commitment. Others who have used the CNRCS scale measured socialization to the role of professional nurses, and role transition by generic baccalaureate nursing students who were in their final preceptored experience (Dobbs, 1988). Researchers who used both scales were also measuring the professional socialization of nursing students who were in a preceptorship; however, they did not discuss professional commitment (Goldenberg & Iwasiw, 1993). Brooks and Shepherd (1992) also used the HCPAI to measure professionalism, but not professional commitment. No studies were found that used either of these instruments to measure professional commitment.

Meyer et al. (1993) conducted a study of nursing students’ professional commitment throughout their program of study. They found that as nursing students progressed through the program, their continuance commitment increased, while their normative and affective commitment decreased. They tested nursing students’ satisfaction with the nursing program to compare with their professional commitment. As expected, affective commitment positively correlated with ratings of satisfaction with the nursing program when measured early in the year; however, near the end of the program satisfaction with the nursing program was not significant. This demonstrates that senior nursing students’ satisfaction with the nursing program may not have an enduring impact on their professional commitment. Moreover, intention to remain in the nursing profession correlated positively with affective and normative commitment (Meyer et al., 1993), providing further support that professional commitment may predict nursing students’ intentions to withdraw from the nursing profession.
Last and Fulbrook (2003) conducted a two-phase three-round Delphi Study to understand why nursing students’ leave before they graduate. The first phase collected qualitative data through one-to-one and focus group interviews. The second phase included completing a questionnaire from the themes identified in the first phase, which was completed by a panel of expert nursing students ($n = 32$), in their final year of education and who were engaged in clinical placements. When the authors asked about participants’ clinical experiences they found that 94% of nursing students reported a poor clinical placement experience would lower their morale. Remarkably, 91% of students did not feel all educated nurses were good at being mentors or clinical assessors. As well, 91% of students agreed that if the ward leader felt students were good and positive, this positive view of nursing students would “filter through the whole clinical area” (p. 453). Therefore, it is plausible to suggest that if the leader feels negatively towards students, the rest of the nursing staff may also feel and act negatively towards students.

The researchers found that general low morale in the National Health Services influenced 75% of nursing students’ view of the nursing profession for the worse (Last & Fulbrook, 2003). Seventy-eight percent reported they do not feel valued as students. “Students commented that they had often wondered if they really wanted to complete their education to join “such a workforce” (Last & Fulbrook, 2003, p. 455). The authors suggested that “the cultural climate, in which students practice, may have a bearing on their perception of nursing as a career choice” (Last & Fulbrook, 2003, p. 455). Based on this research, one may conclude that an authentic preceptor, who is a positive leader and role model to nursing students, may improve the cultural climate of the clinical learning
experience; thus, decreasing workplace bullying, increasing professional commitment, and decreasing withdrawal intent.

The proportion of students who intend to graduate and work as nurses after graduating was examined through a cross-sectional study with \( n = 381 \) final-year nursing students (Ujvarine et al., 2011). Nursing student attrition ranged between 7% and 20%. Students were least satisfied with their future career as a nurse and the most important factor that predicted intent to graduate and work after graduation were satisfaction with faculty support and clinical experiences. Although the majority (58.6%) of nursing students did not consider exiting the nursing program, some (7.1%, \( n = 27 \)) reported that they often or always thought about leaving before graduating. A small percent (7.2%) (\( n = 27 \)) reported it was unlikely they would work in nursing after graduating. Although this number may appear small, a loss of 27 potential nurses is clinically significant and concerning. What is more disquieting is that when unlikely, maybe, and can’t decide answers were combined, the number of students thinking about leaving the profession increased to 25.7% or 98 possible lost nurses. With the estimated 12,000 nursing students needed to graduate per year to keep up with a growing population and an attrition of nurses (RNAO, 2009a), this is cause for immediate action. Any lost nursing student, especially when it is due to avoidable bullying in the workplace, is significant. Equally concerning, those who do stay in the nursing profession might be at risk of multiple psychological and physiological health issues, based on the nursing and non-nursing literature on the outcomes of workplace bullying.

Ujvarine et al. (2011) also reported that satisfaction with clinical experiences and clinical staff strongly and positively affected decisions to graduate and work in nursing
after graduating. Faculty support was also found to be an important predictor, but was not as strong as the clinical experience. These findings beg the question: would poor satisfaction with clinical experiences negatively affect students’ decision to graduate and work in nursing after graduation? Block and Sredl (2006) state, “a negative work environment leads to turnover that makes it even more difficult to narrow the gap between nursing supply and demand” (p. 23). When nursing students feel part of the nursing profession, the supportive environment actually creates opportunities for recruitment and retention of new nurses (Block & Sredl, 2006). Additionally, orientation time may be reduced, providing the healthcare system with an economic benefit.

Moreover, Ujvarine et al. (2011) found those who had more experiences working in nursing, were less likely to want to work in a nursing job than those with less experience. They suggested that attrition in final years would be lower because nursing students have invested more and would therefore have more to lose if they left, which provides support for continuance commitment. They stated that the reason for nurses with prior nursing experience to be more likely not to work in nursing after graduation is unknown; however, they state that these findings highlight the need to carefully examine factors that may contribute to student retention, such as workplace bullying.

More recently, Clements, Kinman, Leggetter, Teoh, and Guppy (2016), conducted a qualitative study to explore second to third year UK nursing students’ commitment, professional identity, and support using Meyer and Allen’s (1991) concept of affective commitment. Through their study, they found a common theme of negative student experiences related to commitment. For instance, students shared that the treatment they experienced influenced their commitment to the profession. They also reported that
commitment was affected when they felt there was limited learning opportunities or when they were made to feel “useless” in placements (p. 23). Students shared that some clinical staff said they did not like students. In contrast to this, other students reported that when they were made to feel welcome by clinical staff, their feelings of being valued and a member of the nursing profession increased.

**Summary of the Literature**

In summary, it is clear nursing students are experiencing bullying in the workplace during their clinical experiences and this is having a negative impact on their professional development and commitment to the profession. Moreover, authentic leadership has been shown to improve the workplace and may decrease the incidence of workplace bullying. Despite this, there is limited research exploring authentic leadership of preceptors and nursing students’ experience of bullying during preceptorship. Although most of the support from the literature is anecdotal or based on non-published research, the current findings suggest nursing students do consider leaving the nursing profession. With the exception of Meyer et al. (1993), few researchers have examined nursing students’ commitment to the profession. With growing concerns of nursing shortages and negative work environments, research examining the relationship between workplace bullying and professional commitment and withdrawal intentions of senior baccalaureate nursing students is timely, and urgently needed. Moreover, research is needed to address the ways in which to overcome such negative workplaces.

Notwithstanding researchers linking authentic leadership to improved work-related outcomes, few nursing scholars have associated authentic leadership to decreased experiences with workplace bullying. Nonetheless, nurses and new nursing graduates
have reported authentic leadership of their managers and preceptors, suggesting nurse leaders are displaying authentic leader behaviours. Additionally, there has been recent support for the link between authentic leadership and decreased reports of workplace bullying experienced by new nurse graduates. Similarly, it was found that preceptors of nursing students exhibit similar characteristics to that of an authentic leader. Therefore, it is plausible that senior nursing students may report perceived authentic leadership of their preceptors during a final clinical placement.

Through authentic leadership, individuals have reported higher levels of psychological capital, which, in turn, is related to decreased negative behaviours in the workplace, such as workplace deviance, and was shown to improve nurses’ professional commitment. Despite this, researchers have not linked higher levels of psychological capital to lower reports of workplace bullying, and there have been no empirical studies relating psychological capital to nursing students’ professional commitment. However, one study did link psychological capital to new nurse graduates’ turnover intention. Additionally, although researchers have made the connection between commitment and intent to withdrawal from the profession, few researchers in nursing education have connected such ideas with a sample of senior baccalaureate nursing students. Theoretical and empirical literature lend support to the idea that nursing students who perceive their preceptor to be an authentic leader might have higher levels of psychological capital; thereby, reporting decreased experiences with workplace bullying, increased professional commitment, and decreased withdrawal intent.

With the many challenges of today’s healthcare, it is imperative nursing students are armed with increased psychological capital through the authentic leadership of
preceptors, to face such challenges upon graduation. Failure to address bullying in the workplace will lead to future generations of nurses being socialized into negative organizations, which will undermine their own self-worth and will negatively affect standards of nursing care (Randle, 2003). Given the wide array of negative outcomes associated with bullying in the workplace, including professional commitment and withdrawal intent, it seems irresponsible, unethical and immoral not to seek to understand this destructive social phenomenon so that this issue does not plague future generations. Therefore, it is vital to the future of nursing and healthcare that nursing students have adequate training in a safe and authentic environment that builds self-efficacy, creates hope, raises optimism, and strengthens resilience, therefore increasing overall psychological capital. Improving nursing students’ psychological capital will enable them to regain the power and control that the bullying behavior may have taken from them. Additionally, those with higher psychological capital may be less likely to engage in bullying behaviours, thus, creating a more positive work environment.

Theoretical Framework

The theoretical framework that provided the overarching conceptual underpinnings of this study is authentic leadership, which draws from the fields of ethics, leadership, and positive organizational scholarship (Avolio et al., 2004; Cooper, Scandura, & Schriesheim, 2005). The hypothesized model for this study, derived from the authentic leadership and psychological capital model, is shown in Figure 1. Although there are other strategies to combat bullying in the workplace, such as structural changes, this study addresses strategies that aim to build positive work environments through focusing on individuals’ authentic leadership and psychological capital. Through Avolio
et al.’s (2004) authentic leadership model, it is proposed that follower attitudes (e.g. commitment) and behaviours (e.g. withdrawal intent) are influenced through the processes of hope and optimism, trust, positive emotions, and psychological capital; however, this study will only examine the mediating mechanism of psychological capital.
Figure 1. Authentic Leadership Model
Gardner and Schermerhorn (2004) describe how the authentic leader builds self-efficacy, creates hope, raises optimism, and strengthens resilience. Authentic leaders build self-efficacy first by role-modeling confidence and by their verbal expressions (Gardner & Schermerhorn, 2004). Individuals’ self-efficacy is altered based on the observations of others’ successes or failures, which is known as learning through vicarious experiences (Bandura, 1997). Therefore, when the authentic leader is able to model confidence, followers feel they can model confidence as well. Additionally, when leaders trust their followers, they encourage them to recognize their own capabilities, thereby providing followers with “important cognitive, emotional, and moral support that facilitates further development” (Gardner & Schermerhorn, p. 274).

The hope construct posits that individuals are inherently goal-directed, and hopeful persons possess the motivation or agency to perseveres despite adversity to reach their goals through discovering new and different pathways (Snyder, 2002). Authentic leaders assist followers with building their hopefulness (that is their agency and pathways) by “infusing work environments with ability and support” (Gardner & Schermerhorn, 2004, p. 275). The authentic leader can construct motivation (agency) by building feelings of competency and self-efficacy, and creating a supportive work environment (Gardner & Schermerhorn, 2004). For example, the authentic preceptor could match nursing students’ talents or abilities with specific nursing tasks and praise students when they have successfully accomplished the task. To assist with developing followers’ pathways to achieve goals, the authentic leader could encourage them to set and pursue realistic goals and develop plans to achieve such goals. It is also important for the leader to assist individuals with “re-goal setting” skills when faced with adversity
or obstacles. It is equally important to anticipate such adversities and obstacles to avoid false hope (Gardner & Schermerhorn, 2004).

Optimistic individuals believe desired outcomes are possible and are able to persevere in the face of adversity (Scheier & Carver, 1992). However, being overly optimistic or having unrealistic optimism may be detrimental to individuals, as they may never take responsibility for failure. A realistic optimist will take credit for successes and failures, while recognizing the role of other contributing factors (Scheier & Carver, 1992). Authentic leaders may develop followers’ optimism by identifying cases of adversity, recognizing self-defeating beliefs about the cause of adversity, understanding the consequences of such beliefs, disputing the belief and challenging the faulty assumption, exploring more optimistic explanations, and experiencing the energizing emotion that is the result of substituting optimistic for pessimistic explanations (Gardner & Schermerhorn, 2004).

Lastly, resilience is also rooted in the authentic leadership theory, where authentic leaders must build up not only their own resilience, but also that of their followers. When faced with adversity, resilient individuals are able to bounce back and spiral upwards making them stronger in the end (Siebert, 2005). To assist followers with building their resilience, authentic leaders provide the support they require to not only overcome but also thrive in the face of adversity, and become stronger when presented with challenges (Gardner & Schermerhorn, 2004). Moreover, authentic leaders must simultaneously build their own and their followers’ efficacy (Avolio & Luthans, 2006). Leaders do this by positively encouraging followers to learn, and bounce back from adversities, such as bullying. To accomplish this, it is important for authentic leaders to remind followers
how they achieved success in the past, drawing on their strengths (Avolio & Luthans, 2006). Resilience enables individuals to take responsibility and gain control over their own lives, ultimately creating and maintaining a more positive work environment. Both the nursing profession and the authentic leadership theory suggest that clients and followers alike need to have their strengths, rather than weaknesses as the focal point of change (Wong & Cummings, 2009a).

**Research Purpose and Hypotheses**

The purpose of this study was to test a model examining the influence of authentic leadership on fourth-year nursing students’ experience of workplace bullying during their preceptorship (see Figure 1). Drawing from the literature and Avolio et al.’s (2004) theory on authentic leadership, Luthans et al.’s (2007) theory on psychological capital and Einarsen’s theory of workplace bullying, the following hypotheses were proposed:

*Hypothesis 1*: Nursing students who perceive their preceptors to have increased authentic leadership will report increased psychological capital (H1).

*Hypothesis 2*: Nursing students who report increased psychological capital will report decreased experiences of workplace bullying from preceptors (H2a) and nurses (H2b).

*Hypothesis 3*: Nursing students who report decreased workplace bullying from preceptors (H3a) and nurses (H3b) will report greater professional commitment.

*Hypothesis 4*: Nursing students who report increased professional commitment will report decreased intentions to withdrawal from the nursing profession (H4).
Chapter III: Research Methods

The research methods are explained in this chapter. More precisely, the study design, setting and sample, and instruments are clearly discussed. Next, data management and analysis procedures are outlined. Lastly, ethical considerations and protection of human rights are addressed.

Study Design

A non-experimental, descriptive, correlational survey research design was used to examine the relationship between major study variables. Study variables included, senior nursing students perceived authentic leadership of their preceptor, psychological capital, experience of workplace bullying from preceptors and nurses, professional commitment, and withdrawal intent.

Setting and Sample

Convenience sampling, which is a nonprobability sampling technique, was used to recruit fourth-year nursing students from five Southern Ontario Universities that offered a 4-year basic baccalaureate nursing program. Pedhazur and Pedhazur Schmelkin (1991) warn that it is not possible to estimate sampling error with this method, resulting in sampling bias. Despite such concerns, this technique was used for the current study to address feasibility and economical sampling challenges. Universities were selected based on their proximity to the researcher and availability for face-to-face data collection during the final preceptorship experience. The list of universities was selected from the Canadian Association of Schools of Nursing website (CASN) (2011), which represents all Canadian baccalaureate nursing programs and serves as their voice for nursing education, research, and scholarship. Only one university offered face-to-face data
collection methods; therefore, face-to-face and e-mail data collection methods were employed and will be discussed in more detail below. This study included a total of five Ontario universities ($N = 1984$ students sample) with 4-year basic baccalaureate nursing programs.

**Inclusion and exclusion criteria.** All fourth-year nursing students, who were in their final practicum from the selected universities, were invited to participate in this study. Nursing students were English speaking and were required to have a formal preceptor in a clinical learning environment. Post-RN baccalaureate and compressed (accelerated) time frame nursing students were not eligible for this study, as their educational and work proficiency might have influenced their experiences of bullying, professional commitment, and withdrawal intentions.

All clinical learning environments were included in this study. Through an evaluation of the nursing literature, it appears bullying is most prominent in acute care hospital settings (Johnson & Rea, 2009; Laschinger, Grau, Finegan, & Wilk, 2010; Yildirim, 2009); however, there is limited research examining bullying in other health care settings. Curtis, et al. (2007) examined nursing students’ experiences of bullying in a variety of clinical placements, but did not state which clinical placements were used, and did not distinguish among them when discussing the results. It is not only important to study bullying in all areas of nursing, including hospitals, nursing homes, public health, community, and clinics, but also to view the different areas individually as well as collectively.

Nursing students who were in a final practicum course were selected because they work closely with a preceptor and nursing staff without the direct support of a clinical
instructor, and the incidence of bullying may be higher during this experience. In one study, students reported that when their preceptor (referred to as clinical facilitator in the study) was not present on the clinical unit, bullying occurred almost invariably (Curtis et al., 2007). Lastly, students in their final preceptorship experience are close to graduation and will be the leaders of tomorrow, making this a crucial and impressionable time in their education. The preceptorship experience is a stage when knowledge and professional practice become strongly integrated, therefore it is critical that students have the opportunity to gain confidence in themselves and their practice.

