Impact of Authentic Leadership on Team Psychological Safety

As Mediated by Relationship Quality.

A Dissertation Presented By

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Dedication

This journey has brought me through many twists and turns, some related to the dissertation process and some not, however all have contributed even if only indirectly to the completion of this project. I dedicate this piece of work to my family, those with us and those who have passed. To my sweet loving boy, Dylan, who left this world far too early but who left an impression on everyone he met and who gave me such strength and courage – I miss you! To the kindest and smartest man I have ever known and who has also left us before we were ready, my Dad. To my Mom who allowed me to find my own way, no matter how often she wanted to push me in a different direction. To my sister, Denise, who encourages me to keep going when I want to quit. To my life partner, Sue, who has loved me unconditionally in a way I could never have imagined and who is the solid foundation that allowed me to reach my goal. It was through her support, love and constant sacrifice that this project has reached its completion. And finally to my beautiful daughter, Marissa, who I love with all my heart. She is the heart and soul of our family and I am so proud of her each and every day. I love you all!
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Abstract

Leadership is a dynamic process with a far-reaching impact. Leadership is the process of guiding a group of individuals towards the achievement of a common goal. Healthcare leadership looks to guide staff towards the common goal of positive patient outcomes. The literature has demonstrated that staff outcomes related to the health of their work environment can impact patient outcomes. A contributor to the health of the work environment is the relational tone of the unit; this tone is partly shaped by the skill and philosophy of the leader. Relational dynamics can influence several processes, including psychological safety which is a necessary component of the aforementioned goal of positive patient outcomes. The literature has identified when levels of psychological safety are high among healthcare providers there is a reduction in error rates and an improvement in quality. This research looks to identify whether another relational faucet of the work environment, relationship quality among nurses, mediates the impact of authentic leadership on the experience of team psychological safety.
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Chapter 1 Introduction

The creation of a healthy workplace is a challenge for healthcare leaders as the patient care environment is a complex ever-changing milieu. The health of the workplace is dependent on many factors, however in the healthcare setting relational constructs play a large role. Collaboration and interdisciplinary teaming are just two examples of the relationally-based constructs in healthcare which support the need for a contextually sensitive, industry-specific investigation. An additional relationally-based construct is leadership. The impact of leadership on the relational tone of a workplace has been demonstrated in the literature, but despite this growing body of knowledge the mechanism of how leadership influences these relational dynamics is not well-understood (Cummings, et al., 2008; Cummings, et al., 2010). This study seeks to address these gaps by exploring leadership styles potential to facilitate psychological safety among nurses through the influence on relationship quality. The variables of leadership, psychological safety and relationship quality have been correlated with the provision of safe patient care (Carmelli, Brueller & Dutton, 2009; Edmondson, Bohmer & Pisano, 2001) however the interplay between the variables in the day to day functioning of the unit is not fully understood. Patient and employee outcomes are multifactorial events and require contextually driven exploration to further advance the science of healthcare management and patient safety (Laschinger, Finegan & Wilk, 2009).
Chapter 2

Disruptive behavior in the workplace:

A review of the literature

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**Aim** – To provide a review of the current behavioral terms and behavioral manifestations used to describe disruptive behavior among healthcare professionals.

**Background** - Workplace relationships are key contributors to the patient care environment. When these relationships become dysfunctional disruptive behavior may develop. Poor interpersonal behavior has been linked to adverse outcomes.

**Evaluation** – A literature search was conducted using Medline, PubMed, CINAHL, PSYCHINFO and Academic Search Premier from 2005 to 2012.

**Key Issues** - This review highlights the various labels used to describe behaviors which interfere with workplace culture. By highlighting the behavioral similarities of the labels we can shift the research agenda from a definitional standpoint to a preventative and interventional query.

**Conclusion:** Disruptive behavior remains a frequently discussed issue in the literature, with much of that literature using different labels to explain very similar behaviors. The behavioral similarities identified in this review suggest possible congruence in the interventional approach.

**Implications for Nursing Management:** Educational and remedial interventions are needed to prevent disruptive behavior. Future research will focus on the care environment, the organizational milieu and conditions supportive of healthy interpersonal behavior to identify effective interventions.

*Keywords:* Bullying, disruptive behavior, incivility, lateral violence, interpersonal relatedness, workplace behavior, healthcare.
Disruptive behavior is an umbrella term encompassing a continuum of behaviors described in the literature (Joint Commission on Accreditation in Healthcare Organizations [JCAHO] 2008, Walrath et al. 2010). The context or setting where the disruptiveness occurs indicates the product or process which is being disrupted. In the hospital setting that disruption is related to the process of quality patient care (Rosenstein & O’Daniel 2005, Walrath et al. 2010, Rosenstein & Naylor 2011, Stewart et al. 2011). At one point in the healthcare literature “disruptive” was a term used only to describe patient-related behavior. It was not until the late 1990’s that the term was found in the literature in relationship to the healthcare providers’ behavior (Pfifferling 1999, Rosenstein 2002, Weber 2004). The term appeared in greater frequency after the Joint Commission, in 2008, used the term in relationship to inappropriate behavior by the healthcare provider. The Joint Commission described this behavior as ranging from overt acts such as physical outbursts and threats, to more passive yet equally obstructive acts such as intentional lack of cooperativeness, refusal to answer questions or ostracizing others (JCAHO 2008).

Disruptive behavior is observed in industries other than healthcare, though different labels are often applied. Interpersonal deviance, counterproductive workplace behaviors (CWB), incivility, psychological aggression and verbal abuse are just a few examples (Keashly 1997, Pearson et al. 2001, Bartlett & Bartlett 2011). Some labels are found across many industries, such as bullying, whereas others are closely linked to an industry or discipline. Lateral violence is referenced primarily in the nursing literature and that literature has chronicled the historic roots of the discipline-specific phenomenon (Roberts 1983, 2000, Farrell 1997, 2001, Demarco & Roberts 2003, Daiski 2004, Griffin 2004, Tinsley & France 2004, Bartholomew 2006, Matheson & Bobay 2007, Embree & White 2010). The behavioral manifestations of lateral
violence such as verbal affront, intimidation and bullying (Farrell 1997, Roberts 1983, Griffin 2004) are equivalent to the behavioral manifestations of other forms of disruption such as incivility. In their seminal work Andersson & Pearson (1999) discussed the incivility spiral, a continuum of behaviors ranging from higher-level aggression or deviance to lower-level deviance. Incivility and rudeness are identified as low level deviance. Intimidation, bullying and mobbing are terms often described as high level interpersonal deviance due to a perceived intent to cause harm. Certainly the higher level deviant behavior offers a unique concern but in the healthcare setting all levels of incivility and aggression create the potential to “disrupt” patient care.

**Significance of the Problem**

The interdisciplinary relationship in the acute care setting has been identified as a central determinant to patient safety and positive patient outcomes (Institute of Medicine [IOM] 2000, Baker et al. 2005, Havens et al. 2010). When faced with intimidating or otherwise fear inducing behavior, a healthcare provider will have an increased incidence of medication errors (Institute for Safe Medication Practice [ISMP] 2003). The quality of the nurse practice environments have been associated with adverse events including failure to rescue and death (Friese et al., 2008). The literature is building a case which points to disruptive, hostile behavior and inadequate communication as primary barriers to practicing efficiently and safely.

**Aim**

The aim is to provide a review of the current terms and behavioral manifestations used to describe disruptive behavior among healthcare professionals. Specifically the review offers a synthesis of the many labels currently used to categorize this phenomenon with the behavioral manifestations being the unifying focus. Because disruptive interpersonal events are not
discipline specific this paper is inclusive of other disciplines in the acute care setting. This review is not limited by terminology nor discipline as the development of a comprehensive approach to address or prevent this phenomenon requires an inclusive reach.

**Methods**

The terms used to conduct this literature review include lateral violence, interpersonal relatedness, work environment, workplace behavior, disruptive behavior, bullying and incivility, healthcare and healthcare providers. Different combinations of the terms were used and the databases searched were chosen for their ability to search the medical, nursing and leadership literature. The databases included Medline, PubMed, CINAHL, PSYCHINFO and Academic Search Premier. Additional studies were obtained by using reference lists from the chosen studies. The inclusion criteria were empirical articles in English, peer-reviewed, with publication dates ranging from 2005 to 2012, however earlier relevant and seminal articles were also included as necessary to highlight a construct. Articles were accepted if behavioral manifestations were noted or if the study could contribute to managerial implications. Excluded studies were those which focused on physical forms of aggression, sexual harassment, and aggression from clients, patients or their family members. Also excluded were articles which did not specifically list behavioral manifestations or lacked leadership implications.

**Literature Review**

The disruptive behavior literature in healthcare has grown rapidly over the last decade as has the list of related labels. This overview of disruptive behavior is completed by dividing the literature according to the various labels and associated behaviors. The umbrella term “disruptive behavior” subsumes the related concepts of bullying, incivility, harassment and negative interpersonal interactions and lateral or horizontal violence. Though the antecedents,
etiologies and the process of engaging in these behaviors may vary, the expression and outcome of the behavior in the patient care setting has a high probability of being disruptive.

**Disruptive Behavior:**

The definition of disruptive behavior is broad and inclusive of the definitions and behavioral examples included in this review. Porto (JCAHO 2006) defined disruptive behavior by categorizing it as follows:

1. Refusal to cooperate
2. Unpleasant and abusive behavior
3. Physical intimidation and violence

These three categories outline a hierarchy of behaviors denoting some level of interpersonal dysfunction or aggression. This hierarchy does span from subtle to overt but unlike the Incivility Spiral described by Andersson & Pearson (1999), a cumulative escalation of behavior is not identified. Instead Porto’s definition strictly offers a means of categorizing the continuum of behavioral expressions which can be identified as disruptive.

When providers experience disruptive behavior the potential for adverse patient events has been documented (Rosenstein & O’Daniel 2005, Laschinger & Leiter 2006, Roche et al. 2010, Dupree et al. 2011, McHugh et al. 2011, Rosenstein & Naylor 2011, Stewart et al. 2011). Studies have demonstrated increased medication errors when providers feel intimidated (ISMP, 2003). Of the providers surveyed 94% believe there is a correlation between disruptive behavior and poor outcomes (Rosenstein & O’Daniel 2005). Sixty percent of the respondents were also aware of potential adverse events which could have occurred and 17% were aware of actual adverse events. A similar provider survey reported 13% knew of an adverse outcome which they believed was related to disruptive behavior (Rosenstein & Naylor 2011). This study linked
Disruptive behavior with adverse outcomes by the impact this behavior had on the individual. Over 50% of the respondents reported impaired concentration and communication secondary to the behavior (2011). The care environment is meant to provide support for interdisciplinary collaboration and communication (Baker et al. 2005). Patient outcomes are impacted by negative or disruptive events in the care environment (Aiken et al. 2002, Vahey et al. 2004, Aiken et al. 2008, Friese et al. 2008, McHugh et al. 2011). Disruptive behavior negatively impacts the quality of collegial relationships, impeding the supportive nature of the care environment (Friese et al. 2008).

Disruptive behavior is an umbrella term for many forms of interpersonal dysfunction which can occur in the care environment. A frequent behavior found in the literature is that of verbal abuse. The ISMP’s (2003) national survey identified that 48% of the respondents’ experienced verbal abuse and 16% reported physicians as the most common offender. The experience of verbal abuse has been reported to be as high as 86% however this study was conducted in response to an adverse patient outcome within one facility and included the peri-operative staff only (Dull & Fox 2010). In a multi-site emergency department (ED) survey Rosenstein and Naylor (2011) found the most common disruptive behavior included yelling, disrespectful and condescending behavior, berating in public and abusive language. Walrath et al. (2010) highlighted the broad reach of the term in their qualitative study. Having identified 168 different kinds of disruptive behavior which were ultimately grouped under 3 themes: incivility, psychological aggression and violence. The prevalence of the behaviors included in the identified subgroups will be explored under the respective heading.
Bullying

The generally accepted definition of bullying is repeated negative acts targeted towards another over a six month period of time with the intent to humiliate or ridicule. The target must feel unable to stop the attacking behavior due to a perceived power imbalance (Einarsen 2000, Salin 2003, Lutgen-Sandvik et al. 2007, Simons 2008). Prevalence rates have been fairly inconsistent over the last decade. Leymann (1996) found that 3.5 % of Swedish employees experienced harassment and bullying, Niedl (1996) reported 7.8% of hospital employees experienced bullying and similarly Einarsen and Rankes (1997) noted 7% of males reported at least 1 bullying episode weekly. Mikkelson and Einarsen (2002) found the frequency dropped from 8% with one episode per week to 2 % with two episodes per week. Over 9% of Danish healthcare workers reported bullying with a drop to 1.8% when asked about weekly occurrence (Hogh et al. 2011). Berry et al. (2012) and Laschinger et al. (2010) explored the new grad experience and found higher rates at 21.3% and 33% respectively. The former studies used the Negative Acts Questionnaire (NAQ) where as Hogh used the Bergin Bullying Indicator.