**Sample size.** It is vital to consider the minimum required sample size when using structural equation modeling (SEM) techniques (Jackson, Voth, & Frey, 2011; Kline, 2011). Jackson (2003) recommends considering the sample size (N) and the number of parameters to be estimated (q) when determining minimum sample size, as this was shown to influence model fit statistics such as root mean square error of approximation (RMSEA). Kline (2011) states that the N:q rule is an appropriate method when researchers use maximum likelihood, which is the estimation method used in this study. According to Kline (2011) and Jackson (2003), an ideal N:q ratio is 20:1; however, 10:1 is also acceptable. Based on the 21 parameters in this model and Jackson’s (2003) N:q rule of 20:1, a minimum sample size of n = 420 was required to preserve sufficient power for hypothesis testing. Researchers who recruited nursing students during scheduled class time had response rates ranging from 73% (Ferns & Meerabeau 2009), 67% (Longo, 2007), and 58% (Clarke, 2009). Clarke (2009) reported the total number of possible participants at one university and two colleges in Ontario was 1167. The final sample for that study was n = 674, yielding a 58% response rate.
Given the sensitive nature of the study question for the current research, the lower yet reasonable response rate of 58% was targeted, projecting a possible sample size of 724 students for this study. To promote increased response rates, the length of the questionnaire was considered, as instruments with fewer items were selected when appropriate to prevent responder fatigue (Dillman, 2007; Edwards, et al., 2002). Additionally, every participant was provided with a tangible reward to demonstrate appreciation for participation (Asch, Jedrixiewski, Christakis, 1997; Dillman, 2007; Edwards et al., 2002; Larson & Poist, 2004). Dillman (2007) suggests providing an incentive to each participant may increase response rates, as it creates a sense of shared obligation that can be satisfied by participating in the study. Similarly, Edwards et al. (2002) found that when incentives were not conditional on response, response rates doubled. Lastly, participants’ confidentiality and anonymity was ensured, as no identifying information was collected and students had the option of completing the survey online.

**Data collection procedures.** Face-to-face and e-mail data collection strategies were used for this study. Regardless of the data collection method, deans and directors were contacted by e-mail and were informed of the study (see Appendix A). The researcher requested the name(s) of the fourth-year coordinator(s), who was then contacted and informed of the study (see Appendix B). The researcher and the coordinator of each School of Nursing discussed the possibility of face-to-face recruitment; however, as stated previously, this was only possible at one school.

**Face-to-face method.** Prior to the face-to-face meeting, the coordinator forwarded an e-mail (see Appendix C) that informed students of the study and provided the letter of
information (see Appendix D). The letter of information included a link to a secure
website where participants could go to complete the survey online. The online survey
was created using an online survey software program, called Fluid Surveys™. Hardcopy
surveys were developed by the researcher (see Appendix E). Numerous researchers
provide participants with a mixed mode approach (Dillman, 2007), thus offering more
than one option to participate, because it is thought to improve response rates (Clarke,
2009; Ferns et al., 2009). Accordingly, participants were given the option of completing
surveys in person or online. Despite the benefits of providing a mixed mode approach,
Dillman (2009) warns of potential consequences such as the risk that participants might
answer questions differently depending on which mode they completed.

During the scheduled 15-minute meeting, the researcher briefly discussed the
study and offered each student an envelope, that included the letter of information,
survey, and a $2.00 gift card to a local coffee shop as a token of appreciation.
Completion of the survey (online or hardcopy) implied consent, which was outlined in
the letter of information. Initially, students were offered light snacks and refreshments;
however, this was an expensive recruitment strategy and did not appear to improve
response rates. Thus, an amendment was submitted to Research Ethics Board (REB) to
cancel future light snacks and refreshments to students who were recruited in person.
Students who completed the questionnaire in class placed the completed survey back in
the envelope and sealed it to ensure confidentiality.

The primary advantage to using this strategy was an increased response rate
compared to e-mail methodology. Additionally, students were given the choice of
completing the survey in class or online, which was timely and convenient for the
participant. Despite these, there were some disadvantages to face-to-face over e-mail, such as a greater expense, difficulty achieving anonymity, and geographic flexibility may be influenced (Larson & Poist, 2004).

**E-mail method.** Although e-mail methodology has many benefits, it also holds limitations. For instance, web-based surveys have been found to have increased “don’t know” responses and higher item non-response (Heerwegh & Loosveldt, 2008). After the researcher discussed the study with the coordinator, the coordinator was asked to forward an e-mail (see Appendix F) to all nursing students requesting their participation in the study. The letter of information, which included a link to the online survey, was attached to the e-mail (see Appendix G). All nursing students who were invited to participate in the study were given the opportunity to pick up a $2.00 gift card to a local coffee shop at the School of Nursing’s front desk. Nursing students, who completed the survey online, were informed that the completion of the survey implied consent. No identifying information was collected. A modified Total Design Method (Dilman, 2007) was used to increase response rates. Specifically, four weeks after the initial e-mail was sent, a reminder e-mail was forwarded to nursing students from the coordinator, which included the letter of information and the survey link (see Appendix H). Four weeks after the reminder e-mail, the coordinator forwarded a final e-mail to inform participants of the closing date of the study (see Appendix I).

In summary, to achieve the minimum sample size required to perform the analysis, three rounds of data collection took place from February 2013 to May 2014. Thus, three different cohorts of nursing students from five universities, who were nearing the end of their practicum experience, were involved in the study. The first round of data
collection took place from February 2013 to April 2013; second round of data was collected October 2013 to December 2013; and the final round of data was obtained February 2014 to May 2014. As nursing students in a final preceptorship course rarely physically meet at the university during this time, face-to-face data collection was difficult and only carried out at one university on two separate occasions.

The first round of data collection achieved a 12.9% response rate \((N = 473, n = 61)\). The majority of nursing students were recruited via e-mail as there was not an opportunity for face-to-face data collection at most schools. Ralph, Walker, and Wimmer (2009) reported a 30% response rate of students who were recruited either online or face-to-face. Therefore, an amendment was submitted to REB to request a decrease in proposed response rate and an increase in the number of participants to be surveyed. Thus, using the suggested minimum \(N:q\) rule of 10:1 and the 21 parameters in the study, a revised minimum sample of \(n = 210\) participants was required.

Overall, 1,187 e-mails were sent, and 391 nursing students were sampled in person. A total of \(N = 1578\) nursing students from five Southern Ontario universities were invited to participate. Of that, \(n = 308\) students participated in the study, resulting in a 19.5% response rate, slightly lower than findings from other researchers who used a sample of fourth-year nursing students (Yonge & Myrick, 2004). Two surveys were discarded due to blank responses on entire questionnaires, resulting in a total sample of \(n = 306\) participants. The combined effects of a sensitive topic (Edwards et al., 2002), difficulty in locating some nursing students due to a geographical change to accommodate preceptorships, and nursing students nearing the end of the nursing program are suspected to have affected response rates.
Deans and directors were contacted after the commencement of data collection to inquire about any leadership, institutional, or curriculum changes during the duration of the study that may have affected the results. According to deans and directors, no changes had occurred between each cohort; therefore, nursing students from each cohort had similar experiences.

**Instruments**

Five standardized self-report questionnaires were used to collect data and measure authentic leadership, psychological capital, workplace bullying, professional commitment, and withdrawal intent (see Table 1). A demographic questionnaire was also included in the survey, and asked questions about participants’ age, marital status, practicum setting and gender. The instruments are discussed in detail in the next section.

**Authentic leadership.** The Authentic Leadership Questionnaire (ALQ version 1 rater), developed by Avolio, Gardner, and Walumbwa (2007), was used to measure nursing students’ perceived authentic leadership of preceptors. This theory-based, 16-item questionnaire has four categories and when tested by Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) were shown to have good psychometric properties. The four categories, self-awareness (4 items, $\alpha = .92$), relational transparency (5 items, $\alpha = .87$), internalized moral perspective (4 items, $\alpha = .76$), and balanced processing (3 items, $\alpha = .81$), were used in this study.
### Table 1
Description of Instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Response range/ anchors</th>
<th>No. items (total 46)</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Leadership Questionnaire (ALQ)</td>
<td>0-4 not at all-frequently if not always</td>
<td>16</td>
<td>0.97</td>
</tr>
<tr>
<td>Psychological Capital Questionnaire (PCQ)</td>
<td>1-6 strongly disagree- strongly agree</td>
<td>12</td>
<td>0.93</td>
</tr>
<tr>
<td>Negative Acts Questionnaire-Revised (NAQ-R)</td>
<td>1-5 never- daily</td>
<td>9</td>
<td>0.80</td>
</tr>
<tr>
<td>Occupational Commitment Scale-Affective (OCS-A)</td>
<td>1-4 strongly disagree-strongly agree</td>
<td>6</td>
<td>0.91</td>
</tr>
<tr>
<td>Occupational Withdrawal Intentions (OWI)</td>
<td>1-5 never-constantly (1-item) 1-5 very likely-certain (2-items)</td>
<td>3</td>
<td>0.86</td>
</tr>
</tbody>
</table>

Nursing scholars who used this instrument on a sample of nurses found adequate internal consistency reliability ranging between .91-.97 for the overall tool (Bamford, et al., 2012; Giallonardo, et al., 2010; Laschinger, et al., 2012 a,b; Wong, Laschinger, & Cummings, 2010). Walumbwa, et al. (2008), completed a confirmatory factor analysis and found support for the validity of each dimension of the construct. Sample items from the instrument include “seeks feedback to improve interactions with others” (self-awareness), “says exactly what he or she means” (relational transparency), “asks you to take positions that support your core values” (internalized moral perspective), and “listens carefully to different points of view before coming to conclusions” (balanced processing). For this study, the term “my leader” was changed to “my preceptor”. Participants responded to each item in the ALQ on a five-point Likert scale with anchors.
of: not at all (0) to frequently, if not always (4). The ALQ is scored by averaging the subscales to produce a total overall score ranging from 0 to 4, with higher scores representing higher levels of authenticity (Walumbwa et al., 2008). Only five items from the ALQ are reported here because of copyright restrictions.

**Psychological capital.** Luthans, Avolio, Avey, and Norman (2007) developed the 24-item Psychological Capital Questionnaire (PCQ) using various instruments from the hope, optimism, self-efficacy, and resilience literature. Instruments were selected based on reported sound reliability and validity, relevance to the workplace, and the capability to measure state-like, rather than trait-like constructs of psychological capital (Luthans, Avolio et al., 2007). An expert panel for each measure selected 6 items from each instrument based on content and face validity. The wording was adapted for the workplace and to be state-like. Responses were put into a 6-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree), and ask participants to think about themselves right now (Luthans, Avolio et al., 2007; Luthans, Youssef, Avolio, 2007).

The 12-item PCQ was used to measure psychological capital of nursing students in this study (Luthans, Avolio et al., 2007; Luthans, Youssef et al., 2007). Norman, Avolio, and Luthans (2010) used a 12-item PCQ that is a mirror image of the original 24-item questionnaire. The revised 12-item measure consists of self-efficacy (3-items), hope (4-items), resilience (3-items), and optimism (2-items). Examples include, “I feel confident analyzing a long-term problem to find a solution” (self-efficacy), “there are lots of ways around any problem” (hope), “I usually take stressful things at work in stride” (resilience), and “If something can go wrong for me work-wise, it will” (optimism). The word “work” was changed to “preceptored experience” to better reflect students’
experience. Reverse scoring was used for items 6 (hope), 10 (resilience), and 11 (optimism). Scores are summed and averaged to produce one total score ranging from 1-6, with higher scores indicating higher levels of psychological capital.

In previous studies, researchers found adequate reliability for each of the individual subscales and overall 24-item PCQ measure (hope = .72-.80; resilience = .66-.72; self-efficacy = .75-.85; and optimism = .69-.79, PCQ = .88-.89) (Luthans, Avolio et al., 2007). Similarly, Norman, et al. (2010) found an overall reliability of .93 for the 12-item PCQ. Strong psychometric support for this instrument has been shown through exploratory and confirmatory factor analysis (Luthans, Avolio, et al., 2007). Discriminant validity demonstrated psychological capital was not related to age, education, agreeableness, or openness, but had a strong positive relationship with core self-evaluations and a moderate relationship with extraversion and conscientiousness (Luthans et al., 2007). Gooty, Gavin, Johnson, Frazier, and Snow (2009) also found support for discriminant validity of the higher order construct of the PCQ in relation to transformational leadership.

**Workplace bullying.** The Negative Acts Questionnaire-Revised (NAQ-R) (Einarsen, Hoel, & Notelares, 2009) measures frequency and type of bullying in the workplace. The shortened nine-item NAQ-R instrument was used in this study to measure workplace bullying experienced by nursing students because it is thought to decrease responder fatigue (Einarsen, et al., 2009). Nursing students were required to complete the NAQ-R for the preceptor and staff nurses that is, they were required to rate the frequency of bullying from their preceptor separately from nurses working on the unit; therefore, it was reasonable to use the shorter version. This questionnaire includes
three subscales; namely, work related, person oriented, and exclusion. Example items include: “someone withholding information which affects your performance” (work related), “spreading of gossip and rumours about you” (person oriented), and “being ignored or facing a hostile reaction when you approach” (exclusion) (Einersen & Hoel, 2001; Einersen et al., 2009). Each item is described in behavioural terms and does not refer to the term bullying, allowing researchers to measure perceived exposure to negative behaviours without forcing participants to label such behaviours as bullying. The three subscales are rated on a 5-point Likert scale ranging from never (1) to daily (5). The items are summed and averaged to create one overall score ranging from 1-5 with higher numbers indicating higher levels of bullying (Einersen & Hoel, 2001).

Hauge, Skogstad, and Einarsen, (2011) reported an adequate reliability ($\alpha = 0.80$) for the nine-item NAQ-R. Researchers found the 22-item NAQ-R to be a valid measure of experiences of workplace bullying (Einarsen, et al., 2009). Criterion validity demonstrated high correlations with both the total NAQ-R and scores on the three factors. Furthermore, it was found that NAQ-R correlated with mental health and leadership, indicating good construct validity (Einarsen, et al., 2009). Criterion validity was also explored and supported by relating the 22-item (Einarsen et al., 2009) and 9-item (Notelaers, & Einarsen, 2008) NAQ-R to a single-item self-labeling measure.

The NAQ-R includes a single-item self-labeling measure that provides a definition of bullying and ask participants if they have experienced bullying over the last six months. For the purpose of this study, six months was changed to three months, as three months most accurately reflects the duration of the preceptorship experience. The definition states:
bullying takes place when one or more persons systematically and over time feel that they have been subjected to negative treatment on the part of one or more persons, in a situation in which the person(s) exposed to the treatment have difficulty in defending themselves against them. It is not bullying when two equally strong opponents are in conflict with each other (Nielsen, Notelaers, Einarsen, 2010).

It is important to include both the NAQ-R and the single-item bullying measure to better understand participants’ exposure to negative acts, as well as their subjective experiences of bullying behaviours (Nielsen et al., 2010). The mean score of the single-item was correlated with the total mean score of the NAQ-R for nurses and preceptors.

**Professional commitment.** Meyer et al. (1993) developed a Three-Component Model of Commitment, which consists of affective, normative, and continuance commitment. According to the authors, commitment has many different factors; therefore, researchers are urged to use a multidimensional approach when studying commitment to attain a more accurate understanding of the individual’s commitment to his or her profession. Blau and Holladay (2006) argued that the continuance commitment scale actually consists of two different constructs (‘limited alternatives’ and ‘accumulated costs’), which is difficult to measure using only six items. Therefore, they revised the original Occupational Commitment Scale to include the two additional constructs and made the reversed-scored items positive, creating a new 24-item scale (6-items affective, 6-items normative, 8-items accumulated costs, and 4-items limited alternatives). Blau (2003) found support for this four-dimensional measure of occupational commitment that is based on Meyer et al. (1993) three-dimensional measure. The description of the
limited alternatives and accumulated cost commitment scales are beyond the scope of this paper; interested readers are encouraged to review Blau’s (2003) article.

Blau’s Occupational Commitment Scale-Affective (OCS-Affective) was used to test fourth-year nursing students’ affective commitment to the nursing profession. The referent *medical technologist* was changed to *nursing*. A sample question includes “nursing is important to my self-image”. Blau’s (2003) occupational commitment measure includes a 4-point response scale ranging from 1 = strongly disagree to 4 = strongly agree. Strong internal consistency reliability was demonstrated for this scale (α = .91) (Blau, 2003). Blau found a higher reliability with the positive scored items than Meyer et al. (1993) reported with the reversed scored items. Additionally, discriminant validity was supported through a CFA (Blau, 2003).