The varying prevalence rate is related to different measurement tools, comparison across different populations or industries, and cultural differences (Mikkelson & Einarsen 2001, Power et al. 2011). In addition to the different tools discrepancies also exist between measurement findings and self-labeling (Mikkelson & Einarsen 2001, Rayner et al. 2002, Lutgen-Sandvik et al. 2007). Simon’s NAQ prevalence rate was 31% however only 2.8 % self-labeled as bullying victims. If bullying is common place in a particular environment this measurement discrepancy might be explained by acculturation (Salin 2003, Lutgen-Sandvik et al. 2007). Vie et al. (2010), however, found the NAQ to be a strong predictor of self-labeling. It will be important to tease
out what is organizational acculturation versus differences in individual appraisals of a given situation (Vie et al. 2011).

Cultural differences can be found on an organizational level (Einarsen 2000) or in reference to national differences (Mikkelson & Einarsen 2001, Sidle, 2010, Power et al. 2011). A more masculine-dominated culture with a greater focus on the individual, such as the US, will have a higher prevalence of bullying. Whereas countries which are more feminine and interpersonally-focused, such as Scandinavian cultures, tend to report lower rates of bullying (Mikkelson & Einarsen 2001, Lutgen-Sandvik et al. 2007). The power divide that is expected in the workplace varies culturally and may also influence the degree of distress experienced (Sidle 2010).

Bullying has been related to negative health effects for the targeted individuals with psychological symptoms and psychosomatic complaints (Mikkelson & Einarsen, 2001, Mikkelson & Einarsen 2002, Vie et al. 2011). Bullying has also been linked to turnover within a department or organization (Simons 2008, Laschinger et al. 2009, Leiter et al. 2009, Hogh et al. 2011). Hogh and colleagues (2011) found that Dutch healthcare employees demonstrated a significant correlation between bullying, intent to leave and social support with over 9% reporting bullying within the first year post-graduation. Of those bullied “frequently” (1.8%) 47.1% had already changed jobs 2 years post-graduation and of those bullied “occasionally” (7.4%) 33.8% had changed positions 2 years out. Non-bullied participant who changed jobs was 20.7%, putting the frequently bullied employee at a 3.6 times greater likelihood of leaving. Bullying has also been linked to burnout. Laschinger et al. (2010) explored the new nurses’ experience with bullying and found that among the 33% who experienced bullying, 48.9% also scored severe on the burnout inventory.
The behavioral manifestations of bullying was explored in a large mixed methods study on the Australian nurses’ perception of bullying. The typology identified included behaviors of personal attack and erosion of professional reputation. The strategies used to bully included isolation and exclusion, intimidation and threats, and belittlement and humiliation (Hutchinson et al. 2008, Hutchinson, Vickers et al. 2010, Hutchinson, Wilkes et al. 2010). This typology is similar to the personal devaluing found by Einarsen and Raknes (1997) and included similar strategies such as social exclusion, insults and silence. Vessey et al. (2009) found the most frequent behaviors as an attempt to humiliate (78%), isolation or gossiping (59%) and excessive criticism (68%). Berry et al. (2012) used the NAQ to explore the novice nurses experiences with bullying. The items identified “withholding information, ignoring opinions or experiencing heavy workloads” were experienced to “some degree” by 87% of the respondents and 84% experienced “being ignored, gossiped about or rumored about” to “some degree”. Bailein et al. (2009) analyzed 87 different case studies across 19 organizations in Belgium and identified the most commonly expressed bullying behaviors as overly critical supervisors, personal attacks on an employee’s lifestyle and inappropriate jokes with humiliating pranks.

Incivility

In a three year mixed methods study Pearson et al. (2001) sought to develop theory with regards to incivility in the workplace and offered the following definition:

“Workplace incivility is low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others.” (p.1397).

Incivility was theoretically placed within the broader scope of antisocial and deviant behavior but with ambiguous intent. It is intent to harm which distinguishes incivility from other forms of aggression (Anderssen & Pearson 1999). The rate of incivility, similar to bullying, is
inconsistent across settings, industries and countries however it has often been grouped with the bullying or harassment literature posing further challenges to frequency determination (Anderssen & Pearson 1999; Cortina et al. 2001). Blau and Andersson (2005) compared an incivility instigator tool with another workplace deviance measure developed by Bennett and Robinson. The second tool measured more aggressive behavior than the incivility instigator tool and these findings reinforced the distinction that incivility falls short of the deviancy reserved for more aggressive interpersonal events.

Cortina and colleagues (2001) developed and tested the Workplace Incivility Scale (WIS) with employees from a US federal court system. Of the participants, 6% reported experiencing repeated episodes of incivility. Surveying students of a small university in the US, Caza and Cortina (2007) reported 76% experienced at least 1 act of incivility within the previous year. While this percentage is high, this is in line with national polling in the US. Shandwick and Tate (2011) reported 86% of those surveyed indentified a recent experience of incivility. In a similar national poll in Australia 31% of the respondents experienced incivility in just the previous month with 42% reporting a frequency of weekly (Phillips 2006). Studies exploring incivility in healthcare found that 67.5% – 77.6% of nurses experienced some amount of incivility from supervisors and coworkers respectively (Laschinger et al. 2009). When the frequency of these events was increased to “incivility on a regular basis” the reported incivility dropped to 4.4% from supervisors and 2.7% from co-workers. Similar rates were found with new nursing grads as 77% - 90% reported some level of incivility with lower rates when occurrence was listed as “frequent” (Smith et al. 2010).

The impact of incivility has personal, professional and organizational effects (Anderssen & Pearson 1999, Lim et al. 2008). Andersson and Peason have described the potential for
incivility to spiral, begetting more incivility as well as the potential for escalation to higher levels of aggression. Workgroup incivility is a potential consequence with the negative affective experience of incivility collectively encroaching on those in the work environment, extending beyond the instigator and target (Andersson & Pearson 1999, Lim et al. 2008). Hutton and Gates (2008) found a statistically significant decrease in productivity when the incivility instigator was a supervisor. The cost of employee turnover is also a concern. Empowering environments with low levels of incivility are correlated with lower levels of burnout and higher retention outcomes (Spence-Laschinger et al. 2009). Generational difference in nurses’ response to incivility was found with Generation X (1961-1981) experiencing higher levels of distress than Baby Boomers (1943-1960) (Leiter et al. 2009, Leiter et al. 2010).

The Veteran’s Health Administration (VHA) developed an intervention called CREW (Civility, Respect and Engagement in the Workplace) in response to incivility being correlated with staff turnover (Osatuke et al. 2009). Leiter et al. (2011) noted an improvement in civility scores through the CREW intervention is correlated with a decrease in burnout. Within this same quasi-experimental study the role of incivility in moderating the effect of stressors and job strain was explored (Oore et al. 2010). The negative effect of workload and job strain on health was stronger in the units with more incivility. After 6 months of CREW intervention this ability to impact health negatively was weaker. These findings support the already established literature on negative health effects of high workloads (Lim et al. 2008) and also demonstrate potential protective effects of a civil and healthy work environment.

The behavioral manifestations of incivility are similar to other identified subgroups. Felblinger (2009) describes incivility as a form of harassment which violates the respect boundary in a given setting. It is the setting which determines the cultural norms and therefore
decides what behavior is appropriate (Baron & Neuman 1996, Andersson & Pearson 1999). Baron and Neuman identified the most frequent forms of incivility in the workplace as verbal, passive, and direct without an overt plan to cause harm; such behavioral examples include the silent treatment and belittling. The nurse faculty of a phenomenological study reported more negative than positive relationships and referenced the familiar phrase of seasoned nurses “eat their young” as a representation of the new educator experience. Specific behavioral examples of incivility included belittling, disrespectful behavior and back stabbing (Gazza 2009).

Cortina and colleagues’ (2001) WIS scale identifies incivility as the experience of condescending language, demeaning, derogatory and unprofessional behavior as well as attempts to ostracize or exclude. Martin and Hine (2005) tested a multidimensional incivility tool, Uncivil Workplace Behavior Questionnaire (UWBQ), which grouped uncivil behavior by hostility (aggressive tone of voice), privacy invasion (reading private communications), exclusionary behavior (withholding information) and gossiping. Additional examples include a lack of common courtesy, rudeness, berating colleagues, belittling others, ignoring others or behaving unprofessionally (Felblinger 2009).

**Harassment and Negative Interpersonal Interactions**

The harassment literature describes behavior which is psychologically violent and interpersonally negative. Harassment and negative interpersonal interactions are linked to the related terms of emotional abuse (Keashly 1997), verbal abuse (Einarsen & Raknes 1997, Kisa 2008) and mobbing (Leymann 1990, 1996, Kisa 2008). The prevalence of harassment is difficult to determine given the lack of definitional distinction from the other forms of psychological abuse. In fact an argument could be made that the terms bullying, mobbing and psychological
harassment are synonymous (Einarsen 2000). For the purposes of this paper, harassment will be explored separately using the literature that denotes it as the primary term.

Leymann (1996) used the term psychological harassment exclusively in his earlier work and identified that 3.5% of Swedish working population experienced some degree of this harassment. Yildrim et al. (2007) used several terms interchangeably throughout their publication but they did report 17% of the nursing faculty was exposed to mobbing behaviors. Exploring the prevalence of verbal abuse in Turkish nurses Kisa (2008) found that 33.5% reported abuse experiences twice/year and 25.3% reported up to five times/year.

Fornés et al. (2011) described psychological harassment as a hostile process of repeated attempts to humiliate over time. Using both objective and subjective measures the experience of harassment by nurses in Spain varied according to the measurement used. The objective behavioral checklist identified the lowest rate at 4.6%, the self report rate was 14.9% and the quasi-objective questions from Leymann’s tool reported the highest rate at 18.9%. A modified Workplace Aggression Research Questionnaire (WAR-Q) was used to assess negative interpersonal interactions for healthcare students in clinical placement and over 88% of the students experienced at least 1 negative event (Ferris & Kline 2009).

experienced verbal abuse found their ability to deliver care was negatively impacted for a period of time after the event (Kisa 2008).

The most common behavioral manifestation of harassment included personal attacks, attempts to belittle and being spoken about in a degrading manner (Yildirim et al. 2007). Often the harassing behaviors were linked to dysfunctional communication, verbal abuse and assigning menial work or unfair workloads (Sakellaropoulos et al. 2011). Harassment can be a personal and/or professional attack and is often operationalized by behaviors such as yelling, insults, threats and attempts to humiliate (Cameron 1998, Fornés et al. 2011).

**Lateral or Horizontal Violence**


The impact of lateral violence in the workplace is similar to the previous constructs. Deterioration in job satisfaction and disillusionment especially for new grads has been reported (Cox, 2001; Stanley et al. 2007). Lateral violence research has demonstrated a relationship between poor work environments, high turnover and the exodus of qualified candidates from the profession (Cox 2001, Farrell 2001, Rosenstein 2002). In light of patient safety concerns, the
negative impact of dysfunctional relationships on team performance has been explored (Daiski 2004, Rosenstein & O’Daniel 2005, Walrath et al. 2010).

Stanley et al. (2007) found that 46% of the respondents felt laterally violent behavior was either “somewhat” or “very serious” of a problem. Walrafen et al. (2012) offer one of the most recent studies on horizontal violence. Using the Griffin (2004) categories the most commonly reported events were “backstabbing (77%), failure to respect privacy of others (76%), nonverbal negative innuendo (72.2%) and bickering among peers (72.1%).” Specific behavioral examples of overt aggression included yelling, degrading comments and taunting. Covert examples included lack of communication, being ignored and others presenting as unapproachable.