Despite Meyer et al. (1993) and Blau’s (2003) argument for a multidimensional commitment scale, Blau’s OCS-Affective instrument was selected. Although other dimensions of commitment are important, it was not feasible in the current study to include two or three additional variables. Further, affective commitment is an important dimension of commitment and may be the best predictor of intentions to withdrawal from the profession. Researchers have found support to suggest affective commitment is related to withdrawal intentions (Blau & Holliaday, 2006; Meyer et al., 1993).

**Professional withdrawal intentions.** Lastly, withdrawal intentions were measured using a three-item occupational withdrawal intentions (OWI) scale that is based on Blau’s (1989) approach and Mobley’s (1977) items (Hackett, Lapierre, & Hausdorf, 2001). The first scale item, “I think about quitting the nursing profession”, is measured on a 5-point scale ranging from never to constantly. The last two items, “I intend to quit
the nursing profession” and “I intend to move to another profession” are also measured on a 5-point scale ranging from very unlikely to certain. Scores are summed and averaged to produce one total score. Hackett et al. (2001) noted the coefficient alpha to be $\alpha = .86$, and found support for the discriminability of organizational and occupational withdrawal intentions through a CFA.

Others used a three-item professional withdrawal intent instrument, which included “I am currently looking for a job outside the field of [nursing]”, “I intend to leave the profession of [nursing] as soon as possible”, and “I have begun the process of changing from [nursing] to another profession” (Blau, Tatum, & Ward-cook, 2003; Chapman, Blau, Pred, & Lindler, 2009). Responses were on a 4-point scale ranging from 1-strongly disagree to 4-strongly agree. This scale was found to have coefficient reliability between 0.84 - .91 (Blau et al., 2003). Although this instrument demonstrated adequate reliability, it was thought the occupational withdrawal intentions instrument is more appropriate for the nursing student population. The occupational withdrawal intentions scale refers simply to the nursing profession, whereas, the professional withdrawal intent instrument discusses leaving one’s job.

**Summary**

In summary, the ALQ (16-item, $\alpha = .97$) was used to measure nursing students’ perceived authentic leadership of their preceptors; PCQ (12-item, $\alpha = .93$) measured nursing students’ psychological capital; nursing students’ experience of workplace bullying from preceptors and nurses was measured using the NAQ-R (9-item, $\alpha = .80$); professional commitment was measured using the OCS-Affective (6-item, $\alpha = .91$); and lastly, withdrawal intent was measured using OWI (3-item, $\alpha = .86$). Each instrument
demonstrated adequate psychometric properties; essential in obtaining meaningful and statistically significant results. Despite the strong psychometric support, such measures also have limitations. For instance, researchers did not use a sample of nursing students to test the reliability of each instrument. Therefore, such reliabilities may not be generalizable to the proposed study population (Kline, 2011). With that said, many researchers did use a sample of RNs, which arguably may generalize to fourth-year nursing students who are close to graduating and becoming a new nurse graduate.

**Data Management Procedures**

**Data cleaning and screening.** Prior to analysis, data were cleaned and screened for violations of normality, linearity, and missing data. Box plot results revealed univariate outliers for ALQ (n = 11), NAQ-R for nurses (n = 20), NAQ-R for preceptors (n = 29), OCS-Affective (n = 2), and OWI (n = 10). All outliers were representative of the sample and did not require deletion. For example, an inspection of the data did not highlight any numbers that were outside of the maximum or minimum value for each variable. Additionally, there were numerous univariate normality violations. The following skewness and kurtosis were found for each variable; authentic leadership (-1.34, 1.70), NAQ-R for nurses (2.04, 4.09), NAQ-R for preceptors (2.64, 7.01), OCS-Affective (-1.47, 3.17), and OWI (1.41, 1.40). Additionally, the Kolmogorov-Smirnov (p < .001) and Shapiro-Wilk test (p < .001) both suggested normality violation.

There is a debate in the literature about what constitutes an unacceptable level of skewness and kurtosis, or how far from zero the values need to be before they are considered non-normal. Some researchers believe values should be within +/- 0.5 (Meyers, Gamst, & Guarino, 2006), while others suggest it could be as high as +/- 3 for
skewness (Kline, 2011). Kline (2011) suggests a kurtosis greater than 10 is an indication of severe non-normality. Other researchers even suggest dividing a skewness or kurtosis value by its respective standard error and evaluating this coefficient with a standard normal table of values, such as the z-scores; however, the equation for standard error considers the sample size, thus it is more likely normality will be rejected if the sample size is large (Meyers et al., 2006).

Although the findings in this study might suggest there are mild deviations from true normality, the results are not unusual and are expected, given the nature of the phenomenon being studied. For example, one would not expect workplace bullying to have a normal distribution, as this would imply the majority of students experienced bullying, while some experienced severe bullying and only some experienced no bullying. It is not expected that the variables would have a normal distribution; therefore, it was decided not to perform transformation. This decision was also based on Kline’s (2011) threshold of +/- 3 for skewness and +/- 10 for kurtosis. None of the values exceeded these arbitrary numbers. The decision, however, was not without limitation. Leaving the data may increase the risk of a type 1 error; while, transforming the data would make it more difficult to analyze data later because it would change all original data. Pearson’s r is robust against violations of normality; therefore, the decision was reasonable given the nature of the variables being studied.

**Missing data.** Missing data were found for each of the five study variables. Although the missing data accounted for < 2.6 % of the sample size, Little’s Missing Completely at Random (MCAR) test was conducted to determine if data are MCAR or Missing at Random (MAR). This is an important test to conduct in order to determine
what to do about missing data. Based on Little’s MCAR test ($\chi^2 = 54.55$, df = 19, sig. = <.001), the null hypothesis would be rejected; therefore, data is likely MAR. Missing at random is a systemic data issue that suggests a variable with missing values is partly dependent on other observed data, but is not dependent on any of the missing values. Thus, the variable is unable to predict the distribution of missing data (Meyers, et al., 2006; Newman, 2014).

According to Kline (2011), it is important for researchers to address how they will deal with missing data. To create a more parsimonious model and to retain the maximum number of cases in the main analyses, missing data was imputed using maximum likelihood estimations (MLE). Maximum likelihood estimation does not delete or replace estimated values; rather, this method uses raw data files only and divides them into subsets, which include the same pattern of missing observations (Kline, 2011). Therefore, all cases are used in the analysis. Although available case methods (including listwise and pairwise deletion), and single-imputation methods (replaces missing data with the overall sample mean) are the more traditional methods used for addressing missing observations, they have no theoretical rationale and take little advantage of the data available (Kline, 2011). Whereas, special ML-based methods do take into account the available data and may have less biased estimates than the more traditional techniques. Observed missing data was low (<5%), and there were no clear patterns of missingness, indicating that MLE is an appropriate method for creating imputed values. Lastly, there were no significant differences between original and imputed values.
Data Analysis Procedures

The Statistical Package for Social Sciences (SPSS, Version 22.0) was used to conduct descriptive and inferential statistical analysis, as well as reliability analysis. Descriptive and inferential statistics were calculated for all study variables and the demographics to describe and synthesize data, and to make predictions about the population (Agresti & Finlay, 2009; Polit & Beck, 2008). Specifically, means and standard deviations were performed on the demographics, and means, standard deviations, and correlation coefficients were calculated for the main study variables. Additionally, analyses of variances (ANOVA) and/or t-tests were conducted between demographic data and the dependent variable, workplace bullying.

Coefficient alpha, also known as Cronbach’s alpha was used to measure the internal consistency reliability, which is the degree of dependability with which an instrument measures a particular attribute (Kline, 2011; Polit & Beck, 2008). There are no universally accepted guidelines for how high a coefficient should be in order to be considered adequate; despite this, Kline (2009; 2011) suggests 0.90 is excellent, .0.80 is very good, and 0.70 is considered adequate because as the number approaches zero, the scores are more likely to be a random number and the majority of variance is likely due to random error (Kline, 2009). Coefficient alphas measured the reliability of each instrument, and associated subscales, used in this study.

**Path Analysis with SEM manifest variables.** To test the hypotheses, Path Analysis (PA) with Structural Equation Modeling (SEM) manifest variables was conducted using Analysis of Moment Structures (Amos, Version 22.0). Kline (2011) suggests that “although PA is the oldest member of SEM family, it is not obsolete” (p.
Path analysis is a single-indicator method that assesses direct and indirect effects of variables, which are hypothesized using theory, through multiple regression or model fit statistical techniques (Kline, 2011; Meyers et al., 2006). Following the advice made by Kline (2011) and Meyers et al. (2006), model fit techniques were employed in this study because all the information relating to the interrelationships between each variable is simultaneously analyzed. Path analysis with SEM processes is appropriate because the observed scores of the six constructs were used as the number of measured variables, as opposed to the latent variables. More specifically, the total scores of the six constructs were analyzed, rather than the subscales.

The structural model for PA uses observed variables and is often referred to as Observed Variable Path Analysis (OVPA), whereas SEM is concerned with latent variables; however, both methods employ the same steps for analysis. According to Kline (2011), six basic steps should be followed when testing the model; namely, 1. Specify the model; 2. Evaluate model identification; 3. Select the measures (select good measures, collect, screen and clean data); 4. Estimate the model (model fit and parameter estimates); 5. Respecify the model; and 6. Report the results. Each of these steps have been considered in the analysis. In the following section, a description of the process of OVPA, as it relates to the analysis of hypothesis testing and estimation, is discussed.

The hypothesized model was evaluated using AMOS 23 and statistical significance was set at $p < .05$. Maximum likelihood (ML) estimation was used to analyze the structural model with observed variables. Maximum likelihood estimation was selected because it simultaneously calculates the estimates of model parameters and such estimates are “asymptotically unbiased, efficient and consistent” (Kline, 2011, p. 103).
The following five steps were considered for the OVPA: 1. Specification, 2. Identification, 3. Model Fit, 4. Respecification, and 5. Estimation.

**Specification and identification.** Specification occurs when the researcher creates a structural equation model to represent the hypothesis, which is based on theory and empirical findings (Kline, 2011). The path model, which is a structural model for observed variables, represents the hypothesized model. In order to assess if the model fits the data, the model must be identified, meaning the degrees of freedom must be positive (more known elements than estimations) (Meyers et al., 2006). The degrees of freedom (number of known elements – number of unknown parameters) is calculated using the equation \( V(V+1)/2 \), which was \( 6(6+1)/2 = 21 \) (known elements) – 12 (unknown parameters; 6 path coefficients, 1 exogenous variable, and 5 error terms) = 9; therefore, the model is identified. The assessment of model fit will be described in the next section, followed by respecification and estimation.

**Assessment of model fit.** To test how well the model explained the data, model fit statistics were conducted (Meyers, et al., 2006). Kline (2011) suggests there are two types of fit statistics: 1. model test statistics and, 2. approximate fit indexes, which are both necessary as they represent a different way of considering model fit. Model test statistics are typically scaled as “badness-of-fit”, meaning a statistically significant result (e.g., \( p \leq .05 \)) could suggest a problem with the model-data correspondence (Kline, 2011). Essentially, the model test statistic measures whether the researcher’s model covariance matrix is similar enough to the sample covariance matrix that the differences could logically be attributed to sampling error. This may provide the first sign that there is a problem with the hypotheses (Kline, 2011).
One way to estimate sampling error is through the model chi-square. This test assists the researcher with deciding whether to reject the model based on the probability measured against the set alpha level (Agresti & Finlay, 2009; Kline, 2011; 2009). The model chi-square was used to estimate sampling error. The chi-square is highly sensitive to sample size; therefore, as sample size increases the more likely the chi-square will find a significant result. However, it is important to note that a statistically significant result does not necessarily support evidence against the model, which is why further information about model-data correspondence should be examined (Kline, 2011).

Unlike model test statistics, approximate fit indexes (AFI) do not differentiate between sampling error and evidence against the model (Kline, 2011). Rather than being a dichotomous decision to reject or retain the model, the outcome of AFI is intended to be a continuous measure of model-data correspondence (Kline, 2011). Additionally, while some AFI are scaled as “badness-of-fit” (root mean square error of approximation), others are scaled as “goodness-of-fit” (goodness of fit index, comparative fit index). Adhering to the suggestions of Kline (2011), the four approximate fit indices, Root Mean Square Error of Approximation (RMSEA), Goodness of Fit Index (GFI), Comparative Fit Index (CFI), and Normative Fit Index (NFI) were used in this analysis because they each offer a unique perspective.

**Root Mean Square Error of Approximation.** The RMSEA is a parsimony-adjusted fit index that “theoretically follows a noncentral chi-square distribution” (Kline, 2011, p. 205); therefore, if chi-square is less than or equal to the model degrees of freedom ($X^2_M \leq df_M$), then RMSEA = 0). Greater parsimony is achieved because as the degrees of freedom increase, the value of RMSEA decreases; nonetheless, as the sample
size increases the correction for parsimony decreases, thus RMSEA does not favor more degrees of freedom. According to Meyers et al. (2006), a RMSEA value of $\leq 0.08$ indicates good fit when a normal distribution is assumed.

*Goodness of Fit Index.* The GFI is an absolute fit index that estimates how well the “researcher’s model fits compared to no model at all” (Kline, 2011, p. 207), and has a range of values from 0-1.0, where 1.0 indicates the best fit; however, GFI is highly sensitive to a larger sample size. For instance, the GFI values increase as the total numbers of cases increase, allowing values to sometimes fall outside of the 0-1.0 range. Values greater than 1.0 are more likely when the chi-square is close to zero and values less than zero often occurs when sample sizes are small and there is poor model fit (Kline, 2011).

*Comparative and Normative Fit Index.* Where GFI is an absolute fit index, CFI and NFI are incremental fit indexes that are used to measure the “relative improvement in the fit of the researcher’s model over that of a baseline model” (Kline, 2011, p. 208). Both measures compare the hypothesized model with the null hypothesis (Meyers et al., 2006). According to Kline (2011) and Meyers et al. (2006) a value of $> .95$ is acceptable.

*Respecification.* If good model fit is not achieved, respecification is a necessary next step of OVPA. Through the modification indices, AMOS provides suggestions as to what could be changed in the model to improve model fit; however, this is based on statistical considerations and does not take theoretical assumptions into account (Meyers, et al., 2006). When respecifying a model, the researcher must adhere to the same principles that were followed with the initial model. For example, the new model must be specified and identified in order to analyze model fit. Furthermore, the new model
must make theoretical, practical, and statistical sense (Kline, 2011). If the researcher alters the model based solely on statistical significance, then he or she will be at risk of committing a type I error, such that they will be capitalizing on chance (Kline, 2011). Once good model fit is achieved, direct and indirect estimates can be analyzed.

**Estimation.** Direct and indirect effects were analyzed through estimation using the unstandardized path coefficients and their associated probability level, as well as the standardized regression weights (Meyers et al., 2006). Considering the effect size of the path coefficients is important; however, Pedhazur and Pedhazur Schmelkin (1991) caution researchers against reporting such values uncritically. They suggest researchers must also consider knowledge of the phenomenon, properties of the instruments, and critical thought when making informed decisions about effect sizes. Maximum likelihood estimation was the method used to analyze the path model with observed variables. This method was selected because it simultaneously calculates the estimates of model parameters and such estimates are “asymptotically unbiased, efficient and consistent” (Kline, 2011, p. 155).

Bootstrapping is a technique where the “sampling distribution of a statistic is estimated by taking repeated samples from the data set” (Field, 2009, p. 782). The approach to bootstrapping by Preacher and Hayes (2008) was used to analyze the significance of the indirect effects of the model. According to the authors, this is the preferred method of analyzing models with multiple mediation where there are specific and total indirect effects. They suggest the bootstrap samples should be at least 1000. In this study, 2000 bootstrap samples were selected as the number of repeated samples from the data set.
In summary, data were cleaned and screened for violations of normality, linearity, and missing data, which did not result in changes to the data as all violations were mild deviations and representative of the sample. Missing data was imputed using MLE, as this created a more parsimonious model and used all the cases in the analysis. Demographic data were analyzed using means and standard deviations and the mean relationships between the demographics and workplace bullying were assessed using Pearson correlation, ANOVAs, and t-tests. Moreover, means, standard deviations, and correlation coefficients were calculated for the main study variables. Cronbach’s alpha was used to measure the internal consistency reliability of the main study variables. Observed variable path analysis, using ML estimation, was used to test the hypotheses. Model chi-square was used to estimate sampling error and the four approximate fit indices, RMSEA, GFI, CFI and NFI, were used to assess model fit. Lastly, bootstrapping techniques were employed to analyze the significance of the indirect effects.