Except for these few interventional studies, much of the nursing literature on lateral violence is descriptive. Even within these descriptive studies the definitions and instrumentation vary greatly. However it was the exploration of lateral violence by nurse researchers that is some of the earliest research exploring the impact of the healthcare professional’s behavior in relationship to quality care. Nursing, in its charge of patient advocacy, was willing to look at its own behavior and role in shaping the patient care environment, ensuring ongoing commitment to high quality care.

**Leadership Implications**

Staff retention, job satisfaction, nursing burnout, quality of care and patient outcomes are all areas affected by disruptive behavior whether that behavior is labeled bullying, incivility, harassment or lateral violence. Disruptive behavior indicates some level of interpersonal dysfunction and therefore the presence of such behavior can be used as a barometer on workplace relationships. Once disruptive behavior is identified leadership can name the occurrence as unacceptable, regardless of etiology, and then plan an intervention. The manager
can focus on the triggers for the behavior and contributing elements without getting caught up in the semantics of the phenomenon.

The quality of the work environment and relationships are created and enhanced by the nursing leadership. If this leadership is perceived as less than present or if inter-disciplinary relationships are not fostered and modeled, then the potential for disruptive behavior increases (Chullen et al. 2010, Roche et al. 2010). Repeatedly study participants have identified the belief that nurse leadership could play a pivotal role in the prevention and remediation of disruptive behavior and dysfunctional workplace relationships (Laschinger & Leiter 2006, Stanley et al. 2007, Roche et al. 2010). Managers who seek to create an environment supportive of healthy interpersonal relationships will provide the foundation needed for culture change. It is the repeated, daily interpersonal exchanges which sets the cultural tone for the department. These exchanges occur informally through socialization and formally through established work processes. By engaging in quality interpersonal exchanges and by continually evaluating the work flow systems, the manager can reinforce those preferred behaviors and resolve barriers in workflow which might create stress interpersonally (Carmelli et al. 2009, Carmelli & Gittel 2009).

Modeling positive interpersonal interactions, building skill in communication and conflict management are key modeling opportunities for leadership (Fontaine & Gerardi 2005, Barrett et al. 2009). Clinical supervision can address these skill sets and enhance the creation of a climate supportive of healthy co-worker relationships. Effectively communicating organizational values and ensuring these values are embedded in performance evaluations sends a clear message of expected behaviors (Kusy & Halloway 2010). Positive employee outcomes and healthy interpersonal behaviors have been linked to environments which cultivate the value of mutual
respect (Havens et al. 2010), foster psychological safety (Carmelli et al. 2009) and lead according to the principles of transformational leadership (Skakon et al. 2010).

**Discussion**

Though not all labels highlighted are synonymous, and certainly etiologies differ, the similarities of these behavioral constructs repeat across the literature. Attempts to humiliate were a common strategy across almost all categories reviewed with attempts to belittle occurring almost as frequently. The harassment category differed slightly in that it only identified belittling however the argument could be made that belittlement would in fact lead to humiliation and therefore could be categorized as the same. Humiliation is an experience which has been shown to beget more humiliation, an escalation similar to the incivility spiral identified by Anderssen and Pearson (1999) (Coleman et al. 2009). This cycle highlights humiliation as a significant factor in the occurrence of intractable conflict, a concern in the daily work life of the healthcare professional.

Bullying was also commonly found throughout the different constructs. Bullying literature does offer some unique definitional distinctions related to intent and timelines, setting this construct apart from the other subgroups. However the behavioral manifestations are similar to the other subgroups and can be categorized as disruptive. In addition to being a phenomenon in its own right, bullying is a behavioral manifestation of lateral violence. Both bullying and lateral violence are tied to the use or misuse of power in the workplace however the power imbalance is generated from different theoretical standpoints (Roberts unpublished, Roberts 2000, Hutchinson et al. 2006, Vessey et al. 2011). Making the distinction between lateral violence and bullying in the clinical setting would be challenging. Intent, for example, plays a significant role in bullying, however intent is not a likely piece of information a manager will be
privy to in the workplace. This challenge supports the notion that these categorical distinctions are too complex to be helpful for those managing in the clinical setting. This review proposes that given the behavioral similarities across constructs such distinctions are not necessary. Moving the disruptive behavior literature into a direction of remediation and prevention will assist management in addressing inappropriate behavior irrespective of etiology.

**Conclusions**

The aim was to highlight the current terminology found in the literature related to disruptive behavior in healthcare. The many labels attached to the interpersonal dysfunction are vast and this diversity is a hindrance. The lack of a unifying construct for this behavior contributes to the lack of movement towards remedial and preventative solutions. This review addressed the gap by providing a detailed overview of the *behavioral* manifestations regardless of label and points to the outcome of the behavior – the disruption - as the unifying construct.

Disruptive behavior is an interpersonal event with individual and culturally mediated factors. The antecedents of any behavior, regardless of setting, are multi-causal and often contextually based. In the complex setting of healthcare behavioral etiologies are likely equally as layered. A single phenomenon or behavioral construct cannot capture such uniquely motivated events. Yet it is impractical to ask management to sift through the vague definitional distinctions of many separate constructs when addressing disruptive behavior.

This review also highlights key interventional considerations for management as the environment is the facilitator of behavior, positive or negative. The creation of an empowering work environment suggests a higher level of employee satisfaction and less disruptiveness. The healthy workplace might even offer protection from job stress. Social support and positive emotional climates may also offer mitigation of the deleterious effect of workplace incivility as
well as provide the foundation for cultural transformation (Bowling & Beehr 2006, Sekerka & Fredrickson 2008). Interventions which are unit specific and culturally sensitive will be more successful in enhancing the relational capacity of the employees than a preset curriculum.

Moving from a dysfunctional interpersonal environment to a healthy milieu is a culture change, thereby necessitating an understanding of that culture prior to formulating interventions.

Healthcare leaders will need to look towards themselves as the starting point. Only through consistent interpersonal modeling can the culture of a group be impacted. Exploring the necessary conditions for the occurrence of high quality interpersonal relationships will move the focus away from the individual only and begin to include the wider environment and organizational climate.
References


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Chapter 3

The impact of leadership on relationship quality and psychological safety among nurses:

A review of the literature
Aim: To provide a review of the current literature exploring the impact of leadership on relationship quality and psychological safety among acute care nurses.

Background: The creation of a healthy workplace within the patient care environment is a challenge for healthcare leaders. The relationship quality among coworkers and the degree of psychological safety experienced among nurses are both elements of a healthy and safe workplace. Leadership can significantly impact the relational tone of a unit, however the style or skill set required to manifest this outcome is not well understood.

Method – A review of the literature published, spanning from 2008 to 2015, was conducted. Electronic databases (including IBSS, Medline, OVID, CINAHL, PSYCHINFO, Psych Articles, Psych and Behavioral Collections Business Source Complete, SSCI, WILEY and Academic Search Premier), reference lists from articles and relevant websites were searched. Reviews that included leadership and workplace relationships or psychological safety in the healthcare setting were included. Each review was initially screened for relevancy by the author. Using an appraisal tool a score was calculated for each relevant article to determine inclusion in the review.

Key Issues – This literature review highlights what is known regarding the impact of leadership style on relationship quality and psychological safety among providers. By exploring these variables a greater understanding of the factors needed to facilitate a healthy in-hospital work environment can be identified. This will provide a template for the education of the future healthcare leader.

Conclusion - Leadership style, relationship quality and psychological safety are variables correlated with the provision of safe patient care. The interplay between these variables in the day to day functioning of the unit is not fully understood. These are important, interrelated
dimensions in healthcare management and additional understanding will contribute to the patient safety and healthcare management literature.

**Implications for Nursing Management:** The position of manager of an acute care unit is not a standardized role nor are the qualifications or training for this position uniform. Given the potential impact leadership can have on relationship quality, a full understanding of the factors most conducive to relationship quality in the healthcare setting is imperative. Examining this process from the start of leadership behavior to the end result of psychological safety may provide important insights for leadership education in the future. Healthcare is a unique setting and the process of leading and relating is a contextually dependent construct, therefore it is a construct best examined and understood within that unique context. This exploration will advance healthcare management science and leadership curriculums in a meaningful manner.

**Keywords:** leadership style/leadership, management, workplace/employee relationship, relationship quality, psychological safety
Introduction

Healthcare is complex. The acuity of illness, the advancement of technology and the multi-system overlap required to offer high quality care all add to the complexity. There are overt mechanisms involved in keeping the industry in motion as well as the less tangible components of the interpersonal nature. There are many interrelated and interpersonal factors which must work synergistically for the mission of safe patient care to be achieved; however empirical identification of these factors and these synergistic mechanics involved is incomplete. In an attempt to begin understanding the interplay between some of the factors which contribute to quality or add to error, researchers have begun to explore this interpersonal component of the healthcare team.

Florence Nightingale spoke to many factors related to safe patient care, proposing that care of the patient is only as good as the attention and investment found in the individual caregiver.

“If a patient is cold, if a patient is feverish, if a patient is faint, if he is sick after taking food, if he has a bed-sore, it is generally the fault not of the disease, but of the nursing.”

(1860 from notes on nursing found at: http://digital.library.upenn.edu/women/nightingale/nursing/nursing.html on dec 22, 2013).

Though this quote is speaking directly to nursing, the responsibility is shared across the entirety of the team, inclusive of other disciplines as well as other responsible parties such as administration. Given the complexity of the healthcare setting today, the attention and investment of the caregiver is influenced by many factors, several of them interpersonal. Interpersonal support from colleagues, from supervisors and others in leadership positions have
been identified as key in an employee’s investment and commitment as well as impacting health and wellbeing, satisfaction and feelings of empowerment (Carmeli, Brueller, & Dutton, 2009; Cummings, et al., 2010; Dutton & Heaphy, 2003; Galletta, Portoghese, Battistelli & Leiter, 2013; Laschinger, Wong, Cummings & Grau, 2014; Tourangeau, Cranley, Lashinger & Pachis, 2010; Wong & Cummings, 2009).

Despite this awareness, the interpersonal aspects of an employee’s work process are easily overlooked in organizations. The manner in which an employee is interpersonally supported to attend to their role or tasks is not a commonly measured concept. Interpersonal support is, in part, built into the system of healthcare provision as a technical maneuver. Treatment team meetings, rounding, patient hand-offs and the like are all identified areas of vulnerability for error and therefore have received safety net strategies such as checklist, templates or care pathways (IOM, 1999; Reid & Catchpole, 2011). Though many of these initiatives have demonstrated success and wide spread application (Haynes, et al., 2009; Woodhall, Vertacnik & McLaughlin, 2008) many others have only reported a negligible impact (Watcher, 2010). These events are highly relational as well as technical and therefore may require strategies with more of a relational perspective (Reid & Catchpole, 2011). Collaboration is an example of both a technical as well as relational event in the acute care setting (Gillespie, Chaboyer, Longbottom & Wallis, 2010). Schmalenberg, Kramer, King, Krugman, Lund, Poduska and Rapp (2005a; 2005b) in their multisite interviews with nurses and physicians, noted that collaboration in and of itself is not what determined the effectiveness of the communicative exchange but rather it is the quality of the underlying relationship involved which determines the depth and quality of that collaboration. The interpersonal environment is a factor in the provision of quality patient care as much as the technical initiatives and care pathways instituted.
This review looks at the system components of leadership style, relationship quality and psychological safety as three interpersonally related phenomenon in the acute care hospital setting. These constructs have been explored individually or in some combination in the work environment but less so in the healthcare industry. The impact of leadership on the manager-nurse relationship has been empirically explored (Cummings, et al., 2010; Laschinger & Fida, 2013; Galletta, Portoghese, Battistelli & Leiter, 2013), however the impact of the leadership behavior as it moves from dyad to team or unit based effect is less understood.

**Significance of the Problem**

The safety of care in the acute care hospital setting has been the focus of many best practice initiatives, funding awards, and national calls for sweeping reform in the industry (Berwick, Calkins, McCannon & Hackbarth, 2006; Hughes, 2008; Institute of Medicine [IOM], 1999; IOM, 2004). Since the IOM (1999) publication, *To Err is Human: Building a Safer Health System*, the concern over patient safety within the hospital setting has continued to grow with preventable adverse outcomes remaining an ongoing concern (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Wachter, 2010). Providing safe, high quality patient care is a multilayered concept with factors ranging from provider competency and team functioning to systematic design and leadership approach. The factors to be explored in this review are couched within the context of relationships, manager-employee and employee-employee relationships. These interprofessional relationships are multifactorial in and of themselves and
therefore require a contextually driven exploration to further advance the science of healthcare management and patient safety (Laschinger, Finegan & Wilk, 2009).

Interprofessional relationships in the acute care setting have been identified as central determinants in the patient safety process (Baker, Gustafson, Beaubien, Salas, & Barach, 2005; Havens, Vasey, Gittel and Lin, 2010; IOM, 2004; Joint Commission, 2008). A High Quality Relationship (HQR) is defined by the content, the connection and the meaning of the interpersonal exchange. Dutton and Heaphy (2003) offer a definition of high-quality connections as a relationship “marked by vitality, mutuality and positive regard.” Golden-Biddle, GermAnn, Reay, and Procyshen (2007) describe high quality exchanges within teams as patterns of bonding that enhance positive regard and respect. HQR in the workplace offer personal, professional, and organizational advantages and, as by-product, employees experience a greater sense of psychological safety (Carmelli, Brueller & Dutton, 2009; Dutton & Heaphy, 2003).

Psychological safety indicates that the workplace climate is conducive to interpersonal risk-taking such as speaking up or challenging a colleague without fear of retaliation in response (Edmondson, 1999; Edmondson, Bohmer & Pisano, 2001). Psychological safety is the tacit knowledge or belief that it is interpersonally safe to be in a vulnerable position among colleagues (Edmondson, 1999; Kahn, 1990). An acute care environment with a psychologically safe climate fosters honesty, willingness to present divergent ideas, safety in admitting error, openness in asking for help and many other risk-taking behaviors needed for effective coordination of complex care. (Carmeli, Palmon & Ziv, 2010). Without the belief that it is safe to ask questions, point out concerns or take other interpersonal risks, the healthcare environment is
at greater risk for error and poor outcomes (Carmeli, Brueller & Dutton, 2009; Edmondson, 2004a; 2004b).

The unit level manager, through their leadership style and pattern of engagement, creates the foundation for the interpersonal potential of their employees. The impact of leadership style or leadership behavior on patient safety and workplace health has been explored (Cummings, et al., 2010; Cummings, Midodzi, Wong & Estabrooks, 2010; Squires, Tourangeau, Laschinger & Doran, 2010; Thompson, et al., 2011; Wong & Cumming, 2007). A manager’s behavior can serve as a model, making the leadership style the template for engagement, psychological safety and relationship formation (Edmondson, 2004a; 2004b). Without the experience of HQR and psychological safety then members of such a team are less likely to take interpersonal risks in their communication with colleagues potentially leading to inefficient and perhaps unsafe practice (Casanova et al., 2007; Edmondson, 2003; Edmondson, Bohmer & Pisano, 2001; Leever et al., 2010).

**Methods**

The terms used to conduct this literature review include leadership, leadership/style, management, workplace/employee relationship, relationship quality, “psychological safety”. Different combinations of the terms were used and the databases searched were chosen for their ability to search the medical, nursing and leadership literature. The databases included IBSS, Medline, OVID, CINAHL, PSYCHINFO, Psych Articles, Psych and Behavioral Collections Business Source Complete, SSCI, WILEY and Academic Search Premier from 2008 to January 2015. Additional studies were obtained by using reference lists from the chosen studies. The inclusion criteria were empirical articles in English, peer-reviewed, with publication dates ranging from 2008 to 2015, however earlier relevant and seminal articles were also included as
necessary to highlight a construct. Excluded studies were those with a population outside of the healthcare setting or with a nonprofessional sample population.

**Literature Review of the Concepts**

The impact of leadership style on the experience of psychological safety and the potential mediating effects of relationship quality among acute care nurses is the basis for this literature review.

**Leadership Style**

The health of the workplace in the hospital setting has been correlated with quality outcomes, for both patients as well as hospital employees (Aiken, Clarke, Sloane, Lake & Cheney, 2008; Baker, Gustafson, Beaubien, Salas & Barach, 2005; Cumming, MacGregor, Davey, Lee, Wong, Lo, &…Stafford, 2010; Laschinger, Wong & Grau, 2012; Tourangeau, Cranley, Lashinger & Pachis, 2010). Each individual in-hospital work environment is contained within the department, specialty or the patient care unit. This microcosm of existence is under the direction of the departmental or unit manager, often the nurse manager for the patient care unit. Though the individual environments are part of the larger organizational culture, they also carry their own unique cultural existence including wide variation in leadership styles.

The literature often makes a distinction between manager and leader with this difference being that leaders inspire and motivate whereas managers structure and facilitate (Scoble & Russell, 2003). Northouse (2004) defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal.” Jennings, Scalzi, Rodgers III and Keane (2007) reviewed a 140 articles and found a large overlap between leadership and
management competencies noted in the literature. Of the 894 separate competencies identified, 862 were found to be commonly cited for both constructs. Much of the literature does identify a different focus and skill set needed for an executive nurse leader than that of the nurse manager, however the nurse manager will need to use many of the executive nurse’s leadership strategies to complete the process of structure and facilitation (Huber, 2010; Scoble & Russell, 2003).

Motivating others by keeping their sights on the bigger picture or vision within the grind of daily work struggle and tasks is no small feat. This is where effective managers call upon certain leadership skills to complete this goal. Determining which leadership skills are most effective in a given situation is important and can guide the curriculum of future leadership training programs.

Leadership styles can be viewed on a continuum beginning with the more task-focused styles such as passive-avoidant or laissez-faire styles on one end and, towards the middle, the more classical styles such as autocratic, democratic and situational. The opposite end of the spectrum is reserved for the more relational styles such as transactional (which closer to the middle than the far left given the emphasis on task completion), charismatic, transformational and shared leadership (Cummings, MacGregor, Davey, Lee, Wong, Lo &… Stafford, 2010). Much of the current research links the more relational leadership styles, such as authentic and transformational practices, to positive workplace outcomes (Chung-Kai & Chia-Hung, 2009; Laschinger & Smith, 2013; Salanova, Lorente, Chambel, & Martínez, 2011; Wong & Cummings, 2009; Wong & Laschinger, 2013; Wong, Laschinger & Cummings, 2010). Resonant leadership has recently been explored in terms of the impact on empowerment and, in turn, the influence on incivility and job satisfaction (Laschinger, Wong, Cummings & Grau, 2014). This a relationally-based approach theoretically based on emotional intelligence theory and it was
found to have both direct and indirect influence on job satisfaction and a strong positive direct
effect on empowerment. The effect on empowerment then had a negative effect on incivility and
burnout, with all of this leading back to the impact on job satisfaction (Laschinger, et al., 2014).

Pearson, Laschinger, Porritt, Jordan, Tucker and Long’s systematic review concluded that
no one specific leadership style was consistently correlated with a healthy work environment
(2007). This analysis was limited, however, due to the varying methods of leadership
measurement found in the literature. The leadership characteristics, as opposed to a specific
style, that were positively correlated with healthy workplace settings included flexibility,
support, trust and respect. These characteristics, inclusive in more relational styles, have also
been correlated with relationship building. This is an important correlation as the relational tone
or interpersonal climate has been correlated to the overall relational health of a unit (Pavey,
Greitemeyer & Sparks, 2011; Rathert & May, 2007). Cummings, MacGregor, Davey, Lee,
Wong, Lo, Muise and Stafford (2010) support this finding in their systematic review, identifying
that the more relationally-focused leadership approaches were consistently linked to positive
staff outcomes as compared to the more task-focused styles. The positive staff outcomes
identified in the healthcare setting include job satisfaction and intention to stay (Abualrub &
Alghamdi, 2012; Laschinger, Finegan & Wilk, 2009; Wong & Laschinger, 2013), improvement
in job/role performance (Germaine & Cummings, 2010; Salanova, Lorente, Chanbel & Matinez,
2011), empowerment (Laschinger, Finegan & Wilk, 2009; Wong & Laschinger, 2013) and even
higher perceptions of health and wellbeing (Nielson, Yarker, Brenner, Randall & Borg, 2008).

Outcomes, including error rates and mortality, have also been linked to leadership
behavior or style. Patient’s 30-day mortality was at 26% lower odds if nursing leadership was
rated as highly resonant according to Cummings, Midodzi, Wong and Estabrooks (2010). Resonant leaders engage in a relational approach which is described as visionary, coaching, affiliative and democratic whereas dissonant leaders have a style which is described as pace-setting and commanding. In this investigation the authors also found that the next lowest mortality odds (14%) occurred with the highly dissonant leadership, essentially the opposite approach of highly resonant, however once other variable were controlled for (patient demographics, comorbidities and hospital nursing factors) the highly dissonant approach no longer had a significant impact on mortality. The mixed form of leadership had a much higher mortality rating then either the resonant or dissonant alone, leading the authors to hypothesize that perhaps clarity of expectations weighed more heavily than the actual style itself.

Organizational research in healthcare measures various outcomes with attempts to narrow the factors involved to those which may have the greater impact and nurse manager leadership is one of those factors frequently explored. Abualrub and Alghamdi (2012) explored both transformational and transactional leadership skills and found that these combined skill sets explained 32% of the variances in staff nurse’s rating of job satisfaction. Though transactional is more task focused than transformational, it is still on the same end of the leadership spectrum in terms of relationally based approaches. This finding speaks to the potential necessity of leaders to use a combination of styles depending on the setting, culture, individual or existing situations.

Individual outcomes within complex organizational processes also have several mediating factors to consider. Employee health within the workplace, as impacted by leadership, is a complex process with several direct as well as partially mediated factors. There are structural factors (specific work conditions) and relational ones (related to self-efficacy) which
have been identified (Nielson, Randall, Yarker & Brenner, 2008; Nielson, Yarker, Brenner, Randall & Borg, 2009). A direct correlation has been demonstrated between transformational leadership and well-being (Nielson et al., 2008; Nielson, et al., 2009), however given the multifactorial nature of this research the need for a contextually driven exploration of these organizational concepts is apparent.

Salanove, Lorente, Chambel & Matinez (2011) examined a similar relationship of the impact of transformational leadership and self-efficacy on extra role performance. While self-efficacy is identified as a personal resource, transformational leadership is believed to provide an environment which enhances this resource. Transformational leadership was also positively correlated with work engagement, thereby mediating measures on extra role performance. Empowerment is a commonly explored mediator in this literature as well, mediating the impact of Authentic Leadership on performance and job satisfaction (Wong & Laschinger, 2013). Similarly a healthy leader-member relationship is demonstrated to have a positive impact on organizational commitment (Laschinger, Finegan & Wilk, 2009).

Other outcomes linked to leadership style include motivation and performance. A systematic review explored what specific factors influenced both nurses’ motivation and performance (Germaine & Cummings, 2010). Work relationships were identified in this review as influential on motivation to perform however nursing leadership was not directly influential. Instead the leadership practices impact on motivation and performance was mediated by the quality of the workplace relationships. A similar finding of leadership impacting collegial relationships can be found in McLennan’s (2005) study where the manager-staff relationship was insignificant in its impact on patient quality care however collegial relationships were significant.
Relational dynamics in the workplace are influenced by many factors, leadership being just one of those factors. Whether the mechanism of this influence remains similar in the healthcare setting as in other industries is unclear and therefore requires further research (Wong & Cummings, 2009; Wong, Laschinger & Cummings, 2010). Authentic Leadership is one of the relational models of leadership being explored for its influence on trust, perceptions of supportive work group as well as other workplace outcomes in the healthcare setting (Wong & Cummings, 2009). The Authentic leadership behavior of relational transparency was found to have an indirect effect on voice behavior in a non-clinician sample and empowering leadership behavior had a direct effect on voice behavior, though only in the clinician sample. Supportive leadership behavior had a significant effect on employee’s perceptions of being in a supportive work group, suggesting that leadership behavior can set the relational tone of a unit. Although Authentic Leadership did not directly influence trust in leadership the experience of a supportive work group did, in fact, mediate the development of this trust.