**Ethical Consideration and Protection of Human Rights**

Ethical approval was granted from REB at Western University, as well as, all participating universities prior to commencement of the study (see Appendix J). During the course of the study, three amendments were requested and granted. The first was a request to increase the potential participants from 724 to 1312 to account for a lower than expected response rate and to reduce the time to complete the survey from 30 minutes to 10 minutes, as students were completing the questionnaire faster than anticipated. The second amendment was a request to remove the “light snacks and refreshments” from the incentive, as the cost was high and it did not appear to improve response rates. The final
amendment was to further increase the number of potential subjects to be contacted from 1312 participants to 1712, as response rates continued to be low.

The proposed research study was not without ethical considerations. When research involves human subjects, it is imperative for the researcher to ensure the rights of participants are protected (Polit, & Beck, 2008). The primary ethical consideration the researcher took in this study was timing of the data collection and confidentiality. Students do not report bullying for fear of failure (Fornasier, 2008). Therefore, students may be reluctant to participate if they are concerned participation will affect academic progression. To account for this, the researcher ensured confidentiality of participants and provided flexible completion dates. Moreover, participants were ensured that personal information would not be collected or disclosed to deans and directors, or to the preceptor, instructors and other faculty. No identifying information was collected.

Location of data collection was at a designated location at the selected university or at a location most convenient for the participant, as nursing students had the option of completing the questionnaire online. Additionally, due to the sensitive nature of the research question and the possibility of participants becoming distressed, support was made available through contact information of the university’s counseling services. A link to the university’s counselling webpage was provided on the letter of information.

Participants’ e-mail and mailing addresses were not collected by the researcher, as questionnaires were either distributed in person, or the fourth-year coordinator forwarded an e-mail from the researcher to the nursing students. Computers with firewalls and security were used for this study. Hardcopies of participant data were stored in a locked
cabinet in the principal investigators office and will be destroyed five years after the first publication. Access to research material was limited to members of the research team.
Chapter IV: Research Study Results

The results are presented in this chapter. Specifically, participant demographics, descriptive analyses of each study variable, relationships among demographics and major study variables, and hypothesis testing using observed variable path analysis.

Participant Demographics

A total of 308 fourth-year nursing students responded to the survey; however, two surveys were omitted because of a high number of items with no response. Thus, the total sample was 306. The majority of the sample was single ($n = 215$, 70%). Participants’ age ranged from 20-62 years with the average age being 25 years ($SD = 6.5$), and most (70%) were less than 26 years old. Eighty-seven percent were female, and males accounted for 11% ($n = 34$) of the sample, which is slightly higher than the provincial average of male nurses working in Ontario (7.3%) (CNO, 2016). The majority of nursing students had their placements on medical surgical units (42.5%), followed by maternal child and long-term care (15%) (see Table 2).
Table 2

**Means and Standard Deviations of Demographics (N = 306)**

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>294</td>
<td>25.2</td>
<td>6.5</td>
<td>20</td>
<td>62</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34</td>
<td>11.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>265</td>
<td>86.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>215</td>
<td>70.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>46</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Law</td>
<td>22</td>
<td>7.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>3.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Practicum Setting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Child</td>
<td>46</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Care</td>
<td>38</td>
<td>12.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical/Surgical</td>
<td>130</td>
<td>42.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term Care</td>
<td>46</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>20</td>
<td>6.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>14</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oncology/Palliative</td>
<td>11</td>
<td>3.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Descriptive Statistics**

Descriptive statistics were performed on all study variables as appropriate; namely, sample means, standard deviations, internal consistency reliabilities (see Table 3), and correlations (see Table 4). Preceptors were perceived by nursing students to have high levels of authentic leadership ($M = 3.21, SD = 0.76$). Moderate levels of psychological capital were reported by nursing students ($M = 4.67, SD = 0.66$). Overall, nursing students’ experienced low levels of bullying from preceptors and nurses ($M = 1.39, SD = 0.71; M = 1.55, SD = 0.74$). More specifically, 6.2% ($n = 19$) and 6.8% ($n = 21$) reported moderate or high levels of bullying ($\geq 3.0$) from preceptors and nurses.
respectively. The latter suggests that some nursing students are experiencing bullying behaviours from preceptors and nurses once a month to weekly. High levels of professional commitment ($M = 3.51, SD = 0.56$) and low levels of withdrawal intent ($M = 1.70, SD = 0.84$) were reported. Lastly, $5.4\%$ ($n = 16$) of students reported they have thought about leaving the nursing profession ($\leq 3.7$).

Table 3

**Descriptive Variable Results ($N = 306$)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\alpha$</th>
<th># Items</th>
<th>Category Range</th>
<th>M (SD)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Leadership Questionnaire</td>
<td>.95</td>
<td>16</td>
<td>0-4</td>
<td>3.21 (.76)</td>
<td>0.38-4.0</td>
</tr>
<tr>
<td>Relational transparency</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalized moral perspective</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balanced processing</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-awareness</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Capital Questionnaire</td>
<td>.80</td>
<td>9</td>
<td>1-6</td>
<td>4.67 (.66)</td>
<td>2.1-6</td>
</tr>
<tr>
<td>(with reverse-scored items deleted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Acts Questionnaire-R Preceptor</td>
<td>.93</td>
<td>9</td>
<td>1-5</td>
<td>1.39 (.70)</td>
<td>1.0-4.67</td>
</tr>
<tr>
<td>Personal</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusion</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-related</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Acts Questionnaire-R Nurse</td>
<td>.92</td>
<td>9</td>
<td>1-5</td>
<td>1.55 (.74)</td>
<td>1.0-4.56</td>
</tr>
<tr>
<td>Personal</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusion</td>
<td>.81</td>
<td></td>
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</tr>
<tr>
<td>Work-related</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Commitment Scale-Affective</td>
<td>.92</td>
<td>6</td>
<td>1-4</td>
<td>3.51 (.55)</td>
<td>1.0-4.0</td>
</tr>
<tr>
<td>Occupational Withdrawal Instrument</td>
<td>.84</td>
<td>3</td>
<td>1-5</td>
<td>1.70 (.84)</td>
<td>1.0-5.0</td>
</tr>
</tbody>
</table>
In this study, the overall internal consistency reliability of the Authentic Leadership Questionnaire was .95, which is in line with previous research in samples of nurses (Bamford, Wong, & Laschinger, 2012; Giallonardo, Wong, & Iwasiw, 2010; Laschinger, Wong, & Grau, 2012; Wong, Laschinger, & Cummings, 2010). The overall initial Psychological Capital Questionnaire (PCQ) internal reliability for this study was adequate ($\alpha = .74$); however, Cronbach’s alpha for resilience ($\alpha = .28$), optimism ($\alpha = -.59$) and hope ($\alpha = .45$) were low (see Appendix K). While it is not necessary to report the subscale reliabilities in Path Analysis, it is important to transparently and clearly report the unusual findings. Namely, the reliability for optimism, which included a reverse-coded item, yielded a negative Cronbach’s alpha. Field (2009) cautions against using negatively worded questions that require reverse coding because the item could have a negative relationship with other items. To ensure the negative reliability was not the result of a data entry error, the entire data set was re-entered and was assessed for correct entry through a meticulous and manual examination of the data. The reverse scored items were re-coded into different variables within the dataset. After which, the negative reliability for optimism remained.

Gooty et al. (2009) conducted an item analysis on the 24-item measure for the resilience and optimism components and found that when the reverse-scored items were dropped, the Cronbach’s alpha increased to .80 for resilience and .83 for optimism. They found an overall reliability of .95 for the revised 21-item measure of PCQ. However, Luthans, Youssef et al. (2007) stated that they used the reversed-scored items to reduce common method biases. Additionally, Gooty et al. (2009) cautioned that using a single
index score of the four dimensions of psychological capital with each having a different number of items is problematic, as this would affect how each construct is balanced.

Despite Luthans, Youssef et al. (2007) and Gooty et al.’s (2009) suggestions, all reverse-scored items were dropped to increase the internal consistency reliability. The raw data scores were analyzed, and it may be that students were answering the negatively worded questions as positively worded questions; thus, the results may not be meaningful or have clinical significance. After the items were dropped, the overall PCQ Cronbach’s alpha increased to .80 and the subscales increased to .66 (hope) and .68 (resilience). While this is an improvement, the alphas for hope and resilience remain low. No items were deleted from self-efficacy; therefore, the alpha did not change and only one item remained for optimism. The final number of items for each subscale after the reverse-scored items were deleted are as follows: self-efficacy = 3, hope = 3, resilience = 2, and optimism = 1.

The 9-item Negative Acts Questionnaire-Revised demonstrated strong psychometric properties for nursing students’ perceptions of bullying behaviours from both preceptors (α = .93) and nurses (α = .92). These reliabilities are higher than those reported by previous researchers (Hauge et al., 2011). Strong internal consistency reliability for Occupational Commitment Scale-Affective was found in this study (α = .92), consistent with Blau’s (2003) findings for the professional commitment scale (α = .91). The Occupational Withdrawal Intention scale produced a coefficient alpha of α = .84, which is similar to other researchers’ findings (Hackett et al., 2001).

The two-tailed Pearson product-moment correlations for the subscale and main study variables are presented in Table 4. There was a significant moderate relationship
between nursing students’ perceptions of preceptors’ authentic leadership, and nursing students reported psychological capital ($r = .35, p < .01$). Perceived authentic leadership was significantly and negatively related to workplace bullying; however, the correlation was large from preceptors ($r = -.58, p < .01$), and moderate from nurses ($r = -.32, p < .01$). Although psychological capital was negatively and significantly related to workplace bullying from preceptors ($r = -.24, p < .01$) and nurses ($r = -.19, p < .01$), the relationship was weaker than the relationship between authentic leadership and workplace bullying. There was a significant and moderate relationship between psychological capital and professional commitment ($r = .29, p < .01$). A strong, and positive relationship was found between nursing students’ experience of workplace bullying from preceptors and from nurses ($r = .58, p < .01$). Workplace bullying scores from preceptors and nurses were negatively related to nursing students’ professional commitment ($r = -.17, p < .01; r = -.13, p < .05$); however, this relationship was weak.

There was a strong and significant inverse relationship between nursing students’ professional commitment and their intentions to withdraw from the nursing profession ($r = -.50, p < .01$). Lastly, workplace bullying from preceptors and from nurses was positively correlated with withdrawal intentions ($r = .26, p < .01; r = .27, p < .05$).

The single-item, self-labeling measure that provides a definition of bullying was positively and significantly correlated with the Negative Acts Questionnaire-Revised from preceptors and nurses. Perception of bullying was highly and significantly related to nursing students’ exposure to negative acts by preceptors ($r = .73, p < .01$) and nurses ($r = .63, p < .01$). Nursing students reported low levels of bullying based on the definition from both preceptors ($M = 1.34, SD = 0.94$) and nurses ($M = 1.45, SD = 0.82$).
Relationships Among Demographics and Major Study Variables

Pearson correlation analysis was also conducted to determine the potential effects of age on major study variables. Participants’ age was significantly, albeit weakly, and inversely correlated with authentic leadership \( (r = -0.14, p < .05) \). Age was not significantly correlated with other study variables.

A one-way ANOVA was conducted to assess for differences in workplace bullying from preceptors and nurses by practicum setting and there were no significant differences between workplace bullying from preceptors or nurses by practicum setting. The independent-samples \( t \) test was used to test for significant differences in the main study variables by sex, but none were observed.

Testing the Hypothesized Model

Observed variable path analysis was used to examine overall model fit and the hypothesized model was tested with the observed data (Meyers, et al., 2006). The hypothesized model is presented in Figure 2. The following five steps were considered for the path analysis: 1. Specification, 2. Identification, 3. Model Fit, 4. Respecification, and 5. Estimation. Drawing from the literature and Avolio et al.’s (2004) theory on authentic leadership, Luthans et al.’s (2007) theory on psychological capital and Einarsen et al.’s (2009) theory of workplace bullying, the following hypotheses were proposed:

**Hypothesis 1**: Authentic leadership of preceptors is positively related to nursing students’ psychological capital

**Hypothesis 2**: Psychological capital is negatively related to workplace bullying from preceptors (H2a) and nurses (H2b).
### Table 4

**Correlations of Main Study Variables (N = 306)**

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<td>-.24*</td>
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<td>18. Work related</td>
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<td>-.27*</td>
<td>-.20*</td>
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<td>.25*</td>
<td>.27*</td>
<td>-.50*</td>
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</tr>
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</table>

* Significant, \( p < .05 \) (two-tailed)
**Hypothesis 3**: Workplace bullying from preceptors (H3a) and nurses (H3b) is positively related to professional commitment.

**Hypothesis 4**: Professional commitment is negatively related to students’ intentions to withdrawal from the nursing profession.

**Assessment of Model Fit.** The model chi-square was used to estimate sampling error, which was significant ($\chi^2 (df) = 271.80 (9), p < .001$) indicating poor fit; that is, a poor match between the proposed model and the observed data. In this study, the Root Mean Square Error of Approximation (RMSEA) with a 90% CI [.28 -.34] was .31, also indicating poor fit. The Goodness of Fit Index (GFI) produced a score of .78, and a value of .38 was found for each of the Normative Fit Index (NFI) and Comparative Fit Index (CFI). Because these values are below .95, acceptable fit was not achieved. Model 1 does not demonstrate good fit and does not explain the data well (see Figure 3); therefore, respecification was considered.
Figure 2. Hypothesized Model
Figure 3. Standardized beta coefficient between study variables in model 1

Model fit:
$\chi^2 (df) = 271.80 (9), p < .001, \text{RMSEA} = .31 (.28 - .34), \text{GFI} = .78, \text{NFI} = .38, \text{CFI} = .38$

Note: * Significant; NS = non significant, p > .05
Respecification. Through an examination of the modification fit indices and the regression weight parameter change statistics, four additional direct paths were suggested (see Figure 4). These paths were added one at a time prior to reaching the final model. A detailed comparison of model fit for the hypothesized model and all subsequent models can be found in Appendix L. Each of these new paths were supported by theoretical and empirical literature. The suggested path from authentic leadership to workplace bullying from preceptors makes theoretical sense. According to Walumbwa et al. (2008), authentic leadership is a positive leadership style that promotes a positive ethical climate, which may positively impact the workplace. This idea is supported by researchers who found perceived authentic leadership was related to positive work climates (Woolley et al., 2011) and decreased experiences of workplace bullying (Laschinger et al., 2012b; Warszewska-Makuch et al., 2015).

The path from workplace bullying from preceptors to workplace bullying from nurses is appropriate because if nursing students are experiencing bullying from the preceptor, they will likely experience bullying from other nurses on the unit. A culture of bullying is often found in the workplace, where bullying behaviours become commonplace (Lewis, 2006; Pheko, Monteiro, and Segopolo, 2017). Pheko et al. (2017) suggest workplace bullying may be influenced by organizational context and practice, such that bullying becomes normalized and bullies become invisible. Additionally, if other nurses witness the preceptor bullying the nursing student they may feel this is an acceptable way to treat the student.

Moreover, workplace bullying is characterized by repeated negative acts where a person feels powerless to defend themselves (Hoel et al., 2004). Such
experiences from nurses may lead to withdrawal intentions of nursing students, supporting the suggested path from workplace bullying from nurses to withdrawal intentions. Clarke’s (2009) non-published research thesis found nursing students who experienced bullying were more likely to report intentions to leave the nursing profession.

A person who demonstrates high psychological capital may be more committed to their profession through their ability to bounce back from adversity and remain hopeful that they can achieve their goals (Luthans, Youssef et al., 2007). Researchers have found psychological capital is related to nurses’ commitment (Luthans & Jensen, 2005), providing empirical support for the path from psychological capital to professional commitment. Including each of the four paths improved model fit ($\chi^2 (df) = 13.03 (5)$, $p = .02$, RMSEA = .07 [.03, .12], GFI = .99, NFI = .97, CFI = .98) and were theoretically plausible; therefore, this model was selected for the final model to be interpreted.