The influence of Authentic Leadership on nurses’ trust in management was again explored as well as its influence on voice behavior and perceptions of unit quality care (Wong, Laschinger, & Cummings, 2010). Though the earlier study’s findings did not support a direct effect of Authentic Leadership on trust in management (Wong & Cummings, 2009) this current study concluded that supportive leadership behavior did have a direct and indirect effect on trust and perceptions of a supportive group (Wong, Laschinger & Cummings, 2010). The indirect effect was mediated by the experience of personal identification with the leader as opposed to the experience of social identification with the work group, suggesting the perception of a supportive work group is a separate concept from social identification with the work group. Both these
closely related investigations demonstrate the intricacies associated with relational influences of the professional connections found in the healthcare setting.

**Relationship Quality**

Dutton and Heaphy (2003) offer a theoretical discussion of relationship quality and define a HQR in the workplace as a connection “marked by vitality, mutuality and positive regard.” The characteristics of HQR in this model are clustered under the headings of capabilities and subjective experience. The sub-dimensions of relational capabilities include the emotional carrying capacity of the relationship, the tensility of the relationship, and the degree of connectivity. Emotional carrying capacity refers to the amount of emotional variability a relationship can manage or to what extent one can freely express their emotions honestly in the context of this connection. A similar construct is tensility which refers to the amount of flexibility a relationship demonstrates and its ability to bounce back from adversity. This speaks to a relational connections ability to tolerate disagreement or conflict and maintain or return to previous level of connectedness. The degree of connectivity is a reference to the strength and growing capabilities of the relationship (Carmeli, Brueller, & Dutton, 2009; Dutton & Heaphy, 2003). In addition to these capabilities the model outlines the subjective aspect of a quality connection which includes the experience of vitality, positive regard and mutuality. According to Dutton and Heaphy, the depth of these capabilities and subjective events speak to the quality of the relationship (Carmeli, et al., 2009).

The impact of relationships in the healthcare setting will vary according to the outcomes being sought and setting or locations used. The supervisor-subordinate relationship has been linked to affective commitment (Brunetto, Farr-Wharton & Shacklock, 2012; Brunetto, Teo,
Farr-Wharton & Shacklock, 2012; Brunetto, Xerri, Shriberg, Farr-Wharton, Shacklock, Newman & Diengeret, 2013), teamwork (Brunetto, Farr-Wharton & Shacklock, 2011b), intent to stay (Galletta, Portoghese, Battistelli & Leiter, 2013), and well-being (Brunetto, Farr-Wharton & Shacklock, 2011a; 2011b; Brunetto, et al., 2013). These findings are demonstrated in a survey completed by Australian and United States (US) nurses however the findings differed by country (Brunetto, et al., 2013). Brunetto and colleagues reported that the Australian quality of the supervisor-subordinate relationships demonstrated a significant and positive relationship to the staff nurse’s level of engagement, their satisfaction with teamwork and well-being and a negative relationship to turnover. Interestingly, the US sample’s supervisor-subordinate relationship did not demonstrate any significant relationship to the outcomes measured. This may suggest differences in the supervisor-subordinate relationship structure among the two countries. The managers’ ability to create change within the hierarchal structure or workload of either the manager or staff nurse’s may differ and therefore impact the relationship quality.

An Australian based cross sectional survey of 900 nurses examined the impact of supervisor-nurse relationship, nurse satisfaction with training and nurse perception of wellbeing on affective organizational commitment. Additionally they explored generational differences between Baby Boomers, Generation X and Y. The supervisor-nurse relationship was measured via the satisfaction with communication only and all three generations were less than “slightly satisfied” with the quality of this relationship. Baby Boomers, however, did demonstrate a statistically significant greater perception of wellbeing and affective commitment than the other generations (Brunetto, Farr-Wharton & Shacklock, 2012a). Though a generational difference in satisfaction with supervisor relationship was not a finding in this study, the difference in
perception of other factors may indicate the importance of considering generational differences in future exploration of supervisor-nurse relationships, especially with different instrumentation.

The impact of supervisor-nurse relationship on teamwork, role ambiguity and well-being in both the private and public sectors of Australian healthcare was measured using the Leader-Member-Exchange (LMX) instrument. A positive correlation was found with nurse’s satisfaction with the supervisor relationship and the other outcomes. The supervisor-nurse relationships and the 2 other factors accounted for 23.6% variance in well-being perception in the private sector and 37.7% in the public sector, however the private sector reported a greater degree of satisfaction with supervisor-nurse relationship overall as compared to public sector (Brunetto, Farr-Wharton & Shacklock, 2011b). In a similar study surveying both Australian nurses and police officers, the impact of Human Resource policy changes on supervision practice was explored. The Human Resource outcomes investigated included perceptions of wellbeing and level of affective organizational commitment for both these public sector employees. Nurses were “somewhat satisfied” with supervisor-subordinate relationships and in turn reported a higher perception of wellbeing than police officers, however police were somewhat committed to their organization whereas nurses were somewhat non-committed. This finding is in opposition to much of the literature which supports the impact of supervision or leadership on organizational commitment (Brunetto, Farr-Wharton & Shacklock, 2011a).

The literature is beginning to demonstrate the importance of high quality relationships and relational exchanges in the healthcare setting, demonstrating an impact on the health of the overall work environment (Kramer, Schmalenberg & Maguire, 2010). However relationships explored in the healthcare setting are either supervisor-nurse or physician-nurse relationships. Nurse-nurse relationships are more often quantified when exploring unhealthy relating such as
lateral violence and bullying (Oore, LeBlanc, Day, Leiter, Laschinger, Price & Latimer, 2010; Roberts, DeMarco & Griffin, 2009; Vessey, DeMarco & DiFazio, 2010). In a mixed methods study nurses identified poor nurse-to-nurse relationships as a factor in either contemplating or actually leaving their unit. Nurses also identified factors which they believed would enhance positive nurse-to-nurse relationships such as supportive interpersonal behaviors among nurse colleagues (identified by 51% of participants), positive leadership actions (identified by 39% of participants), teamwork (identified by 24% of participants) and effective communications (identified by 21% of participants) (Moore, Leahy, Sublett & Lanig, 2013).

Examining the supervisor-nurse and physician-nurse relationship Galletta, Portoghese, Battistelli and Leiter (2013) demonstrated that both leadership quality as well as nurse-physician relationship influences nurses attachment as well as turnover intent. In a systematic review, Germaine and Cummings (2010) found that leadership did not directly influence a nurse’s motivation to perform however it did influence the building of other workplace relationships which, in turn, influenced motivation to perform. The indirect impact of leadership behavior was also demonstrated by McLennan (2005) who reported that though the supervisor-nurse relationship was not a factor in the nurse’s ability to provide high quality care, the quality of the relationships with colleagues was a strong indicator. The importance of establishing an environment supportive of relationship building continues to be demonstrated across the literature.

**Psychological Safety**

High quality relationships offer several professional and organizational advantages including fostering the experience of psychological safety (Carmeli, Brueller & Dutton, 2009;
Dutton & Heaphy, 2003). Without the belief that it is safe to ask questions, point out concerns or take other interpersonal risks, the healthcare provider is at greater risk for committing error and facilitating poor outcomes (Carmeli, et al., 2009; Edmondson, 2004a; Edmondson, 2012). The concept of psychological safety was identified in the seminal work by Kahn (1990) as he explored the concepts of personal engagement/disengagement, work context and the psychological experiences which shift work engagement. Kahn described psychological safety as “feeling able to show and employ one’s self without fear of negative consequences to self-image, status, or career.” The factors identified in this early work as influential in the experience of psychological safety included “interpersonal relationships, group and intergroup dynamics, management style and process, and organizational norms.” Edmondson (1999) furthered this work by exploring the concept within teams, making the distinction that the experience of team psychological safety is defined as “the shared belief” or the tacit knowledge that it is interpersonally safe to be in a vulnerable position among colleagues. This extends beyond the experience of interpersonal trust and includes respect for a colleague’s skill and a caring for a colleague as an individual (Edmondson, 1999).

Psychological safety has been linked to enhanced learning within organizations (Carmeli, Brueller & Dutton, 2009; Edmondson, 2003; Edmondson, 2004; Edmondson, Bohmer & Pisano, 2001; Ortega, Van den Bossche, Sanchez-Manzanares, Rico & Gill, 2014), team creativity (Carmeli, Reiter-Palmon & Ziv, 2010; Kessel, Kratzer & Schultz, 2012), and engagement in quality improvement work (Nembhard & Edmondson, 2006). Leadership behavior can influence the experience of psychological safety with the specific behavior of inclusiveness being linked to this outcome (Nembhard & Edmondson, 2006; Hirak, Peng, Carmeli & Schawbroeck, 2012). Hirak and colleagues found that leader inclusiveness on the unit level positively influences the
perception of psychological safety. This influence was strongest on units which had previously been underperforming, suggesting the importance of a psychologically safe environment when addressing both individual and unit level performance based issues. Leadership behavior which is consistent with espoused safety values of a unit will enhance the experience of psychological safety among nurses. As the nurses recognize the behavioral integrity relative to safety values, they feel assured in the safety or reporting errors (Leroy, Dierynck, Anseel, Simons, Halbesleben, McCaughey, Savage & Sels, 2012). Additionally, the impact of change-oriented leadership on team learning was explored in several hospitals in Spain. The findings continued to support the mediating effect of psychological safety on team learning and, ultimately performance (Ortega, et al., 2014).

In addition to leadership other workplace environmental factors can contribute to the experience or facilitation of psychological safety. Units with a strong focus on continuous quality improvement also report a greater experience of psychological safety (Rathert, Ishqaidef & May, 2009). The sharing of knowledge has been shown to mediate the effect of psychological safety on creative team performance. Healthcare teams that treat rare diseases were surveyed and the finding supported this mediating effect of knowledge with know-how sharing offering direct mediation and information sharing indirect (Kessel, Kratzer & Schultz, 2012). Exploring the many factors which drive the perception of psychological safety can add to our understanding as to how to best enhance this experience.

Conclusions

The acute care hospital setting is an active environment with numerous strategically developed processes implemented to help in the delivery of patient care. These processes are often established to facilitate the exchange of information or some other interface between
individuals, shifts, departments and the like. In such a complex setting there will be several factors, often less tangible factors, either positively or negatively impacting these processes. Explored within this literature review is the interpersonal or relationship factor among providers.

What has been demonstrated is that the underlying relationships between providers, such as nurses and physicians, can ultimately determine the success of several professional events which occur during the provision of patient care. For example, collaboration, an important daily event in the acute care setting, is often facilitated by protocols or other strategies in an attempt to enhance the provision of safe and high quality patient care. However such protocols are often specific and directive and therefore does not lend itself easily to the more relational aspect of the exchange. This communicative exchange is a structured, goal directed event however because the underlying relationship impacts at least the nurses perception of the communicative exchange, this phenomena bears further investigation.

The underlying relationship quality among nurse colleagues has been shown to impact the overall health of the workplace environment, impacting the experience of psychological safety and ultimately patient safety. In fact the literature has consistently demonstrated the damaging effect of an unhealthy work environment, producing harmful outcomes for providers as well as patients in the healthcare setting. To address these ongoing concerns it becomes important to begin identifying the factors which will promote the healthy environment. Leadership, HQR and psychological safety are the three concepts explored in this review and these are three concepts which are embedded in the interpersonal processes of the workplace. Interpersonal relatedness in the workplace has been explored more from a deficits or pathology-based perspective than a positive or asset-based viewpoint, though this paradigm is shifting (Luthans & Youssef, 2007; Dutton & Ragins, 2007). Positivity literature and organizational
positivity are concepts that are beginning to emerge in the research and may be applicable for future preventative and remedial interventions (Sekerka & Fredrickson, 2008).

The relational capacities linked to HQR and psychological safety have been explored to a greater degree in other industries (Brueller & Carmeli, 2011; Carmeli, Brueller & Dutton, 2009) but what allows these capacities to evolve in the healthcare setting requires further investigation. Much of the relationship-based language in the healthcare setting is referencing either collaboration or communication structure. An exploration of the less tangible aspects of relating, those aspects which are not technically or strategically based, may shed much needed light on how more relationally based leadership behaviors impact the health of the work environment. Empirical evidence in healthcare linking the role of leadership relational behavior to nurse-to-nurse relationship quality is also limited (Wong & Laschinger, 2013). Exploring the impact of a positive leadership approach on relationship quality and psychological safety among acute care nurses may enhance the understanding of strategies which will facilitate the development of a healthy workplace.
References


Brunetto, Y., Farr-Wharton, R. & Shacklock, K. (2011a). Using the Harvard HRM model to conceptualise the impact of changes to supervision upon HRM outcomes for different


Nightingale, F. (1860). *Notes on Nursing: What it is and what it is not*. New York: D Appleton and Company. Available at: 

http://digital.library.upenn.edu/women/nightingale/nursing/nursing.html


Chapter 4

Path Analysis on the Impact of Authentic Leadership on Team Psychological Safety

As Mediated by Relationship Quality
Abstract

Background: Leadership skills within a healthcare unit can influence the workplace setting for the provider and, therefore, the healing environment for the patient as they are one in the same. Psychological safety is a necessary state for error reduction and improved quality. Previous research suggests the relational tone established by the leadership style may influence the experience of psychological safety. The quality of workplace relationships may be a mediating factor in the link between leadership and psychological safety.

Methods: In the current study path analysis was used to test the hypothesized model of authentic leadership influencing team psychological safety in paths mediated by high quality relationships and workplace incivility.

Results: The analysis did not fully support the model as identified as neither leadership nor relationship quality (positive or negative) influenced psychological safety. There was a significant relationship found between authentic leadership and high quality relationships and incivility.

Conclusions: The findings did not support the hypothesized model in its entirety as a significant relationship between leadership style and psychological safety was not found. Indirect mediation effects of relationship quality on psychological safety was also not supported. However a significant relationship was found between leadership and relationship quality.
**Introduction**

Leadership at the nurse manager level is a growing area of interest in the healthcare setting. The IOM report (2011) has identified the need for nurse managers who have the ability to see the larger system within which they function as opposed to the historical view of the individual units functioning as silos. The demands from this front line manager have continued to grow as the healthcare setting has become increasingly complex, however the identification, hiring and training of nurses for this position has not kept up with this demand (Kleinman, 2003; Surakka, 2008). Leadership is linked to several outcomes, both for staff and patients, further supporting the need for ongoing research on this topic.

Psychological safety is the belief that it is safe to take interpersonal risks with your colleagues when sharing work related ideas, reactions or feedback (Edmondson, 1999). This experience has been linked to improved outcomes and quality care. With leadership being seen as a strong factor in setting the relational tone of a unit (Shirley, Ebright & McDaniel, 2008) its impact on interpersonal safety requires additional exploration. The mechanism of this impact is unclear however both constructs are relationally based, supporting the notion that mediating factors may also be grounded in additional relational constructs. Poor quality relationships, often found in environments fraught with incivility, can negatively impact the experience of psychological safety and high quality relationships have been linked to a greater degree of learning behavior and psychological safety (Hirak, Peng, Carmeli & Schaubroek, 2012). This study looks to further explore the relational dynamics of leadership and psychological safety through the evaluation of relationship quality.
Specific Aims

The elements which promote a safe and healthy environment for patients and healthcare employees alike are not fully understood and therefore are not actionable. Leadership style, provider relationships and the experience of psychological safety have all been linked to positive patient and employee outcomes. Yet, despite this research there is surprisingly little known about the interplay between these three variables. This gap will be addressed in this study through the following aims:

1. To explore the congruence between nurse director’s self-evaluation of authentic leadership style and staff nurses’ evaluation of leadership style.
2. To determine the impact of leadership style on team psychological safety.
3. To identify if leadership style’s impact on psychological safety as mediated by peer-to-peer relationship quality.

Theoretical Framework


Avolio, Gardner, Walumbwa, Luthans and May’s (2004) Authentic Leadership (AL) theory proposes to contain the core elements of other positive leadership approaches, specifically Transformational and Ethical, with an overlap between the two. There are four components of this model: self-awareness, balanced information processing, relational transparency and internalized moral perspective and it is through the self-possession and the modeling of these
four elements that the authentic leader is believed to shape the work environment (Avolio et al., 2004). There is a growing number of empirical studies using AL model, with a small portion occurring in healthcare. Wong and Laschinger (2013) found AL was significantly related to job satisfaction and performance, with this relationship mediated through empowerment. A relationship between AL and perceptions of quality care by staff nurses was mediated by trust in the manager (Wong, Laschinger & Cummings, 2010). Laschinger and Smith (2013) demonstrated both AL and structural empowerment were significantly related to a new nursing graduate’s perception of inter-professional collaboration.

Relationship quality in the workplace has been explored from many vantage points from collaborative exchanges to the experience of bullying and incivility. Dutton and Ragins (2007) offer a definition of high-quality relationships (HQR) in the workplace as one “marked by vitality, mutuality and positive regard.” The theoretical construct offers the following sub-dimensions: emotional carrying capacity of the relationship, the tensility of the relationship, the degree of connectivity, vitality, positive regard and mutuality. Emotional carrying capacity refers to the amount of emotional variability a relationship can manage whereas tensility addresses flexibility in a relationship. Connectivity refers to the strength and growing capabilities of the relationship and vitality, positive regard and mutuality are expected experiences in HQR (Carmeli, Brueller, & Dutton, 2009; Dutton & Heaphy, 2003).

Team level psychological safety is the experience of feeling safe in taking interpersonal risks such as speaking up or challenging a colleague without fear of reprisal (Edmondson, 1999; Edmondson, Bohmer, & Pisano, 2001). Psychological safety is the tacit knowledge or belief that it is interpersonally safe to be in a vulnerable position among colleagues (Edmondson, 1999; Kahn, 1990). The experience of psychological safety is protective for both the patient and
provider as it significant lowers the risk of error and, therefore the risk of poor patient outcomes (Carmeli, Brueller & Dutton, 2009; Edmondson, 2004a; Edmondson, 2012).

Workplace incivility is a relational construct that may interfere with the development of psychological safety. In a three year mixed methods study Pearson, Andersson and Wegner (2001) sought to develop theory with regards to incivility in the workplace and offered the following definition:

“Workplace incivility is low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others.” (p.1397).

Examples of incivility included a lack of common courtesy, rudeness, belittling others, ignoring others or behaving unprofessionally. Cortina, Magley, Williams, and Day-Langhout (2001) has put forth a notion of workplace incivility which measures disrespectful, rude or condescending behavior.

The impact of incivility has personal, professional and organizational effects. Hutton and Gates (2008) explored incivility and the relationship to productivity. Though the rate of incivility in this study was generally low, a statistically significant decrease in productivity was found when the instigator was a direct supervisor. Organizational effects were noted by the Veteran’s Health Administration (VHA) as exit interviews demonstrated persistent incivility as the contributor to organizational turnover. In response the VHA developed an intervention titled CREW (Civility, Respect and Engagement in the Workplace) in an effort to create a culture change (Osatuke, Moore, Ward, Dyrenforth, & Belton, 2009). The CREW intervention was correlated with an improvement in civility scores, a decrease in burnout and a decrease in absenteeism (Leiter, Laschinger, Day & Oore, 2011). The role of incivility in moderating the effect of stressors and job strain has also been explored (Oore, et al. 2010). Findings indicate the
negative effect of workload and job strain on health was stronger within the units with higher rates of incivility. After 6 months of CREW intervention this ability to impact health negatively was weaker; if workload and job strain remain unchanged but the environment contains less incivility, then the strength of the negative impact of these factors on health is much weaker. These findings support the already established literature on negative health effects of high workloads (Lim, Cortina and Magley, 2008) and also demonstrate potential protective effects of a civil and healthy work environment.

When exploring the how and why individuals relate to one another in a workplace setting there are several personal factors to consider (general sense of trust in others, relationship experience, emotional maturity) however when adding in the complex backdrop of an organization, additional mediating factors must be considered. Employee health is a personal factor and the literature has demonstrated that leadership impacts employee health and well-being (Brunetto, Farr-Wharton & Shacklock, 2011a; 2011b; Brunetto, et al., 2013; Nielson, Randall, Yarker & Brenner, 2008; Nielson, Yarker, Brenner, Randall & Borg, 2009). When nurses were queried regarding factors they believed would improve peer relationships, positive leadership actions were identified as an important factor by 39% of respondents (Moore, Leahy, Sublett & Lanig, 2013). In a study done by McLennan (2005) leadership was again reported to have an impact on collegial relationships through the manager-staff relationship itself.

Exploring the direct and indirect effect of leadership style on a team measure such as psychological safety, is also a multifactorial exploration. Specific leadership behaviors such as inclusiveness (Nembhard & Edmondson, 2006; Hirak, Peng, Carmeli & Schawbroeck, 2012) and consistent behavioral integrity (Leroy, Dierynck, Anseel, Simons, Halbesleben, McCaughey, Savage & Sels, 2012) has been linked to psychological safety. The literature supports the
investigation of the proposed conceptual model linking leadership style to psychological safety, exploring the mediating effect of relationship quality in the workplace setting.

Methods

Procedure

Data were gathered via electronic survey. Convenience sampling was necessary as this study explored the leader and staff characteristics together and the relationship between both. The potential survey participants included staff nurses working in the identified acute care settings and the unit leader who is directly responsible for the day-to-day management of the unit. An informational session for Nurse Directors was held and an email was sent to all potential participants four days prior to the release of the survey explaining the study objectives, data collection procedure, investigators role and contact information as well as a notification that a second email with a survey link will be forthcoming. The second email provided a link to the confidential survey and a follow-up email with the same link was sent within 2 weeks to those who had not yet completed the survey. To improve response rate, a $10.00 gift card incentive was offered upon completion of the confidential survey. Participants were informed that their survey responses would remain confidential however the surveys were coded to link a survey to a specific unit manager.

Participants

Participants were staff nurses and Nurse Directors working in general medical and surgical units within an acute care hospital setting. An invitation to participate was sent to all staff nurses and Nurse Directors within this setting of the acute care hospital and only nurses who responded to at least 3 out of the 4 survey dimensions were included in the final analysis.
(staff nurse n = 455; nurse director n = 17). A total number of surveys initially sent to both staff nurses and nurse directors was 2210 over 27 units or unit combinations, however 15 had returned for incorrect email addresses, leaving the total number accurately sent and received by the participants was 2195 (27 to nurse directors and 2168 to staff nurses). Initially the staff nurses n = 617 however 35 (5%) did not answer the unit they worked on and therefore had to be excluded for n = 582 (26% of total number of correctly sent surveys). Of this number, incomplete surveys (missing more than 1 of the 4 major variable section) were also excluded. A response rate of usable surveys were 55% for the nurse directors (n = 17) and a 21% response rate for staff nurses (n = 455).

Measures

*The Authentic Leadership Questionnaire (ALQ)*

Leadership style was measured both from the unit manager’s perception of their own AL skill as well as the unit nurse’s perception of the manager’s level of AL behavior. The ALQ is a 16-item measure with four subscales which correspond to the four constructs of self-awareness, balanced information processing, relational transparency and internalized moral perspective (Avolio, Gardner & Walumbwa, 2007). Item examples for each of the constructs include: As a leader I encourage everyone to speak their mind (relational transparency), As a leader I make decisions based on my core values (moral perspective), As a leader I listen carefully to different points of view before coming to conclusions (balanced information processing) and As a leader I know when it is time to reevaluate my position on important issues (self-awareness). The item responses measure frequency of behavior on a 5-point Likert scale from 0 – “not at all” to 4 – “Frequently if not always”. The subscales are averaged for an overall AL score, where a higher score corresponds to a higher AL rating. Construct validity through Confirmatory Factor
Analysis (CFA) has been established by Walumbwa, Avolio, Gardner, Wernsing & Petersen (2008) and Cronbach’s alpha reliability in previous studies have been consistently acceptable ranging from 0.70 – 0.90 across all subscales (Bamford, Wong & Laschinger, 2012; Laschinger & Smith, 2013; Laschinger, Wong, Grau, 2012; Wong & Laschinger, 2013; Wong, Laschinger & Cummings, 2008). A reliability value of .981 was calculated in this study.