The final revised model (see Figure 4) supported two out of the original four hypotheses (see Figure 2). In other words, authentic leadership of preceptors was positively related to nursing students’ psychological capital, and professional commitment was negatively related to students’ intentions to withdrawal from the nursing profession. However, psychological capital was not related to workplace bullying from preceptors and nurses, and workplace bullying from preceptors and nurses was not related to professional commitment.
Model fit:
$\chi^2 (df) = 13.03$ (5), $p < .02$, RMSEA = .07 (.03 - .12), GFI = .99, NFI = .97, CFI = .98

Note: * Significant; NS = non significant, $p > .05$
Black lines: Original significant paths; Grey lines: Original non-significant paths; Orange lines: Added significant paths

Figure 4. Standardized beta coefficient between study variables in final model
Table 5

Comparison of model fit for hypothesized model and final model

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>p</th>
<th>df</th>
<th>RMSEA [90% CI]</th>
<th>GFI</th>
<th>NFI</th>
<th>CFI</th>
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<tbody>
<tr>
<td>Hypothesized model</td>
<td>271.80</td>
<td>.000</td>
<td>9</td>
<td>.31 [.28-.34]</td>
<td>.78</td>
<td>.38</td>
<td>.38</td>
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<tr>
<td>Final model (additional direct path from workplace bullying from preceptors to workplace bullying from nurses; authentic leadership to workplace bullying from preceptors; workplace bullying from nurses to withdrawal intentions; and, psychological capital to professional commitment)</td>
<td>13.03</td>
<td>.02</td>
<td>5</td>
<td>.07 [.03 -.12]</td>
<td>.99</td>
<td>.97</td>
<td>.98</td>
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**Estimation of path coefficients (or effects).** Analysis of parameter estimates was conducted on the final revised model (see Figure 4), and results (including unstandardized coefficients ($b$), standardized coefficients ($\beta$), critical ratio, standard error ($SE$), significance level ($p$-value), and confidence interval (CI) at the 95% level) are reported in Table 6. Each of the unstandardized path coefficients demonstrated statistical significance at the at $p < .001$ level, except for the paths from psychological capital to workplace bullying from preceptors and nurses, and from workplace bullying from preceptors and nurses to professional commitment, which were not significant.

Authentic leadership had a moderate and significant effect on psychological capital ($\beta = .350, p < .001$). A large inverse relationship between authentic leadership and workplace bullying from preceptors ($\beta = -.564, p < .001$) was found. There was a similar relationship between workplace bullying from preceptors and workplace bullying
from nurses ($\beta = .563, p < .001$). A moderate relationship was found from psychological capital to professional commitment ($\beta = .264, p < .001$), and from workplace bullying from nurses to withdrawal intentions ($\beta = .203, p < .001$). Lastly, a moderate and inverse effect was demonstrated between professional commitment to withdrawal intentions ($\beta = -.476, p < .001$).

Bootstrapping methods were employed to analyze the significance of the indirect effects in the final model (see Table 6), using standardized indirect effects at 95% confidence interval for 2000 bootstrapped samples. Statistically significant results were found for the following indirect relationships: authentic leadership had a moderate and significant indirect effect on workplace bullying from nurses ($\beta = -.346, p < .001$), professional commitment ($\beta = .156, p < .001$), and withdrawal intentions ($\beta = -.144, p < .001$). Additionally, workplace bullying from preceptors had an indirect effect on withdrawal intentions ($\beta = .166, p < .001$), and psychological capital also had an inverse indirect effect on withdrawal intentions ($\beta = -.145, p < .001$). The squared multiple correlations ($R^2$) indicate the extent to which the variance of the endogenous variable is explained by the exogenous variable (Meyers et al., 2006). These values indicate that 29.4% of the variance of withdrawal intention was explained by the model.
Table 6

Effect Estimates

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<th>Structural Paths</th>
<th>Unstandardized Coefficients ((b))</th>
<th>Standardized Coefficients ((\beta))</th>
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<td>-.176</td>
</tr>
<tr>
<td>WPB-P → WPB-N</td>
<td>.590</td>
<td>.563</td>
<td>11.727</td>
<td>.081</td>
<td>&lt;.001</td>
<td>.435</td>
</tr>
<tr>
<td>PsyCap → AC</td>
<td>.211</td>
<td>.264</td>
<td>4.708</td>
<td>.046</td>
<td>&lt;.001</td>
<td>.123</td>
</tr>
<tr>
<td>WPB-P → AC</td>
<td>-.072</td>
<td>-.092</td>
<td>-1.359</td>
<td>.070</td>
<td>.174</td>
<td>-.215</td>
</tr>
<tr>
<td>WPB-N → AC</td>
<td>-.022</td>
<td>-.030</td>
<td>-.442</td>
<td>.052</td>
<td>.658</td>
<td>-.123</td>
</tr>
<tr>
<td>WPB-N → WI</td>
<td>.233</td>
<td>.203</td>
<td>-4.189</td>
<td>.081</td>
<td>&lt;.001</td>
<td>.078</td>
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<tr>
<td>AC → WI</td>
<td>-.724</td>
<td>-.476</td>
<td>-9.809</td>
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<td>&lt;.001</td>
<td>-.985</td>
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<td>AL → WPB-P</td>
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<td>-.013</td>
<td>-.722</td>
<td>.018</td>
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<td>-.047</td>
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<td>-6.407</td>
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<td>.080</td>
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<td>4.333</td>
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<td>.051</td>
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<td>PsyCap → WI</td>
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<td>PsyCap → AC</td>
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<td>-.008</td>
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<td>WPB-N → WI</td>
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<td>.014</td>
<td>.368</td>
<td>.038</td>
<td>.681</td>
<td>-.061</td>
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Note: AL = authentic leadership; PsyCap = psychological capital; WPB-P = workplace bullying from preceptors; WPB-N = workplace bullying from nurses; AC = professional commitment; WI = withdrawal intentions

Summary

The final observed variable path analysis model supported two of the original four hypotheses; namely, authentic leadership of preceptors was positively related to nursing students’ psychological capital, and professional commitment was negatively related to students’ intentions to withdraw from the nursing profession. Despite this, psychological capital was not related to workplace bullying from preceptors and nurses, and workplace
bullying from preceptors and nurses was not related to professional commitment. In addition to the proposed hypotheses, four additional relationships were identified and demonstrated statistical significance: the relationship from authentic leadership to workplace bullying from preceptors, workplace bullying from preceptors to workplace bullying from nurses, workplace bullying from nurses to withdrawal intentions, and psychological capital to professional commitment.

Moreover, there were numerous indirect relationships that reached statistical significance. Authentic leadership was indirectly related to workplace bullying from nurses, through the mediating effect of workplace bullying from preceptors; however, the indirect relationship between authentic leadership to workplace bullying from preceptors was not statistically significant. Authentic leadership also had an indirect relationship to professional commitment, and participants’ withdrawal intentions. Workplace bullying from preceptors had an indirect effect on withdrawal intentions, through workplace bullying from nurses. Professional commitment mediated the inverse relationship between psychological capital to withdrawal intentions, such that as participants’ psychological capital increased, their withdrawal intentions decreased through the effect of increased professional commitment.
Chapter V: Research Discussion and Implications

A discussion of the key study findings is presented in this chapter. Additionally, implications for nursing practice, education, research and theory, recommendations for future research, and limitations of the study are considered.

Discussion of Key Study Findings

The purpose of this study was to test a model linking perceived authentic leadership of preceptors with psychological capital, workplace bullying, professional commitment, and withdrawal intent of fourth-year nursing students from Ontario universities. It was hypothesized that nursing students’ reporting greater perceived authentic leadership of their preceptors would report increased psychological capital, decreased workplace bullying from preceptors and nurses, increased professional commitment, and decreased withdrawal intent. To our knowledge, the results presented are the first to demonstrate a link between perceived authentic leadership of preceptors to fourth-year nursing students’ experiences of workplace bullying.

Authentic leadership is a timely and urgently needed leadership style that may address current health care concerns (Shirey 2006; Wong & Cummings, 2009a), such as workplace bullying. Workplace bullying is negatively affecting nursing students and patients. Nursing scholars identified patient safety and care is at risk due to bullying among nurses, and between nursing students and nurses (Clarke, 2009; Randle, 2003; Tee et al., 2016), and ultimately influencing students’ withdrawal intentions (Clarke, 2009). Stevenson et al. (2006) suggested nurses are morally obligated to address bullying experienced by nursing students. In the following section a summary of the hypothesized model, authentic leadership and its influence on workplace bullying and psychological
capital, psychological capital and its influence on professional commitment, and predictors of withdrawal intent and indirect effects is presented.

**Summary of the hypothesized model.** The results of this study supported the original hypotheses; such that, perceived authentic leadership of preceptors had a positive effect on nursing students’ psychological capital ($\beta = .350, p < .001$), and nursing students’ professional commitment had a negative effect on their intentions to withdrawal from the nursing profession ($\beta = -.476, p < .001$). More specifically, as nursing students’ perceptions of their preceptors’ authentic leadership increased, so did their self-reported psychological capital. Additionally, as nursing students’ professional commitment increased, their intentions to withdraw from the nursing profession decreased. While this is the first known study to link these concepts using a sample of Canadian nursing students, other researchers have measured similar variables. For example, Peterson et al. (2012) examined a USA military organization and found authentic leadership positively predicted psychological capital ($\beta = .62, p < .001$). And, McCormack et al. (2009) found the affective commitment of Chinese school-teachers predicted their intention to leave the organization ($\beta = -.19, p < .001$). Despite the similarities between study results, it is difficult to make direct comparisons due to the obvious differences in study participants between Canadian nursing students, and USA military and Chinese school-teachers.

Results from the current study offer new insight into the leadership practices of preceptors, and nursing students’ commitment and intent to remain in the nursing profession.

Although two hypotheses were supported in the original model, two hypotheses did not achieve statistical significance. Psychological capital did not predict nursing
students’ experience with workplace bullying from preceptors or nurses. As well, workplace bullying from preceptors and nurses did not predict professional commitment. The reasons for these findings are unclear; however, it is suspected that the shortened version, reverse coded-items, and low reliabilities of the psychological capital questionnaire may have contributed to the lack of statistical significance. Laschinger and Nosko (2015) did not find statistically significant support for their model examining the relationship between new nurse graduates’ experience of workplace bullying and post-traumatic stress disorder symptomology through the mediating effect of psychological capital. No research studies were found in the nursing education literature that linked workplace bullying to professional commitment, despite well documented links between workplace bullying experienced by nursing students and withdrawal intentions (Birks et al., 2017; Clarke, 2009; Federizo, 2009; Tee et al., 2016). While the results of the current study were surprising, this is the first study to explore such concepts with a sample of Canadian nursing students; therefore, the lack of statistical significance between the hypothesized relationships could be the result of the exploratory nature of the study.

Due to the exploratory nature of the study, post hoc testing was considered and resulted in four additional paths. These paths demonstrated theoretical and statistical significance; namely, 1. authentic leadership to workplace bullying from preceptors; 2. workplace bullying from preceptors to workplace bullying from nurses; 3. workplace bullying from nurses to withdrawal intentions; and, 4. psychological capital to professional commitment.

In this study, authentic leadership negatively predicted workplace bullying from preceptors ($\beta = -.564, p < .001$), such that as nursing students perceived their preceptors
to have increased levels of authentic leadership, their experiences with workplace bullying from their preceptor decreased. Authentic leadership is a positive leadership theory that enhances positive emotions and morale within the workplace (May et al., 2003). Thus, it is reasonable to suggest nursing students who perceive their preceptor to be an authentic leader will have a more positive experience in the workplace. Findings from the current study provide preliminary support for Yokoyama et al. (2016) who suggested authentic leadership might have a direct effect on nurses’ experiences of workplace bullying.

In contrast, nursing students’ experience of workplace bullying from preceptors predicted their experience of workplace bullying from nurses ($\beta = .563, p < .001$). This finding lends itself to the idea of toxic work cultures that may consciously or unconsciously support negative behaviours (Pheko et al., 2017). As well, the preceptor’s attitudes and behaviours toward the nursing student may set a precedent to how others perceive and treat the student. Last and Fulbrook (2003) found that if the leader felt students were good and positive, nursing students reported that this attitude would “filter through the whole clinical area” (p. 453), supporting the findings presented here.

Alarmingly, nursing students’ experience of workplace bullying from nurses predicted their withdrawal intentions from the nursing profession ($\beta = .203, p < .001$). Although alarming, this is not surprising given findings from other researchers who discovered that nursing students contemplated leaving the nursing profession because of negative work cultures (Last & Fulbrook, 2003). Similarly, other researchers identified that satisfaction with clinical staff and treatment nursing students experienced influenced their decisions to work in nursing after graduation (Clements et al., 2016; Ujvarine et al., 2016).
These findings highlight the need to develop preceptors’ authentic leadership to minimize nursing students’ experience of bullying from nurses, thus a possible decreased intent to withdrawal from the nursing profession.

In light of the previously stated study findings, developing preceptors’ authentic leadership might also improve nursing students’ psychological capital. This is important because nursing students’ self-reported psychological capital unexpectedly predicted their professional commitment ($\beta = .264, p < .001$). These findings are similar to Chinese researchers, Peng et al. (2013), who linked psychological capital to nurses’ organizational commitment ($\beta = .73, p < .001$). No studies were found that linked psychological capital of nursing students to their professional commitment. Therefore, the current study results contribute to new nursing knowledge by providing preliminary support to suggest nursing students’ professional commitment is influenced by authentic leadership and psychological capital.

**Authentic leadership and its influence on workplace bullying and psychological capital.** This is the first known study to examine perceived authentic leadership of preceptors with a sample of fourth-year nursing students. Denver et al. (2015) examined nursing students’ perceptions of their own authentic leadership, but they did not find statistically significant results. This outcome was thought to be a consequence of nursing students not having formal leadership experience. Additionally, self-reported leadership measures may increase the risk of social desirability response bias (Polit & Beck, 2017). Canadian researchers examined authentic leadership of preceptors; however, they used a sample of new nurse graduates (Giallonardo et al., 2010). As stated previously, literature examining new nurse graduates is comparable to
studies about fourth-year nursing students because both groups are novices in the profession, and both are working on developing professional skills, knowledge and abilities. Giallonardo et al. (2010) found new nurse graduates perceived their preceptors to have moderate levels of authentic leadership ($M = 3.05, SD = 0.62$), which is consistent with findings in this study.

Current study findings provide early evidence to suggest nursing students perceive their preceptors to possess high levels authentic leadership ($M = 3.21, SD = 0.76$), consistent with Avolio’s et al. (2004) conceptualization of authentic leadership. This is an important finding because it increases understanding about the student and preceptor relationship. It also supports the idea that preceptors are engaging in authentic leader behavior. Given the connections made between authentic leadership and workplace bullying, the results of the current study provide important information about how the preceptored learning environment can be strengthened.

**Workplace bullying.** Researchers have discussed the need for authentic leadership in relation to nurses’ and new nurse graduates’ experience with bullying (Chachula et al., 2015; Yokoyama et al., 2016). Despite this, no published research studies were found that linked authentic leadership to nursing students’ experience of bullying. In the current study, perceived authentic leadership was significantly and negatively related to workplace bullying from both preceptors ($r = -.58, p < .01$) and nurses ($r = -.32, p < .01$), such that as nursing students’ perceptions of their preceptors’ authentic leadership increased, their experiences with workplace bullying decreased. While no studies were found that linked perceived authentic leadership of preceptors to nursing students’ experience of workplace bullying, researchers examined the
relationship between authentic leadership of supervisors to new nurse graduates’ experiences of workplace bullying (Laschinger et al., 2012b; Laschinger & Fida, 2014). Although not the same population, fourth-year students are soon-to-be new nurse graduates and they are a reasonable comparator. Similar to the current study findings, researchers found authentic leadership of supervisors was related to lower levels of workplace bullying (Laschinger et al., 2012b; Laschinger & Fida, 2014). The results relating to the hypothesized relationships among study variables are evidence of the role authentic leadership plays in relation to nursing students’ experience with workplace bullying from preceptors and nurses.

Researchers suggest preceptors have the ability to create authentic connections between nursing students and other health care staff (Myrick et al., 2010; Myrick et al., 2011). This supports the strong correlation found in the current study between nursing students’ experience of workplace bullying from preceptors and nurses ($r = .58, p < .01$). Similarly, Giallonardo et al. (2010) identified a relationship between authentic leadership and nurse-nurse interaction, and new nurse graduates were more satisfied and engaged in their work when they perceived their preceptors to be authentic leaders. To our knowledge, this is the first study to examine nursing students’ experience of workplace bullying independently from nurses and preceptors.

The rates of bullying experienced by nursing students varies in the literature. For example, 95.6% of USA nursing students’ experienced bullying during clinical and classroom experiences (Cooper et al., 2009); however, these researchers did not distinguish between clinical practice and classroom settings, making comparisons difficult. More recently, 50% of Australian and 35.5% of UK nursing students were
found to experience violence and bullying (Birks et al., 2016). Despite the similarities, uncritical comparisons to the current study are cautioned as the authors did not use the Negative Acts Questionnaire-Revised to measure bullying, and nursing students were not from North America. This study provides a unique Canadian perspective of fourth-year nursing students’ experience of workplace bullying during preceptorship.