**Relationship Quality**

Relationship quality was measured using two separate instruments which are expected to be negatively correlated. The High-Quality Relationship tool, informed by Dutton and Ragin’s (2007) conceptual model and empirically tested by Carmeli, Brueller & Dutton (2009), was used. This is a 20-item measure with initial reliability coefficients for each sub-dimension ranging from 0.72 – 0.85. Cronbach’s alpha for this study was .939, a higher value than what is found in the literature. The instrument sub-dimensions include three capabilities (emotional carrying capacity, tensility and the degree of connectivity) as well as the two subjective experiences (positive regard and mutuality) (Carmeli, et al., 2009; Dutton & Heaphy, 2003). The scale is on a 5-point Likert scale from 0 – “strongly disagree” to 4 – “strongly agree”. Item examples for each of the construct include: “My coworkers and I do not have any difficulty expressing our feelings to each other” (emotional carrying capacity), “Even during times of stress and pressure, we always manage to find effective solutions” (tensility), “We are attentive to new opportunities that can make our system more efficient and effective” (connectivity), “I feel that my coworkers and I try to develop meaningful relationships with one another” (positive regard) and “I feel that my coworkers and I do things for one another” (mutuality). The final score is the average of all items, with the possible range of 0 to 5.
Workplace Incivility

Nurses were asked to measure their relationship quality with their nurse colleagues in a second manner: the experience of incivility. The Workplace Incivility Scale (WIS) is a highly reliable instrument (reliability coefficient .86 to .88 in literature and .904 in current study) and this instrument measures employees’ experiences with rude or condescending behavior (Cortina, Magley, Williams, & Langhout, 2001; Cortina & Magley, 2003; Leiter, Laschinger, Day & Oore, 2011). All staff nurse participants were asked to complete this measure which is on a 5-point Likert scale ranging from 0 – “never” to 4 – “many times”. An examples of this 6-item questionnaire includes: “During the past year while employed at “insert organization here” have you been in a situation where any of your superiors or coworkers: Put you down or was condescending to you?” The final score is the average of all items, with the possible range of 0 to 4.

Psychological Safety

Edmondson’s (1999) Psychological Safety instrument was used as an individual and a team level measure. It is a 7-item highly reliable and valid scale with coefficients ranging from 0.78 (Carmeli, Brueller & Dutton, 2009) to 0.82 (Edmondson, 1999) and .748 for the current study. This measure explores the individuals team experience of psychological safety with colleagues and was scored on a 5-point Likert scale ranging from 0 – “strongly disagree” to 4 – “strongly agree”. An item example includes: “It is completely safe to take a risk on this team.” The final score is the average of all items, with the possible range of 0 to 4.
Data Analysis Plan

Data were analyzed using Statistical Package for Social Sciences (SPSS) version 23 for Windows and Mplus (Muthén & Muthén, 2007). Alpha level were set a priori to .050 for all applicable statistical tests.

First, we performed analyses of missing data to examine whether any of the background variables explain lack of survey completion. Each response was given a binary indicator: missing (1) or not (0). A series of chi square tests of independence or the Fisher’s exact tests in cases when the assumption of the minimal sample size per cell was violated were used to examine effects of gender, time in current position, length of time as a nurse and nursing education on the likelihood of completing the survey.

Second, descriptive statistics in forms of frequencies and percentages were computed for demographic variables and means with standard deviations for major study variable for each participant group: nurse directors and staff nurses. Third, to address the question of congruency between nurse directors and staff nurses’ rating of the director authentic leadership ability, Pearson product-moment correlations were computed.

Fourth, in preparation for mediation analysis, we examined the extent to which major study variables are related to each other. We computed Pearson product-moment correlations and examined distributional normality of these variables. Fifth, we have examined the magnitude of the nesting effects. Given that staff nurses shared the environment within a cluster of one nurse leader and that we examined these environments across several units, there was a possibility that responses from staff nurses would be correlated, which can be accounted for the multilevel modeling approach if deemed necessary. To determine the degree of dependence, intra-class
correlation coefficients (ICC) were computed for four major study variables. The ICC is the proportion of variance in an outcome accounted for by the nesting structure. It is evaluated as a ratio of the variance of the intercept in an empty multilevel model to the total variance (e.g., variance of the intercept plus the residual variance). ICC values close to zero imply minimal impact of the nesting units and most variability occurring at the inter-individual level (Hayes, 2006; Peugh, 2009).

Given that all ICCs were negligible it was not necessary to utilize multilevel modeling. A path analysis mediation model was utilized. Conceptually, path analysis is designed to explore the mechanism through which the main variable of interest (authentic leadership style) impacts the main outcome of interest (psychological safety). The mechanism is evaluated by assessing the role of mediators, or variables that explain the intervening effect. Figure 1 summarizes the mediation model, where HQR and WIS are mediating variables. Direct relationship between ALQ and psychological safety (path d) represent the impact of ALQ on psychological safety. The indirect relationships through HQR and WIS (path c₁, c₂) represent either full or partial mediation if path d disappears or weakens when path c is entered into the regression. The magnitude of the mediation effect is quantified as a difference between c₁ and c₂, reflecting weakening of the relationship between ALQ and psychological safety after inclusion of mediators (Hayes, 2009; Munroe, 2005).
Mediation analysis was carried out in Mplus (Muthén & Muthén, 2007) with a bootstrap method of estimating model parameters and standard errors. This approach has been recommended for when the normality of the sample distribution has been violated as is the case for our data (Hayes, 2009). Bootstrapping approach to parameter estimation doesn’t impose distributional assumptions as it repeatedly samples from the data (5,000 times in our case) with replacement and estimates necessary parameter values. In the mediation model, we controlled for the effects of the covariates gender, age, length of time as a nurse, time in current position and education. The final model contained all covariates significant at the .01 level.

**Figure 1** Model of impact of Authentic Leadership style (ALQ) on psychological safety (PS) as mediated by relationship quality measures of high quality relationships (HQR) and workplace incivility (WIS).
Results

Missing Data

Results of chi square and Fisher’s tests revealed that none of the background variables accounted for whether the survey was completed or not (Table 1). There were 28 nurse directors who received the survey and 17 returned usable surveys. Of the staff nurses who returned usable surveys ($n = 582$), the total $n$ dropped to 455 when cases were eliminated for completing less than 3 out of the 4 study variable questionnaires. Missing data for the demographics was approximately 5% across all four variables.

Table 1

Frequency and percentage of missing data

<table>
<thead>
<tr>
<th></th>
<th>Frequency (%) of Staff with missing data</th>
<th>Chi Square</th>
<th>Fisher’s exact test or Likelihood Ratio (LR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>98 (4.9%)</td>
<td>.286$^a$</td>
<td>.500</td>
</tr>
<tr>
<td>Time in current position</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 years</td>
<td>95/ 5.1%</td>
<td>4.394$^b$</td>
<td>3.731(LR)</td>
</tr>
<tr>
<td>3-10 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11+ years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of time as a nurse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 2 years</td>
<td>96/ 5.1%</td>
<td>2.882$^c$</td>
<td>2.002(LR)</td>
</tr>
<tr>
<td>2-5 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 + years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than BSN</td>
<td>94/ 5.2%</td>
<td>3.735$^d$</td>
<td>.061</td>
</tr>
<tr>
<td>More than BSN</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: Sample size \( n = 455; \) BSN: Bachelors of Science in Nursing

a. \( x^2_{(1)} = .286, \ p < .05 \) No significant association
b. \( x^2_{(2)} = 4.394, \ p < .05 \) No significant association
c. \( x^2_{(2)} = 2.882, \ p < .05 \) Assumptions violated; Asymptomatic significance = .237 – not statistically significant
d. \( x^2_{(1)} = 3.735, \ p < .05 \) No significant association

Sample Description

The sample size for this study was carefully planned. Based on the review of the literature and the use of survey to gather data, we estimated a modest effect size of 0.2 for the relationship between ALQ and psychological safety. Using the G-Power software (Faul, Erdfelder, Lang, & Buchner, 2007) for correlational analysis, a recommended power of 0.80 (Cohen, 1988), alpha level of .05, and a two-tailed test, we estimated a sample size of 321 or greater was required. The current study met this requirement with 455 staff nurse participants and 17 Nurse Directors.

Descriptive statistics in forms of frequencies and percentages were computed for demographic variables for both nurse directors and staff nurses (See Table 2). Of these participants, all the Nurse Directors were female (100%) with ages ranging from the 20 year olds to 60 years or more. The largest percentage of nurse directors reported age range as 50 to 59 year olds (52.9%). The length of time as a licensed nurse for all Nurse Directors was 6 years or more (100%) and the nurse directors reported their length of time in their current position with 35.3% being 2 years or less, 35.3% from 3 to 10 years and 29.4% have been in their current position as a nurse director 11 or more years. The majority of the Nurse Directors reported nursing education more than a bachelors (94.1%).
Of the staff nurses 37 (6.8%) were male with ages ranging from the 20 years old to 60 years or more. The largest percentage of staff nurses reported an age range of 50 to 59 year olds (26.5%). The length of time as a licensed nurse for staff nurses ranged from under 2 years (1.5%), 2 to 5 years (6.6%) and 6 or more years (74.4%). The majority of staff nurses have been in their current position 11 or more years (45.3%) with the remaining being 3 to 10 years (25.8%) and under 2 years (11.5%). The majority of staff nurses reported more than a bachelor’s degree (68.4%).

Table 2

Demographics frequencies and percentages for nurse directors and staff nurses

<table>
<thead>
<tr>
<th>Variables</th>
<th>Nurse Director</th>
<th>Staff Nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>100%</td>
<td>75.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.8% Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing 17.9%</td>
</tr>
<tr>
<td>Age Range</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-29 (5.9%)</td>
<td></td>
<td>20-29 (7.7%)</td>
</tr>
<tr>
<td>30-39 (17.6%)</td>
<td></td>
<td>30-39 (19.6%)</td>
</tr>
<tr>
<td>40-49 (11.8%)</td>
<td></td>
<td>40-49 (21.4%)</td>
</tr>
<tr>
<td>50-59 (52.9%)</td>
<td></td>
<td>50-59 (26.5%)</td>
</tr>
<tr>
<td>60 + (11.8%)</td>
<td></td>
<td>60 + (7.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing 17.1%</td>
</tr>
<tr>
<td>Time in current position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2yrs (35.3%)</td>
<td></td>
<td>0-2yrs (11.5%)</td>
</tr>
<tr>
<td>3-10yrs (35.3%)</td>
<td></td>
<td>3-10yrs (25.8%)</td>
</tr>
<tr>
<td>11+yrs (29.4%)</td>
<td></td>
<td>11+yrs (45.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing 17.4%</td>
</tr>
<tr>
<td>Length of time as a nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6+yrs (100%)</td>
<td></td>
<td>Under 2yrs (1.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-5yrs (6.6%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6+yrs (74.4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing 17.5%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than BSN (5.9%)</td>
<td></td>
<td>Less than BSN (14.8%)</td>
</tr>
<tr>
<td>More than BSN (94.1%)</td>
<td></td>
<td>More than BSN (68.4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Missing 16.8%</td>
</tr>
</tbody>
</table>

Note: Nurse Director n = 17; Staff Nurse n = 455
Congruency between nurse director and staff nurses report of ALQ scores

The ALQ, a measure of authentic leadership skill, was completed by both the Nurse Directors (n = 17) and staff nurses (n = 455). The staff nurse’s evaluated the Nurse Director (M = 3.59, SD = .26) and the Nurse Directors evaluated themselves (M = 4.30, SD = 1.10) on the ALQ measure. The correlation results indicate there is no relationship between the staff nurses’ evaluation and nurse directors’ self-evaluation for matched comparison.