While research on nursing students’ experiences of bullying during clinical placements has increased, research about bullying during preceptorships is lacking. In this study, nursing students reported low levels of bullying from preceptors and nurses ($M = 1.39, SD = 0.71$; $M = 1.55, SD = 0.74$); however, $6.2\% (n = 19)$ and $6.8\% (n = 21)$ reported moderate or high levels of bullying ($\geq 3.0$) from preceptors and nurses respectively, indicating nursing students are experiencing bullying behaviours from preceptors and/or nurses once a month to weekly. This is especially concerning given the well documented negative consequences of bullying on nursing students, such as low self-esteem and self-confidence, feelings of powerlessness, belittlement, humiliation, anxiety, stress and anger (Foster et al., 2004; Hoel et al., 2007; Randle, 2001; 2003).

The single-item self-labeling measure that provides a definition of bullying was used to gain a more balanced understanding of workplace bullying experienced by nursing students. Similar to the questionnaire, participants in this study reported low levels of bullying from both preceptors ($M = 1.34, SD = 0.94$) and nurses ($M = 1.45, SD = 0.82$). Perceptions of bullying (self-labeling measure) was highly, positively and significantly related to nursing students’ exposure to negative behaviours by preceptors ($r = .73, p < .01$) and nurses ($r = .63, p < .01$). Such that, as nursing students’ perceptions of being bullied increased, so did their reports of experiencing negative acts from
preceptors and nurses. This result provides evidence to suggest nursing students are not only experiencing negative behaviours in the workplace, but they also self-label themselves to be targets of bullying (Nielsen, Notelaers & Einarsen, 2011). Clarke’s (2009) dissertation also examined the self-label bully item and found nursing students did not perceive themselves to have been bullied, despite reports of experiencing higher levels of negative acts as identified in the questionnaire. However, the researchers collapsed the four responses into two categories, bullied and not bullied, which may explain the unique findings.

While reports of bullying in this study are low, anecdotal reports suggest bullying is a widespread epidemic. The low reports of bullying in the current study could be a consequence of underreporting. Numerous researchers found nursing students did not report the bullying behaviour for fear of failure (Clarke, 2009), being victimized (Birks et al., 2017), not being in control of their emotions (Hoel et al., 2007), and fear that nothing would be done (Birks et al., 2017; Clarke, 2009). Other nursing students stated they did not report the bullying behavior because of the organizational culture, lack of support, power imbalances (Ferns et al., 2009), feelings of shame, and others not believing them (Hoel et al., 2007). While some of these reasons might lend themselves to reporting the incident to an authority, other reasons, such as feeling shameful, fear of failure, and not being in control of emotions might have impacted nursing students’ responses to the questionnaire, resulting in lower than anticipated rates of bullying.

Researchers identified that nursing students were more likely to experience bullying or harassment in the hospital setting compared to community or aged care settings (Birks et al., 2017; Budden et al., 2017). Similarly, Ferns et al. (2009) found the
majority of nursing students experienced bullying in adult nursing, compared to mental health and pediatric units. Despite strong support from the literature, results from the current study did not find statistically significant differences between workplace bullying from nurses or preceptors by practicum setting. Additionally, there was no statistically significant difference in the main study variables by sex. Comparatively, Australian researchers did not find a statistically significant difference between rates of bullying between male and female nursing students (Birks et al., 2017). While this was an unexpected finding, it may have been because of the unequal sample distribution between demographic variables, such as practicum setting and sex.

**Psychological capital.** Although there was a significant relationship between psychological capital and workplace bullying from preceptors \((r = - .24, p < .01)\) and nurses \((r = - .19, p < .01)\), the relationship was weaker than the relationship between authentic leadership and workplace bullying. This suggests authentic leadership has a stronger influence on workplace bullying than psychological capital. The relationship between authentic leadership and workplace bullying has been supported in nursing (Laschinger et al., 2012b; Laschinger & Fida, 2014; Read & Laschinger, 2013) and non-nursing literature (Warszewska-Makuch et al., 2015); whereas, research linking psychological capital to workplace bullying (Cassidy et al., 2014; Laschinger & Grau, 2012), is limited. Additionally, a moderate relationship was found between nursing students perceived authentic leadership of preceptors and nursing students reported psychological capital \((r = .35, p < .01)\).

Overall, moderate levels of psychological capital were reported by nursing students \((M = 4.67, SD = 0.66)\). Liao and Liu (2016) found Chinese nursing students’
psychological capital was $M = 4.33$, $SD = 0.72$, and Woo and Park (2017) identified South Korean nursing students reported moderate levels of psychological capital ($M = 4.27$, $SD = 0.71$). Despite similarities between these and the current study findings, both studies were conducted outside of Canada. The unique cultural and social practices of Canadian nursing students may affect direct comparisons. Canadian researchers, Boamah and Laschinger (2015), found new nurse graduates reported high levels of psychological capital ($M = 5.16$, $SD = 0.67$); however, nurses’ professional experiences may have influenced perceptions of their psychological capital.

**Psychological capital and its influence on professional commitment.** While no studies were found that linked psychological capital to the professional commitment of nursing students, some researchers found support to suggest psychological capital is related to nurses’ organizational commitment (Luthans & Jensen, 2005) and nurses’ turnover intent (Laschinger, Grau, et al., 2012; Luthans & Jensen, 2010). In this study, a significant and moderate relationship between nursing students’ psychological capital and professional commitment ($r = .29$, $p < .01$) was found, suggesting as nursing students’ psychological capital increased, so did their professional commitment. Focusing on strategies to improve nursing students’ psychological capital, such as working with a preceptor who is an authentic leader, might be an important strategy in strengthening nursing students’ commitment to the nursing profession.

Nursing students were found to have high levels of professional commitment ($M = 3.51$, $SD = 0.56$), suggesting nursing students do in fact feel committed to the profession, and stay in nursing because they want to (Blau, 2006; Meyer et al., 1993). Meyer, et al. (1993) found the occupational commitment of nursing students was related
to intentions to remain in the profession. In the only known study to explicitly measure nursing students’ professional commitment, Meyer et al. (1993) found intention to remain in the nursing profession positively correlated with affective commitment. Similarly, there was a strong and significant inverse relationship between nursing students’ professional commitment and their intentions to leave the nursing profession ($r = -.50, p < .01$). Overall, nursing students in the current study reported low levels of withdrawal intent ($M = 1.70, SD = 0.84$); however, 5.4% ($n = 16$) thought about leaving the nursing profession. These findings are important because although the percentage of students contemplating exiting the nursing profession is low, any lost nursing student, especially when it is due to workplace bullying, is significant and troubling.

**Predictors of withdrawal intent and indirect effects.** In the final model, authentic leadership predicted withdrawal intention through two distinct pathways; through, 1. workplace bullying from preceptors to workplace bullying from nurses, and 2. psychological capital to professional commitment ($\beta = -.144, p < .001$). Additionally, increased perceptions of preceptors’ authentic leadership predicted lower rates of bullying from nurses through the mediating effect of workplace bullying from preceptors experienced by nursing students ($\beta = -.346, p < .001$). This suggests that authentic leadership of preceptors indirectly influenced nursing students’ experience of workplace bullying from nurses through the experience of bullying from preceptors. For example, if nursing students perceived their preceptors to be authentic leaders, then they would experience decreased bullying from the preceptor, which would result in decreased experiences of bullying from other nurses. Moreover, workplace bullying from preceptors had a small indirect effect on withdrawal intentions through workplace
bullying from nurses ($\beta = .166, p < .001$). These are important study findings because they offer insightful information to suggest that if preceptors engage in authentic leader behavior, this may decrease nursing students’ experiences of bullying from the preceptor and nurses, in turn leading to decreased intentions to withdrawal from the nursing profession.

Authentic leadership may also be an important strategy in increasing nursing students’ professional commitment, through the mediating effect of psychological capital ($\beta = .156, p < .001$). Psychological capital was also shown to have an indirect effect on nursing students’ withdrawal intentions through their professional commitment ($\beta = -.145, p < .001$). This finding further supports the idea that perceived authentic leadership of preceptors may increase nursing students’ intentions to remain in the nursing profession after graduating through increasing nursing students’ psychological capital and professional commitment.

In summary, as far as we know our study is the first to address important gaps relating to authentic leadership in the current nursing education literature. Numerous studies highlight the importance of authentic leadership in nursing (Wong & Cummings, 2009a) and nursing education (Waite, Mckinney, Smith-Glasgow & Meloy, 2014) to address current health care and educational needs; however, no studies were found that examined authentic leadership during preceptorship. Preceptorship is a crucial time in nursing education, where nursing students are immersed in the health care culture and work alongside an RN without the direct support of a clinical facilitator. While this can be a very positive experience, some researchers have reported it can also be one of the most stressful experiences for nursing students (Myrick et al., 2010; Yonge et al., 2002),
as they may experience conflict (Mamchur & Myrick, 2003), or worse, bullying behaviours (Birks et al., 2017). Researchers have identified that a negative clinical experience may influence nursing students’ intentions to remain in the nursing profession after graduation (Clarke, 2009).

The findings in this study highlight important information about the preceptored experience. Nursing students were found to not only perceive their preceptors to have moderate levels of authentic leadership, but such perceptions were related to decreased withdrawal intentions from the nursing profession. Nursing students reported experiencing workplace bullying from their preceptors and nurses, which contributed to increased withdrawal intentions. Despite these grim findings, this study also found that when preceptors were perceived to be authentic leaders, nursing students’ experiences of workplace bullying from preceptors and nurses decreased, and their psychological capital and professional commitment increased. Given the current global nursing shortage crisis (International Council of Nurses, 2006), and well documented negative consequences of workplace bullying for both the individual and organization, the results of this study are timely and urgently needed as they have important implications for nursing education, practice, leadership and theory, as well as, future research.

**Implications for Nursing Education, Practice, Leadership, and Theory**

As stated previously, these study findings provide unique and preliminary evidence to support Avolio et al.’s (2004) theory of authentic leadership to fourth-year nursing students’ experience with workplace bullying and withdrawal intentions. Results from this study contribute practical information for nursing education, practice, leadership and theory.
Implications for nursing education. These study findings have important implications for nursing education as they shed further light into the topic of preceptorship. This study provided evidence to support the idea that preceptors are able to create authentic connections between nursing students and experienced nurses as predicted by Earle et al. (2011). Preceptors, who can be considered authentic leaders, have the opportunity to be positive role models to nursing students, which can promote the development of closer professional relationships, thus decreasing negative conflict and workplace bullying (Earle et al., 2011).

Nursing students are experiencing workplace bullying from preceptors and nurses; however, when they perceive their preceptor to be an authentic leader, experiences of bullying decrease. Thus, nursing education leaders are urged to use the findings from this study to create an authentic leadership development workshop for preceptors. This workshop could also be extended to clinical instructors and faculty advisors. Developing preceptors’ authentic leadership is an important strategy in improving the preceptored experience for nursing students, which may subsequently improve patient care as well. Lewis (2006) asserts that bullying is a learned behavior. This idea is supported by Hoel et al. (2007) who found nursing students became “harder and more resilient” when they encountered bullying; however, they stated this was a negative reaction and may contribute to the reproduction of bullying. Similarly, Randle (2003) identified that students who were initially upset that bullying existed between nurses and patients, nurses and students, and among other nurses, had “begun to use their own power in the hierarchy of health care, often at the expense of patients” (p. 398) by the end of the program. Improving preceptors’ authentic leadership will not only benefit
nursing students and patients, but may also improve the preceptors’ experience, thus strengthening partnerships between educational institutions and clinical placements.

**Implications for nursing practice.** Results from this study suggest workplace bullying may be a more widespread issue as evidenced by nursing students’ reports of experiencing bullying from nurses in the clinical placement. In fact, nursing students reported the rate and severity of bullying was slightly higher from nurses compared to preceptors. When a culture of bullying is present in an organization, such negative behaviours become accepted as normal behavior (Lewis, 2006; Pheko et al., 2017). Other researchers have reported similar trends. For example, bullying was identified among nurses and between nurses and students, which was putting patient safety at risk (Clarke, 2009; Randle, 2003; Tee et al., 2016).

In addition to patient safety, a culture of bullying also impacts nursing students’ intentions to remain in the nursing profession. In this study, nursing students who reported increased bullying from nurses, were more likely to report withdrawal intentions. This is a significant finding for nursing practice as it may influence recruitment and retention of nursing students. Additionally, nursing students’ intentions to withdraw might be followed by their actual departure from the nursing profession, which would perpetuate the nursing shortage crisis. It has been documented that nurse turnover costs an average of $25,000, with the majority of the cost going to recruitment efforts (CNA, 2009). Policymakers are challenged to implement mandatory authentic leadership development for nurse managers as engagement in such a program might promote a more positive work culture. According to Avolio et al. (2004), followers become more authentic by the role modeling of their leaders, which in turn, eventually
creates an authentic organizational culture (Avolio et al., 2004). Therefore, if nurse managers are perceived to be authentic leaders, the positive leadership behavior may filter down to other nurses and staff in the specific clinical area, thus promoting a more positive environment of benefit to nurses, patients, and students. Additionally, this may improve the student experience, leading to a decrease in their intent to withdrawal from the nursing profession, and may lead to improved recruitment efforts of organizations. Lastly, this strategy may also improve turnover intent of nurses.

**Implications for nursing leadership.** Nursing leaders are being asked to develop and test an authentic leadership development workshop for preceptors and nurse managers. Interested and inspired leaders are encouraged to read Avolio, Griffith, Wernsing, and Walumbwa’s (2009) book chapter on *What is authentic leadership development?* Avolio et al. (2009) highlight that leaders are not born, rather they are developed. Through a review of the leadership literature, they found that leadership interventions generally had a positive effect, even when the intervention was brief. This is an important consideration when developing a workshop for preceptors and nurse managers, as their availability in terms of time may be limited. It is clear from this and other studies, that authentic leadership is a worthy and timely leadership approach that may improve the clinical environment for nurses, patients, and students.

**Implications for nursing theory.** Lastly, this study also contributes to new knowledge relating to nursing theory. For example, how authentic leadership theory improves our understanding of the student-preceptor relationship. While research relating authentic leadership to nurses and nurse managers is gaining momentum (Adil & Kamal, 2016; Alilyyani, Wong, & Cummings, 2018); Bamford et al., 2013; Giallonardo
et al., 2010; Wong & Laschinger, 2013), research aligning authentic leadership to nursing students and preceptors is scarce. This study expands our knowledge about authentic leadership in nursing, and more specifically within nursing education. Preceptors are exhibiting authentic leadership behaviours, which appear to be contributing to more positive learning environments for nursing students. Nurse leaders are encouraged to further research this positive leadership approach.

**Future Research**

While this study addressed some of the gaps within the literature pertaining to preceptorship, it also unearthed further gaps that need to be explored. As previously stated, researchers could develop an authentic leadership development intervention study that measures preceptors’ authentic leadership before and after a workshop. Additionally, Avolio et al. (2004) suggested there are additional mechanisms that are necessary for building lasting relationships between the leader and the follower, such as trust. Future research might include trust as an antecedent or outcome to perceived authentic leadership of preceptors by nursing students. Canadian researchers identified a link between perceived authentic leadership of managers to nurses’ trust in their leaders (Wong & Cummings, 2009b; Wong et al., 2010; Wong & Giallonardo, 2013). Researchers might examine how trust in the leader affects nursing students’ experience of workplace bullying from both the preceptor and nurses.

The purpose of this study was to examine the influence of authentic leadership on nursing students’ experience with workplace bullying and their withdrawal intentions during a final preceptorship; however, it may be important to investigate other possible outcomes of workplace bullying experienced by fourth-year nursing students, such as
post-traumatic stress disorder. As well, it is suspected the reporting behaviours of nursing students may have influenced the rates of workplace bullying; thus, research examining or exploring nursing students’ experiences of workplace bullying and their reporting behaviours in research studies is important.

Quantitative study designs are important and contribute to new nursing knowledge by providing generalizations about specific populations (Pedhazur & Pedhazur-Schmelkin, 1991; Polit & Beck, 2008); however, it may also be meaningful to explore nursing students’ experiences of the preceptorship through a qualitative analysis. This may provide rich data and a deeper understanding of nursing students’ experiences. Moreover, qualitative researchers might also explore nursing students’ suggestions about how workplace bullying might be addressed by schools of nursing.

Another suggestion for future research is to use a multidimensional approach to measuring nursing students’ commitment to the nursing profession, as this may provide a more balanced understanding of students’ professional commitment. For instance, research on the four dimensions of commitment; namely, affective, normative, limited alternatives, and accumulated costs is warranted (Blau & Holliday, 2006).

Lastly, while the majority of nursing students reported low intentions to withdraw from the nursing profession, some students reported they had considered leaving the profession. A longitudinal cohort study, measuring fourth-year nursing students’ experience of workplace bullying and withdrawal intentions, and into their first two years of practice, would provide invaluable information about workplace bullying and withdrawal intentions of nursing students. For example, this may provide important information about whether intent to withdrawal is a predictor of actual withdrawal from
the nursing profession within the first two years of practice. Chachula et al. (2015) identified that nurses, who left the nursing profession within the first five years of practice, reported experiencing bullying as a nursing student, and such experiences continued into the first year of practice.

Limitations

The findings must be viewed and interpreted with caution as there are limitations, despite careful consideration to study methods and study variables. For instance, self-report questionnaires are cost effective and less time consuming; however, there is potential for response bias (Polit & Beck, 2008), thus a study limitation is the use of a self-report questionnaire. A poor response rate and small sample size limits the generalizability of study findings. Moreover, the sample population was from a specific geographical area, which also limits generalizability. Additionally, there are limitations with regards to the selected study variables. There may be other unknown and unmeasured variables that may contribute to the relationships examined between the main variables in the study. For instance, as previously stated, trust might be an important concept to consider when measuring preceptors’ authentic leadership.

Numerous researchers suggest that when psychological states, such as psychological capital, are being examined it is important to measure them over a period of time (Culbertson et al., 2010; Luthans et al., 2007; Norman et al., 2010a; Sweetman et al., 2011). Psychological capital is state-like and is very open to change; therefore, participant responses may vary over time. Subsequently, a cross-sectional research design may be considered a limitation. Common method variance is another possible limitation of this study, as participants answered the questionnaire at one point in time.
using common methods (Field, 2009; Kline, 2011; Pedhazur & Pedhazur-Schmelkin, 1991).

Although good model fit was achieved, there is concern the psychological capital questionnaire was not a reliable indicator of nursing students’ psychological capital. For instance, after the reverse scored items were deleted, the subscales of hope and resilience continued to produce poor reliabilities. To be confident in the results, Path Analysis requires that instruments have strong psychometric properties (Kline, 2011; Meyers et al., 2006). Additionally, only one item remained for optimism, which might not effectively assess one’s optimism as part of the psychological capital state. Moreover, Gooty et al. (2009) cautioned that researchers should not use a single index score of an instrument that offers unbalanced items for different subscales. Future researchers examining psychological capital as a mediator might consider analyzing the individual dimensions of this construct (Laschinger & Nosko, 2015).

**Conclusion**

Knowledge generated from this study may improve the clinical learning environment for nursing students, particularly senior nursing students who are close to graduating and becoming RN’s. This knowledge will positively impact future recruitment and retention of new nurse graduates, thereby addressing the projected nursing shortage, and improving quality of care for current and future generations. With the many challenges of today’s healthcare, it is imperative nursing students be armed with high levels of psychological capital to face such challenges upon graduation. It is essential to the future of nursing and healthcare that nursing students have adequate education in a safe and supportive environment. Through the authentic leadership of
preceptors, higher positive psychological states will increase nursing students’ professional commitment, and decrease their experiences of workplace bullying from preceptors and nurses, thereby increasing their intentions to remain in the nursing profession after graduation.
References


Dever, K.H., Roman, T.C., Smith, C.M., Bowllan, N.M., Dollinger, M.L., & Blaine, B.E. (2015). Comparing professional values and authentic leadership dimensions in


Fudge, L. (2006). Why, when we are deemed to be carers, are we so mean to our colleagues? *Canadian Operating Room Nursing Journal, 24*(4), 13-16.


Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and


Ontario Nurses’ Association (November 24, 2009). *Submission to the standing committee on social policy on bill 168, violence and harassment in the*


Environment & Health, 27(1), 63-69


Appendix A

E-mail Script for Deans and Directors

Subject Line: Invitation to participate in research

Dear [Dean/Director’s Name],

I am a doctoral candidate in the Arthur Labatt Family School of Nursing and am supervised by Dr. Mary-Anne Andrusyszyn. I am conducting a research study on the influence of authentic leadership on fourth-year nursing students’ experience of workplace bullying during preceptorship. I am requesting a short telephone meeting with you to discuss the study, request your permission to contact the fourth-year coordinator so that I may recruit fourth-year nursing students either during the last 30 minutes of a scheduled class or through e-mail. The letter of information is attached to this e-mail.

If you agree to a telephone meeting, please provide a date and time when you are available and your contact information.

Respectfully yours,

Lindsay Anderson, PhD(c)
Western University, Arthur Labatt Family School of Nursing

Research team members:
Supervisor: Dr. Mary-Anne Andrusyszyn
Advisory Committee: Dr. Heather K. Laschinger,
Dr. Carol Wong, and Dr. Yolanda Babenko-Mould
Appendix B

E-mail Script for Coordinator

Subject Line: Invitation to participate in research

Dear [Coordinator’s Name]

I am a doctoral candidate in the Arthur Labatt Family School of Nursing and am supervised by Dr. Mary-Anne Andrusyszyn. I am conducting a research study on the influence of authentic leadership on fourth-year nursing students’ experience of workplace bullying during preceptorship. I am requesting a short telephone meeting with you to discuss the study and to request your permission to recruit fourth-year nursing students either during the last 30 minutes of a scheduled class or through e-mail. The letter of information is attached to this e-mail.

If you agree to a telephone meeting, please provide a date and time when you are available and your contact information.

Respectfully yours,

Lindsay Anderson, PhD(c)
Western University, Arthur Labatt Family School of Nursing

Research team members:
Supervisor: Dr. Mary-Anne Andrusyszyn
Advisory Committee: Dr. Heather Laschinger,
Dr. Carol Wong, and Dr. Yolanda Babenko-Mould
Appendix C

E-mail Script for Recruitment
(Face-to-Face)

Subject Line: Invitation to participate in research

This e-mail is to inform you that on [date of scheduled class] during the last 15 minutes of your scheduled class, you will be invited to participate in a research study that involves completing a survey about authentic leadership and workplace bullying during the final preceptorship experience. It will take approximately 10 minutes of your time. You will have the option of completing the survey during the scheduled class time or online.

I am conducting this study as part of my doctoral research under the supervision of Dr. Mary-Anne Andrusyszyn. Other members of my advisory team are Dr. Heather Laschinger, Dr. Carol Wong, and Dr. Yolanda Babenko-Mould.

This study will be explained in greater detail on [date] and you will receive the letter of information and the survey on this day. If you have any questions, please contact me at the contact information given below.

Thank you,

Lindsay Anderson, PhD(c)
Western University, Arthur Labatt Family School of Nursing
Appendix D

Letter of Information  
(Face-to-Face)

Project Title: The Influence of Authentic Leadership on Nursing Students’ Experience of Workplace Bullying During Preceptorship

Principal Investigator: Mary-Anne Andrusyszyn, PhD, Arthur Labatt Family School of Nursing, Western University

Co-Investigators: Lindsay Anderson, PhD(c), Arthur Labatt Family School of Nursing, Western University, Heather Laschinger, PhD, Arthur Labatt Family School of Nursing, Western University, Carol Wong, PhD, Arthur Labatt Family School of Nursing, Western University, Yolanda Babenko-Mould, PhD, Arthur Labatt Family School of Nursing, Western University

Letter of Information for Classroom Participants

1. Invitation to Participate

My name is Lindsay Anderson and I am a doctoral candidate in the Arthur Labatt Family School of Nursing. My research is being supervised by Dr. Mary-Anne Andrusyszyn as well as other key faculty members noted above. You are being invited to participate in this research study about authentic leadership and workplace bullying because you are a fourth-year nursing student who is currently enrolled in a final integrative practicum and have a formal preceptor.

2. Purpose of the Letter

The purpose of this letter is to provide you with information required for you to make an informed decision regarding participation in this research.

3. Purpose of this Study

If projections are accurate, Canada will be short 60,000 nurses by the year 2022 (Canadian Nurses Association, 2009). Anecdotal reports suggest nursing students are reporting intentions to leave the profession because of the negative working environments in which they learn to become competent and confident nurses (Curtis et al., 2009; Randle, 2003). While research on workplace bullying in nursing is gaining momentum, few researchers have examined workplace bullying during preceptorship.

Preceptorship is thought to be even more stressful than the first year of employment (Myrick et al., 2010; Yonge et al., 2002). The reasons for this are not clear, however, it is suspected negative work environments and workplace bullying are contributing factors.
Researchers have found that nursing students are experiencing conflict with their preceptors and others have reported that nursing students are experiencing workplace bullying (Mamchur & Myrick, 2003; Clarke, 2009).

Preceptors, however, have the rare ability to create authentic connections with students (Earle et al., 2011). This can be done through a process called authentic leadership, which is a positive leadership style that focuses on individual strengths, rather than their weaknesses and is thought to improve morale within the workplace (Avolio et al., 2004). Preceptors must be honest, genuine, and authentic, characteristics congruent with the authentic leadership theory (Myrick & Barret, 1994). It is suspected such outcomes and characteristics contribute to positive work environments. Despite this, few researchers have examined the leadership styles of preceptors.

Psychological capital, a higher order construct consisting of hope, optimism, resilience, and self-efficacy, is thought to mediate the relationship between authentic leadership and workplace bullying (Luthans et al., 2007). Additionally, it is thought to have both a direct and indirect influence on nursing students’ professional commitment and professional commitment is suggested to influence nursing students’ intentions to withdraw from the nursing profession. To promote a healthy future in nursing and healthcare nursing students need to be educated in safe and authentic environments.

The purpose of this research study is to examine the influence of perceived authentic leadership of preceptors on fourth-year nursing students’ experience of workplace bullying from preceptors and nurses and how this might contribute to their professional commitment and intentions to withdraw from the nursing profession. Specifically, the objectives of this study are to examine if perceived authentic leadership increases nursing students’ psychological capital, thereby decreasing their experience of workplace bullying from preceptors and nurses; thus, increasing their professional commitment and intentions to remain in the nursing profession.

References:


4. Inclusion Criteria

Individuals who are English speaking, enrolled in a four-year baccalaureate nursing program at an Ontario university or partnered college, and who have a formal preceptor in a final integrative practicum are eligible to participate in this study.

5. Exclusion Criteria

Individuals who are in a post-RN or accelerated (compressed) time-frame nursing program, do not speak English, do not have a formal preceptor in a final integrative practicum, and who are not enrolled in a four-year baccalaureate nursing program at an Ontario university or partnered college are not eligible to participate in this study.

Study Procedures

The researcher will invite you to participate in this study during the last 15 minutes of a scheduled class at the university or college. If you agree to participate, you will be asked...
to complete five self-report questionnaires that will ask you to report on your preceptors’ authentic leadership, your psychological capital (hope, optimism, resilience, and self-efficacy), experience of workplace bullying from the preceptor and nurses, and your professional commitment and intentions to withdraw from the nursing profession. It is anticipated that the entire task will take about 10 minutes to complete. You have the choice of completing the task in class or online. If you choose to complete the survey in class, please place the completed survey in the envelope provided. If you choose to complete the survey online, you may do so by going to [website] and following the instructions. Your personalized code is [code].

6. Possible Risks and Harms

The nature of the research questions may trigger strong feelings or reactions, which may result in some anxiety. Should you feel upset or distressed, please contact your university’s counseling services at [universities contact information] for support. Additionally, because you are invited to participate during the last 15 minutes of a scheduled class, you may feel inconvenienced; however, you will not be expected to stay past the scheduled class time.

7. Possible Benefits

The possible benefits associated with participating in this study is knowing that you are contributing to new nursing knowledge that addresses the issue of workplace bullying towards nursing students. You may also feel satisfied knowing you are contributing to the development of a clinical authentic leadership model that aims to promote more positive clinical and work environments through increased psychological capital. The possible benefits to society may be informing future research studies that examine the recruitment and retention of nursing students and new nurse graduates, thereby addressing the projected nursing shortage. Additionally, it may inform future programs or workshops on developing preceptors’ and managers’ authentic leadership, which may help to create more positive health care environments that might impact both workers and clients.

8. Token of Appreciation

As a token of our appreciation, you will receive a $2.00 gift card to [name of local coffee shop]. The gift card will be given to all possible participants and will not be dependent on your participation.

9. Voluntary Participation
Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time with no effect on your future academic status.

10. Confidentiality

All data collected will remain confidential and accessible only to the investigators of this study and all data collected will remain anonymous. The dean/director/faculty members/ and staff will not be informed of your participation or lack of participation. No personal information will be collected; therefore, if the study is published your participation will remain anonymous. If you choose to withdraw from this study after you have already completed some of the survey, the information you provided prior to your withdrawal might be used in statistical analysis. Your research records will be stored in a locked cabinet in a secure office and will be destroyed five years after data collection.

11. Contacts for Further Information

If you require any further information regarding this research project or your participation in the study you may contact Lindsay Anderson. or Dr. Mary-Anne Andrusyszyn, .

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics (519) 661-3036, email:

12. Publication

If the results of the study are published, your name will not be used. If you would like to receive a copy of any potential study results, please contact Lindsay Anderson.

13. Consent

Completion of the survey is indication of your consent to participate.

*This letter is yours to keep for future*
Appendix E

Hard Copy Survey
The Influence of Authentic Leadership on Nursing Students’ Experience of Workplace Bullying During Preceptorship

Investigators: Lindsay Anderson, PhD(c), Dr. Mary-Anne Andrusyszyn, Dr. Heather Laschinger, Dr. Carol Wong, and Dr. Yolanda Babenko-Mould
March 2013

Instructions: The following survey items refer to your preceptor’s style, as you perceive it. Judge how frequently each statement fits his or her leadership style using the following scale:

0 = Not at all  1 = Once in a while  2 = Sometimes  3 = Fairly often  4 = Frequently if not always

My Preceptor:

<table>
<thead>
<tr>
<th>Statement</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Says exactly what he or she means</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Admits mistakes when they are made</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Encourages everyone to speak their mind</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Tells you the truth</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Displays emotions exactly in line with feelings</td>
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<td></td>
<td></td>
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<tr>
<td>6. Demonstrates beliefs that are consistent with actions</td>
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<td></td>
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<tr>
<td>7. Makes decisions based on his or her core values</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Asks you to take positions that support your core values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9. Makes difficult decisions based on high standards of ethical conduct</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Solicits views that challenge his or her deeply held positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Analyzing relevant data before coming to a decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Listens carefully to different points of view before coming to concl</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Seeks feedback to improve interactions with others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Accurately describes how others view his or her capabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Knows when it is time to reevaluate his or her positions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Shows he or she understands how specific actions impact others</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Thank you for taking the time to complete this survey, if you have any questions please contact Lindsay Anderson at landers4@uwo.ca

Instructions: Below are statements that describe how you may think about yourself right now. Use the following scales to indicate your level of agreement or disagreement with each statement. The work of the nursing student is engaging in preceptored experiences; please respond to the following statements as they relate to your experience during preceptorship.

<table>
<thead>
<tr>
<th></th>
<th>1= Strongly disagree</th>
<th>2= Disagree</th>
<th>3= Somewhat disagree</th>
<th>4= Somewhat agree</th>
<th>5= agree</th>
<th>6= Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I feel confident analyzing a long-term problem to find a solution</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I feel confident helping to set targets/goals in the preceptored environment</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I feel confident contacting people outside the preceptored environment to discuss problems</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>At the present time, I am energetically pursuing my preceptorship goals</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>There are lots of ways around any problem</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>When I have a setback in this preceptored experience, I have trouble recovering from it, moving on</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I usually manage difficulties one way or another during this preceptored experience</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. I feel I can handle many things at a time during this preceptored experience.  
9. When things are uncertain for me during preceptorship, I usually expect the best.  
10. If something can go wrong for me during this preceptored experience, it will.  
11. During this preceptored experience, things never work out the way I want them to.  
12. I approach this preceptored experience as if “every cloud has a silver lining.”

Instructions: The following behaviours are often seen as examples of negative behavior in the workplace. Over the last three months, how often have you been subjected to the following negative acts from preceptors and nurses during your preceptorship? Please circle/choose the number that best corresponds with your experience over the last three months:

<table>
<thead>
<tr>
<th>1=Never</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5=Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Someone withholding information which affects your performance</td>
<td>Preceptor</td>
<td>Nurses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 2. Spreading of gossip and rumors about you |
| 3. Being ignored or excluded |
| 4. Having insulting or offensive remarks made about your person, attitudes, or your private life |
| 5. Repeated reminders of your errors or mistakes |
| 6. Being ignored or facing a hostile reaction when you approach |
| 7. Persistent criticism of your errors or mistakes |
| 8. Practical jokes carried out by people you don't get along with |
| 9. Being shouted at or being the target of spontaneous anger |
Please share any ideas or suggestions you have about how the issue of workplace bullying can be addressed by schools of nursing:

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

Open-Ended Questions

Please add any additional information that you would like us to know about your preceptor experience:

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________
Bullying takes place when one or more persons systematically and over time feel that they have been subjected to negative treatment on the part of one or more persons, in a situation in which the person(s) exposed to the treatment have difficulty in defending themselves against them. It is not bullying when two equally strong opponents are in conflict with each other.