Table 3
Correlation of nurse directors ALQ self-rating with staff nurses ALQ rating

<table>
<thead>
<tr>
<th></th>
<th>Nurse Director ALQND</th>
<th>Staff nurse ALQRN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson correlation</td>
<td>-.045</td>
<td>-.045</td>
</tr>
<tr>
<td>P value</td>
<td>P&lt; .050</td>
<td>P&lt; .050</td>
</tr>
<tr>
<td>Mean</td>
<td>4.303</td>
<td>3.596</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.102</td>
<td>.260</td>
</tr>
</tbody>
</table>

Note: ALQND – Authentic Leadership Questionnaire for the Nurse Director; ALQRN – Authentic Leadership Questionnaire for the staff nurse

Correlational analysis between major study variables

In Pearson’s correlation results revealed a moderate positive correlation between staff nurses report on HQR and ALQ, r = .338 (p = .050) and a moderate negative correlation between staff nurses report on WIS and ALQ, r = -.339 (p = .050). A strong negative correlation of r = -.551 (p = .050) was found between staff nurses report on HQR and Psychological Safety; however no significant correlations were found between the ALQ scores, HQR and WIS with psychological safety (p’s > .050; See Table 4).
Covariance and distributional normality of the study variables were examined as well as the magnitude of the nesting effects and are presented in Table 5. The skewness and kurtosis was significant at less than .010 for all major study variables except kurtosis on the ALQ measure.
Mediation analysis

The ICC values were negligible (WIS ICC = .011; HQR ICC = .087; psychological safety ICC = .007) negating the need for multilevel modeling and therefore path analysis mediation model was employed.

Based on the correlation analysis, these findings do not support a direct relationship between ALQ and PS. While this is a red flag for potentially no mediation whatsoever, previous literature reports that mediation is possible even when there is no direct link between an independent variable and an outcome, especially when presence two or more mediators cancel out the overall relationship (Preacher & Hayes, 2008). However, the path analysis model demonstrated the direct effect of ALQ on PS (path d) was not significant either, even in presence of the two mediators and covariates (path d in Figure 2; $\beta = .003$, $SE = .019$) (See Figure 2).

![Path analysis results of model with coefficients. ** indicates significant relationships (p>.050)](image-url)
Paths between ALQ and the two mediators, HQR and WIS (path a and b), were found to be significant ($\beta = .185, SE = .028$ for path a; $\beta = -.264, SE = .041$ for path b). However neither ALQ nor mediators, WIS or HQR, predicted psychological safety when controlling for covariates (all p’s > .050). The indirect effects were also not significant ($\beta = .004, SE = .009$ for path $a^*c_1$; $\beta = -.014, SE = .009$ for path $b^*c_2$).

**Discussion**

The authentic leadership scores between the nurse directors and the staff nurses were not congruent. The healthcare literature measuring Authentic Leadership has used self-report method from the leader themselves (Shirey, 2009) or staff nurses evaluation of their leaders’ Authentic Leadership skills (Bamford, Wong & Laschinger, 2012; Giallonardo, Laschinger & Iwasiw, 2010; Laschinger, Wong & Grau, 2012; Wong, Laschinger & Cummings, 2010) however a comparison between the two, the self and other ratings, was not found. Self-reporting bias could certainly contribute to this discrepancy however the use of 2 measures in an attempt to address the concern, has not consistently been shown to adequately compensate for the issue, especially with supervisor and supervisee measures (Donaldson & Grant-Vallone, 2002). A narrower measure of leadership skill was used in this study as an attempt to isolate key leadership behaviors which may impact psychological safety, however there are broader relationally-based measures which might better capture the wide skillset of these leaders.

The conceptual model proposed was not supported by the study results. The literature has explored the link between leadership and psychological safety (Nembhard & Edmondson, 2006; Hirak, Peng, Carmeli & Schawbroeck, 2012), leadership and patient outcomes (Cummings, Midodzi, Wong and Estabrooks, 2010) and relationship quality and psychological
safety (Carmeli, Brueller & Dutton, 2009; Edmondson, 2004a; Edmondson, 2012). What has been unclear in the literature is what specific style or leader behavior lends itself best to creating that safe environment? Also, what other factors must be present for this impact to occur or to be enhanced? Given the importance of positive patient outcomes secondary to psychological safety, attempting to understand the dynamic flow from leader to these outcomes is a worthwhile exploration. This study sought to explore those questions however future studies will need to explore additional constructs, both personal and organizational, to better understand this dynamic.

Authentic leadership is a relationally based leadership approach and psychological safety is an interpersonal experience, therefore a relationally-based mediator was examined as a possible factor in this dynamic. The literature has demonstrated that the quality of relationships, whether positive (HQR) or negative (WIS), are impacted by the leadership style (Laschinger & Fida, 2013; Laschinger & Smith, 2013; Laschinger, Wong & Grau, 2012). The literature has also shown that the quality of the workplace relationships are a possible precursor to psychological safety (Hirak, Peng, Carmeli & Schawbroeck, 2012; Carmelli, Bruellar & Dutton, 2009). This study demonstrated similar findings as the literature, showing the link between leadership and relationship quality. Higher levels of authentic leadership was correlated with higher levels of relationship quality and lower levels of incivility. This supports the notion that leadership style does impact the relational tone of a unit, thereby influencing the peer-to-peer relationships within the team. This is an important factor when considering training for nurse managers or when attempting to address problems within a team that is not relationally healthy.

The lack of direct or indirect relationship of leadership to psychological safety is contrary to previous literature findings cited. This may indicate either different or additional
factors involved in the mediation. Given the complex nature of organizational research and the multiple mitigating factors involved in such research, the model may require the addition of these other factors. There are personal, cultural, contextual and organizational factors to consider when exploring relational dynamics as well which may need to be considered.

The absence of a direct or indirect effect of leadership on psychological safety may also be related to an inability to conduct a team based measure. There was little to no variation within and between groups indicating that perhaps the instruments used were not sensitive enough to the relational concepts being explored. Different or the development of new measures may be needed. Additionally missing information may have played a role as not all nurse directors participated in the study. Without a unit by unit analysis, we could not adequately measure the impact of a specific leader’s style to that unit’s level of psychological safety as the nuances of the unit culture and context may have been lost. Timing of the survey release was a noted limitation. A meeting with the nurse directors did occur and a discussion of the research and survey was in-depth, however the survey was released 4 weeks after this meeting. Had the release occurred closer to the time of the informational session, response from the nurse directors may have been more robust. Lastly the staff nurses at this facility are unionized but the nurse managers are not and it is not known what impact that has on overall workplace culture, perceptions of power, trust in leadership and psychological safety. A study which compared union and non-union organizations on the perceptions of leadership and the level of psychological safety may well be an important step in determining the impact of unionization.

Limitations of this study have already been cited throughout the discussion however additional limitations include the use of convenience sampling. Though initially a unit based measure was sought, lending itself best to convenience sampling, future studies using multi-sites
would allow for probability sampling which could address this issue. In summary these findings did not support a significant relationship between leadership style (ALQ) and psychological safety nor indirect mediation effects through incivility (WIS) or peer relationships (HQR). These findings do no support the hypothesized model in its entirety, neither direct or indirect effects on the outcome variable, however a significant relationship was found between ALQ and both measures of relationship quality, HQR and WIS.

The ALQ’s impact on relationship quality does support previous research and contributes to the educational curriculum and training programs for nursing leadership and management. Emphasizing that communication among providers is not strictly a technical exchange which can be addressed by implementing a communication tool or developing communication policy alone and instead it forces a shift in how new initiatives are to be developed. First the underlying interpersonal relationships of the involved providers must be understood and considered as part of the initiative, for without a healthy work environment any technical endeavor may not fully succeed or even fail. This research has contributed to the growing understanding that relational events between leaders and employees can impact work environment. With this growing understanding leadership training can further incorporate the relational learning needs of future leaders. Future studies using the ALQ might look to compare the 4 subscales of this measure to identify, with further specification, which of the subscales characteristics may contribute more towards developing a healthy interpersonal environment in the healthcare setting.
References


Chapter 5 Summary and Conclusions

This dissertation manuscript chronicles an interest and an exploration in relational dynamics in the healthcare setting. The initial examination of the literature began with the dysregulating behaviors of incivility, bullying and other disruptive relational events encountered in the workplace. The literature was initially explored in an attempt to understand why such behavior might happen as well as identify the potential consequences of such behavior, especially in the acute care setting of a hospital. The literature demonstrated consequences that included financial (higher sick calls from staff), organizational (increased staff turnover) (Leiter, Laschinger, Day & Oore, 2011), employee outcomes (increased burnout) (Oore, et al., 2010) and patient outcomes (adverse events) (Leroy, et al., 2012). Negative, disruptive behavior is a costly event for a patient care organization, with that cost spanning from the loss of actual dollars to the potential loss of life.

Recognizing the potentially devastating impact on patient outcomes outlined in the literature, patient safety became a focus with the intent to identify precursors to higher quality, safe patient care. In an attempt to back into the relational dynamics in the acute care setting three components, relational events in and of themselves, were identified: psychological safety, relationship quality and leadership.

The experience of psychological safety has been consistently linked to patient outcomes. Psychological safety is the knowledge or belief that it is safe to take an interpersonal risk in the workplace setting (Edmondson, 1999; Kahn, 1990). For nurses in the acute care environment taking interpersonal risks often include communicating with peers about patient related concerns. Adverse patient outcomes occur with greater frequency when psychological safety is reportedly low (Nembhard & Edmondson, 2006). Healthcare teams with higher levels of psychological
safety have been shown to have higher error reporting, which initially appears contrary to the former statement. However, this higher reporting of errors indicates that staff feel safe to report such errors which, in turn, is linked to lower occurrence of ongoing errors over time (Edmondson, 2004). Team members feel safe divulging errors and then the potential for repeat errors drops as the system is evaluated and corrected. This correction happens sooner as errors are discovered in real time without having to wait for a tragic outcome to initiate the response.

In exploring psychological safety two additional contributing events were found in the literature: the quality of the team members’ relationships and the leadership behavior of the front line manager. The literature related to nursing and relationship quality often explores the dynamic from either the supervisor-employee or the nurse-physician relationship (Brunetto, Farr-Wharton & Shacklock, 2012; Brunetto, Farr-Wharton & Shacklock, 2011; Galletta, Portoghese, Battistelli & Leiter, 2013). Literature which speaks specifically the nurse-to-nurse relationships is more focused on the disruptive events of lateral violence, incivility or bullying (Oore, LeBlanc, Day, Leiter, Laschinger, Price & Latimer, 2010; Roberts, DeMarco & Griffin, 2009).

Relationship quality can contribute to the health and well-being of a work unit but fostering higher quality relationships also requires a healthy foundation, a responsibility of the front line nurse manager. Unlike other industries, empirical evidence in healthcare linking the role of leadership relational behavior to nurse-to-nurse relationship quality is limited (Wong & Laschinger, 2013). It is the leadership which can set the relational tone of a unit by consistently modeling healthy interpersonal behavior (Pavey, Greitemeyer & Sparks, 2011). Leadership style will vary according to individual, unit culture and organizational missions, however there are leadership behaviors which have been positively correlated with healthier work environments: flexibility, support, trust and respect (Pearson, Laschinger, Porritt, Jordan, Tucker & Long,
These characteristics are more inclusive in the various relational styles of leadership, such as authentic leadership.

This study sought to explore the potential relationship between these variables and asked the question: What is the impact of authentic leadership on team psychological safety, as mediated by relationship quality for the acute care nurse? Based on the literature presented a model was hypothesized and tested within an acute care hospital setting. Organizational research is fraught with challenges given the multidimensional factors involved. Additionally in this study, not only were we conducting the research in a complex environment, we were exploring the less tangible aspects of relational dynamics. The analysis, however, did not support the hypothesized relationship between ALQ and psychological safety. However ALQ was shown to have a significant relationship with both measures of relationship quality, HQR and WIS.

The limitations of this study include the use of a convenience sample. A large multisite study could address this issue and still allow for unit based measure. The use of self-report as the only method is a limitation therefore staff were also asked to rate the leader on the same instrument, however the two measures were incongruent. The lower than expected nurse director response was also a limitation and a contributor to this low response may have been timing of the survey release. An informational session for the nurse directors was held to explain the study purpose and address any concerns, however the survey was not released until 4 weeks later. This lag time may have been detrimental to the response rate.

Though the model was not supported in its entirety, the research did provide further validation on the impact of leadership skills on the relational health of a team or unit within such a complex environment. Other mediating factors may need to be considered to better explain this model. Continued exploration of the conditions which enhance high quality relationships within
the healthcare setting is necessary. It is only by understanding what factors contribute to a healthier workplace can we improve upon leadership education and create an environment of high quality for patients as well as staff.
References