According to this definition, during your preceptored experience in the last three months have you been subjected to bullying by:

<table>
<thead>
<tr>
<th>Your preceptor</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No</td>
<td></td>
</tr>
<tr>
<td>2. Yes, once or twice</td>
<td></td>
</tr>
<tr>
<td>3. Yes, now and then</td>
<td></td>
</tr>
<tr>
<td>4. Yes, about once a week</td>
<td></td>
</tr>
<tr>
<td>5. Yes, many times a week</td>
<td></td>
</tr>
</tbody>
</table>
Instructions: Listed below is a series of statements that represent possible feelings that individuals might have about their occupations or professions. Consider your own feelings about your occupation or profession and indicate your degree of agreement and disagreement with each statement by choosing a number from 1-4.

1=Strongly Disagree  2=Disagree  3=Agree  4=Strongly Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nursing is important to my self-image</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I am happy to have entered the nursing profession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I am proud to be in the field of nursing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I like being a nurse</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I strongly identify with the nursing profession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I am enthusiastic about nursing</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I intend to quit the nursing profession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I intend to move to another profession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1=Never  2  3  4  5=Constantly

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I think about quitting the nursing profession</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1=Very Unlikely  2  3  4  5=Certain
Demographic Questionnaire

1. What was your age at your last birthday? ____________________

2. What is your sex?
   a. Male
   b. Female

3. What is your marital status?
   a. Single
   b. Married
   c. Common-Law
   d. Divorced
   e. Other

4. Where is your practicum setting?
   a. Medical
   b. Pediatrics
   c. Emergency
   d. Critical care
   e. Palliative
   f. Other, please specify: ________________________________

   __
Appendix F

E-mail Script for Recruitment
(E-mail)

Subject Line: Invitation to participate in research

My name is Lindsay Anderson and I am a PhD candidate in the Arthur Labatt Family School of Nursing at Western University. I am working on a research study supervised by Dr. Mary-Anne Andrusyszyn. My advisory team includes Dr. Heather Laschinger, Dr. Carol Wong, and Dr. Yolanda Babenko-Mould.

The study involves completing an online survey about authentic leadership and workplace bullying during your preceptorship experience. It will take approximately 10 minutes of your time.

If you would like to participate in this study please click on the link below to access the letter of information and survey.

[URL]

Thank you,

Lindsay Anderson, PhD(c)
Western University, Arthur Labatt Family School of Nursing
Appendix G

Letter of Information
(E-mail)

Project Title: The Influence of Authentic Leadership on Nursing Students’ Experience of Workplace Bullying During Preceptorship

Principal Investigator: Mary-Anne Andrusyszyn, PhD, Arthur Labatt Family School of Nursing, Western University

Co-Investigators: Lindsay Anderson, PhD(c), Arthur Labatt Family School of Nursing, Western University, Heather Laschinger, PhD, Arthur Labatt Family School of Nursing, Western University, Carol Wong, PhD, Arthur Labatt Family School of Nursing, Western University, Yolanda Babenko-Mould, PhD, Arthur Labatt Family School of Nursing, Western University

Letter of Information to Students Participating via Email

1. Invitation to Participate

My name is Lindsay Anderson and I am a doctoral candidate in the Arthur Labatt Family School of Nursing. My research is being supervised by Dr. Mary-Anne Andrusyszyn as well as other key faculty members noted above. You are being invited to participate in this research study about authentic leadership and workplace bullying because you are a fourth-year nursing student who is currently enrolled in a final integrative practicum and have a formal preceptor.

2. Purpose of the Letter

The purpose of this letter is to provide you with information required for you to make an informed decision regarding participation in this research.

3. Purpose of this Study

If projections are accurate, Canada will be short 60,000 nurses by the year 2022 (Canadian Nurses Association, 2009). Anecdotal reports suggest nursing students are reporting intentions to leave the profession because of the negative working environments in which they learn to become competent and confident nurses (Curtis et al., 2009; Randle, 2003). While research on workplace bullying in nursing is gaining momentum, few researchers have examined workplace bullying during preceptorship. Preceptorship is thought to be even more stressful than the first year of employment (Myrick et al., 2010; Yonge et al., 2002). The reasons for this are not clear, however, it is
suspected negative work environments and workplace bullying are contributing factors. Researchers have found that nursing students are experiencing conflict with their preceptors and others have reported that nursing students are experiencing workplace bullying (Mamchur & Myrick, 2003; Clarke, 2009).

Preceptors, however, have the rare ability to create authentic connections with students (Earle et al., 2011). This can be done through a process called authentic leadership, which is a positive leadership style that focuses on individual strengths, rather than their weaknesses and is thought to improve morale within the workplace (Avolio et al., 2004). Preceptors must be honest, genuine, and authentic, characteristics congruent with the authentic leadership theory (Myrick & Barret, 1994). It is suspected such outcomes and characteristics contribute to positive work environments. Despite this, few researchers have examined the leadership styles of preceptors.

Psychological capital, a higher order construct consisting of hope, optimism, resilience, and self-efficacy, is thought to mediate the relationship between authentic leadership and workplace bullying (Luthans et al., 2007). Additionally, it is thought to have both a direct and indirect influence on nursing students’ professional commitment and professional commitment is suggested to influence nursing students’ intentions to withdraw from the nursing profession. To promote a healthy future in nursing and healthcare nursing students need to be educated in safe and authentic environments.

The purpose of this research study is to examine the influence of perceived authentic leadership of preceptors on fourth-year nursing students’ experience of workplace bullying from preceptors and nurses and how this might contribute to their professional commitment and intentions to withdraw from the nursing profession. Specifically, the objectives of this study are to examine if perceived authentic leadership increases nursing students’ psychological capital, thereby decreasing their experience of workplace bullying from preceptors and nurses; thus, increasing their professional commitment and intentions to remain in the nursing profession.

References:


### 4. Inclusion Criteria

Individuals who are English speaking, enrolled in a four-year baccalaureate nursing program at an Ontario university or partnered college, and who have a formal preceptor in a final integrative practicum are eligible to participate in this study.

### 5. Exclusion Criteria

Individuals who are in a post-RN or accelerated (compressed) time-frame nursing program, do not speak English, do not have a formal preceptor in a final integrative practicum, and who are not enrolled in a four-year baccalaureate nursing program at an Ontario university or partnered college are not eligible to participate in this study.

### 6. Study Procedures

If you agree to participate, you will be asked to complete five self-report questionnaires that will ask you to report on your preceptors’ authentic leadership, your psychological capital (hope, optimism, resilience, and self-efficacy), experience of workplace bullying from the preceptor and nurses, and your professional commitment and intentions to
withdraw from the nursing profession. It is anticipated that the entire task will take about 10 minutes to complete. The survey will be completed online by going to [website] and following the instructions.

7. **Possible Risks and Harms**

The nature of the research questions may trigger strong feelings or reactions, which may result in some anxiety. Should you feel upset or distressed, please contact your university’s counseling services at [universities contact information] for support.

**Possible Benefits**

The possible benefits associated with participating in this study is knowing that you are contributing to new nursing knowledge that addresses the issue of workplace bullying towards nursing students. You may also feel satisfied knowing you are contributing to the development of a clinical authentic leadership model that aims to promote more positive clinical and work environments through increased psychological capital. The possible benefits to society may be informing future research studies that examine the recruitment and retention of nursing students and new nurse graduates, thereby addressing the projected nursing shortage. Additionally, it may inform future programs or workshops on developing preceptors’ and managers’ authentic leadership, which may help to create more positive health care environments that might impact both workers and clients.

8. **Token of Appreciation**

As a token of our appreciation, you will receive a $2.00 gift card to [name of local coffee shop]. The gift card will be given to all possible participants and will not be dependent on your participation. The gift card will be left with the receptionist at the school of nursing’s front desk. The receptionist will not know the study topic and you are not required to provide identification to receive the token of appreciation, as all 4th year nursing students in the program at [specific university name] will receive the gift card.

9. **Voluntary Participation**

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time with no effect on your future academic status.
10. Confidentiality

All data collected will remain confidential and accessible only to the investigators of this study and all data collected will remain anonymous. The dean/director/faculty members/and staff will not be informed of your participation or lack of participation. No personal information will be collected; therefore, if the study is published your participation will remain anonymous. If you choose to withdraw from this study after you have already completed some of the survey, the information you provided prior to your withdrawal might be used in statistical analysis. Your research records will be stored in a locked cabinet in a secure office and will be destroyed five years after data collection.

11. Contacts for Further Information

If you require any further information regarding this research project or your participation in the study you may contact Lindsay Anderson. Or Dr. Mary-Anne Andrusyszyn. If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics (519) 661-3036, email:

12. Publication

If the results of the study are published, your name will not be used. If you would like to receive a copy of any potential study results, please contact Lindsay Anderson.

13. Consent

Completion of the survey is indication of your consent to participate.

This letter is yours to keep for future reference.
Appendix H

Reminder E-mail Script for Recruitment
(E-mail)

Subject Line: Invitation to participate in research

My name is Lindsay Anderson and I am a PhD candidate in the Arthur Labatt Family School of Nursing at Western University. I am working on a research study supervised by Dr. Mary-Anne Andrusyszyn. My advisory team includes Dr. Heather Laschinger, Dr. Carol Wong, and Dr. Yolanda Babenko-Mould.

An email was sent to you four weeks ago and we wanted to send you a quick reminder about our study.

The study involves completing an online survey about authentic leadership and workplace bullying during your preceptorship experience. It will take approximately 10 minutes of your time.

If you would like to participate in this study please click on the link below to access the letter of information and survey.

[URL]

Thank you,

Lindsay Anderson, PhD(c)
Western University, Arthur Labatt Family School of Nursing
Appendix I

Final E-mail Script for Recruitment
(E-mail)

Subject Line: Invitation to participate in research

Dear Nursing Student,

My name is Lindsay Anderson and I am a PhD candidate in the Arthur Labatt Family School of Nursing at Western University. I am working on a research study supervised by Dr. Mary-Anne Andrusyszyn. My advisory team includes Dr. Heather Laschinger, Dr. Carol Wong, and Dr. Yolanda Babenko-Mould.

On (Date) we sent to you an invitation to participate in an online survey about authentic leadership and workplace bullying during your preceptorship experience. This e-mail was followed by a reminder e-mail on (Date). We would like to remind you that we welcome your participation and that the online survey will be available until May 30, 2013.

The study involves completing an online survey about authentic leadership and workplace bullying during your preceptorship experience. It will take approximately 10 minutes of your time.

If you would like to participate in this study please click on the link below to access the letter of information and survey.

[URL]

Thank you,

Lindsay Anderson, PhD(c)
Western University, Arthur Labatt Family School of Nursing
Appendix J

Western Research Ethics Board Approval
Appendix K

Descriptive Variable Results: Psychological Capital Questionnaire Reverse Items and Deleted Items

<table>
<thead>
<tr>
<th>Variable</th>
<th>α</th>
<th># Items</th>
<th>M (SD)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic Leadership Questionnaire</td>
<td>.95</td>
<td>16</td>
<td>3.21 (0.76)</td>
<td>0.38-4.0</td>
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<tr>
<td>Relational transparency</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internalized moral perspective</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Balanced processing</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-awareness</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Capital Questionnaire With reverse items</td>
<td>.74</td>
<td>12</td>
<td>4.54 (0.59)</td>
<td>2.0-5.8</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>-.59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Capital Questionnaire With items 6, 10, and 11 deleted</td>
<td>.80</td>
<td>9</td>
<td>4.67 (0.66)</td>
<td>2.1-6</td>
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<tr>
<td>Self-efficacy</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>n/a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Acts Questionnaire-R Preceptor</td>
<td>.93</td>
<td>9</td>
<td>1.39 (0.71)</td>
<td>1.0-4.67</td>
</tr>
<tr>
<td>Personal</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusion</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-related</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Acts Questionnaire-R Nurse</td>
<td>.92</td>
<td>9</td>
<td>1.55 (0.74)</td>
<td>1.0-4.56</td>
</tr>
<tr>
<td>Personal</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusion</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-related</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Commitment Scale-Affective</td>
<td>.92</td>
<td>6</td>
<td>3.51 (0.56)</td>
<td>1.0-4.0</td>
</tr>
<tr>
<td>Occupational Withdrawal Instrument</td>
<td>.84</td>
<td>3</td>
<td>1.70 (0.84)</td>
<td>1.0-5.0</td>
</tr>
</tbody>
</table>
## Appendix L

### Comparison of Model Fit for Hypothesized Model and Subsequent Models

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>p</th>
<th>df</th>
<th>RMSEA (90% CI)</th>
<th>GFI</th>
<th>NFI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model</td>
<td>271.80</td>
<td>.000</td>
<td>9</td>
<td>.31 (.28 - .34)</td>
<td>.78</td>
<td>.38</td>
<td>.38</td>
</tr>
<tr>
<td>Model 2 (additional direct path from workplace bullying from preceptors to workplace bullying from nurses)</td>
<td>158.29</td>
<td>.000</td>
<td>8</td>
<td>.25 (.22 - .28)</td>
<td>.87</td>
<td>.64</td>
<td>.65</td>
</tr>
<tr>
<td>Model 3 (additional direct path from authentic leadership to workplace bullying from preceptors)</td>
<td>51.49</td>
<td>.000</td>
<td>7</td>
<td>.31 (.28 - .34)</td>
<td>.95</td>
<td>.89</td>
<td>.90</td>
</tr>
<tr>
<td>Model 4 (additional direct path from workplace bullying from nurses to withdrawal intentions)</td>
<td>34.43</td>
<td>.000</td>
<td>6</td>
<td>.13 (.09 - .17)</td>
<td>.97</td>
<td>.92</td>
<td>.93</td>
</tr>
<tr>
<td>Model 5 (additional direct path from psychological capital to professional commitment)</td>
<td>13.03</td>
<td>.02</td>
<td>5</td>
<td>.07 (.03 - .12)</td>
<td>.99</td>
<td>.97</td>
<td>.98</td>
</tr>
</tbody>
</table>

Lindsay Anderson, RN, PhD (c)  

Curriculum Vitae

EDUCATION

2010-Present  Western University, Nursing  
Ph.D. (c), Concentration in Leadership in Nursing Education  
Expected completion date September, 2018  

2009-2010  Western University, Nursing  
MSc.N (year 1), Fast-tracked to Ph.D. program  

2005  York University, Nursing  
BSc.N, Dean’s Honor Roll  

LEADERSHIP EXPERIENCE

April 2018-Current  Sheridan College  
Oakville, ON  
Director, Clinical and Experiential Learning  

Nov. 2008-Aug. 2009  Columbia College  
Calgary, AB  
Nursing Skills Lab Coordinator  

TEACHING EXPERIENCE

May 2015-April 2018  Humber College  
Toronto, ON  
Full-time Professor  

July 2012-Dec. 2013  Sheridan College  
Oakville, ON  
Professor  

Sept. 2009-2015  Western University  
London, ON  
Graduate Teacher’s Assistant  

June 2008-Aug. 2009  Columbia College  
Calgary, AB  
Faculty  

July 2008-Aug. 2009  Columbia College  
Calgary, AB  
Clinical Facilitator  

Sept. 2007-June 2008  Mount Royal College  
Calgary, AB  
Clinical Instructor
Lindsay Anderson, RN, PhD (c)

Curriculum Vitae

NURSING EXPERIENCE

Alberta Health Services: Safeworks
Calgary, AB
Registered Public Health Nurse

Foothills Medical Center
Calgary, AB
Registered Emergency Nurse

Sept. 2006-Dec. 2006
SRT Medical Staffing
Toronto, ON
Registered Emergency Nurse

May 2005-Dec. 2006
North York General Hospital
North York, ON
Registered Emergency Nurse

RESEARCH EXPERIENCE

Western University
London, ON
Graduate Research Assistant

Nov. 2010-May 2011
SickKids Hospital
Toronto, ON
Clinical Research Nurse Coordinator

AWARDS & SCHOLARSHIPS

- Honor Society of Nursing Research Award, Western University, Nov. 2012
- Joseph and Vera Byrne Graduate Scholarships in Nursing, Western University, Sept. 2012
- Queen Elizabeth II Aiming for the Top, York University, Sept. 2001-Aug. 2002
- University of Toronto Scholarship Program for Dependents of Faculty Members, Professionals/Managers, and Research Associates, York University, Sept. 2001-Aug. 2002

AFFILIATIONS & MEMBERSHIPS

- College of Nurses of Ontario
- The Honor Society of Nursing, Sigma Theta Tau International: Iota Omicron Chapter

PUBLICATIONS & PRESENTATIONS

Lindsay Anderson, RN, PhD (c)  